MEDICARE PAYMENT ADVISORY COMMISSION

PUBLIC MEETING

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

**Thursday, March 18, 2004**
**10:06 a.m.***

COMMISSIONERS PRESENT:

GLENN M. HACKBARTH, Chair
ROBERT D. REISCHAUER, Ph.D., Vice Chair
AUTRY O.V. "PETE" DeBUSK
NANCY-ANN DePARLE
DAVID F. DURENBERGER
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JOSEPH P. NEWHOUSE, Ph.D.
CAROL RAPHAEL
ALICE ROSENBLATT
JOHN W. ROWE, M.D.
DAVID A. SMITH
RAY A. STOWERS, D.O.
MARY K. WAKEFIELD, Ph.D.
NICHOLAS J. WOLTER, M.D.

* March 19 proceedings begin on page 270.

AGENDA PAGE

P R O C E E D I N G S

DR. REISCHAUER: Good morning. For those of you who were not here at the executive session, Glenn Hackbarth, the chairman, is testifying before the Ways and Means Subcommittee on Health and will be here this afternoon.

The first session that we have this morning deals with private insurers' strategies for purchasing imaging services. We have a distinguished and very knowledgeable panel that Kevin will introduce and set up with any introductory material that is necessary. Kevin?

DR. HAYES: Thank you. We are really starting off here with two sessions which concern purchasing strategies. These are strategies used by private insurers and others to improve efficiency. By that we mean reducing spending while maintaining or improving the quality of care. So our first session will focus on imaging services.

Just by way of context, we wanted to give you a brief overview of how Medicare pays for imaging services under the physician fee schedule, just to give you a frame of reference for interpreting what the panelists have to say.

We also distributed for you an article that

appeared in the New York Times on Saturday, a timely article that addressed imaging services, specialties of physicians providing those services and the fairly rapid diffusion of imaging equipment in, I believe it was in Syracuse.

So moving on then to this overview, we can begin first by just looking at the types of imaging services that Medicare pays for and we see them arrayed here in different categories of services, computed tomography, magnetic resonance imaging, echocardiography, other echography or ultrasound services, nuclear medicine, standard imaging which is essentially plain film x-rays, chest x-rays, and x-rays of the musculoskeletal system, that kind of thing. And then a category here, a small image called imaging procedures, which is more invasive things like cardiac catheterization and angiography.

You can see fairly even distribution among the categories in roughly the 12:00 o'clock to 9:00 o'clock of this, all ranging in the area of 11 percent to 17 percent of total spending. But standard imaging is one of the bigger categories at 23 percent of total spending and then that imaging procedure one is kind of small.

Services are provided by physicians in different

specialties. This is all payments for services under the physician fee schedule. We can see here that radiology is a very key specialty with payments approaching half of the total. Cardiology is another important specialty here, close to one-quarter, and then other categories shown as you can see there.

For purposes of payment we can categorize, we can decompose, break down imaging services into two components. One is a professional component, and that would be the portion of the service usually provided by a physician. It includes supervision of the imaging study, interpretation of the results, and preparation of a report. Then there's the technical component of the service which is the work of a technician, use of the equipment, supplies, that kind of thing. So it is possible for separate billing for each component or for both together, and that is what it meant by this global service that you see here.

This is a count of units of service so obviously there are some technical components missing here. The other technical components that you do not see here are the ones that are provided in a facility setting; hospital outpatient department. Even if a patient receives an imaging service

as an inpatient, results still need to be interpreted so that is not shown on here but just something to keep in mind as part of the imaging services that beneficiaries receive.

One thing you will hear about during the panel discussion has to do with an issue having to do with multiple imaging services appearing on one claim for payment. So this is one example of that phenomenon. We see here computed tomography services, roughly 60 percent of the claims include one service, but the other 40 percent include two or more services. Sometimes payers make an adjustment for the second and subsequent services in terms of payment. The idea here being that there are some efficiencies associated with providing more than one service during a single encounter. Medicare is doing this kind of thing already with respect to surgical services but not with respect to other services.

A final point to make has to do with coding edits. These are rules, essentially, that are implemented observed during processing of claims and they detect during automatic claims processing any improperly coded claims. Examples of that would be one service on a claim that is actually a component of another service that's on that same claim. So

these coding rules would detect that. This is all part of an effort, fairly transparent effort on the part of Medicare called the correct coding initiative that allows for clinical input in the process of establishing these coding rules.

We checked with CMS and they asked the carriers who process the claims to keep track of savings associated with these edits and they reported to us that the savings totaled $333 million in the year 2002 which is approaching about 1 percent of total spending.

What you will hear from the panelists is that they too use edits like these. In fact some of them actually use the CCI edits, but then they couple that with some other edits as well. Instead of just looking at pairs of codes that appear on the claims they might look at other information on the claim like the sex of the beneficiary or diagnosis. This is a way that they implement any kind of payment adjustments for second and subsequent services that are reported on a single claim.

So that's it in terms of just a quick snapshot, overview of how Medicare is paying for imaging services. I can answer any questions but we want to also keep an eye on

the clock here and allow plenty of time for the panel and the discussion that follows.

MS. DePARLE: This is a very basic question. On your first slide, Kevin, where you break down the distribution of spending among types of services, I realized -- I thought this was in the text but I didn't see it -- that I'm not sure I understand what standard is versus CT, MRI. I understand procedures and how they're different, but what is standard, the 23 percent standard?

DR. HAYES: The 23 percent standard, the standard services are essentially plain film x-rays, chest x-rays and that kind of thing.

MS. DePARLE: Thanks.

DR. ROWE: This information is very nice and sets the stage for the discussion. If you have a chance it would be interesting to see what some of the trends are over time. These are kind of a cross-sectional look at the distribution, and it would be helpful to see where the growth is in dollars or in volume or in unit price, and just over every other year for the last six years or eight years or something like that so we can get a sense of what the opportunities are.

DR. HAYES: Sure. I can recall some of those details for you. We look at growth as part of our assessment of payment adequacy for physician services and what I recall from the analysis we did for the March report was that in the areas of CT and MRI we see growth there in the area of 15 percent or more per year per beneficiary.

DR. ROWE: Dollars or volume?

DR. HAYES: This is volume. That's volume in the sense that it's both the units of service as well as any changes in coding, intensity, or in the intensity of the service. So we're at 15 percent, 17 percent, whatever it might be in the case of CT and MRI. Echocardiography is right around 9 percent, nuclear medicine is somewhere, it's either in the 10 percent, 15 percent area, something like that. Standard imaging is very low, more in the 4 percent area I would say. And I just don't remember the imaging procedure.

DR. ROWE: Thanks.

DR. REISCHAUER: Kevin, do you want to introduce the panel?

DR. HAYES: I would like now to introduce our panelists. We have with us today Miriam Sullivan, who is

the director of Allied Health Services for the Tufts Health Plan which serves Massachusetts and parts of New Hampshire and Rhode Island. We also have with us today Tom Ruane, who is the medical director of PPO and Care Management Programs for BlueCross BlueShield of Michigan. And third we have Cherrill Farnsworth who is the CEO and chairman of the board of HealthHelp Incorporated. HealthHelp is a radiology benefit management company providing services to a number of payers. So I'll turn things over to the panel and then we'll have a discussion to follow. We'll begin with Miriam.

MS. SULLIVAN: Thank you very much for the opportunity to be here this morning. I think Kevin's opening comments were a nice dovetail to the experience that we've had at Tufts Health Plan and I thought what I'd like to do today is walk you through some of the key reasons and drivers that we addressed imaging, some of the historical approaches we use, some current considerations, and lastly, just briefly touch on lessons that we have learned.

Essentially one of the key drivers that we formed a task force within our health plan was rising concerns about not only the cost but also the utilization trend as it related to overall diagnostic imaging. During 2000 to 2003

we saw a 48 percent increase in advanced imaging procedures, CT, MRI, nuclear cardiology, and PET scans. A majority of that 48 percent was made up by MRI and CT. That was 90 percent of that increased trend. Collectively, as we looked at our medical trend evaluation across the organization, radiology quickly jumped to number five of the top 10 key cost drivers. In addition, we were seeing different avenues, requests and demand for compensation payment and delivery of diagnostic imaging services and procedures in traditional settings that we had not previously seen before.

Our historical approach up until then was comprised of a number of things. We have had a provider privileging program for approximately eight to 10 years where we privileged physicians in subspecialties to be able to before imaging services, and throughout the tenure of that program we have enhanced that and expanded that and feel that we have had great success with that.

Secondly, from a contracting perspective we went throughout our entire network and really looked at where were the services being provided, where were the opportunities, and we went and recontracted with our entire network and really expanded the freestanding service

providers and found that there was opportunity not looking for access but also more innovative and creative ways to be able to structure some reimbursement methodology. So that was also part of this 13-month initiative that we concluded in 2003 and continues in '04.

I will skip for a minute to our radiology advisory committee. They've also played a vital role. We have a group of practicing radiologists throughout our network with specific subspecialties that we have chosen to be able to get a global and unique perspective about what they are seeing in their practice and also help guide on the clinical programs, protocols, et cetera.

Lastly, during 2003 we made a concerted effort to look at utilization management programs and vendors, and we have spent significant time evaluating those and at the end of that analysis we chose not to pursue that angle for a number of reasons, but the salient points I believe was, number one, in terms of the vendors that we selected for the RFP process we found that the costs associated with that contain some duplicate nature of what we had already implemented at the plan. And in addition we heard intense feedback from not only the member and the provider community

that we use that the role of the traditional gatekeeper method within an HMO product, Secure Horizons was our Medicare+Choice program, was a significant loud and clear message that they did not see that role.

We understood that there would be some political pushback from that so what we did was we engaged them in a conversation to say, if not that, what would you be willing to work with and how can we come up with a strategic approach that will help us stem the utilization of also be transparent to the members and reduce some of what the perceived hassle factor was for the physicians?

So essentially from that 13-month initiative hat we found is it really -- our key findings fell into three specific areas. The increase consumer demand. We heard loud and clear that our members want access and choice. They want to be able to, as they are more informed in their health care decisions, they absolutely want to be able to have access and convenience in seeking out, and that's no different for diagnostic imaging.

We also worked very closely with our employer groups, and it was interesting over the past two years where the cost of pharmaceuticals and all of the well-documented

experience with those trends, that radiology actually rose to the top of their list ahead of pharmaceuticals as wanting to know what were interventions that were going to be put in place to help drive and monitor those costs and mitigate the trend.

We found a real parallel between the direct-to-consumer marketing of pharmaceuticals similar to the be well body scans, give your family members and friends gift certificates over the holidays. We had a large marketing blitz in the Boston area and we had significant feedback that people were feeling me-too, the worried well, that type of approach, that we definitely heard that and it was resonating in more frequency.

The second was just the proliferation of imaging equipment. We have seen significant expansion in the hospital outpatient departments, significant -- and I think depending on what side of the coin that you sit on, there is often documented reports about the lack of radiologists. In the Boston area there's been a number of studies linking, is it a true lack of radiologists or is it also keeping up with the capacity and increased utilization? We're also following some of those studies closely because I think

there's some merit in terms of the trend mitigation.

Lastly, we have seen over the past 18 months, significant increase in physician-owned imaging equipment as the cost -- it's almost two ends of the spectrum. The hospital outpatient are purchasing the newest technology, large expensive equipment, and as the technology comes down to smaller size and cost that would fit well within an individual or an independent delivery networks, the physicians are looking to be able to purchase that as well.

Lastly, were the varied referral patterns, the clinical protocols that we evaluated. What was the referral process for people who physicians were vending services; hospitalized outpatient versus a freestanding facility? The second bullet, the distinct member receiving repetitive testing is extremely concerning to us. Our clinical and medical directors team are part of an evaluation with that. It should be noted for oncology, PET scanning, mammography, all of those screens that we would want people to seek were excluded from this.

We looked at people with diagnosis of maybe knee pain, knee strain, ankle strain, we looked at people who were having testing ordered even before a physician was

evaluated. So they would call the office to say that they had some discomfort. The office staff would order imaging series. They go to the PCP's office and would have one of those procedures done. They then might be referred to an orthopedist who might do another battery of tests, and so on. When we really drilled into the data and saw the numbers of tests that distinct members were having, that was extremely concerning to us.

That led us to take a step back and look and see, rather than do a quick hit or a reactive approach, that we really wanted to take a step back and look at what were all the driving factors that influenced the increased utilization of diagnostic services. As you can see on this slide indicated here, we thought that there was really a number of forces but we found that they were well-situated into four buckets.

First, the consumer demand, the worried well. We heard from a focus group of physicians who say that there is significant pressure at the office to say, I want this procedure, I want this test. So it's a new development and that's where we saw the parallels with the pharmaceuticals about the me-too drugs. So that was one component. And the

education and safety around that.

Secondly, the provider payment policies that we engaged our physicians and our freestanding facilities to actively seek and look at opportunities so that we didn't need to do a broad brush approach and we really wanted to incent the physicians that were using high-quality centers, appropriate protocols, and not paint a broad brush, especially where the physicians who were meeting the goals and objectives that we were looking for. I'll speak in a minute to some of the performance measures and contracting initiatives that we embarked on in the past six months.

We also looked at benefit design and member cost-share, looking at steerage to more cost-effective facilities. In terms of benefit design, at least in the Boston area in the local markets we don't see a lot of cost shifting to the members in terms of copays or coinsurance for imaging services yet but it's something that's been talked about at length.

Lastly, our clinical coverage policy decisions, how do we meet the challenges of new technology, is the new technology more efficacious than existing or is it a case of, in some instances that is appropriate but in others new

necessarily isn't always better? So what we've looked to do is enhance our existing privileging program, expand the credentialing requirements, and also expand our radiology advisory board with specialties in specific areas to help guide us in those procedures as well.

So the result of this is that we have just recently kicked off a corporate-wide imaging steering committee. We found that without the assistance and the help from a clinical perspective, contracting perspective, and a benefit design perspective, all of those components could help us achieve the ultimate goal that we were looking for. We also wanted to have a higher body from our senior leadership level to be able to gauge the effectiveness and understanding the trends in marketplace change, so how can we be effective in monitoring that? So this committee will be charged with approving the strategic goals, overseeing the policy development, and also monitor the execution of those key initiatives relative to diagnostic imaging.

The current initiatives that we have underway, as you can see listed on the slide, really are five-fold. One was provider payment restructuring. We have entered into alternative reimbursement methodologies with our providers.

We've created incentives for preferred imaging facilities, whether it's access, more ease to schedule for membership, volume for steerage of membership to our identified or preferred providers.

We've also looked at clinical coverage guidelines and we have a team of medical directors that evaluate, along with our radiology advisory committee, and develop policies around the emerging technology and set guidelines for expansion of services into non-radiology settings. I think one of the things that was notable for the Tufts Health Plan is we were getting consistent calls into our medical directors from physicians who said, I took a weekend course on ultrasound-guided biopsy, is this covered under your plan or benefit design? We just started to tally what people were asking for and realized that there was real need and a real commitment to be able to set guidelines to ensure quality and have a philosophical approach from our plan's perspective.

We also looked to enhance our privileging program. We do site visits and do credential all of our imaging facilities, and we have worked with radiology consultants to go out and really scan the equipment on a

more frequent basis, tie it to coding to make sure that we are maximizing the way that the centers are billing it and coding accordingly, and also use the enhanced privileging program to endorse the physician education surrounding clinical appropriateness and testing and really get our physicians and the radiology advisory committee to work hand-in-hand with our network physicians.

Probably the most novel and creative change the we've experienced at the plan are performance measures. When we had spoken about the utilization management programs we heard loud and clear that the physicians did not want that gatekeeper. We did focus group with some members along a number of UM programs not just solely related to diagnostic procedures, and what we did was we looked at what would be a benchmark across our network. We evaluated the performance of all of our physician groups and saw where they fell above that utilization network and where they fell below. What we were surprised to find is that it is very focal and there are pockets of where the utilization is driving a lot of the trend.

So what we have adopted are focal risk arrangements to be able to give incentives to physicians to

get them to actively monitor the key drivers of trend, of which radiology is just one of those areas. We have actually seen some great success with that.

Lastly, the member education. We are embarking on an education campaign highlighting the risks and benefits of repetitive testing. One of the things that we thought this dovetailed with, our launch of a new consumer-driven health product in January of this year where this product enhances members to get preventative screening and hospitalization where needed, and gives them incentives and healthy rewards. But it also takes away some of the cloudiness around reimbursement structures. So we're providing transparency around the true cost of these procedures. And as it relates to a discretionary procedure, giving them the information and the education so that they still have the opportunity to make that decision, but we want it to be an informed decision that they make.

Lastly, as a result of this we felt that from the Tufts Health Plan perspective we wanted a strategic long-term approach to look at the delivery of diagnostic services, understanding that there will be continued new technology, that the landscape may change, product design

will change, and really the hallmark of our approach is relegated to ensuring that our membership have access to quality care while balancing the intensified pressure for cost controls.

We hear that in an increasing basis, that we wanted a way to effectively manage the proliferation of that new technology and have clinically sound protocols for addressing that. But we also wanted to ensure that we had member education and satisfaction, and lastly, achieve physician engagement by offering incentives and decreasing the hassle factor which in the past was really a deterrent for helping us achieve that trend. We are approximately six months into this latest initiative but we have had great success.

DR. REISCHAUER: Thank you.

Dr. Ruane.

DR. RUANE: Thank you. I am always jealous when I'm on a panel with someone from a real managed care program, all the tools that they have at their disposal to manage costs, and we have so little in my health plan. But that's another story.

I was invited here today I think to really talk

about the practical application of three programs that we use at BlueCross BlueShield of Michigan PPO programs that we believe have had an impact on moderating the increased cost of radiology services. I'll spend a few minutes talking about that, but I have to give you just a bit of background in terms of who we are and why we made the decision to do the programs that we did to, again, put these in context.

BlueCross BlueShield of Michigan is a large, single state, not-for-profit Blues plan. We have just under 5 million members. We have a history -- our success over the past 50 years has really been in the administration of a traditional indemnity insurance type product. That is regulated quite tightly in the state of Michigan by a specific public law that does apply to all non-profit large health insurers but we are the only ones, so we believe it's our own personal law. It really limits what we can do.

It requires us to allow every physician with an active license to participate in our plan, and it requires us to have equitable payment policies so that we have a single fee screen for all participating physicians. It also requires us to pay for, in general, all of the services that are within the scope of practice for a particular physician.

So that really gives us very limited opportunity to manage apparently. But some things that happened that have changed that a bit.

Our business has migrated to a PPO structure within BlueCross BlueShield of Michigan and we believe that under the PPO structure we do have some more latitude in terms of what we can do in terms of managing health care. But we also really are well aware that both our doctors and our members really like many of the aspects of their traditional coverage, and we are really committed to preserving that. So although we are a PPO structure, we have 90 percent of the physicians in the state participating with us.

We also do not have any primary care physician assignment or control of referrals within our PPO network, and we do, from the physician side, do operate on a single fee screen for all physicians. We really have done minimal limitation of types of services available that each individual physician can provide. So that's the context. We are, again, not a managed-care organization competing with several others in a relatively mature market. We're much closer to the way that Medicare is actually

administered.

I won't spend any time on this except to indicate that in general 10 percent of the health care dollar goes to imaging; about 20 percent annual trend. Just for rule of thumb, all two-thirds of that goes to high-tech procedures and about one-third goes to low-tech office-based procedures. This is the pie that Kevin showed you only sliced in two pieces. The trend, and I think there is general agreement that the trend on the high-tech imaging side is really higher.

What drives the trend? I think the number one driver of the trend is technological advancement. These are wonderful tests that are available that really have improved the care of patients. Our fundamental business is making these tests available to people. It really should go against the grain to be talking about limiting access to these tests and it really does. I think we really have to keep in perspective the fact that we really want to make these tests available without unnecessary or improper barriers.

The other things that drive trend are medical inflation, capacity, availability of the test. Anything you

have to wait in line a long time for will be delivered less frequently. But the big piece that we believe, it's sort of the intellectual underpinnings of all of this work is that there is widespread practice variation among physicians and that it is not related to differences in the patients that they see and the illnesses that they treat. It really is related to differences in practice style.

Again, among those things that cause that variation are different degrees of concern about defensive medicine. I think that's a genuine concern of most physicians, but it's also maybe an excuse to act out for other physicians who are so annoyed with this prospect.

Follow-up of previous positive tests. There is nothing more annoying than having a $500 test that was not necessary and finding some odd thing that requires a $1,000 test to the make sure that it really does not mean anything. So I think it is important to not get into that kind of cascade.

Our doctors tells us that patient expectations are important and what are they to do? Their patients are demanding these tests and sometimes they tell us that they are demanding those tests because they're standing right in

front of them with their advertisement and their Val-Pak coupon for the discount demanding this particular test. So that's really an interactive issue.

Then finally, self-referral. This is a topic for another day, obviously, but the extent to which the tests that a physician decides on and orders for the care of his patients or her patients actually results in benefit to that physician is a real difficult issue in medicine across the board, particularly in imaging. The Medicare program and the federal government have written wonderful draft guidelines on self-referral that I think have really moved the discussion on this forward, but reaching consensus on even definition and appropriate action across-the-board is more difficult. But I think I would say that self-referral is just the key to many of the issues that we are dealing with here.

I think just one thing I want to say about why in our situation we would do management of radiology services, because I think there is a temptation to say, this is wonderful stuff. Most of it's good. It's not cheap. It's not easy to do anything about the cost. Sort of, let the good times roll, let the market sort this out, and maybe at

the end of the year we will be able to, if we have high cost and utilization we'll be able to decrease the price a bit. I think that approach might or might not work. It has it's own pros and cons to it.

But it's simply not an option for us. Many of our customers are large businesses and over the past 30 years they have been challenged and they've gone through wrenching changes to deliver higher-quality products at lower costs. They just are not going to listen to that type of an argument, let the market work. They have done very difficult things internally and they've imposed their quality improvement processes on their suppliers as well. So we are a major supplier for those companies and they are really visiting us every day wanting to know what we're doing actively to manage care, to deliver value for the money.

I because that if you think about it, if we are able to save $3,000 or $4,000 in our market, that funds the health insurance for a worker who otherwise might not have it, it allows a company to honor its commitment to a retired worker who is Medicare age for health insurance, and to honor their commitment for a drug benefit for, or Medigap

benefit for their retired employees. So it's very serious business and we have to have very specific answers as to what we're doing.

Three programs that we do. We require precertification of high-tech, high-cost procedures. That's the slice of the pie related to that that's growing most rapidly. Privileging; Miriam mentioned. We restrict payment for specific procedures to particular specialists or provider types. Then thirdly, we include some general cost profiling of our physicians' performance in our PPO panel and a large piece of that really has to do with imaging variation, which I'll mention briefly when I get to that.

This is a parts where I'm telling Cherrill her business, so I don't think you can see if she kicks me, but I'll let you know if that happens. But precertification is a process whereby we require preauthorization of relatively expensive procedures. It really makes sense to do this. These procedures often new. They're ordered by every physician and the indications for particular procedures are not always known by the physician in practice. A new technology might become available that would, even though more expensive is now the appropriate test, and we don't

want a physician ordering an inappropriate test, even if it's less expensive and then needing to do the better test later on. So we think there is an opportunity for education in this environment. So that's one of the reasons this makes sense.

For the program to work what you need is the providers of the radiology services have to believe that they will not receive full payment unless an authorization accompanies the claim that they send to BlueCross. So when the doctor wants to order a particular test that comes under this program, his office calls the imaging facility, tells them it's a BlueCross patient. They need to say, we'll need an authorization number. The doctor then calls the precertification agency and obtains that authorization number.

That, again, is an interaction that does come with some cost. It comes with a cost actually for the health plan to hire a vendor to do that, which I think is really pretty necessary in this age. And then it comes at a second cost to the doctor who needs to do this, even though he, the ordering physician, is not in the game in terms of payment for the procedure.

But I think there are pros and cons to this particular program. The pros are, it doesn't raise regulatory issues. It doesn't restrict the scope of practice of any physician for ordering, or any radiologist for performing the procedure. It simply requires this precertification step. The quality improvement component I've mentioned. We do find that a significant period of time physicians are ordering the wrong test and our radiology management program helps to get the right test done.

But it works in the longer run by changing physicians' practice pattern. When I call and want to order an MRI for someone's back pain that they've had for four days and they don't have any sciatica or other things that make it particularly worrisome, once I call once and get that precertified and they say, you know, doctor, the standards are that if this pain is recent, if there aren't any complications, you really can delay imaging for several weeks. I will not call the next time I have a patient in that situation. I'll learn those criteria and I will likely wait a bit longer or look for specific findings before I would order that test, that again, medical consensus would

regard as unnecessary at that point.

Than an additional benefit of this program is it monitors for new technology and novel applications for existing technology. We can get three claims for a CT scan of the abdomen, a CT scan of the pelvis, and a radiology claim that relates to a computer construction of an image and the diagnosis is abdominal pain. We'll typically pay that.

In our precertification program we will learn when the doctor calls up to precert that that's a virtual colonoscopy. There is not a code for that yet so it pays under existing codes. The vendor that we use can tell the doctor that this is not an approved technology at this point for our health plan and not approve it. So that is an unanticipated spinoff, a benefit of the program.

On the negative side, these are expensive and specialized programs that you few health plans could carry off on their own. They do require vendors doing very high-quality business. It adds a non-reimbursed administrative expense to the ordering physician for every study. Then finally, because it works mainly by the effect of educating the physicians and telling them what the criteria are, you

lose the high rate of denials very quickly, even if you do see them. So it is difficult to document internally for us to justify the continued expense of these programs when we don't see a big difference in trend. We do see some difference but we don't see a big difference in trend from year-to-year.

But I think in the main we believe that this is an effective program. We think that the charge that we need to give to our radiology vendor in this program is to absolutely minimize the interaction cost for the appropriate procedure. Get that down to nothing if they can. They are able to use telephonic, fax, and web-based technologies to really reduce those costs and increase volume. And then secondly, to really have available when the doctor calls, if the test is questionable, an appropriate specialist to really guide them in the right direction. Both of the those things can be fairly expense to carry out.

Privileging is the restriction of payment defined to particular specialists. We do have this program in our PPO program. We don't apply it to a terrific number of procedures. Radiologists are paid for all studies, and then appropriate specialists are paid for specialized studies.

The main impact of this is that it does eliminate high-volume, low-quality non-invasive studies in the primary care physician and podiatrist's office. Doppler, ultrasound, echo kinds of studies really are in that situation. And then nuclear cardiology is a very high-volume, high-cost procedure that we really do not want to see disseminating out of the specialist environment.

Pros and cons of privileging? It is relatively inexpensive but it does require accurate specialty and provider type listing in a computer file that your payment file can talk to. If you have not paid in a health plan anything based on specialty before you might be surprised that you don't have that. We were surprised that we didn't have it when we tried to implement the program, and it does require some work to get those systems talking.

It eliminates high-volume, low-quality studies. The diagnostic equipment that becomes somewhat obsolete in our tertiary medical centers often does not go to the Third World. It often goes down the street to another doctor's office where it lives another life.

Against the privileging, it really does restrict for services within the scope of practice of a physician,

something that physicians are very sensitive about. It may limit access in a rural area, and we have exempted our rural counties from this program to deal with that. And it's a blunt tool. There are primary care physicians out there who do these tests only when they're absolutely necessary and do a fine job, and unless we want to get down to the even much more expensive proposition of privileging them individually, which again, our overhead doesn't permit us to do, we impact them as well and we really wouldn't want to do that in a perfect world.

The final thing I'll mention very quickly is that within our PPO program we profile the cost of care for each of our physicians within a number of specialties. We haven't figured out how to do it for everyone, but we do it for primary care physicians, allergists, dermatologists. We're doing it for pain medicine specialists now and a few other groups. We look at the ones whose cost of care is substantially higher than their peers, and we identify and notify the high-cost outliers of the pattern. Again, when we send them a letter saying, the cost of care in your practice is pretty high, we find that that has been generally ignored and had no impact.

But our current letters say, because costs of care in your practice is very high our credentialing committee has voted to remove you from our network. Then the rest of the letter tells them how they can stay in. Those letters do get some attention. So the possibility of sanctions has to exist, not just on paper, but in the physician's mind.

Pros and cons of profiling are that the process clearly focuses on the bad apples. When physicians object to administrative cost of doing precertification or losing of clinical privileges they always say, I'm a good doctor. Why don't you go after the bad apples? This is a program that really does focus on people who are at least statistically inordinate utilizers of various procedures.

It can be applied to many procedures. We find that imaging is always a major contribution to cost of care in our primary care specialty areas. But it does apply to things that we see a lot that you folks are not as concerned about like acne surgery, but also physical therapy; a number of procedures that can put people in this situation.

The other positive thing is that the impact is usually correction. Eighty percent of the time when we notify a physician of this type of practice pattern, within

two years they are within peer norms, which we regard as within 25 percent of the peer group in terms of average payment per patient. So the impact is usually correction. The need for disaffiliating doctors from the network is much less than you might anticipate.

On the con side, it's something that you can't do without a large database for comparison. It's time-consuming and confrontational. It's the opposite of precertification which really is best done by a highly specialized organization. This really can only be done by someone that does it every day within the health plan. The have to understand what's going on in Flint, Michigan, and Saginaw, Michigan and Grand Rapids, Michigan and our various issues around access and specialty really to do this appropriately. So it's not an easy procedure.

Then it must consider reasonable practice variation and risk adjustment. The physicians want to have us adjust their data to compensate for the fact that their patients are sicker and all of the other reasons that physicians believe cost is high, and we aren't able to do that electronically, but we do do that on a one-on-one basis, and then physicians are very sensitive to this type

of sanction.

Methodologically complex to say what the outcome is, but we believe that we achieved initially an absolute 10 percent reduction in cost of outpatient imaging at the beginning of the program and a slightly lower continuing trend that results in somewhere between a 20 percent and 30 percent difference between what we would have experienced in managed care and what we have in our PPO.

Just three bits of information that talk about this self-referral, just if you are concerned that it might not really exist. There's publications that show selected imaging costs four to seven times higher when they're provided by the ordering physician, even when the services are readily available outside the doctor's office. That makes a big difference. We have one experience where neurologists owning an MRI equipment resulted in 30 percent higher community-wide utilization. And then our radiology vendor has told us that they managed two areas next to each other, adjacent areas, where the nuclear cardiology procedures are twice as high in the environment where the cardiologists own and operate the nuclear imaging machines compared to similar environment where those are in the

hospitals and the cardiologists don't have a financial stake in the use of that equipment.

Thank you.

DR. REISCHAUER: Thank you. Ms. Farnsworth.

DR. HAYES: Let me, if I may, just check on our time here. We are scheduled to go until 11:30. Cherrill has a 15-minute presentation. Is it okay if we go over a little? I'm not sure how long the discussion is going to last but I have a feeling it's going to be a little bit more than --

DR. REISCHAUER: The longer the presentations take, the less the discussions will take.

MS. FARNSWORTH: I will try to help catch us up, because I've always been able to talk fast anyway.

HealthHelp is a radiology benefit manager that's really based on evidence-based medicine, quality and safety. We believe that methodologies that have resided in imaging in the past haven't worked or we wouldn't see the trends that we are seeing today. Within HealthHelp we see anything from 15 percent trends to one large Midwest BlueCross BlueShield plan that had a 40 percent trend in outpatient imaging. We have about 17 million lives in our data

warehouse so we have a wonderful ability to look at different plans with different benefit design and that are doing different tools and see what is working best, and also see the feedback from those physicians that are interacting.

There certainly are programs -- we have seven standardized programs. We only have one plan that we for that is using all seven, because in certain geographic areas things are appropriate or things are not. I know that is something that's very hard for Medicare to deal with.

Our programs are focused on making sure that we get the appropriate procedure, and hopefully not with a hassle factor, but more on evidence-based, education, appropriate site of service, and the correct payment. We tell radiologists and other imagers, we certainly want to pay them for what they did, but it's very important that we don't pay them for what they didn't do.

One of these programs, as you can see on this slide is about provider privileging. I think we've all talked about it. I think it's becoming very important. Our programs are all evidence-based based on peer-reviewed literature, not the world according to us, which I think is very important. At any rate, it's specialty specific. We

want doctors to be able to do those things that they were trained to do in their residency program. But if they haven't been trained to do them, we don't want them doing that.

An off-the-wall outlier example is we have a plan, one of our plans who actually has podiatrists reading MRIs, and they are having to reimburse that. That's a severe example but it's a lot of money, and these tests many times get done over because no surgeon or therapist is going to act on an exam that he doesn't feel was read by the right person.

So our provider privileging focuses on non-radiologist. We have discovered that the quality in a non-radiologist's office on equipment and on the professional read is very low. As a matter of fact this literature here points out that 10 percent to 35 percent of non-radiologists have an error in their imaging examination. Sixty percent to 90 percent of all non-hospital physician-based imaging is performed by non-radiologist. So when we look at our imaging costs and our spend, we have to look at the non-radiologists. Otherwise we're the tail wagging the dog; we're not hitting the biggest piece of our spend. And of

course, we believe that all of this must be based on published literature and national experience.

What I did for you, and I'm not going to spend time on these numbers -- you have them and can look at them later -- is I used an example of one of our payers. They have 2 million PPO members, all fee-for-service like Medicare. They spent $709 million in outpatient radiology. None of these savings are based on inpatient. Their trend was 12 percent when we took on this task, and I wanted to show you what they saved by implementing different ones of these plans.

Provider privileging. We have certain areas that we don't believe any imaging privileges are merited based on the education of those physicians. Ones that do, and as you can see here, for this program was a $45 million potential savings. What we have shown here is a $27 million saving because we see that about 40 percent are going to the right doctor. So they're not eliminated, they're just going to the appropriate physician. So with that in mind, about a $27 million savings.

Site inspection. This is one that is just near and dear to my heart. I don't think Medicare enrollees or

any citizens of our country should be exposed to some of the old imaging equipment and high radiation dose that we see. We've seen a lot of equipment that's pretty shocking that's used it physicians' offices.

What we're doing is literally assessing the safety and technical quality of outpatient imaging facilities. This is a program that is not about high quality. This is about minimum safety. Just please keep our members safe. We provide objective information that we can use for participation and the technical component privileging. We then can assure our members and their physicians that the contract imaging facilities are safe. And it definitely complements provider privileging.

I'm showing you this from a plan. This was actually published and presented at the RSNA by our group and also published in Radiology by Dr. David Levin and Dr. Bill Oreson, a part of HealthHelp. This is interesting. This plan, they actually had a chiropractic vendor who had represented and warranted that all the imaging equipment was safe. We found podiatrists using old dental equipment to do toes. We found facilities that actually had no imaging equipment at all and were billing our payer. We found one

internal medicine physician who the nurse said the chest machine hadn't been plugged in in four years. It didn't work, but they were showing a positive or a negative film to their patient and then billing our plan.

I will tell you that this plan is in the state of Utah, the healthiest state in our country. So this is not something where we're going to a place we expected to see poor imaging equipment. Remember, this is not what we would consider high quality. This is basic safety. Forty-nine percent of all chiropractors in the network did not pass. And unfortunately, we had one radiology group that didn't pass either based on old CT scanner that they had in the practice from the 1980s.

The savings opportunity here was pretty clear. This plan was adamant that their enrollees were going to be safe and they were going to meet certain minimum standards. You in Medicare have this type of thing, a precedent for this with mammography already that's overseen by the FDA. The savings opportunity for this plan was $5 million dollars and we certainly saw that -- really this was conservative because it was based on a 5 percent reduction. Most of our plans see something like 10 percent reduction in cost

because of the certification.

We do do claims editing and claims review. We find that that's a very strong area to save money and it's certainly not -- we do use the CCIs as Kevin Hayes had referred to. But more than that, we've added a number of edits based on technology, changing technology. As an example I'll to you, when the CPT code for CT of the abdomen and CT of the pelvis were developed, those were two very separate exams. Today with ultra fast slip ring technology, that second exam might take an extra two minutes or three minutes. Does that radiologist expect to receive two payments? We haven't had any pushback when say, no, that's one exam on the technical component.

So we have a lot of edits that we've added that are just based on all the good things that have happened with new technology that have now made our payment policy a little obsolete.

The savings opportunity in our plan here, if you look at the risk management edits, these are edits that have to do with paying a fraudulent claims inadvertently. So we consider that risk management because if you're working for an employer he's certainly not going to like you spending

his money that way. The policy edits that I had referred to earlier, combination edits, those edits are all based on technology, not on medical necessity. The savings opportunity here was $48 million, $49 million. The savings that we projected was $31 million, assuming that the plan might only take 40 percent of our policy edits.

We are big believers in consumer education. We believe that citizens of our country, enrollees in our plan are our partner, and when we can get information to them they will vote with their feet. They want to know and they will study and they'll read. Some of our plans have actually used this for benefit design as well. This program is called Rad Aware. It's written at the sixth-grade level. We actually had teams of sixth-graders take it and pass the test and understand it.

So one of the things that we're teaching is that imaging is good. It's great to have your mammography. You need to do that. We also talk about the fact that asking for, as Miriam pointed out, a full body CT is not what you want because the radiation load you're getting and also the false positives that you might have that frighten you and lead you down a path that spends a lot of money.

So we want patients to participate with their doctor in these imaging decisions and have some thinking. They have a right to ask, is a radiologist going to read my exam? They have a right to ask, has anyone accredited this facility? We want them to know that.

Our savings opportunity here we're never going to know, but just a conservative guess, if there were only two scans per doctor per month that were not done because a patient asked for it and those only cost $100, a national opportunity for savings here is $400 million. I think you who are physicians know that two scans not done per month at $100 each is pretty low. But Rad Aware for enrollees, we have found has been very important.

We also show the enrollee knows what his copay is when he schedules his exam, he understands what his copay his, and he understands it's different many times based on where he goes to have his exam.

Physician proficiency in ordering. We think a highly-educated ordering physician panel will get way in front of the power curve as far as trends. Instead of the hassle factor -- and this is why we're friends anyway. We're sparring a little bit -- is that instead of the hassle

factor of calling and asking, what if you knew already, because you actually took an online exam?

So we have an online ordering physician exam, four hours of CME credit, all based on evidence-based literature. You can't fail because it's multiple choice. You click on the pdf file, read the peer-reviewed literature. It has the answer in it. Then answer the question. It's actually scored while you take it so you can see if you're -- what we see is the first two or three they miss because they're not reading because they think they know this already. Then the rest of them, they start reading and they pass.

So it teaches things like only use imaging when it's going to influence your clinical decisionmaking. If you are going to do imaging but you're not going to do surgery anyway, then why do it? Instead of ordering the multiple exams, only order one.

Summary of our solutions, just to take clear you quickly through that. The problem, the solutions and the lessons that we've learned. I think we all have stated that self-referral leads to over-utilization. We see it in the data. We've seen it in the studies that the GAO had done in Florida.

The solution. Criteria for physician privileging based on evidence-based literature.

Lessons learned. You can save, in this example I gave you, a lot of money. The quality of imaging facilities varies widely, and it's a safety issue. It's important. When the bad actors go away you save a lot of money.

Loose rules on claims payments. We need to tighten those rules and make sure that we're spending our money wisely, just like we do in other areas.

Patient demands waste exams. So consumer education. The correct exam is not always ordered. We love our Rad Excel program. We find the ordering physicians like it, and we do give incentives, or our plans often give incentives around a higher reimbursement if you have taken this exam. You can afford to do that. One of our plans actually is giving a flat $300 if you take the exam. Talk about the return on investment. If he just ordered one less CT next year, it's huge.

And ordering MDs need to be empowered with updated information. They can't keep up with it all and they need to have this in front of them.

I'm going to end with that and we can move on to

the questions.

DR. REISCHAUER: Thank you. We'll begin with Ralph.

MR. MULLER: Thank you to all three of you for this array of fascinating information. One of the ones that probably was most alarming to me is the facility failure rate and I want to explore that chart with you a little bit more because I'm a little surprised that based on the failure rates you have on that chart which go 7 percent to 40-some percent, that the savings that you estimate is only about 5 percent. That surprises me.

Second, I would say, when you have the kind of proliferation of imaging to places that are not as traditionally regulated and scrutinized and you show that in one of your other charts, and you combine that with the consequences of self-referral and I think Dr. Ruane and Miriam also talked about how the incidence is higher, and this is known in national studies when the people ordering it own part of the facility and so forth.

So first I'd just like to get the facts, why is only a 5 percent savings on the facility failure rate. But then maybe speak a little bit more -- it strikes me when

sometimes we're talking about how the market model may save more in terms of -- than the regulatory model, there seems to be some evidence here that regulating these facilities more fully the way other institutions that are more used to being regulated, may have some real power. And especially when you put that together that in many of these facilities that have conflicts of interest in terms of ownership and so forth.

So maybe any one of you or maybe Cherrill first can -- maybe you can speak to your chart first and then maybe you can all speak to the coming together of these non-regulated facilities with a complex of interest in ownership.

MS. FARNSWORTH: The 5 percent that you saw, there was a 180-day right to cure, so some folks did cure, which is good.

MS. DePARLE: What does that mean?

MS. FARNSWORTH: We actually had a course on CD that we gave to everyone on how -- if your failure was this, this is what you do to cure it. We let them correct it. It wasn't punitive. All we're asking them is to be safe.

MS. DePARLE: So correcting it means changing

their equipment, or what would they do?

MS. FARNSWORTH: Changing their equipment.

MS. DePARLE: Because if they did a read wrong, it's wrong.

MS. FARNSWORTH: Exactly. If they did a read wrong, it's wrong. But this is equipment, so it would be replacing a piece of equipment. I think the state of Utah, there are many physicians that have the money to do that. I don't think we would see that on a national basis. But 5 percent of your imaging spend is a lot of money.

DR. REISCHAUER: But also the fraction of all services delivered by radiologists is probably very hot and they have the lowest rates, so there's a weighted average of these failure rates.

MR. MULLER: Bob, one of the other charts points out that when it goes to the distributed settings, then in fact it's not -- the radiologists are the ones in institutional settings. But by and large, once you go to these distributed sites -- I have to see what table it is -- then in fact it's these other people who start doing the imaging much more fully. I can't remember whether it's Tom's or Miriam's tables that indicated that.

DR. RUANE: If I could just comment on that as well. Really I think the market is always important and I think that if you take the approach that you are going to cut fees or not allow fees to increase for professional services like evaluation and management codes, this is exactly where the increased payments comes up, with more frequent tests.

We actually had an inspection and accreditation program initially and we found out because of the size of our plan, when we found really bad equipment doctors bought new equipment and had to support that. If you want the kind of doctor that's doing toe x-rays with a dental machine to buy new equipment and have to pay it off, I think that's the balance of where you get to with that. But I think all of us agree that this type of safety needs to be addressed, but the economics are difficult.

MS. SULLIVAN: I would also agree because I think one of the benefits that we have found is that by expanding the freestanding imaging facilities, increased competition, less desire for the physician groups to purchase this, and also incent them so perhaps it isn't the revenue stream that they were doing by the volume, but getting them to subscribe

to the quality and the evidence-based guidelines that there can be some win-win where they're going to be able to be benefitted for following those protocols without just having the proliferation and having the capacity issues that we see.

MR. MULLER: Also just as a follow-up, I'd like to have you -- I think you're commenting on where I see the convergence of the distribution of the imaging equipment, especially to be people where there may be some real incentive to higher use through self-referral. I would also -- I think we discussed a year or two ago, and I don't know whether you have estimates, as to how much the cost of imaging equipment is going down and some kind of -- obviously, it's hard to think of this as a weighted average, but there have been -- this is one of the areas in which in fact the technology is considerably less expensive than it was four or five years ago. I know at least some of the large companies, the GEs, the Siemens and so forth, seem to have an aspiration to put one of their imaging devices in every doctor's office in America.

So I thin that will continue to occur and therefore we'll have these two factors working together.

MS. ROSENBLATT: My question is for Cherrill. Your slides weren't numbered but there's a slide that shows a savings opportunity projected PMPM of $35.83, which I find astounding. Was that a Medicare population, a commercial population? And what's included in that number?

MS. FARNSWORTH: It's a commercial population. It's not Medicare. And it's on the slide that's titled what? Under which program?

MS. ROSENBLATT: It says, imaging facility technology certification.

MS. FARNSWORTH: This is on the site accreditation process, the facility accreditation process. Most of the money in this particular situation was in non-radiologist offices that did not have equipment and the savings, as we pointed out, is huge. But not only that, the patient safety issue is a big one.

MS. ROSENBLATT: So is this a fraction of the total membership then?

MS. FARNSWORTH: Of this plan?

MS. ROSENBLATT: Yes.

MS. FARNSWORTH: This is the PPO line of business in this plan.

MS. ROSENBLATT: The total PPO membership?

MS. FARNSWORTH: Right, 2 million lives.

DR. ROWE: If I can help, here's I think the problem that Ms. Rosenblatt may be having, and that is that if this is a commercial population with a total PMPM of $200 per member per month and you're going to save $35 per member per month, that's 17 percent, which is 7 percent more than the total cost of imaging. So that not only is all imaging disappearing but you're saving twice as much as you would if all the machines were thrown out. So you have to have the same number of protons and electrons or something here. You can't do this unless the PMPM is $400 or $500 per month, in which case it wouldn't be a commercial population.

MS. ROSENBLATT: That's why I asked.

MS. SULLIVAN: I think the other component, and maybe this is in relationship to that, that we found in evaluating the vendor programs and we solicited the experience of 15 plans throughout the country, and we found that the plans who had percentage off or discounts, more indemnity-based networks saw significant savings, and part of that was just steerage to lower-cost facilities. That definitely helps to bring this --

DR. ROWE: Ms. Sullivan, we're not questioning that. We're questioning, if I'm spending $15 on something, you can't tell me I'm going to save $25 on it by using your program.

Do you guarantee this savings?

MS. FARNSWORTH: We have performance penalties in our contracts. But if you look at this, the projected spend is $949 million. The savings is $5 million.

DR. MILLER: So the PMPM isn't necessarily the savings number.

MS. FARNSWORTH: No, the projected PMPM is the gross amount --

DR. ROWE: So what is the savings on a PMPM basis?

MS. FARNSWORTH: There are 2 million people in this plan --

DR. MILLER: It will be roughly 5 percent of $35.

MS. FARNSWORTH: Exactly. I'm sorry, the projected PMPM is if you did not put this program in place.

DR. ROWE: PMPM for what? Is this radiology or all health care services?

MS. FARNSWORTH: All modalities in imaging.

DR. ROWE: Just imaging.

MS. FARNSWORTH: In imaging. So chest x-rays through PET scans; mammography.

DR. MILLER: So the way I read this slide is $35 per member per month in imaging. Then you go through the multiplication to get the total spend, and then you take 5 percent in savings.

MS. FARNSWORTH: Exactly.

MS. ROSENBLATT: But $35 is a very high PMPM for imaging.

DR. ROWE: It's a very high number for a commercial population.

MS. FARNSWORTH: This is a plan that has a lot of indemnity. It's a large Blue plan with a lot of indemnity work. And it's in a state that we believe, and this plan actually ended up believing, that the consumers were driving a lot of these costs.

DR. ROWE: Are these savings net of your expenses and your charges --

MS. FARNSWORTH: Yes.

DR. ROWE: -- or are these before?

MS. FARNSWORTH: Net of our fees.

DR. NELSON: And they pay chiropractors

[inaudible]?

MS. FARNSWORTH: Right. Mostly self-insured employers. Mostly indemnity. It is not a CON state so there's lots of equipment everywhere. Clearly they had to do something about their imaging costs.

DR. ROWE: Moving on, just a couple observations. One is nomenclature, which I thought was kind of interesting and almost sad in a sense. But Ms. Sullivan said -- it was interesting -- we're concerned that too many patients are being scanned with the machines and she said that one of the things that she was doing was they were going out and scanning the machines. So not only are we scanning the patients but we're scanning the machines. We should use a different word there. It sounds like we've got machines scanning machines.

But I think that's an interesting difference between, or a subtle point here on precertification that everybody should be aware of, because physicians are allergic to precertification because it's telling them how to practice medicine and they don't like that. I understand that.

But one of the ways that this is done in some

plans, I think, is that you don't have to do necessarily precertification as long as you do prenotification. That is you say to the physician, okay, you can order that procedure on that patient but you have to call us and tells us you're doing it. At which point -- it's not like you have to get our approval, you just have to notify us.

When that phone call comes in then the health plan can say, thank you, doctor, and by the way, the radiologist in our network with whom we have a contract who is closest to that patient's home address is doctor so-and-so and we want you to send the patient to that doctor for this scan. Because one of the major drivers of cost here, as was included in one of Ms. Sullivan's slide is leakage, and one of the issues is steerage. So that if you have a network that you're contracted with at certain rates but the doctors are self-referring or referring to the doctor down the hall who's in their group or in their building who's not in your network, that is a source of a lot of the additional expenditures. You can actually influence that without necessarily precertifying as long as you can prenotify or somehow get the doctor or the patient on the phone before the test is done.

So that's a subtle difference but I think -- I don't know if you've had experience with that but I know at least one plan has had some positive experience with that.

MS. FARNSWORTH: We definitely do that. Not only do we at that time keep the patient in network but we also give him his differential copay, because in many of our plans, if they go to the hospital outpatient they have a larger copay and if they go to freestanding they have a lower copay. We also tell the patient -- this is including the enrollee in decisionmaking. We also tell the patient if they charge to park, if they're on a bus line, if they provide free transportation, their hours of operation. These things are really appreciated.

DR. RUANE: Just a quick comment. I think the two things are subtly different but they can merge, and a prenotification requirement that includes some clinical information and produces automatic approval if they're met becomes precertification. Also, no physician believes that he or she needs precertification, but many believe that their colleagues would benefit greatly. So again, it's one of those beliefs that needs some testing.

MS. FARNSWORTH: Another thing that we have done

that I think is helpful is even though it's notification, as you said, Dr. Rowe, if the test does not look like it falls into appropriate exam, we're auto e-mailing and auto faxing out the peer-reviewed literature regarding what the right decision would have been. We don't say no.

DR. ROWE: If I can just continue one more second. One approach that we've tried which has worked in certain geographies is a kind of redux approach. That is, we've gone to capitation.

What has happened is we have capitation contracts with large imaging groups and they get a capitation fee for all the Aetna patients in the area. So that when a doctor feels that he needs a CAT scan or an MRI of an elbow or a shoulder, he'll send a patient to one of our participating radiologists who's capitated. Then it's not us telling the doctor that he doesn't need an MRI of that shoulder; that a plain film of a certain view is really the right x-ray, or no x-ray at all. What's happening is a radiologist examines the patient who's in our network and then calls the referring doctor and says, Joe, I've seen Mrs. Smith and I've examined her knee and I know you ordered an MRI but this is the test you really need and that's the one we're

going to do.

It's a little bit like when I was a practicing physician I didn't order an operation. I ordered a surgical consultation and the surgeon came and told me whether he thought the patient should be operated on, and if so, what operation they needed. I wasn't telling them what operation to do. I was an internist seeking advice. We'd like to get our physicians thinking, and I think in Medicare, Medicare should get their physicians thinking that they're getting advice from radiologists about what test is the test to be done rather than getting Medicare in between the referring doctor and the radiologist.

MS. DePARLE: Jack, does this mean that you will not reimburse the doc for doing it in his office? So under these arrangements in the geographies where you use them, they send them to the radiologist group?

DR. ROWE: Yes, I think in those geographies where -- I believe that that's the case but I don't know it specifically to be the case so I don't want to be quoted. And there are only so many geographies where we can find a big enough radiology group that confident enough, et cetera, and our volume and our market share is big enough so that we

can develop a mutually beneficial arrangement to capitate. But where we do it, I think it controls costs and it improves quality.

DR. REISCHAUER: But you also have to monitor access because the radiology group has an incentive to, at the margin, choose somebody who's outside of your system because they get a benefit from that and they don't get any benefit from one more scan for your patient.

DR. ROWE: I think that's right. But you have some data available in an ongoing way to give you a sense of whether the utilization is appropriate.

What you really get is you get feedback from the referring physicians saying, this is working or it's not. And many times they say, you know, I've learned a lot over the last six months in all these conversations with radiologists about which x-rays I've been ordering all these years and which ones I should have bee, and that feedback part is very positive.

DR. NEWHOUSE: Dr. Ruane said he was jealous or something like that of Miriam Sullivan working for a real managed-care plan. I think that probably you can square that for Medicare.

I was wondering if any of the three of you had any reflections on whether any of the techniques you talked about could be transferred into the traditional Medicare world or not.

MS. SULLIVAN: I think that probably the greatest opportunity is around payment restructuring. I think we all talked a little bit about things like continuous body part, looking at multiple procedures. I also think one of the things that we're really excited about in the Boston area is that meeting with the physician groups and the large IDNs, they're putting their own programs in place to say, we hear loud and clear what the options are out there. We did throw out some capitation arrangements, similar to what we do for lab services, and really looking at what is the best opportunity that we all have a role to play in this.

We've seen in one particularly large IDN, they've hired radiologists internally using the American College of Radiology guidelines, and depending on where their physicians within that IDN sit, if they are above the benchmark they need to consult with their internal radiologist. So I think we've seen success and put the onus on the particular physician group.

I think the other piece of it gets to the self-referral. I think if that continues, we start with x-rays and now with all of the other advanced imaging that we talked about, to the extent that that's allowed to continue and they set up that -- then I think it's just going to create monopoly situations and in that avenue it's only going to get worse.

But I do think, given the opportunity, that it's not punitive for physicians, but there is an upside for them, is where we feel we're going to be able to be successful going forward.

DR. RUANE: I'll let Cherrill comment on the precertification piece, but our key, I think our opportunity to really make a difference really relates to network management, really relates -- and there's two key things. One is the doctors really have to want to be in the network. So there has to be good payment. There has to be good provider relations. They have to get prompt payment. They have to be happy with that. They have to feel that they're being treated fairly. Then you have to connect that with the threat that they might not be able to if their behavior is not appropriate.

So I think that to my mind, I see in our commercial health plan the opportunity to improve the quality and cost is really more related to the privileging and profiling piece. But you do have to have those two components. The fees have to be such and the administrative simplicity has to be such the doctors really want to be in, and the health plan really has to have the authority to say, Dr. Smith, we have to part ways.

DR. ROWE: There's a really important point here I think that we shouldn't miss for Medicare. That is that much of the ability of a health plan to do this is related to its local market share. Of course, BlueCrosses have dominant local market shares.

DR. REISCHAUER: Medicare does pretty well with market share.

DR. ROWE: That's what I was going to say. And particularly when you look at the fact that utilization might be 3.5 times as much in a Medicare beneficiary as an average commercial beneficiary, that if there were ever a plan that should be able to implement these kinds of things, some of the inhibitions or impediments that health plans had, Medicare will not have because of the market share.

MS. FARNSWORTH: I think without question, I know the work that Medicare has done with the CCI coding issues has been a good experience. Adding edits regarding the technical area of radiology, you could build on that. I certainly think that privileging of the technical component and privileging of the professional components -- I know Medicare has had some experience through MSQA and mammography certification that we could build on with the technical privileging. The professional component privileging is a policy. So as long as it's evidence based, I think certainly having that in place is something Medicare could do.

The other thing that would be interesting to see is something like a consumer education program about imaging, like our Rad Aware. I think that Americans would really appreciate the fact that Medicare distributed information that they could learn about. The feedback we get on that is, this is the first time I felt like my health plan ever cared about me. Those kinds of things are excellent feedback that health plans love to get.

Even with the new Medicare Modernization Act there's some incentive for hospitals, a financial incentive

for hospitals to report the quality indicators. Certainly doing something like education, benchmarking, profiling, or education of the ordering physician and giving an incentive; not a mandate but an incentive, a financial one I think could easily follow on to that over time.

DR. NEWHOUSE: Can I ask a follow-on? Does Medicare have the same kind of ability to decertify an unsafe radiologic facility that it would in some other provider types? That is, we saw all of these failure rates, rights to cure and so forth.

MS. DePARLE: Some of this isn't even regulated by Medicare. It was at one point FDA.

DR. NEWHOUSE: But Medicare could say, to qualify for payment you have to meet such and such a standard or we deem such and such an entity to --

MS. DePARLE: Medicare could do that.

DR. NEWHOUSE: But does it? That's my question.

MS. DePARLE: We did something like this with DME suppliers, just doing site visits to them. But the FDA has some regulatory authority here, doesn't it, Mark? Or is it CDC?

MR. MULLER: The problem is, if I can just put it

in empirical -- these sites are not necessarily inspected by the states. By and large, large facilities like hospitals are inspected by states, the joint commission, et cetera. These doctors' offices and so forth are by and large not necessarily inspected for that. So therefore, for Medicare to do it you first need that prior step of a local authority, usually a state, to go certify. Then Medicare could act on that, but by and large they're not inspected.

MS. DePARLE: I don't think you have to have that. We did it for DME suppliers. I think Medicare can go out -- it takes resources so it would take the QIOs or someone to go out and do it. But based on what I've seen on the quality here, I'm very disturbed by that.

DR. MILLER: I was keeping a list of what I thought Medicare can do, and that can be for another conversation. But on this specific point, I think you could talk about conditions of participation here, you could actually talk about things like failure rates and the types of standards that you would want and either have an organization deemed to look behind it, or you'd have to think about some element of, whether FIs, QIO, or whatever within the Medicare program. I think this is reachable on

the safety standards. I think this is one of the easier things to do.

MS. DePARLE: I'll make just a quick point. I think this has been a great discussion so thanks to Kevin for putting it together.

I'm surprised that the correct coding initiative doesn't have any of these imaging related edits in it. That seems to me to be the low-hanging fruit, as it were. But the more provocative point out of all this to me is the self-referral issue. This discussion adds a gloss to that issue as I've always thought of it, because I've always thought of it as more of -- the policy against self-referral is really driven by concern about over-utilization and incentives that physicians may have, physicians or other practitioners may have to perform services that aren't needed.

Here what we're hearing is something that's even more troubling, which is the quality of some of those services appears to be really questionable. So it wouldn't just be an issue of financial incentives and Medicare spending growth being higher than it should be, it's also a matter of the quality being -- looks pretty terrible.

I guess I am wondering, are there other analogs -- and like is maybe a discussion for later since you're back in the audience, but it seems to me that's something that came out of this that may be more difficult, Mark, if you did a list of the things we could do. But it sure seems to cry out for something there. I didn't realize that -- I hadn't really thought about it that any -- I assuming this is saying that any practitioner who's certified by a state and participates in the Medicare program can do any of these imaging procedures?

DR. MILLER: I think from Medicare's perspective that's pretty much the situation.

MS. FARNSWORTH: That's the situation across the country.

MS. DePARLE: That doesn't seem right to me.

DR. ROWE: [Inaudible.]

MS. DePARLE: They're doing some privileging and they're doing some things around it. We're not doing anything right now.

DR. NELSON: Is there any evidence that your programs wash over to other payers within the area? I would think that facility certification might lead some of the

facilities with substandard equipment to close down, and that would benefit other payers? Or do they continue with substandard equipment?

The same might be said of prior authorization and privileging functions. Would other payers like Medicare benefit within the areas where you're operating? Is there evidence to that effect?

MS. FARNSWORTH: The evidence that we have is that it depends on the state, but I'll use the example of Florida. Where we have done site visits and a plan to chooses to not have this person on the panel for imaging, other think but not imaging, we find that they just do imaging with their other revenue sources. Because unfortunately the whole idea is you've got to get the payment made to pay for the equipment.

DR. RUANE: I think we do see spillover into our traditional product from the managed product that makes it hard to figure out what the benefit of the program is. I think none of us operates in a vacuum. We can't thank you enough for DRGs. They pay us every day in terms of how the hospital dynamics changed. So there always is spillover.

MS. SULLIVAN: I would just close in saying that

with our privileging program we have clinical radiology staff that go out and do the site visits so we feel that that's an imperative part of our program, to make sure that we don't have providers in our network that we would look to see that they are providing substandard care. That's really what we hope to maximize in the future.

DR. REISCHAUER: I, like Nancy Ann, am shocked by the quality safety issue and reflect on the fact that we almost everywhere in the United States inspect cars for safety, but apparently not imaging equipment when we allow Medicare patients to go to those facilities.

I want to thank all of you. I think this has been tremendously informative for us and we will study your slides further and be in contact with you I'm sure more as we go along formulating our positions, so thank you.

We move next along the same lines to purchasing strategies with Anne and Jill.

MS. MUTTI: Today we will present our workplan and initial findings for a project we're calling purchasing. As it has been alluded to, this will naturally build on what you've just heard. As Kevin mentioned, the particular strategies we are focusing on here are those that improve

efficiency, and by efficiency we mean reducing spending while maintaining or ever improving quality of care.

Our plan here is to first identify a range of strategies being used by private-sector purchasers as well as other public purchasers. And then second, to examine whether of them could be applied to fee-for-service Medicare. Again this builds on just the conversation you've had here except that we're looking at a broader range of services, not just imaging services.

We think this research agenda may be useful to policymakers for a couple of reasons. It recognizes that a majority of the beneficiaries are expected to stay in fee-for-service, even with the reform legislation that just passed. Also we think that pressures to contain Medicare spending growth are likely to increase, not decrease, especially given the continued growth in health care costs and the impending retirement of baby boomers.

This approach also responds to commissioners' requests for information on private-sector practices related to containing physician volume growth. So hopefully we'll give you some examples there.

As I said, it relates to Kevin's work on imaging.

This work also relates to Karen's work and the Commission's work in the past on quality of care. Certainly quality and efficiency may go hand-in-hand. But there are aspects to efficiency measures that I think deserve a more focused approach to looking just at efficiency.

This work also builds on our exploration of Medicare demonstrations that improved efficiency in fee-for-service, and those were the centers of excellence and competitive bidding in durable medical equipment that we talked to you about the last year.

Our first step in this project has been to conduct interviews, and today and in April we plan to focus on summarizing our findings from those interviews and begin to consider what some of the issues might be for Medicare to undertake some of these approaches. We plan to come back to you then in the fall with more specifics on what some of those options could look like.

To date we have interviewed people in 13 organizations, including four purchasers, five health plans, and four benefit consultants. We have asked them to identify the array of approaches they have undertaken and some of the implementation issues that arose in those

strategies.

Let me first note a couple of caveats in this summary. First, we looked at people who were innovators, so they might not necessarily be representative of the whole market. Our findings may not, therefore, what the norm is.

Also, this is an interim report so we expect that our future interviews over the course of the next month will help round out our understanding of what's going on out there.

In general, our interviewees identified strategies that were directed at three drivers of health spending, volume of services, productivity in delivering those services and the price for those services. We'll present the strategies with that organizing theme in mind, but we certainly recognize that the strategies do overlap the themes. It just seemed helpful at the time.

So let me start with volume strategies. By far the type of volume strategy that we've heard most about is directed at identifying efficient provers and improving provider efficiency. As motivation for this approach many of our interviewees mentioned the Fisher and Wennberg work on geographic variation in health care services. They also

mentioned research showing that both high-cost and low-cost providers are able to offer quality care.

At a minimum, this approach involves measuring the relative efficiency of provider or provider profiling. We've heard some of that this morning. Approaches varied on a number of dimensions. First, plans differed on who they profiled. Most of the plans that we spoke to really focused on profiling physicians. Among them, some of them both profiled both primary care physicians and specialists. Some focused on one or the other. Some also focused on profiling hospital services, and within that they might profile the whole hospital's performance or they might focus on selected services that they were very interested in. We did hear about them profiling radiology services like we heard this morning.

The measures of efficiency varied largely by the type of provider that they were profiling as well as if they were profiling an individual or a group. In general, the themes that we heard were that people were interested in using claims-based data for administrative ease in their profiling. They were intending to do the best job they could on adjusting for case mix. They also seemed to be

interested in moving to measuring care over an episode, not just an individual unit of service.

Along those lines, several were using commercial software products that measured physician efficiency by comparing what expected utilization would be to what actual utilization would be. One plan we spoke to also looked at whether certain surgeries were necessary to begin with. So that rather than measuring efficiency once the episode was triggered, they examined whether the episode was necessary to begin with.

For primary care physicians, plans used measures such as total cost of patient care, referral patterns, use of generic drugs, admissions to the ER. For hospitals, measures tended to be total costs and mortality rates associated with a particular episode.

Opinions varied on the validity of these measures, particularly so with respect to the software that was measuring these episodes. Some were concerned that it did not do an adequate job in adjusting for case mix. Some felt that they could not adequately assign patient costs to a particular physician, particularly primary care physicians so we're only using this software for specialists.

Another issue that came up repeatedly was the need for adequate data. I think we heard that this morning, that you had to have adequate claims in a given marketplace to make this work. Some plans were restricted in which markets they could do this profiling even though they felt that it was quite effective. So repeatedly we heard from people the request that Medicare make their claims data available to them so that they could do a better job profiling.

Nearly everyone indicated the need to have both quality and efficiency data; that that would be the optimal way to profile people. Some of the plans seemed to think they had a decent handle on that, were coming the two together well. Others did not feel that way. In fact one plan asked us to give them a call back if we came up with any really good ideas.

Most acknowledged that profiling had the potential to cause tension with providers who were being profiled. Some had been doing it for years. They didn't feel that it was such an issue anymore. They had overcome most of the obstacles. Other plans were a little bit more new to it and they were encountering resistance. But I think we heard a couple of themes from everyone that a few things could help

make providers more responsive to profiling. One was that the profiling criteria should be transparent. That everybody should be able to understand what they were being measured against; it should be publicly available.

Two, if they could see how actually patient care could be improved as a result of the profiling they were more comfortable with it.

And three, if the profiling was to be paired with incentives, and we'll get to that in just a moment, that those incentives should be positive ones. I think that was reflected this morning also.

So this brings me to a discussion about incentives. Certainly information disclosure is one incentive that you could pair the profiling with then disseminating that information. Nearly every plan we spoke to fed that information back to the providers. I would say that quite a few felt that it was pretty effective. That they did find that providers responded to the comparison to their peers. A couple seemed to think it was particularly effective if they could see how it was directly related to adhering to evidence-based practices, especially those -- if they could compare whether they were meeting the diabetic or

asthmatic criteria and felt that their patient care could be improved as a result of measuring up, they were more likely to change their behavior.

For disclosing this information to beneficiaries, it seemed that more plans were more inclined to disclose quality oriented information to beneficiaries, less so efficiency. One of our interviewees mentioned that they felt that beneficiaries would need some education on how to interpret efficiency information. That there was a perception that more services were better, and that that might need to be clarified.

Some plans also felt that the profiling needed to be combined with financial inducements in order to be more effective. This might be financially rewarding providers who provide more efficient care and/or beneficiaries for selecting more efficient providers. One example of this is creating tiered networks of care where profiling results are used to assign certain providers into tiers, each of which might have beneficiary cost-sharing or provider payment implications. Plans use different calculation methods to assign providers to tiers and seem to value the flexibility that they had in different markets to make different

determinations as to what the criteria would be for each tier.

Some plans were also using profiling information to designate centers of expertise or centers of excellence. They usually focused on high-cost procedures, some did transplants and then just picked one national center or several national centers and their benefit only covered care in those centers. There was no out-of-network benefit for those services. Others were interested in creating centers of excellence for cardiac, cancer, orthopedic surgeries that were in different markets around the country. There would be an out-of-network benefit for not going to those centers for those services.

Another type of financial inducement is to share the savings resulting from the reduced volume between providers and the insurer or purchaser. This may be a bonus payment being paid to providers who are able to have actual costs for an episode that are below what the expected costs would have been.

In addition, another incentive is to selectively contract with certain providers and create an exclusive network. While most reported that they were keeping their

networks broad, some did say that the employers that they were working with were interested in exclusive networks and they were planning on developing those type of products.

Other volume oriented strategies focused on paying for appropriate care regardless of the relative efficiency of the provider. They included preauthorization requirements and coding edits, both of which we heard today. I guess one thing I'll just add on preauthorization requirements, we heard that some plans had curtailed using them. They felt that they had antagonized providers and they were holding back on that. But we certainly heard at least from one about that they were reinstating their preauthorization requirements. They had gone too far in cutting back on them and they couldn't afford to lose those savings that they had been getting with them.

I won't say anything more about coding edits. We also heard about trying to address consumer demand for health care services. Again, I think we heard about that this morning too.

The one thing I'll add though is that in addition to these wellness programs, informing people how to manage their conditions, having self-assessments on an Internet

program, there were also these decision-support programs. These programs are designed to help beneficiaries choose between treatment options and be better informed about their expected care. One purchaser told us that what they did is they allowed individuals to decide sometimes to choose a less invasive option rather than the more invasive option of care, and then they were better prepared to follow along their course of care and maybe catch something that was being missed and just better manage their care. They felt that this was a very effective way of controlling demand and volume for services.

Another subset of strategies, attempt to encourage providers to change the cost of production, or reduce the number of resources required to deliver the same unit of services. In some cases this may also reduce volume.

Examples here include hospitalists and intensivists. Almost everyone we spoke to had high praise for this approach. These are specialists trained to handling inpatient or, in particular, intensive care unit care. They seemed to be saving a fair amount of money and reduce length of stay.

One plan adjusts surgeon's payments if they select

a less costly site of service in which to perform their surgery. A few plans also indicated that they bundled for hospital and physician services for transplant surgeries. But otherwise it seemed that most payers were paying providers separately on a fee-for-service basis. A few that used to capitate physician groups were no longer doing so.

We found that while payment itself seemed largely unbundled, the providers and managed-care plans were increasingly being held accountable for a bundle of services surrounding an episode of care, as we talked a with profiling, so that their ability to hold costs of an episode down might be rewarded by bonus payments or by a higher fee schedule. So in some ways there's almost like a shadow bundling going on.

We did hear from one integrated delivery system that they felt constrained in their ability to induce physicians to cooperate to hold down hospital costs. This provider mentioned that they thought that they might have a problem with drug-eluding stents, that they were being overused. He approached one of his cardiologists to ask them if they would help identify ways to reduce overuse, and the cardiologist responded that it wasn't his problem; it

was the hospital's problem; not his cost. The executive felt that he was constrained by gain-sharing, in creating gain-sharing incentives by the anti-kickback laws that exist that present this kind of arrangement.

A few plans discussed strategies they used to improve the price they pay for services. These include competitive bidding, and these were used for laboratory, specialty pharmacy services as well as durable medical equipment. Generally they reported that they got significant savings out of this benefit but sometimes it was labor-intensive, creating such a formal bidding process.

A number of plans also indicated that they adjust their price if multiple services are performed at a single encounter. That mirrors what we heard this morning on imaging services.

Tiered networks, in a sense, are also a type of pricing strategy. Plans or purchasers can accept the price offered by providers but based on that price assign them to a lower tier that's associated with higher beneficiary cost-sharing. Indeed, providers may respond to that threat by reducing their price.

Those are the types of things that we encountered

on price. Let me go to next steps here.

As I mentioned, in the next month we plan to conduct more interviews, add to our summary findings information from the literature review, and begin to broach the opportunities and challenges in applying these strategies to Medicare fee-for-service. Then we plan to come back to you in the fall for some discussion of how they might be applied to Medicare fee-for-service.

I will turn it over to Jill now for an update on Medicare contracting reforms and at the conclusion hope to get your feedback on the array of strategies we've identified here. Those that you're more interested, would like more information on.

DR. BERNSTEIN: Clearly, assessing whether there are purchasing strategies that could or should be incorporated into Medicare is going to involve a lot of discussion. You've already had some of that discussion start here today. But to set the stage I'd like to direct your attention to something that's actually new in the discussion, and the key point here is that the new legislation has changed what the Medicare program is allowed to do as a purchaser.

Briefly, the MMA eliminated provisions that restrict the Secretary's contracting authority in the Medicare program. The new law removed requirements that claims processors be nominated by broad organizations. It eliminated some provisions that made terminating contracts harder. And it ended the requirement that Part A and Part B contractors have either only pure Part A or pure Part B contracts. And it also eliminated the provision that they had to do the full range of things that a contractor has to do as a claims administrator.

Under the MMA reforms, the existing fiscal intermediaries and carriers will be replaced by Medicare claims administrators called MCAs. The new contracts will, with certain exceptions, be completed under the regular rules of the federal acquisition system. Not that these are the most nimble things in the world, but they're a lot different than what they had before. The transition to the new contracts will begin on October 1, 2005 and it's to be completed by September 30th, 2011, so we have a little bit of time. The statute specifically requires the Secretary to develop performance measures and standards and to incorporate these performance standards into these new

contracts with the contribution of physician and provider organizations and beneficiaries organizations in developing the performance requirements.

The new provisions could provide some opportunities for Medicare. First, the pool of contractors should expand, allowing the organizations with special expertise, like some of the places we've been talking about today, to compete for Medicare contracts. This could be by service or, for example, there are now special home health contractors. We could do that for other services in theory, or they could contract with organizations with special expertise in things like post-payment review or prepayment review. This could also provide CMS with an opportunity to review the various activities of its other contractors, including the quality improvement organizations and the program integrity contractors as well as the new claims administrators, to determine how the various activities involving profiling and analyzing payment and utilization might be better coordinated program-wide.

Second, the focus on contractor performance standards could provide more impetus for CMS and the contractors to focus on strategies to inform providers about

effective practice, or to devise more effective claims screening protocols, et cetera.

I will try to answer any questions about that or we can turn to them more broader issues that we've been discussing.

DR. REISCHAUER: Thank you.

DR. ROWE: Anne and Jill, I found this very helpful and I thought your presentation was very articulate. I have a number of points I'd like to make about the tiering issue which I hope are helpful. First, I think the description of tiering in the chapter could be beefed up a bit. You have it on page 10, and with respect to hospital tiering I would refer you to an article in Health Affairs by Jamie Robinson, a professor at Berkeley that was a year or two ago where he talked about different approaches that health plans have to tier hospitals and he has an example of High Mark and of the Tufts Health Plan, of Wellpoint and a couple different strategies that have been used or not used. I think it's a nice articulation of an approach so I would refer you to that.

Secondly, I would refer you to the Leapfrog Group which I think is going to come out shortly with a new

approach to tiering. So you should check with Suzanne Delbanco or Arnie Milstein at Mercer who I think may be working with them on that. So that by the time this comes out, we want to be informed of what they're doing so we can be up-to-date, because I think this tiering strategies may be the brave new world for Medicare and it would be very interesting to have a little more information about that.

With respect to the Pitney Bowes experiment which you refer to towards the end of the chapter, I think it would be worthwhile -- you are going to ask some questions about why it ended. Because you talk about how successful it was and you noted it went for two years. The question is why did it end. I think there's some political lessons to be learned there.

I would think that it's worth talking about the fact that one of the intrinsic assumptions that many institutions are using to tier hospitals is that volume is a proxy for quality. There are now some data in the literature with respect to cardiac angiography, et cetera, I think from Pittsburgh, that suggests that volume may -- the utility of volume as a proxy for quality may vary by age of the population you're studying and some other factors and

that may be relevant to Medicare. That's worth looking at because that is intrinsic in a lot of these tiers.

A second issue relates to pooling, and I think Medicare can be particularly important here. Many of the pooling issues that we've had so far have been by health plans who have been limited in their capacity to tier doctors because a given health plan has a small portion of the physician's practice. The physician says, you've only got 10 percent of my practice, it's not representative, et cetera. Medicare by virtue of its size and the proportion of the practice that it would have for many practitioners, if Medicare were willing to pool its data, administratively available data with health plans, we could have some sort of national pool and we could really have a very valid sense of performance.

I think there have been some concerns about privacy. You refer to them in the chapter. But it would be nice to examine what those concerns really are and whether or not we might be able to get anonymized data or something. It's not really about the individual patients, it's about the complication rates and other things. How many patients who have a diagnosis of an MI have a beta-blocker

prescribed. You don't have to know the names of the patients. So I would suggest that we consider looking in that direction.

Two other final points. One is I think we should differentiate when we talk about quality, tiering for quality. Anne, you mentioned that. If you're tiering in such a way that you're removing 15 or 20 or even -- say, percent of the practicing physicians, then what you have left is a tier that is acceptable quality. We don't differentiate in the chapter and in our language high quality from acceptable quality. People seem to think when you say you have a quality network that this is like the top 5 percent of doctors. What we're not doing is identifying the ultra elite. What we're doing is removing the bad guys, and we should distinguish between those two things.

This is a tremendous among to be gained and much less political pushback from organized medicine when you eliminate the outliers on the downside, because everybody knows who they are and the rest of the doctors are happy to have them eliminated. It's not like we're taking on the medical establishment by eliminating 80 percent of the doctors. There should be some discussion about that because

I think that that's important.

And that's important to the last point, and that is that I think the utility of tiered networks is dramatically influenced by the supply of physicians. The reason Pitney Bowes was able to do it in Fairfield County, Connecticut is there was perceived to be an excess of physicians, so that they could eliminate some proportion and not have access problems. Medicare is dealing with a national situation with wide variations in the numbers of physicians. I think MedPAC, if we're talking about things like this we should be mindful and express our awareness of the intersection of any recommendations with respect to this with the issue of access and the size of the Medicare network across different sections.

Thank you.

DR. REISCHAUER: Thank you for that brief intercession.

MR. DURENBERGER: You took three of my items so maybe mine will be even briefer.

Secondly, I'm so enthused about what we're doing here that I can't come up with a superlative to compliment Mark and the staff and everybody else. I just think it's

really important.

On the issue surrounding volume, productivity, price and things like that I would love to see some inclusion of the VA and all the work that the VA has done and how they've gone about doing it. I know it's a different kind of a system but I think there are ways in which -- could be extrapolated.

Secondly, the work around six Sigma, Toyota, and so forth that are being done by some of the larger probably multispecialty groups. Mayo comes to mind because I know they are doing it, and plenty of others, and what does that tell us and how does that inform the language that we use and other things like that.

Third is workforce utilization as an impediment to productivity. When I look at hospitalists and intensivists, I think in Minnesota we counted up, we now have 400-plus licensed allied health professions, something like that. The whole issue is like the role that licensure, credentialing and all of these other factors play in getting in the way of particularly clinical or system productivity. That probably a whole piece of research on its own but I just thought some allusion to it would be important.

Fourth, I would suggest that what the MMA did to prohibit cost-effectiveness study on drugs and medical devices ought to be reversed in some way and I think we ought to speak to that. I think the ability for CMS to do or sponsor cost-effectiveness studies is very important and it is just another example of the way that some of the interest groups have made sure we couldn't work on the effectiveness area.

The next one relates to the employer, the role of employer. I think Jack alluded to the Leapfrog. The commitment that the governors made in Minnesota to these same kind of strategies begins with employers, and it's the public and private employers. So the way in which the employer combined with the work the plans are doing and the work that certain kinds of provider groups are doing probably will be informative to the work that Medicare has to do.

I think that's my list. Thank you.

MR. FEEZOR: I would like to also compliment Jill and Anne for the work. In the first section where you start out on some of the limitations on Medicare's current policy in fee-for-service, I think that could be expanded a little

bit and I certainly would encourage what seems to be a history of not encouraging the individual to take better care in terms of managing their own, although arguably the new initial physical could begin to take a step in that direction.

Equally, and you talk about in a couple of different places some anecdotal comments about difficulty to do incentives across providers and gain-sharing, I think some enumeration or at least reference to that under the current policy might be helpful.

Somewhere in there there was a reference to, by providing individual's information about the quality of their provider, provider networks, there was an ability to move 3 percent per year. We probably need to be careful to make sure that that is equally applicable to Medicare as it is to commercial. My suspect would be that it is not.

Then finally, I guess I was a little surprised in your initial interviews that it didn't come out as an explicit purchasing strategy, maybe it's more under quality control, but certainly the whole movement to consumer-driven product I think is not just a cost avoidance but is an effort, a conscious effort on the part of purchasers to, by

making the patient more involved, to begin to dampen the demand side. You reference that actually in the narrative but whether you want to call that out as a separate purchasing strategy is something to think about.

Then finally, I think also individuals, particularly in self-funded plans and the ability to do risk profiling is not only to, I think, try to set out care management but is a way of saying, we are going to spend our monies on a narrow segment of our beneficiary population that need that care. As a consequence I think even high risk identification and risk stratification within the beneficiaries and differing the level of care management that you might have in that is an explicit strategy as well.

MR. HACKBARTH: This is good stuff and thank you for the work on it. I want to make sure though that we don't race into the details. I think that there might be some important threshold questions that bear discussion about whether, assuming we could change Medicare to adopt some of these practices, whether it would be a good idea to do so. It's commonplace for people to say, this or that's politically difficult and it may be unpopular with beneficiaries or with providers and that's why Medicare

can't do it.

But I think there is a more basic question about whether Medicare should do it. I ask the question without having a firm opinion on one side or the other, but for a public program to undertake some of these activities, I think the consequences are different. Most basically, if a private health plan does one or more of these things and it doesn't go well, they're subject to market discipline. And if it doesn't go well, they can change things quickly, make revisions in a way that I don't think necessarily happens in the political process. The cycles of change and improvement are not as rapid, not as flexible, and the political discipline may not be as efficient in this case as market discipline is in correct errors and problems.

I wonder whether philosophically the thing to do might not be to say, we ought to operate the traditional Medicare program as a traditional free choice system with virtually all providers permitted to play and the like, and to the extent that we seek innovation of this sort, the way it ought to be made available to Medicare beneficiaries is in fact through the offering of private plans that work in a whole different environment, in some ways with fewer

constraints but also with the market discipline. The beneficiaries can leave if they don't like what's happening, whereas you can't leave -- if traditional Medicare does awry we've really lost something that's difficult to replace.

So it's a question, but I think it is an important threshold question before you get deep into the details of the advantage of this approach or that approach.

DR. REISCHAUER: I think that's a good point and I would agree with much of it, but the question here is comparative cost and information on quality and you have to be able to compare the quality in the plan or the plans with the quality that exists in the traditional system. Heretofore we haven't been willing to do that. The plans themselves can come up with information about how good they are or they can use HEDIS measures or whatever. But the ability to then compare it to what you would get in the other world isn't there yet.

MR. HACKBARTH: Of course I would support that sort of comparison. I think what you get in traditional Medicare is you get a tremendous variation in quality. It's not like it's a monolith. You can get most anything from the best in the world to the worst in the world. But

certainly I'm all in favor of enhancing our ability to compare. I'm just not sure that you are really comparing anything meaningful in traditional Medicare in the aggregate, which incidentally is one of my fears about how private health plans have evolved too, to the extent that they have all-encompassing networks of providers, virtually everybody in a community, I think they have also become just a hash. Comparing the quality performance of one IPA HMO that encompasses everybody in the market to another IPA that encompasses everybody in the market is pretty a sterile exercise in my view.

MS. MUTTI: Just a clarifying question based on what you just said, Glenn. Are you comfortable with us going forward with the summary and alluding to some of those issues that raised too as to the advisability of Medicare -- are you comfortable with us producing a product like that?

MR. HACKBARTH: Yes, in fact I see this as a developing area of the Medicare debate. There are very vocal, articulate proponents of the view that Medicare ought to become a more active purchaser, like Bob Berenson. Bob and I were talking about this last week. As opposed to say, private plans are the only way to get innovation. We can do

it in Medicare. I think that's a very important question to raise. I just want it framed properly.

DR. REISCHAUER: Thank you, Anne and Jill.

We now have a few minutes for a public comments. As is always the case, identify yourself, keep your comments brief, and please don't repeat what others have said before you.

MR. THORWARTH: I'll do my best. My name is still Bill Thorwarth. I'm a practicing a diagnostic radiologist from Hickory, North Carolina and currently president of the American College of Radiology. I'd like to congratulate MedPAC first of all for addressing this issue or this group of issues, and the presenters for a good summary of those issues that need to be addressed.

Why do I say that? Radiologists are commonly viewed as the reason for this increased imaging cost. I think as has been pointed out, radiologists do examinations that are requested and referred by other physicians and therefore really are not at the heart of that particular expansion. I'm glad to hear the active evaluation and discussion on the issues regarding self-referral with regards to exactly where the expansion and growth of imaging

services is.

The American College of Radiology's slogan is quality is our image, and has long been in the business of promoting the right test by qualified providers at a high-quality facility. These product, overseen by our commission on quality and safety include what are known as appropriateness criteria, a group of 190 different clinical indications with 900 variations of those indications as far as what kinds of tests are appropriate and effective in those clinical circumstances.

The second component of that is the practice guidelines and technical standards defining those requirements for facilities, technologists and physicians who can then perform the tests in a quality fashion.

Then the final is accreditation. Not unlike mammography accreditation that's mandated under the Mammography Quality Standards Act, we have accreditation programs in other things such as MR where right now half the MR facilities units in the country are accredited through the American College.

I think that high-quality imaging has got to be recognized as, it can often result in an overall decrease in

a cost of care per episode. Two very common circumstances are abdominal trauma that presents in the emergency room that commonly used to go to laparotomy for exploratory laparotomy to determine if there was a significant injury. Now CT can very effectively determine which are candidates who can be treated conservatively, which treated operatively. Likewise, MRI of the joints can often times give, in fact most of the time gives accurate detail as to which patients can be treated by conservative management versus operative management.

I had two responses to specific comments that were made during the discussion. First, the comment about efficiencies of multiple studies as one of the strategies to potentially decrease cost. I think that it's important to recognize that there may be an efficiency we talked about -- there was mention of a CT scanner where the patient stays on two minutes longer and has another contiguous anatomic part examined.

I think that it's important to recognize that the efficiency may be in the technical component side of the acquisition of that study but does not necessarily transfer to the professional component side, simply because if I'm

reading an ankle x-ray and a foot on two different patients or I'm reading an ankle and a foot on the same patient, I'm still basically reading the same number of films. If I'm reading a CT scan of the pelvis on a patient that just had an abdominal CT, the only efficiency to me is I don't have to say their name twice. I still have to examine all the images. In fact the finding in the second exam may require that I go back and re-examine the first exam to see if there's a related finding in that first exam.

So as the Commission considers this concept of efficiency in multiple imaging exams I wanted to stress that there is really a difference between efficiencies gained in the technical side versus efficiency in the professional side.

Then final comment about radiologists being consultants and examining a patient and trying to recommend a better tests for a given patient. Personally, if I call my orthopedist and I tell him that I've examined his patient's shoulder and he doesn't need an MRI and he needs such and such, I'm not going to make it very far. I think the concept that the radiologists know best what imaging test answers what clinical question best is true. So if the

referring physicians provide us with the appropriate clinical history we can guide them to the appropriate and most cost-effective way to work up that particular clinical condition. But I think the likelihood -- first of all there's no value placed in any of the imaging procedures that include E&M values of going to examine patients.

Secondly, I think, as I mentioned before, our overriding a clinician who's done a full E&M evaluation, may have been taking care of that patient for months, for me to override that would be really impossible.

So the college stands ready to work with MedPAC and with CMS to solve this very real issue of expanding imaging costs, and I appreciate the opportunity to comment.

DR. REISCHAUER: Thank you. We stand adjourned for lunch and we'll reconvene at 1:15.

[Whereupon, at 12:24 p.m., the meeting was recessed, to reconvene at 1:15 p.m., this same day.]

AFTERNOON SESSION [1:22 p.m.]

MR. HACKBARTH: Welcome, Chris. Next up on our agenda is a discussion of disease management and chronic care. Joining us is Chris Hogan from LLC Research. Rachel, are you going to set this up?

DR. SCHMIDT: Actually, it's Direct Research LLC. This is the first of two presentations on disease management and care coordination. The goal of this one is to lay out some context in which to consider the role that disease management might play in fee-for-service Medicare. The new Medicare Modernization Act calls for a chronic care improvement program. It's really a pilot program that will begin by this December and may be rolled out to serve a broader number of the fee-for-service population in three or four years.

Karen, Joan and Nancy will provide you with more of the specifics about that pilot program along with some of the things that we have learned from interviews we've conducted with physician groups, insurers, disease management companies, state officials and other experts. Our chapter in the June report is going to combine these two papers, the one we're about to give now and the one that

Karen, Nancy, and Joan will give. But today we thought it would be easier for you to look over our data analysis first and then consider some of the policy issues within that context.

Two of the many goals for care coordination are improving quality of care and slowing the rate of growth in Medicare spending. Some analysts and policymakers have argued that the fee-for-service population is particularly well-suited for disease management because of its high prevalence of chronic conditions, the high concentration of spending that's associated particularly with hospital stays, and the perception that there's room for better coordination of care within the fee-for-service payment structure.

As practiced in commercial programs, disease management often involves targeting services such as beneficiary education and monitoring toward certain people based on their past patterns of care, the conditions they have, their prescription drug claims and self-reported health assessments. Chris Hogan and I are going to walk you through some data analysis based on the type of data that would be most readily available for disease management services, or coordinating care in the fee-for-service

population; that is Medicare claims data. We'll cover patterns of program spending and the prevalence of certain conditions within the fee-for-service population and try to answer some of the questions that you see on this slide.

Chris is not going to walk you through some of them methodology and caveats with this analysis.

DR. HOGAN: I'm briefly going to go through two slides on methods. The first slide is what you see in front of you. I'm just going to say, we're looking at a one in 1,000 sample of beneficiaries. Just to give a quick look and an easy way to get at modifying the analyses however you see fit. This slide just describes what we did. The more interesting slide is the caveats. I want to say, particularly relevant to disease management, a couple of strong caveats about the use of diagnosis information off claims to identify cohorts of beneficiaries.

The first thing you have to realize is, there's no standard way to do this. Every analyst decides which diagnoses you're going to count, which set of claims is going to be counted, how often you have to see a diagnosis in order to flag somebody's having a condition. The upshot is, the population that I call the CHF population may or may

not match the population you'll see in some other piece of analysis. There's no standard way to do it, so there's some uncertainty. In addition, as you know, physicians may have some uncertainty in what they report on the bills themselves.

A second point that you need to keep in find for evaluating a disease management or case management demo is that when you draw a population out of claims you're not looking at everyone who has the disease, you are looking at everyone who is being actively treated for that disease in the year. That means the cost you see in that baseline year when you draw that population are going to be higher, on average, than the cost you see the next year. Costs tend to regress toward the mean.

What this means for case management or disease management is that your target for evaluating whether or not the program has saved you any money is not, did costs go down, but did costs go further than I expected them to go down based on this regression to the mean that we know is going to happen? So it's not simple to evaluate whether or not a case management or disease management program has saved you money, because if I pulled the population from

claims I'm looking at people being actively treated, and sure enough, next year the cost of that population will go down no matter what you do.

There are some other caveats here, particularly with regard to definitions of the institutionalized, ESRD, and Medicaid that are not really relevant to much of the case management discussion so I'll turn it over to Rachel to discuss the results.

DR. SCHMIDT: So let's take a look at some of the statistics that Chris ran for us. I know it's not surprising to you that fee-for-service program spending is highly concentrated, but maybe the degree to which it is concentrated I found somewhat surprising. Our findings of concentration in spending are consistent with those of other researchers and they're also fairly stable from year-to-year.

We looked at the period 1996 to 2002. The top 1 percent of beneficiary ranked by fee-for-service program spending accounted for about 20 percent of total program spending in 2002 and had an average program spend of about $9,600 per month which is about $115,000 in that year. The top 5 percent of beneficiaries accounted for nearly half of

program spending, and the top quartile or 25 percent made up nearly 90 percent of total spending. So this distribution of spending is obviously highly skewed.

Mean spending for the entire fee-for-service population was about $500 a month in 2002. And the median, the point where half of the population had spending that was higher and half low was just $92 per month. So the bottom three quartiles of people ranked by spending only accounted for about 12 percent of total program spending.

But you might next wonder whether high-cost beneficiaries remain high cost from year-to-year. That's an important consideration for thinking about how to identify who might benefit the most from better care coordination. In our data set one would look at these results and the glass could be half full or half empty.

This table shows one-year persistence in each year's beneficiary's ranking based on their spending. So the rows are showing you a person's rank in year one and the columns are showing their outcome in a subsequent year. If you look at the first couple of columns in you'll notice that some of our beneficiaries drop out of the data set between years because some die and some are simply lost from

our sample: we're unable to match their data from year-to-year. These results reflect the average position of beneficiaries in our data set over any two years over the 1996 to 2002 period.

So now I'm going to take away some of this data just to make it easier to look at the most costly groups.

If you look at the circled value, this is showing that about half, 48 percent of the beneficiaries who were among the most expensive 25 percent in the first year were also among the most expensive 25 percent in the subsequent year, so that suggests a fair amount of persistence. But among those people who were in the top quartile of spending in the first year, another 15 percent died, 1 percent were lost from our sample and the remaining 22 plus 11 plus four, which is 37 percent, fell into the lower three quartiles of spending in the subsequent year. So that's what Chris meant by saying there is a fair amount of regression toward the mean. A sizeable share of the high spenders are going to have much lower spending in the next year.

If your job was to predict who was going to be among the most expensive 25 percent in year two, about half of these people, the 28 plus 16 plus 8 percent there, were

from among the bottom three quartiles in the previous year. If you remember, those bottom three quarters were only accounting for about 12 percent of spending in 2002. So that's telling you that some of the people who become very high spenders in year two are coming from relatively low amounts of spending.

DR. ROWE: Can I ask a question about that? You really should take the 15 percent who died out because we're not worried about what their expenditures are going to be in the second year, as we're looking at the efficacy of the program. So that then increases the proportion in these other quartiles by 15 percent or so because the size is now that 15 percent less. So your 48 becomes 55 and your 22 becomes 26 or something like that; is that right?

DR. SCHMIDT: Yes, that is right. We were trying to go for full disclosure here about what is happening to some of the people.

DR. ROWE: Regardless of how hard you manage disease, you hardly ever influence the expenses in the year after they die, despite the full disclosure aspect. So really you're up over 55 percent or so of the relevant population that could be managed, are in the first quartile.

And if you look at the first and second together you're up by almost 80 percent; is that right?

DR. SCHMIDT: So you're a half-full kind of guy.

[Laughter.]

DR. ROWE: As an insurance guy, I'm aware that while there are no expenses in the year after death, there are also no premiums.

[Laughter.]

DR. SCHMIDT: Moving on. Disease management companies also use information about diagnoses from claims data to target enrollees or to stratify the services that different people receive and provide different intensities of care coordination. In the left-hand bars we show the prevalence of certain conditions, certainly not all conditions, as well as by certain characteristics of interest. In the right-hand bars we're showing you the share of fee-for-service program spending accounted for by that group. Spending numbers contain all of the program costs for people who had those conditions including any of their comorbidities. People could fall within several of these categories at the same time. Clearly, in each of these groups they're accounting for a disproportionate share

of spending.

So why did we pick these particular conditions and groups? Three of the conditions, CHF, COPD, and diabetes are considered threshold conditions for the chronic care improvement program in the Medicare Modernization Act. That means that these conditions are one basis by which people may be targeted for enrollment in that program. We also included ESRD because that population is one that might particularly benefit from better care coordination and we plan to devote some time and attention to that population as well as those with chronic kidney disease in our June chapter.

We also asked Chris to take a look at dementia because of its higher prevalence in the Medicare population. We think that is one unique aspect of the Medicare population that could make care coordination more challenging. There may be other factors as well.

The Commission has talked about other beneficiaries, such as those who are dually eligible for Medicare and Medicaid, those who approaching the end of line, and people who are institutionalized as other populations of particular interest.

This table gives you a bit more detail about average Medicare program spending by the beneficiaries who have these conditions or characteristics that I just showed you. So you can see, for example, that fee-for-service enrollees who had a diagnosis in claims data of CHF spent an average of nearly $1,900 per month in 2002, which is about 3.7 times the overall average of $500 per month. The third column shows us that 41 percent of beneficiaries who had a CHF diagnosis in 2002 claims data fell into the top 10 percent of beneficiaries ranked by fee-for-service program spending. And since CHF is fairly prevalent, about 10 percent of fee-for-service enrollees have it, CHF patients made up a sizable share of everybody in the top 10 percent; 38 percent of those people.

By comparison, if you look midway down at ESRD, those costs per person are much more on average than CHF; nearly $3,900 per month in 2002, or about eight times average program spending. This table shows you that 80 percent of the beneficiaries who had ESRD fell among the top 10 percent of people ranked by spending. But ESRD has much lower prevalence that CHF, only about 1 percent of fee-for-service enrollees have it, so those people with ESRD made up

only about 6 percent of everybody who is among the top 10 percent.

You might be somewhat surprised comparing some of the groups on this slide. For examples, while beneficiaries with a diagnosis of diabetes certainly spent more than average, they're spending is less than twice the average versus some of the other factors that you see up on the screen that are much larger. Likewise, people who are dually eligible for Medicare and Medicaid had spending that was about 1.5 times the overall average.

I mentioned that some people point to the high prevalence of chronic conditions, particularly multiple chronic conditions, as a reason why the Medicare population might benefit particularly from better care coordination. Here we're showing the distribution of combinations of just the three threshold conditions that I mentioned were in the MMA, CHF, COPD and diabetes. So we're showing here that 74 percent of fee-for-service enrollees had none of those three conditions. But since this is based on claims data as Chris described, that is probably an underestimate of prevalence. Many of the 74 percent certainly had other types of chronic conditions.

We might see higher prevalence of these three conditions if we also were able to look at prescription drugs claims, which we did not for this analysis. Of the 26 percent who had one of these combinations, 20 percentage points are made up of people who had one condition, five percentage points of people who had two of these conditions, and one percentage point had all three conditions.

This slide is pointing out that the more conditions one has on average, that's associated with higher spending. That's reflecting the fact that people who have more conditions tend to require more complicated care, more types of specialists and providers and probably are at greater risk of needing a hospitalization. So for example, a person with a diagnosis of one of these three conditions had spending about 1.7 times the overall average, while someone who had all three was about 6.4 times more expensive than the average. Nearly two-thirds, or 63 percent of the beneficiaries with all three of these conditions fell among the top 10 percent of beneficiaries ranking by spending. But since those people are so few in number, they only made up about 6 percent of everybody who was among the top 10 percent.

It's kind of interesting to see that 37 percent of people who had none of those three conditions were among the top 10 percent. But again, they probably had other types of conditions that just were not included on this slide.

In your mailing materials there was also some discussion, some combinations of these conditions with dementia. I don't have a slide on that here but if you were to compare pair-wise, people who have a condition and that condition plus dementia it does seem to add considerably towards their average spending, on the order of 1.5 to three times varying with that condition.

Finally, Chris took a look at each of our conditions and the populations of interest and the number of hospitalizations that they had and that's what this slide portrays. So in the far left-hand bar you can see that among the entire fee-for-service population 80 percent had no hospitalizations in a given year, 13 percent had one, and 7 percent had two or more. About 62 percent of beneficiaries who had ESRD, which is on the right-hand side, had one or more hospitalizations a year, which is probably not too surprising considering the complexity of that particular condition. But what I think we found was more

surprising was that people with CHF had that same share as ESRD, about 62 percent had one or more hospitalizations.

ESRD patients were more likely to have repeated hospitalizations than CHF patients. Nevertheless, this information supports one thing that we heard repeatedly in interviews with the various experts that we spoke with. We heard over and again that CHF was considered the low hanging fruit among different conditions for care coordination and disease management. In other words, if care coordination programs can educate patients and help them to monitor their conditions more closely then we might be able to avoid some expensive hospitalizations and improve the quality of their care.

DR. NELSON: Was the diagnosis applied during the index hospitalization? That is, congestive heart failure may be diagnosed initially as a result of a hospitalization which would tend to push that higher. Whereas, COPD may be diagnosed first in the office and a subsequent hospitalization would not necessarily trigger the diagnosis being applied.

DR. HOGAN: You're correct, that it may well have been -- the initial hospitalization during the year is where

we picked up the CHF diagnosis. The last time I looked, one-third of Medicare fee-for-service hospitalizations have a diagnosis of CHF on them somewhere, so that probably explains -- that came out in the additional CHF payments to managed-care plans. So that may explain why the CHF hospitalization rate looks so high. We get one-third of hospitalizations in our population off the crack of the bat, and anyone else who is diagnosed on an outpatient basis shows up there as well.

DR. SCHMIDT: So let me finish up by summarizing some of what we've learned by looking at fee-for-service claims data. First, we found that program spending for beneficiaries is highly concentrated and high costs are somewhat persistent. So about half of those who are among the top 25 percent of spending in one year were also among the top 25 percent in a subsequent year. But predicting who's going to be among the top 25 percent of spenders is a bit tricky because many of the people who are going to be among that top 25 percent are coming from the lower ranks of spending in the previous year.

It's common practice to also use diagnoses from claims to help determine who to enroll in care coordination

programs or to tailor the sorts of services that they're going to receive. But Chris I think pointed out, or we told you in the mailing materials anyway, that diagnoses are not necessarily put consistently on claims data from year to year, so this certainly a limit or something you should bear in mind.

Finally, claims data are obviously going to be very important to CMS and to the organizations that are going to deliver care coordination for fee-for-service enrollees because they're going to need it to target enrollees and to tailor their services. But they may need to supplement claims data with other sorts of data, such as health assessments and prescription drug claims, if that becomes available. And timely access to Medicare claims information is going to be extremely important.

We'd be happy to take your questions and suggestions. Thank you.

DR. ROWE: A couple comments about this. I certainly agree with the view that predictive modeling and the selection of participants to be included is the important determinant in the financial and clinical outcome of disease management. I think that many of the disease

management programs are commodities and they may be implemented to different degrees by different vendors, but the secret is selecting the right patients, and I think we need to emphasize that.

I think that a point that begs to be made in the chapter, which you mentioned in our comments but could be emphasized more, is the fact that with the Medicare Modernization Act we may start to get some information on medications. and that's going to dramatically improve the predictive modeling ability. Medicare currently doesn't have medication information. And it's important to understand that disease management in chronic heart failure is medication management. Many of these disease management programs are basically medication management programs. Certainly asthma is a great -- not so much in the elderly, but in the younger population it's all about medication management to keep the patients out of the emergency room.

So I would emphasize that, that the MMA provides us with an opportunity to be more effective in disease management than we would have otherwise if we can capture the pharmaceutical information.

A third point is, it would be worth mentioning the

distinction between disease management and these chronic diseases and chronic care, because if people aren't clinicians they're going to confuse the two. Managing a chronic disease is one thing; very important. The savings in these programs are avoiding acute complications of chronic diseases. It's the acute exacerbation of hypertension, heart disease, heart failure, the angina, the pulmonary edema, the stroke, those are the things we want to avoid. Those are acute illnesses that are treated in the hospital.

They're not chronic illnesses. They're the acute complications of chronic illness. As opposed to arthritis, which is a chronic disease that gets chronic care but which you're not necessarily looking for a target of an acute exacerbation. So these two things are a little bit different, as a clinical point.

It would be worthwhile knowing what the persistency is within disease categories, because while this global information you presented is helpful, there is no global patient. Every person is either a diabetic or a chronic heart failure patient or whatever, and those are the decisions that have to be made about the program.

The last point I would make is, I think it's important to say a few words about the role of the physician here, because we don't want to talk about the Medicare program coming in and somehow, in a way that's orthogonal to what the physician is trying to manage these patients. You read this chapter and where's the doctor? It's about Medicare and the patient. We want to talk about Medicare and the doctor and the patient, and helping the doctor use what is known about disease management for his or her patients who are Medicare beneficiaries.

I think that's really important because you will not get the patients to enroll or remain in the program unless the physicians are partners, I think.

DR. SCHMIDT: I think that's a very good point and I hope that you will find at the point when we integrate these two papers, we definitely in the second paper coming up try to emphasize that point and I hope we bear that.

MR. FEEZOR: Jack made more eloquently the two points that I was going to make. Is there any -- if we were able to include the pharmaceutical cost component would the arranging of the top five or the percent of money being spent be about the same, or is there any extrapolation on

that?

DR. HOGAN: No. If you want to see it we can do it though. We can take the Medicare current beneficiary survey, they have the drug costs there and if you want to see that we can do it. My guess is --

DR. NEWHOUSE: There's some data in the under-65 that show drug costs are more persistent than hospital and doctor costs, and there's no reason to think that wouldn't apply to the over-65. But the drug spend is probably a small enough part of the total it wouldn't importantly change the qualitative conclusions here.

DR. HOGAN: Yes, hospitalizations drive it.

MS. ROSENBLATT: Just a little bit more on what Jack said about finding the right people for these disease management programs. We found with the commercial population that a lot of the disease management involves patient self-management; people with heart disease not eating salt and things like that. So there's a compliance issue, and these are not going to be effective if you get the patients that aren't interested in being compliant or doing that kind of stuff.

I would think with the Medicare population there's

an additional issue of who's capable of complying versus those who aren't; 65-year-olds probably can comply with some of this stuff, the 85 and 90-year-olds maybe would like to but just aren't able to. So I think there may be an issue there that we could explore more fully.

MS. RAPHAEL: I was just going to ask if you had any hypotheses about the dually eligibles, because you commented and I also was surprised that they are not as costly as one might have expected. I know from some work I've been doing on Medicaid high utilizers that among their most expensive encounters have to do with inpatient stays for psych, which we wouldn't at all capture here. But I just was wondering if you had any thoughts about that.

DR. SCHMIDT: One of our findings from some work that Chris had done was about half of the institutionalized are on Medicaid.

DR. HOGAN: Yes, a little more than half. You can watch them spend down to Medicaid once they're in the institution. So I think that most of the higher costs we see there are the costs of the institutionalized population being Medicaid. We should benchmark these numbers against others, but certainly CMS publishes statistics on the

average cost by buy-in status and we can make sure we got it right, insofar as that's right.

DR. SCHMIDT: It does seem to be the case that the dually eligible are not a uniform population. There are some who are institutionalize and costs associated with that, and others who are less expensive. Let me put in a plug for the work that some colleagues are doing on the duals that you'll see later this afternoon where they're going to look at that in more detail.

DR. STOWERS: I was going to bring out the physician point, but another question, Chris, when you carry the data forward on the number of hospitalizations that involve congestive heart failure, is that there primary diagnosis?

DR. HOGAN: No, it's the economist looking at it; a dollar is a dollar. It was the total number of hospitalizations.

DR. STOWERS: They could come in with a fractured hip but had a previous diagnosis of congestive failure and it's still going to be a congestive failure admit then?

DR. HOGAN: No, I will still count them as having been admitted to the hospital and in my congestive heart

failure bucket. Yes, they may have been admitted for a hip fracture but it's still one of their admissions.

DR. STOWERS: So getting to Jack's point about we're looking for acute exacerbations or preventing those within heart failure because of medication management or whatever, that may not be why they're back in the hospital. It could have been for -- so the fruit might not be quite as low hanging as we think.

DR. HOGAN: I would have no problem trying to flag the ones where the principal diagnosis was congestive heart failure or pneumonia.

DR. STOWERS: I think that's a huge issue because all of our practice, once they're labeled with congestive heart failure, that's in their history and physical when they come in. We manage the medications for that during the acute stay, even though they've had absolutely no exacerbation there and that's not the reason they're there. They could have come in for an elective, anything, and --

DR. NEWHOUSE: That should balance out between the non-CHF and the CHF patients.

DR. STOWERS: No, but your diabetes is carrying forward, your congestive failure is carrying forward. It

may not be exacerbations of these at all is what I'm saying. I think it needs to be the primary reason they went in, that's what I'm trying to say.

DR. HOGAN: Right, I cheerfully break those out by principal reason for the admission. You'll find for the diabetics that almost nobody the principal reason is diabetes. But for CHF we'll see. I'll bet it's half, but we'll go look.

DR. STOWERS: It could be big. I just don't know what that --

DR. REISCHAUER: But Joe's point is the population you're comparing it to has the hip fractures, everything like that, in it already and what you're looking at is just the difference between the two.

DR. ROWE: The point is how much can be saved? How many of the admissions that occur are potentially avoidable? And these unrelated ones are not unavoidable, right?

DR. REISCHAUER: No, but what you're looking as is the difference between the two and they are not in the difference between the two.

DR. NEWHOUSE: If the incidence of hip fracture is

the same in the two groups, they difference out.

DR. ROWE: If what you're looking at is the difference. If what you're looking at is the number of admissions and you're assuming that they are avoidable, it may be that --

DR. STOWERS: We're saying the admissions are what's driving the cost up, trying to save acute exacerbations, that's not what this data is. It's just any admission that had that diagnosis.

MR. SMITH: Chris, just a quick caveat about your caveats. As I read the mail text I assumed that the failure of diagnosis persistency would raise the share of the most expensive cohort in the second year. Is that the right interpretation of that? So along with Jack's subtracting the folks who weren't around any longer, that number would still be higher because of the lack of coding persistence.

DR. HOGAN: If you want me to look at persistence by disease then I have to make an important choice as to when I'm going to flag somebody having a disease. Right now I do it one year at a time. If you had CHF in one year then you're a CHF patient. And if you didn't have it reported the next year you're not. If I'm going to look at

persistence by disease I'll have to make some sort of decision rule about whether or not -- for example, if I have CHF in either year, should I now count you as a CHF patient? So I don't really know how to answer your question until I've gone back to look at the data to see how that will work out.

MR. HACKBARTH: Any others? Continuing now on the theme of chronic illness we're going to talk about the Medicare Modernization Act and chronic care improvement.

MS. MILGATE: One of the most important challenges to the Medicare program is to find ways to better address the needs of beneficiaries with chronic conditions and ways to better coordinate care for all beneficiaries. The Commission stated its support for exploring these issues in past discussions.

In the private sector, an increasing number of purchasers and health plans are purchasing or developing disease management programs to address these concerns for their own enrollees, and many have also suggested these programs may be useful as a cost-saving tool. Recognizing this need, Congress established the foundation for a voluntary chronic care improvement program in the fee-for-

service part of Medicare in the Medicare Modernization Act. In this session and in the chapter in the June report we focus primarily on implementation issues coming from Section 721 in that act, but we'll also continue to evaluate the extent to which these goals are met more generally.

We ask you to consider whether this draft chapter addresses the issues you've identified in previous discussions and any additional issues that would be useful in the chapter.

Just a brief overview of what the provisions did in the legislation. The goals of the chronic care improvement program in the MMA are to improve the quality of chronic care for those with chronic conditions, improve the beneficiary satisfaction, and to achieve savings targets. The program is put in place in two phases. The first phase begins in December of 2004 with CMS contracting with contractors who will then take on responsibility for care management for particular populations. These contracts will be for three years and the program must overall be budget neutral.

CMS will issue a solicitation for bids in the next couple of months. The contractors' fees will be at risk.

To move into phase two of the program, the individual programs must meet savings targets as well as quality goals, and overall the program will also need to show itself as budget neutral.

This slide just illustrates the implementation issues that we've identified and that we'll go through on this presentation. I'm not going to go through each of the questions but that's how the rest of the presentation will be organized.

The first issue, who will receive chronic care improvement services. First of all it's important to note that not every beneficiary is eligible for this particular service. The legislation allows CMS to determine how to define the regions where this will be available as well as to actually decide how to target the initial population; the key issue that you've identified in the previous discussion. In the legislation, the threshold conditions I noted are congestive heart failure, chronic obstructive pulmonary disease, diabetes, and then there is an other category which could be used if they decide there's another type of chronic condition to target as well. The legislation states that beneficiaries who will be eligible for this service will

need to have one or more of those conditions.

Then there is also a question about what level of severity will be included in the target populations, and that's a lot of the discussion you've just had and Rachel showed data on how that's a very difficult issue to address because many folks will be in the high severity level in one year and then move down to a lower category naturally without any intervention necessarily. And there are others who are currently at low risk who will move into a high-risk population. So that's one issue that will be a difficult one, both for CMS as well as the contractors.

The other question though that we take is important more broadly is whether this method of identifying those that would need these services would actually be able to identify a broad group of categories of beneficiaries who might need them. For example, those with chronic kidney disease, dually eligible, or those who at the end of their life and may need some care coordination for end-of-life care may be identified through the conditions that we have just noted, the threshold conditions, but in fact some of them may be left out and there may be some concern over whether they would actually be able to get the services they

need given they aren't necessarily -- their CHF might not be their most important problem, for example.

The other category of people we think we might not be targeted as well as they otherwise could have been would be those who were at low risk, but at risk for these conditions, such as those with hypertension or high cholesterol.

So there's two levels of targeting. One is done by CMS and then the second level noted on the second bullet there is that contractors will also be able to decide what types of interventions to give to certain people. So what we were told in our interviews with a variety of different organizations that do disease management is that they, in addition to using claims data to target those that are high severity or high risk for some of these diseases, is then tailor the interventions based on health assessments and then more intense predictive modeling. So that, for example, a diabetic who has fairly controlled levels of glucose wouldn't necessarily have the same level of services as someone who has an uncontrolled level.

DR. SOKOLOVSKY: Another important issue, and it's already been identified in the earlier session is who will

provide chronic care services under the act? The MMA states that these programs can be provided by physician group practices, disease management organizations, insurers, and integrated delivery systems. This we think is appropriate because there is no single model for the provision of chronic care. This is particularly true in the case of physician participation in the program. We saw a lot of models out there.

Programs range from those that are run by or for physicians to those where most or all communication between disease management organizations and physician is mediated through the patient.

Physician-centered approaches include the primary care case management program in North Carolina Medicaid that we had a presentation on in our October meeting. Additionally, some physician multi-specialty group practices, and one example is the Geisinger system in Pennsylvania, have created disease management programs for management of their patients with chronic conditions. These programs employ nurses to handle patient education and care coordination, freeing physicians for more time to practice medicine, as they say.

Commercial disease management programs also have a wide range of relationships with physicians, but tend to focus more on patient self-management of their condition. Nurses provide patient education and monitoring services, but they also work with physicians in many different ways. All the protocols that are used by these organizations are developed by physicians. Some of the programs, but not all, use physicians to help identify patients who need the services and encourage patients to enroll. All of the programs provide data on their patients to physicians, and some provide additional data so that physicians can benchmark themselves against their colleagues.

Another question is what services will be provided. The MMA gives a very general list of services. It requires contractors to develop care management plans for each participant and these care management plans are meant to be tailored to the individual needs of the participant based on their levels of risk. The program must screen for additional chronic conditions and contractors must have enough information technology capacity to do predictive modeling, create protocols for nurse call centers, and evaluate the impact of their programs on an ongoing basis.

But specific interventions are not mandated. The law assumes that the programs will provide some services that are now covered under the Medicare program. For example, it says that programs should provide at-home monitoring technologies to beneficiaries if appropriate.

One service that's typically not provided by current disease management programs is case management. From what we heard in our interviews, disease management organizations typically refer their highest risk cases to either Medicaid or insurers' case management programs. Case management would be a particularly important service for the Medicare population because of the greater likelihood of their multiple comorbidities, and also because of their greater frailty level. Since Medicare doesn't have case management services, contractors will need to develop the capacity to furnish these services.

Another issue that is somewhat addressed in the law but not in any great detail is how payment will be set. The law says that contractors will be paid on a per-member per-month basis but is not at all specific on what that will be. The contractors will bid to provide the service and CMS will then negotiate with the bidders based on the services

they propose to provide and the population that they propose to provide them to.

Bids will take into account the services, and additionally, contractors have to take performance risk. That means that the fees that are paid to the organization by Medicare will be withheld if the programs do not meet their contracted goals. But they will not be responsible for any additional medical costs.

One aspect of the law that we're looking into is, I said at the beginning that it's meant to be available for many different models, but there are some aspects of the law that may make it difficult for group practices to participate. This is especially true because of the size of the areas in which the programs must be based. They must be based in an area where there are at least 10,000 beneficiaries with the targeted condition who are available to be a control group. And in aggregate the program must be conducted in areas where at least 10 percent of the Medicare beneficiary population lives.

Another important issue, while the statute gives chronic care improvement organizations considerable flexibility, CMS has ongoing responsibilities that will

significantly affect whether the program succeeds or fails. First, current organizations require timely data to determine appropriate levels of intervention for enrollees, to reevaluate the risk levels of their population, and assess the effectiveness of what it is that they're doing. CMS will have to supply claims data to contractors at least quarterly and many of our interviewees said that monthly would be preferable.

Another issue which also has come up earlier is the issue of dual eligibles. Half of all states have Medicaid disease management programs and CMS is encouraging more of them to start these programs. But there are few mechanisms to coordinate care or share data between Medicare and Medicaid. Coordination is necessary to prevent redundant efforts. Also, if the data from both programs were available, targeting and care management would be much improved, and the beneficiaries in both programs would benefit.

Lastly, the MMA includes a number of other programs for chronic care improvement. All the new drug programs are required to establish drug therapy management programs for beneficiaries with multiple chronic conditions.

Additionally, CMS is currently negotiating in its eighth scope of work for the quality improvement organizations to address care for beneficiaries with multiple chronic diseases. In neither case is it clear how coordination between the drug plans and the QIOs and these new chronic care improvement programs would work.

MS. RAY: Another issue we considered is that most beneficiaries suffer from multiple chronic conditions as already pointed out to you by Rachel and Chris. Overall, about 70 percent of beneficiaries suffer from two or more conditions and 20 percent suffer from five or more conditions. Contractors will need to pay particular attention to conditions whose prevalence increases dramatically with age.

We specifically mentioned dementia and frailty as examples of those conditions. From our analysis, we learned that 5 percent of beneficiaries suffer from dementia. That probably is an underestimate because it is derived from the claims data. From MCBS we know that 15 percent of all beneficiaries have three to six activities of daily living impairments. Just picking up on Joan's point, of concern is that some contractors have limited experience in dealing

with dementia and frailty in their commercial populations, and when they do have these patients they are often referred to case managers.

An issue related to the fact that many beneficiaries have multiple conditions is the use of clinical guidelines. Most current disease management contractors base their intervention on evidence-based guidelines. The concern raised by interviewees is that most clinical guidelines are typically developed for a single chronic disease and may be of limited help for patients with many comorbidities. In that instance, a physician who knows the history of a patient may have a greater capacity to tailor a care management plan to fit the needs of the individual.

I'd like to just now briefly raise two areas previously mentioned by the Commission as areas where care coordination has potential. The first is end-of-life care. To the extent that beneficiaries can be identified prospectively they may benefit from care coordination. The MMA does require that contractors' care plans include information about hospice and end-of-life care. Many of our interviewees agreed upon the need for care coordination for

those near the end-of-life but that most programs were not yet effective in providing services for this population.

The second group I'd like to briefly touch upon are those with chronic kidney disease. Here the MMA does not include chronic kidney diseases as either a threshold condition or as a condition that should be somehow considered in the care management plan. The concern here is that contractors may not address the needs of CKD patients or dialysis patients in particular because they represent only 1 percent of all Medicare beneficiaries. However, as Rachel pointed out, they account for about 6 percent of all spending. Dialysis patients could benefit from care coordination because they do suffer from multiple chronic conditions.

Next month at the April meeting we will be presenting you additional information about patients with chronic kidney disease, their spending before and after dialysis, and the potential benefit for screening for chronic kidney disease and providing interventions to CKD beneficiaries before they require dialysis.

The last issue we'd like to talk with you about is evaluation. Each program is required to be evaluated. The

law requires that, and the law is specific as to requiring an assess on the quality improvement measures, particularly adherence to evidence-based guidelines and rehospitalization rates, and beneficiary and provider satisfaction, health outcomes, financial outcomes, including any cost savings.

As already touched upon by Karen, to expand in phase two a program's evaluation must show that the program improved the clinical quality of care, improved beneficiary satisfaction, and achieved savings targets. Your briefing materials raise five issues that CMS will need to address when thinking about how to evaluate each program.

First, the law requires the selection of a control group so that Medicare can assess the effectiveness of each chronic care improvement program. But the law does not address who is required to collect outcomes data like beneficiary satisfaction that's not available from the claims data, about the control population. That is, should it be CMS, the contractor's responsibility, or is it the independent evaluator's responsibility to collect that data?

The second and third bullet points are related. The law does not require standardized measures or a standardized approach to evaluate each program. If there is

no standardization, the concern here is that it will be difficult to determine which programs are more effective than others. In addition, the threshold for expanding into phase two could vary from contractor to contractor.

The implementation of the Part D prescription drug benefit during the three-year study period could affect the analysis of a program's financial outcomes if, for example, controls are less likely to enroll than program participants.

The last evaluation issue I'd like to raise concerns the law's budget neutrality provision. That is, the aggregate sum of Medicare program payments for beneficiaries participating in the program and funds paid to the contractor cannot exceed estimated payments that would have been made for participants in the absence of the program. It remains to be seen how the Secretary will structure savings targets for individual programs to ensure the overall budget neutrality.

Also, it remains to be seen what happens if individual programs achieve their goals but overall Section 721 is not budget neutral.

At this point we have completed our presentation

and we'd be happy to take questions and hear additional issues.

DR. WAKEFIELD: I want to see if I understand this correctly. Would it be your case that the way this is structured that it's going to result in some pretty significant exclusion of rural populations, given an N of 10,000 and a control group and high numbers actually enrolled in the program? So what's your take about how accessible this will be for rural providers and populations?

DR. SOKOLOVSKY: In some way it might be the opposite because the regions will have to be very large and therefore one would think that they would go beyond any particular metropolitan area.

DR. WAKEFIELD: I'm thinking about a physician group, for example, and I would say the physician group based in my hometown of Grand Forks, North Dakota might have to service the entire state to get the numbers with a particular disease to be able to qualify to participate in this program.

DR. SOKOLOVSKY: I think that that is an issue with physician group practices and I tried to raise that because I think in general most of them may have quite a bit

of trouble meeting that requirement.

DR. WAKEFIELD: If this appears in the June report I just hope that that would be pretty explicit. You can start to connect the dots as you're reading through the text but it's not clear. So where you see it playing an advantageous way, that would be helpful to see. I did not quite get there, but that would be helpful then if that's the case. I see the disadvantages and I think that where we can highlight those -- I mean, it just almost struck me as wholesale exclusion of some areas.

I actually have one other comment, and the comment is later on in a subsequent session we'll be talking about information technology applications with a discussion about the role of the federal government in terms of encouraging application of IT. If there's anything more you can tell us here about the use of IT with chronic care as it's embedded in these kinds of programs, I think that would be helpful, at least for informing my thinking about its application and the discussion that comes in the IT chapter. In other words, how important is it, if you can get a sense of that at all. One of you mentioned it in passing in your comments, but it seems to me that if I had a better sense of

how fundamental it was to this set of programs then that might help inform my thinking about recommendations and ideas that we'll have regarding the role of the federal government in encouraging the IT applications or not within the Medicare program. So if you could make those linkages in some fashion that would be useful.

MR. MULLER: I'd like to tie these two presentations together and especially three themes that arose from that, and then ask a question about it. First is the fact that 5 percent of the most expensive beneficiaries cost about $60,000 to $100,000 a year. I think that's what was shown in Chris' table. A lot of it does come, as Jack noted, from when patients with a lot of comorbidities, a lot of underlying disease have in fact acute episodes.

Second, the question of how well we can identify and target those people, identify them in any kind of way in advance.

Then third is, what kind of interventions could we in fact put into place that would help us both improve the quality of the care, the quality of life, and also avoid some of the costs? Because it strikes me, if it's costing us -- there will obviously always be a top 5 percent of

cost, but in fact there are beneficiaries who we could help avoid some of these acute conditions and if we knew how to target them and knew how to do the interventions, at $60,000 to $100,000 per patient a year you could think about spending an awful lot of money. You almost could have a daily check in with them with a nurse or something like, absent privacy and other kind of concerns, but just as a way of thinking about it. You would think about a lot of interventions you'd want to think about both in terms of keeping them out of those life-compromising situations.

So to what extent are we going to be able to, as part of these analyses and these programs, look at those kind of issues of whether in fact we can target those patients better, because in some ways a lot of our programs are thinking about millions and millions of beneficiaries. But in some ways if we could target a very small subset of beneficiaries and understand what kind of interventions we could make that would make a difference by keeping them out of these acute conditions, that strikes me that would be a major advance in their quality of life and also obviously have big cost savings implications. So to what extent do you think we will be able to find those kind of things out

through these analyses and these studies?

MS. MILGATE: I don't know if we can really answer the extent to which. I think you put your finger on the two real critical questions, which is how possible will it be to actually target these people? Number two is, will the programs that are contracting with Medicare be able to deliver the kinds of services that those folks in particular would need.

Clearly, those are some folks that are using a lot of services and there are a lot of physicians and a lot of different facilities involved so some real serious case management is what it would call for. But I don't know if either one of you want to comment on the extent to which we could actually identify them.

MR. MULLER: In some ways, whether it's Mary's point about the populations in North Dakota or other such issues about how one changes the whole system, in some ways it may be easier in a complex world to figure out how to target individuals who need this kind of help more so than to try to change physician practice patterns in America or a payment system. These other things are very hard to do. But if in fact we could -- for many of these people, since a

lot of them -- I don't know whether the top 1 percent -- I know there are 15 percent who die so the top quartile, what the rate would be in the top 5 percent and so forth, but obviously is we could maintain and continue a quality of life for them rather than having these acute episodes, that could be a major advantage there as well.

DR. MILLER: Just to respond, when you were saying we, did you mean the Commission's work or the work related to this program?

MR. MULLER: The latter.

DR. MILLER: Okay, because that makes me much more comfortable. I think we'll be able to do broad data analysis and talk about potential populations. I think one of the key evaluation issues will be when you grind down into these programs, how do these programs actually go about -- because a lot of them will start with administrative data but then gather additional information through their contact, phone calls and that kind of thing. That helps them actually do the targeting. Some of the evaluation I think has got to get to which of those interventions really get to the target and then actually have an effect. So I think your point is taken. I was a little worried that you

were wondering whether we were going to be able to get to that point, and I don't think so.

MS. RAPHAEL: I'm not entirely clear who is going to do the targeting. is CMS who's going to do the targeting, or is the contractor who's going to do the targeting?

MS. MILGATE: I maybe wasn't clear. There's really two levels. The first level, CMS is given the ability in the legislation to decide what actual population is eligible. And the legislation's guidance is that the beneficiaries have to have one or more of these conditions. It's CHF, COPD, diabetes and other. Within that though there are some issues of what level of severity, where the beneficiaries may live, and then in particular regions, as Nancy noted, there's also a control group. So those folks might actually have some of those conditions like their neighbor but not necessarily be targeted good for interventions.

But then when the contractor actually takes responsibility for managing the care of the particular population that's targeted, what I was saying is what we generally heard from our interviewees, even at that level

there's another level of targeted that happens to basically determine what types of interventions to give to different people in your population. So those with a diabetes would get different interventions, clearly, than those with CHF.

But actually, one thing we didn't emphasize is that once those beneficiaries are targeted through their threshold conditions, the contractors are responsible really for their overall care. So they don't just manage presumably their CHF. They're supposed to look more broadly at what else might be useful to manage for that particular beneficiary. So then there would be different levels of intervention depending upon the level of severity, the other types of conditions, some of the information they may gather from personal visits with the family or phone calls with the beneficiaries. Some of them have told us, for example, they may, over a period of time, pick up some dementia on the part of the beneficiary and then maybe target their interventions a little bit differently.

Does that answer your question?

MS. RAPHAEL: We've always come back and worried about selection issues and I'm wondering to what extent, if I'm a contractor, can I then just take one slice of this

very broad population, one or more chronic conditions, and just target people who have diabetes and try not to get people who have CHF or COPD or dementia?

MS. MILGATE: It depends a little bit on what CMS does. If a contractor has to have people in its population that are of all those kind or only one kind, I don't think we know for sure how that will happen. But it does leave that flexibility. I would suggest that if they had those three conditions they maybe could target what they thought was going to be the most -- the condition that would be easiest to improve or else have more ability to keep more people out of the hospital, for example.

DR. SOKOLOVSKY: Can I take a shot at this? The RFP will go out and contractors will bid for a particular population in a particular area. But it is CMS who will not only target that population but make the initial contacts and decide who's going to be enrolled in the program. Then CMS will give to the contractor all the people that they are responsible for, and they will be taking performance risk for all those people whether they intervene with them or not. So if you try to avoid the people that would be more expensive, in fact it will cost you more.

DR. ROWE: The contractor is responsible for the care of the patient? CMS determines this?

MR. HACKBARTH: Let me pursue it because I'm still trying to envision exactly how these work. So will the contractors in effect have an exclusive market area where they will have responsibility for a set of Medicare beneficiaries? That they get the list from CMS so they will be the contractor in that particular geography for this list of beneficiaries?

DR. SOKOLOVSKY: The law isn't exactly clear about it but we are assuming, especially given the requirement that all in all these programs have to be spread out so at least 10 percent of the population --

MR. HACKBARTH: Because you could eliminate one set of selection issues in your evaluation process if you say that it's an exclusive contract to deal with this set of beneficiaries with chronic conditions, A, and C.

Let me just play this out for a second. Now CMS in order to have randomization for purposes of evaluation has said that these beneficiaries are eligible and these are not. It's the responsibility of the organization to then do the outreach to the individual beneficiaries? But the

individual beneficiary has a choice on whether to participate or not?

DR. SOKOLOVSKY: Yes.

MR. HACKBARTH: So another type of selection might be introduced at that step depending on the nature of the outreach.

DR. SOKOLOVSKY: Yes and no, because CMS will have made the first contact and CMS will give to the contractor the list of all the people that they are responsible for. So if the contractor attempted to, for some reason, to discourage some of the people they would still --

MR. HACKBARTH: They would still be calculated for purposes of the overall evaluation. If you discourage the more challenging patients then you would be stuck with their high cost at evaluation day.

Now what about getting to Jack's point about the role of physicians in this? If you're responsible for an entire area, that really biases the model towards an all-inclusive physician model, because if you discourage physician participation you're not going to be able to manage, influence the cost of beneficiaries who see those physicians. So the basic model is an open network with

regard to physicians?

DR. SOKOLOVSKY: If a physician group practice bids then they can be as closed as they want. But I do think there are things that would bias against that.

MR. HACKBARTH: If you're going to do, how can you possibly do well on the evaluation if you can't relate to the other patients that go to other physicians?

DR. MILLER: Can I say something about this? There may be different ways that it can happen, but just to try to get a fundamental understanding. You have an area and you have some entity that says, I will disease manage for this area. They may have very different models they may go -- they may go at it and say, the way we do disease management is we really have a heavy involvement with the patient, so we really talk to the patient about their care and we work through them. Another disease management group or entity may have a very physician-focused approach to it.

So in this instance we would say -- a lot of this is evolving so just in terms of exactly what's going to happen but this is the area. The entity would come in and overlay the fee-for-service setting in that area and then use its disease management tools to target and either work

with the patient, work with the physician, work with both, whatever their particular intervention style is.

DR. ROWE: Most of these programs are telephonic programs with nurses and we need to understand what these programs are. They are telephonic programs with nurses using an ongoing updated database. So the nurse notices that a prescription was not refilled or whatever and calls--

DR. REISCHAUER: And they're going to get the information from the 30 drug plans that are available within that region on a timely basis? When I read this I wrote, unworkable, on the top. My question was going to be, is there a lot of interest out there in the industry about this, because you have the scale issue, you have the fees at risk, it's only three years long. You have the fact that it's $100 million, which is chump change for what we're talking about. It struck me as a great expression of interest in something but then packaged in a kind of unworkable way.

MS. MILGATE: Can I just comment on that? I think all of that is true, but at least the disease management vendors we spoke with on the other side of it for them is in particular they believe that congestive heart failure, and

they have worked some with diabetes, but because of the prevalence of congestive heart failure in the Medicare population and some of the other chronic conditions that in fact it represents a huge opportunity. But you're right, there are a lot of ways that it makes it a pretty difficult job as well.

DR. ROWE: One way it might work, Bob, just to respond to you is, if you have a group of cardiologists who are doing a really good job and they have a lot of Medicare beneficiaries with CHF, which we should refer to, by the way, as chronic heart. That's what it stands for. Because not all chronic heart failure is congestive. Some isn't. So it's chronic heart failure. They have a bunch of patients with chronic heart failure. They may already have hired nurses, advanced practice nurses who are specialists in cardiovascular disease who are following up on patients, doing home visits, on the phone, checking the medications, doing a really good case management job which they're currently not getting paid for at all.

DR. REISCHAUER: So we pay them and make it budget neutral? Pay them to do what they're doing already?

DR. ROWE: That's a second question. I'm just

responding to your question about is it worth it to anybody to do it? For those people who are really working in the patient's best interest, because the better the case management is, the fewer doctor visits there are, the fewer hospitalizations and the fewer Medicare claims these doctors submit, quite frankly. But they are doing a good job for their patients. Those physician groups would be benefitted by this, and probably would apply.

MS. RAY: I just would want to add another point. There's nothing in the law hat explicitly says that phase two is budget neutral, and phase two can begin as early as, I believe, two years after the implementation of phase one.

MR. HACKBARTH: I have several people who have been patiently waiting.

DR. STOWERS: I just wanted to get back to this a little bit. We kind of leave the attitude through the entire chapter that, I think the statement is, Medicare currently does not provide case management service or chronic care services. I would contend on a daily basis millions of these patients with multiple of these diagnoses are receiving millions of Medicare dollars through their primary care physicians' offices and practices to be getting

this very service. I haven't heard any service mentioned today that our practice plan doesn't provide for these patients. The point is made, it's not being paid for in a lot of cases. It's just coming out of the base budget of the practice. Maybe that's an answer for the rural areas that don't meet the requirement for the 10,000 or whatever, that we could have some other way of rewarding those, but it that's another story.

Another thing, we've learned the very hard way with these kind of services is that unless they go through the physician's office and involve the physician -- we said in our access chapter that 92 percent or whatever had a primary care provider and they were happy with that, and 80 percent of the people entering the system here are coming through a primary care provider. Yet when we get to this chapter we just leave all of that out, and that's what the primary care providers do.

But my one last point is that, again what we've learned is that unless you are going through that physician and they're just receiving the phone call or the letter or whatever and you have this content patient with their family physician or their primary care provider, it's kind of like

water off a duck's back. They may bring it into you and they may show it to you, but they're happy where they are, they're happy with their doc, and that's what our own data shows. So I think somehow we've got to bring that around, that this is an all-new service and it's an add-on, it's a help or whatever to what's already going on out there. And noted it needs to be done a lot better.

MS. RAY: I just want to ask for some clarification though. Do you think it's an issue with the recruitment of patients, the fact that physicians initially are not going to -- it's CMS being --

DR. STOWERS: I can tell you on the plans that we did, and currently another one just tried it in our practice, those that did not go through the physician that were just starting to contact a group of patients out there had almost no response. It was just very, very poor. I have read stuff on that that -- do you agree, Jack?

DR. ROWE: Yes. Patients get bombarded with so much stuff, many of them are not going to be able to differentiate this. They're just going to think it's some other vendor out after them and they're going to do what their doctor recommends.

DR. STOWERS: But when we tell them, they're right, this is something you need to do, you need to go get your eyes checked once a year, then it happens. So we need to identify those that aren't getting care and help them come into the system and that kind of thing. Don't get me wrong, there is a lot of help to be done out there. But if it's done independently, if somebody just gets assigned a big bunch of people and they're going to start making phone calls and all of that and don't incorporate the current health care system --

MR. HACKBARTH: But I think what that means is that the smart organization will go through physicians and try to involve them in the process, and the ones who don't do that, if you're right, will just fail and won't succeed. Presumably, to the extent that we have contestants, if you will, who are experienced in the private sector, they're well aware of that lesson already and they're not new to the enterprise when they come to Medicare.

MS. ROSENBLATT: I think one of the things that MedPAC could do to help with this is do some, analysis and let me describe the analysis. Wellpoint has tried to quantify the impact of disease management programs, and as

you so correctly state in the text there's a lot of that quantification that's been done that it's not really quantifying that. It's quantifying regression to the mean and other things like that, and I think you made a good point about that. So we have thought about using a control group and have tried to use a control group to quantify it.

What has happened in an attempt to do that is, first of all, when you look at a particular disease category, like look at diabetes, look at diabetes within a particular area, you're going to find that the range of annual cost is very large. You might have some people with diabetes spending $100 and others spending $100,000. So then you get to, with that wide range, in order to prove that there's a meaningful, statistically significant difference between the control group and the group where you're using disease management, you need a very population.

That's an analysis you could do, pick what's the statistically significant difference and what does that mean your population needs to be and I think you'd get some very interesting results. Now particularly if you think about it in connection with Mary's point about the rural areas, or even, I think within a large metropolitan area you're going

to have problems.

DR. NELSON: I don't worry so much about these entities when they incorporate their activities within the existing care system. But there will be some areas where they'll go in parallel as an alternative to the existing care system. Some of those won't make their performance risk targets and they're going to go belly about, and I worry about disruption of care. I worry about them leaving a whole bunch of beneficiaries confused. If the beneficiaries are lucky, whoever was taking care of them before will welcome them back, but there's going to be some disruption.

At least that seems to me to be a realistic possibility and I think that somewhere we ought to point out that to the degree that this is set up as an alternative to the existing care system it poses some risk, a disruption of care if they don't make it.

MS. MILGATE: It doesn't require actual building of networks, so people wouldn't change physicians for example.

DR. NELSON: No, but I can see one of my patients saying, I'm going to the diabetes disease management outfit

now and they'll be taking care of my multiple chronic illnesses, and that may be quite an expectation for a nurse to handle, for example. I know ideally they will reinforce and support the existing delivery system. But if there's an opportunity for entrepreneurs I'm not sure that they will necessarily integrate with the existing system.

DR. MILLER: I guess what I don't follow in the comment is, do you think that they're going to go and get their care there, or just that they're going to be having communication with -- when you said, I could see a patient saying, I'm going to go to my diabetes management growth, did you think that they were going there to get care?

DR. NELSON: I infer that they will be receiving advice and some of that advice might be with respect to their treatment protocols and the medications they're on and so forth. Is that inaccurate?

DR. MILLER: No, I think that's correct. But did you think that they were going to go to a different physician, I guess that was --

MR. HACKBARTH: What I thought he was referring to was educational groups. Not necessarily a different physician but there are educational programs that may

involve going on to a different place.

DR. NELSON: And changing the treatment protocols, putting the patient on a whole new regimen and then disappearing. That's what I'm talking about.

MR. HACKBARTH: So even if it's not a physician there is engagement, ongoing relationships that could be disrupted I think is what Alan is saying.

DR. ROWE: For example, if they have a reason to prefer one type of cholesterol-lowering drug than another, they're going to be on the phone with the patient talking with the patient every week about the medications and they can say, you're on Lipitor but we think you should be on Pravachol or vice versa. Something like that would be a way in which they could influence the system, but the physician still has to write the prescription. So the physician is still in control with respect to that.

I don't feel the same concern Alan feels about what might happen but I may not be envisioning the kind of entrepreneur that may find a loophole.

MR. HACKBARTH: Let me just a comment to the broader audience. What I think is going on here is we're trying to envision what this is exactly and have questions

about how it will work and how it's connected to the underlying delivery system and insurance program, and it's not all that easy to imagine it. So I caution people against interpreting all of the question as being negative on the idea of disease management for the Medicare population.

To the extent that we've discussed it in the past I think the commissioners have generally been very positive about the concept, but now we're trying to come to grips with how it might be operationalized and it's complicated and raises lots of challenging questions.

DR. WOLTER: My comment is kind of on that point because I'm still not sure exactly what is possible in the design of this, and that would affect a lot of how it unfolds. For example, if 10 percent of beneficiaries have to be in one region, that's either a highly dense urban area or a very, very large geographic area.

MS. MILGATE: It's 10 percent overall have to be in the program, but then it's 10,000 within a region.

DR. WOLTER: It says 10 percent here.

DR. REISCHAUER: They don't have to be enrolled. They have to be in the geographic area.

DR. WOLTER: It says will be offered in geographic areas where, in aggregate, at least 10 percent of all of Medicare beneficiaries live.

DR. REISCHAUER: But the capacity of the contractor that wins might not be such as to be able to serve all 10,000 if they --

DR. WOLTER: I'm getting to that point. But is the region envisioned to be in an area where at least 10 percent of all of Medicare beneficiaries live?

MS. MILGATE: All of the regions together have to add up to at least 10 percent.

DR. WOLTER: Then once the regions are defined, is it possible that the law as it's written would allow more than one contractor to be chosen to do disease management?

DR. SOKOLOVSKY: It's not really clear except for the fact that the contractor will bid for a threshold condition but then be responsible for all the other conditions. The idea of having two contractors in one region using a different threshold condition but contacting patients, perhaps the same patients and trying to manage them, one for their diabetes and one for CHF I think would leave it --

DR. WOLTER: That could complicate it. The reason I ask is that that would allow the potential that rural areas could have somebody involved. It could allow the potential that group practices could manage a smaller number of patients but still be involved in the program, and it would allow it to compare how group practices do compared to private vendors, this whole issue of how do you intersect with the providers. But the devil is in all those details in terms of what would be possible.

My last comment is just that we were one of 12 or 14 organizations chosen for a group practice demo by CMS and in many ways what we're working through with CMS on that demo is very similar to these issues, because we're trying to look at how do patients get chosen, how do we compare them to a sample group, how do we look at the costs that would be in the group we manage versus that group, how does the incentive get created if we do something more efficiently than the sample group, and then what measures are going to be used to look at the quality on the quality side?

I will tell you, this has been very difficult, just this little small project with 12 -- this is to your

point of being unworkable I think, Bob. It's been very, very hard to get to those details. I think CMS has had to struggle with it.

Also there's another issue that comes up that will, I think, be in play here and that's HIPAA and how patients are identified and screened and who has access to patient-identifiable records, and when happens and how do we deal with the regulatory side. There really are a lot of issues here that I'm not quite sure what our role is, but it has a lot of promise but it is hard to imagine some of these details.

DR. NEWHOUSE: Like Alice I want to make a comment about the evaluation, but it really is triggered by Jack and to some degree what Nick said. Suppose that we have some good guys out there who are doing a good job in disease management and they're not getting paid for it because they're not a covered service, but it is in fact effective. And that these are the people that come in and say, okay, pay us, we'll do it. And CMS looks at them and says, yes, it seems like you're doing a good job, we'll put you in the demonstration.

My problem is that these people won't show,

presumptively, any reduction in their cost because they're already getting it. Then if one says, all right, so evaluate them against the bad guys, then you won't know if it's the disease management or the fact that these are just better doctors or better something or others.

So I'm not sure, given this process of selecting people, how it is evaluated in a way that sheds any light on the effectiveness of disease management.

DR. REISCHAUER: But you say this practice is doing the right thing now and has these ancillary services and all that, and that is presumably the difference between another group that doesn't have it.

DR. NEWHOUSE: But maybe it isn't. Maybe these are just better -- maybe these guys are using better -- there's better medication management here anyway because these are the cream of the crop of the doctors that are doing -- they're better cardiologists than the other guys.

DR. REISCHAUER: But you won't necessarily know that if a group that hasn't been doing the good things pops up and says, I will do the good things. They might be better doctors as well.

DR. NEWHOUSE: Yes, but I still am stuck I think

in evaluating. I don't know what to make of it.

MR. SMITH: I'll try to be quick. Actually my comment was the flip side of Joe's. But let me go back and make sure I understand your answer to Carol's original question. CMS is going to hand the contractor 10,000 lives.

MS. RAY: No, it's 10,000 controls. The law doesn't specify how many program participants. It specifies that there's 10,000 --

DR. REISCHAUER: It's going to hand them a geographic area in which there are 10,000 potential participants.

MR. SMITH: At least 20,000.

MS. RAY: Controls, so there is even more.

MR. SMITH: Joe asked the other half of the question I was going to ask. If Ray and Jack are right, and it seems to me they are, that there are good general practice docs out there doing this stuff, and their patients say, I don't need this, when CMS calls, they end up perhaps in the control growth. They're getting this good stuff from good docs who aren't getting paid for it. I think Joe is right, if they have been getting this good service they are likely to show less improvement than folks who haven't been.

Somehow it seems to me the design issues here are really screwy. I'm back to Bob's unworkable comment. I had somewhat the same reaction as I read it.

Let's assume we have a thoughtful medical consumer who is being well treated and getting this sort of coordination and management and has got a nurse of a physician's assistant that she feels comfortable with, why on earth would she say yes when CMS calls?

DR. NELSON: To get home testing equipment, all kinds of stuff.

DR. REISCHAUER: But presumably we're in this because there aren't very many people in that fortunate circumstance. SO the impact might be biased downward but it's not going to be obliterated by that fact.

MR. SMITH: It makes the design issues very complex.

DR. ROWE: I think I'm on the wrong committee.

DR. REISCHAUER: Finally, a consensus has been reached.

[Laughter.]

DR. ROWE: I think I'm finding myself on a study design committee, and that's not the committee I'm supposed

to be on. I think there are some issues here, but let's not talk ourselves out of a good thing. There's no way this could be a bad thing for Medicare beneficiaries. They need it. There are a lot that aren't getting it, and I think we have to focus on that. We do have to understand that this is not a substitution but it has to be a supplement for the existing care system in such a way that we pay a fair price for the right services and we target the beneficiaries. We're raising some questions but I don't think we can answer them now.

DR. REISCHAUER: And the presentation made it clear that CMS has a lot of flexibility in the way it goes forward on this. So we shouldn't raise all the devils until they produce the detail.

DR. MILLER: The only thing I would say about all those last sets of comments, I think this is some of the places where we can make a contribution. So that rather than waiting to see the details on the evaluation, for example. we might raise some of these issues. I'm sure people at CMS are thinking about this too and can help provide some guidance. Then as we think through some of the other implementation issues we can talk about that. I think

these are the kinds of questions we can actually help with.

MR. HACKBARTH: But I think Jack's comment is a good one to leave on. Again, I don't think that we are negative about this same idea. In fact to the extent that I have concerns about the evaluation I'd be worried that the results would be biased downward as a result of some of these issues.

Okay, good work. More on this later. Let's move ahead to what's next, and that's IT, I think.

DR. WORZALA: Good afternoon. We are here to share with you what we've learned about information technology and health care. Since this is rather a new topic for the Commission we do see this primarily as an informational piece. We've been gathering information and talking with people in the field since the summer. We also had a contractor do both a lit review and a series of interviews with hospitals about their investments in IT. If you want a copy of either of those contractor reports just let us know. They weren't in your briefing materials.

IT in health care has been receiving considerable attention recently, and especially clinical IT that has a potential to improve quality. Policy questions that we

thought were relevant for MedPAC particularly at the beginning are what kinds of investments have hospitals and physicians made in IT and in what kind of IT? What are the barriers and drivers for further diffusion of IT systems? And what steps might be taken to further encourage diffusion of IT?

Just like this table, IT is multifaceted and complex. The applications are evolving day to day and they're very specific to installation in a specific organization. For example, an order entry system which allows a physician or a nurse to use electronic communication to ask for an ancillary service may be solely for medications or prescriptions, or it could also include lab tests, radiology, consults, referrals, other kinds of orders.

Similarly, an electronic health record can be essentially a digital version of a medical chart or it could be a tool that allows real-time access to patient information that might provide clinical decision support services like a prescribing alert, or it could also incorporate order entry functions. So when you talk about IT it's important to know exactly what you're talking about

because the installation and the outcome may vary depending on what specifically is being done.

So to help structure our discussion of IT we created a typology that included administrative IT systems such as billing and payroll, clinical systems, things like CPOE, PACS and/or digital imaging, and the electronic health record. There all also infrastructure that must be put into place to support IT and that includes the hardware, the networks, and the security system that supports other functions.

In your briefing papers we did go through these technologies in considerable detail and looked at both the hospital and physician settings, but in the interest of time we won't do that here. We just want to focus on some general conclusions from our review.

The first of those is that the administrative systems are more widely diffused than any of the others. However, most of the policy attention has really been focused on clinical systems, and particularly CPOE and electronic health records. It's important when you talk about IT to remember the infrastructure costs which are fairly higher for many of the clinical systems. For example,

if you decide to introduce CPOE into your hospital, do you also need to make that a wireless system and what would that mean? Then if you start holding or transferring clinical information electronically via your electronic health record what kind of security protocols do you need to put in place to protect that information?

Finally, an investment in IT is not just purchasing the technology itself. There are many other factors. There are maintenance and support costs. There's initial and ongoing training. There are changes to work processes for almost everyone in the organization. And considerable effort needs to be put in to gain the acceptance of providers and to promote widespread usage of the technology.

So that was talking about IT within an organization. But in addition to that, many people have talked about the benefits that can be gained from facilitating communication among providers. The term interoperability is often used to describe the ability to transfer electronic clinical data from one provider to another. There are very few providers now who share information electronically. Instead much of this is done

through the mail, faxes, phones, and of course, patients carrying things back and forth from one provider to another.

However, faster and electronic communication among providers does have the potential to enhance coordination of care, lead to better decisionmaking based on greater information, and potentially result in savings on repeat tests and procedures. Achieving this level of communication requires development of standards for both the content and the messaging of information. This really forms the base of what people refer to as an information infrastructure.

Currently, there is very little of this going on in the United States. There are several cities that have linked the emergency departments of local hospitals, and a couple of places are developing data repositories that link local providers, but they are the exception rather than the rule. As Karen will discuss, building an information infrastructure is something that is a priority of the Secretary.

Given the recent attention that has been given to clinical IT I thought we'd spend a bit of time on that and talk about the diffusion estimates. A very large caveat here. There really are no nationally representative surveys

of IT use among hospitals and physicians. One exception would be the community tracking survey and the physician surveys that have been done by the Center for Studying Health System Change, but that's a little bit older data. The surveys that do exist generally suffer from selection bias. For example, many of these surveys are conducted on the Internet so you would think that they probably are biased towards those who are more advanced users of IT than the average.

Nonetheless, current levels of diffusion are estimated to be low for CPOE. There seems to be a consensus, 5 or 6 percent of hospitals having operational systems in place now. A lot of people think this may be a conservative estimate, depending on the definition of what you mean by an operational system in place now. Nevertheless, those are the numbers that are out there.

For electronic health records, surveys suggest that 20 to 25 percent of physicians have them, and EHRs do seem to have diffused more widely among physicians than among hospitals. This may be because physicians do have a greater need to follow their patients over time and across settings than do hospitals.

For both hospitals and physicians, the size of the institution does seem to be correlated with the use of IT, so larger hospitals and larger physician groups are more likely to be advanced users of IT. In addition, closed systems such as the VA or a staff model HMO is also more likely to have IT systems implemented.

Despite the low current diffusion, in the past few months surveys have suggested a remarkable increase in providers' interest in IT. Hospitals have been increasing their capital budgets and IT has really become a priority within the capital spending of many hospitals. Physicians also expressing an increased interest in having electronic health records. This may be fueled in part by some alternative ways to go about it, so leasing options and subscription options whereby an IT company actually maintains the software and stores the data and the physician would pay a monthly fee to use it.

So when you think about investing in IT one of the first questions is, will pay all off? Our analysis of what's out there about the financial return to investment in IT is that the administrative systems generally have paid off. Financial returns for the clinical applications

however are really quite uncertain. This is partly because it's hard to quantify the cost and the benefits for many of these systems because it involves so much more than just the technology.

So if you take the example of a physician investing in electronic health record, they do have the cost of the hardware and the software and training, and then they have to re-work the processes in their office. But there are some physicians saying that an electronic health record actually increases their workload because they need to enter the information themselves. They also feel that it might interfere with the personal interaction between the physician and the patient. So those costs can be hard to measure.

Then the benefits could be increased documentation of care, fewer rejected claims, increased efficiency of keeping medical record which could lead to lower admin costs. You may be able to take a room devoted to paper record storage and turn it into an exam room, leading to increased revenues. And you may be able to save on your malpractice costs as you have better care documentation. And of course, you may have improved quality of care. So

quantifying those things, measuring them, making an ROI is fairly difficult.

In the hospitals that were interviewed as part of this project, they really did not assess the return on investment, particularly when they were talking about CPOE or EHRs. They were really focused on the quality and safety improvement as the main justification for investment.

There are, however, some clinical technologies such as PACS, which is a radiology system for storing images on the computer rather than on film, there is a positive return generally and it has been realized among some hospitals, particularly the large hospitals and the large radiology practices that do a lot of imaging. This positive return along with the more narrow focus of the application and the clear benefit to the physicians do seem to be why PACS is diffusing more rapidly than some of the other clinical IT systems.

So when we think about the financial return to the investment there is one other issue which is that the financial return may not accrue to the organization that makes the investment. So if a hospital puts in a CPOE system and prevents an adverse drug event that might have

required an additional hospitalization, it's not the hospital that will see the financial gain. It's the insurer that sees the financial gain. I think we've talked about that previously. And of course, the patient benefits in that example from the improved care.

So if the financial return is uncertain, what is driving investment in IT, at least to the extent that see it? It does seem like the promise of quality and safety gains have been the major reason to invest in clinical IT, and particularly CPOE and EHRs. This has been bolstered by the attention to IT systems from the Leapfrog Group, IOM and others. In addition, the development of data standards and regulations have been cited as prompting investments. So for example, many hospitals are currently enhancing their IT security systems to comply with HIPAA regulations.

Similarly, in February the FDA put out a final rule requiring drug manufacturers to label their products with bar codes. A lot of people think that this will encourage hospital investment in bar coding technology to read those bar codes. A cautionary note there, people feel that widespread adoption by hospitals will depend on the extent to which bar coding happens at the dose level as

opposed to being on packaging of a larger unit of drugs.

So other drivers of IT investment include continuing evolution of the technology leading to a better product at a lower price, and competition among providers with the desire to be seen as cutting edge and technologically advanced.

Those are some of the drivers. What are the barriers? Cost is certain considered a major barrier to investment in IT. These are expensive systems. But we found that this is by no means the only barrier to investment. In our interviews with hospitals and in the trade press the nascent technology market was seen as a significant barriers. Products are evolving and vendors may not be able to deliver the level of support that is needed. In addition, the market is perceived to be unstable with individual products being obsolete or no longer supported and vendors buying each other up.

In addition, providers can't be certain that an investment will actually become operational. I think you've all heard about some of the high-profile failures that have occurred.

Implementing an IT application is difficult and

risky because it is a very complex system and you need to integrate the new system into your existing system, which isn't always easy. And you're going to be putting in significant work process changes to use this new IT. And if you don't, it seems like the benefits of the IT don't actually come about.

Finally, a lot of people talk about the uncertainty of acceptance by the users of IT, by physicians, nurses, and other hospital staff. And finally, some have noted the lack of specific reimbursement for IT as a barrier to adoption. Just pause again to note that the strength of the barriers does seem to change by setting. Larger hospitals and systems do seem to be better able to overcome them.

I'm going to turn it over to Karen now.

MS. MILGATE: In this part of the presentation we'll discuss current public and private sector efforts to encourage further diffusion, a little bit about whether a need exists for further action for speeding up the adoption of technology, and what other public and private efforts might be possible to make this happen.

Current public and private efforts are many. I

would just note that during the process of doing this analysis, Chantal and I felt like we were inundated daily with new efforts that were out there, both privately and publicly, for ways to try to further encourage diffusion of health care IT.

Basically the efforts were at two levels. One was the individual provider level; how can we make it more possible for individual providers to adopt health IT? And the other level was really more of the interoperability level; the word that we learned how to pronounce that at first we did not know how to pronounce. That is just the basic concept of information flowing across providers. So I think that is an important distinction.

The first bullet on this slide is about standards adoption. What I've done here really is give an example under each of these areas of a public effort and a private effort. Interestingly, on this one there's a huge overlap between the efforts, which was by design, at least from the public sector folks.

Under standards adoption, the purpose here is more the information flow across providers. Here the concept that has made it easier for me to understand what is this is

a railroad car where you have standards to determine what the tracks are like and what the cars are made of, and you also need some standards to determine how you're going to talk about what's in those boxcars. So they do both. They do definitions of the lab values that will go in and out of the lab, but also the type of messaging that will occur within the information system itself.

HHS has put quite a bit of effort to developing the National Health Information Infrastructure Initiative. A couple of examples of what they've done there is working through their consolidated health informatics program, tried to work on adoption of specific standards for federal government health programs. So for example, they've adopted standards for labs, prescription drugs, imaging, and a couple of others for use for all federal government agencies. So you have the VA, the DOD, for example using the same kind of messaging standards.

They've also put some efforts forth to try to define some functionalities for the electronic health record. So when institutions are putting in place electronic health records they're really talking about the same things and it's easier for them to define what types of

functionalities they want within their own organization.

Private sector efforts, and one of the larger groups that's being used both by the public and the private sector is Health Level 7 group. I don't have a huge familiarity with them, but their basic purpose is to develop standards. So some of these programs have been given to Health Level 7 standards. For example, right now they have out for comment the functions that they've defined through a consensus process for electronic health record. The standards that were adopted by the Secretary for labs and prescriptions were adopted by private sector organizations. So you have really very much of a public-private effort there.

The other thing that both public and private sector organizations have done is try to fund research on the value of health IT. AHRQ has done a lot of research on this, but they put out an RFP recently to spend $40 million in 2004 to try to get a better handle on the value, both in terms of quality payoff as well as cost payoff, or savings payoff for putting in place health information technology.

Another example is the Center for Information Technology Leadership. I don't know if the actual report is

out now or not, but they are working on a report showing significant savings if health information technology were fully implemented and used throughout the nation.

Other efforts include just the basic encouraging the use of health information technology. The Medicare Modernization Act, for example, had some provisions to encourage the use of e-prescribing. Again, it was to try to adopt standards and then require those who do electronic prescribing to use the standards. They also include some matching grants for physicians to actually put in place software or hardware, handheld devices to electronically prescribe.

The MMA also established a commission on systemic interoperability to try to strategize how to achieve that, prioritize some of the steps to take to get there. Then also within the physician pay-for-performance demo that was included in the Medicare Modernization Act they included the use of health IT as one of the measures of quality that physicians could use to actually qualify for the bonuses that are a part of that demonstration project.

In the private sector, Chantal talked to you before about the Leapfrog group. Clearly they have had a

fairly significant impact on the awareness of CPOE. Some recent research shows it hasn't necessarily paid off in terms of actual implementation as much as they would like, but they certainly have raised the awareness of benefits of CPOE. Then the types of quality incentives that we talked about in our June report last year, there are certainly some private sector plans and purchasers putting in place incentives for use of IT.

The American Academy of Family Physicians had an interesting model where they have worked with some vendors to try to get less expensive deals, so to speak. I don't know if that's the best way to talk about it, but for their members for those smaller practices that are out there and that might want to adopt electronic health records. As Chantal mentioned, there are some regional initiatives where you have providers in actual specific communities getting together and putting some monies together to create secure platforms, to share information.

There also some efforts to mandate various health IT tools. The FDA bar code rule that Chantal alluded to is one of those. It doesn't actually mandate that hospitals use them, but by mandating that pharmaceutical companies put

bar codes on their products, it makes it more likely that hospitals might use them. There are some payers that are also requiring electronic billing, so that pushes the use of health IT as well.

So to the question of whether there is a need for further action, one of the questions is whether IT does actually improve quality and safety. It seems odd to ask that question because it really does make intuitive sense that clearly it would. Health care rests on having the right information at the right time for the right patient. Computers can sometimes make much more complicated calculations than the human brain, such as looking at drug interactions and applying specific protocols to certain specific people. It also makes it easier for information to move across settings much more than a paper-based system would.

There are some studies that show the potential for health information technology, particularly computerized physician order entry and bar coding, to reduce medication errors. In some cases though, some of the literature does show that even when implemented, sometimes it's not used. Now that may have less to do with the actual technology, as

to how it was implemented, how much commitment the organization had to it, but I think it shows the potential for failure if it's not done right.

The other issue that we found in our analysis of the literature on whether IT actually improved quality and safety was how generalizable some of those studies were. The best studies were really done in a few institutions that had shown strong commitment and leadership to putting these systems in place. So one of the questions that some have raised, actually including AHRQ by doing more research in this area, is how is it possible to gather more data on how IT actually does improve quality and safety.

While many are concerned that the current pace of diffusion is too slow, surveys do indicate, as the Chantal noted, a growing interest in the adoption of health IT. There's a tremendous increase, at least voiced in one survey, on more capital investment and much of the commitment in those investments seemed to be on putting in place health information technology.

In addition, because of some of the cautions we heard about the current level -- how good the product is currently, there were some that wondered if the current pace

may be necessary to make sure that in the long run that health IT was put in place in an effective manner. Implementing health care IT in both hospitals and physician practices, we heard over and over again about how complex it was and how important it was to have strong commitment because of the long-term investment of time and resources it took to put these things in place appropriately. There may need to be time to build on lessons learned, both in terms of developing the appropriate products as well as learning from best practices of how to best implement these systems.

So what type of action could strengthen the drivers? The drivers that we heard about primarily were external and internal expectations regarding quality and safety. So there's a variety of different ways those drivers could be reinforced. One is something we've talked about, incentives to improve quality. We heard that even an indirect approach where you would reward those who actually put in place better practice guidelines could encourage providers to put these types of systems in place. It wouldn't necessarily one-for-one pay for the investment, but if there was a higher expectation that this would be the output of the system there would be more encouragement to

actually put these systems in place.

Another way to do it might be through public reporting. Again, an incentive to improve quality that might put more emphasis on the need for putting in place these types of systems if they do improve quality. The other, which I believe is happening to some extent but which could be enhanced is research to show the value, both in terms of quality and cost savings.

What could lower the barriers? Clearly, as Chantal talked about, there are several different types of barriers. It is somewhat difficult to consider how one of the main barriers, the complexity of implementation, could actually be lowered through explicit public or private action, but perhaps there are ways to document some of the best practices and the research, the implementation issues so we could get a better handle on how to actually implement IT and it would make it easier for systems to put it in place.

There's a possible of, in a variety of different ways, infusing more dollars into the system. But what would be important here is to recognize that not all providers need these dollars as much as others, so it would have to be

targeted. Those hospitals, for example, that are larger or in systems where there's more ability to share resources may not need the dollars as much as some others.

One concern here is whether it might important to have more experience, again, with the products themselves and how to put them in place before you would infuse too many dollars. Clearly, the efforts to adopt standards will increase the ability for information to flow between providers and potentially increase confidence in the individual provider institution that the system they buy today will be useful for tomorrow, so there won't need to be a new infusion of investment because standards might change.

So these are some efforts that are already underway in some public or private initiative but could be expanded further. These are not as well-developed as the ones I mentioned at first. First, payment policy could be used to encourage further diffusion. Really there's two ways this could be used. One I mentioned in terms of incentives for quality. To the extent the output of quality is valued, and one way to get there is through better use of IT, that might be an incentive for further diffusion. In

addition, some have talked about using IT, and I've given some examples, of one measure of whether someone is doing a quality job or not.

Others have suggested it might be useful to create a loan fund. One proposal is for matching grants with states and there would be some regional loan funds, and those regional loan funds would then decide at their own level, their regional level, who would get loans for what. Also some have suggested grants, and clearly the MMA put out some level of grants to physicians to do e-prescribing.

One other way to do it would be to mandate use of IT. Basically any purchaser could put this in place. The COPs, for example, could be used to require CPOE. Or it might be possible for conditions of participation to require certain functions be met, such as we want physicians to use clinical practice guidelines. Again, that could be in indirect incentive to put in place health IT.

One issue that's been raised by some are some of the legal barriers. The primary issue that is talked about is somehow creating a safe harbor from anti-kickback statute. Hospitals, for example, have told us they'd like to in some way, shape or form give physicians incentives to

use health IT, or even buy the hardware for them, and they have been afraid of the anti-kickback statute. I won't say that we've done a full analysis of how serious a barrier that is, but that's certainly mentioned quite often.

Another that isn't on here that I think is important the more I've heard about the community level initiatives is the possibility of sharing resources at the community level. That is a model that is currently in several different regions that I think poses a really practical and interesting model for us to think about.

This is the end of the formal presentation but we'd like your feedback on the draft chapter, the appropriate balance, and the manner in which we discuss the issues and any issues that we may have overlooked in your current draft.

MS. ROSENBLATT: I was delighted to see this chapter. I think that the draft was well done. I'd liked to ask that you think about adding something. When you talk about public and private efforts, health plans are doing stuff. Wellpoint recently, for example, committed $30 million and received a lot of press for making computers and e-prescribing available. It's an initiative called I-Doc.

If you want information on that Woody Myers, who is an ex-MedPAC commissioner could give you a lot of information about it.

We offered that choice, because I think your point is well made, that there are physicians in different states of acceptance of technology, which we recognize, so some of the small practices need the basic PC, so we made that available. Some of the larger practices already have that. They're ready to move on the e-prescribing and things like that. So that was the other part. So that we were recognizing that one size does not fit all, and I think that's a good point that you made.

MS. RAPHAEL: The chapter is titled information technology and health care, but you only talk about hospitals and physicians. I was wondering if there was a reason --

The other point I wanted to make besides that point is something else that I'm very interested in, is to what extent do we know anything about the ability of IT to improve productivity? I know you focus on quality and safety and the ROI there, but I think that's a very area for us. We have some experience with e-learning and tele-health

and a few things, but I would say they're fairly stage. So I would be interested in what we could glean about that.

DR. REISCHAUER: On that point, do we have any information in our hospital database on how far along the various hospitals are with respect to acceptance of the administrative clinical whatever, because you could relate margins to that if we had it.

DR. WORZALA: It's difficult. There's a data source out there that's at the hospital level but we're not totally sure about the validity of the data. But it's something to look at. I think we were trying with the return on investment to really get at this issue of, is this improving efficiency enough to make up the investment, and it's just really hard. People have got systematically evaluated at that level.

DR. ROWE: Two points. In your barriers to investment in IT, while it's implicit in part, I think it's worth being explicit about the limitation and the access to capital in not-for-profit hospitals. In the for-profit sector there is access to the markets, but it's more limited for the not-for-profits and that's a problem.

The second thing is, at the end of the chapter you

talk about what could be done and what different proposals have been made. One of the proposals in this regard, you refer to the IOM but you don't refer to -- the academic health center report of the IOM had a recommendation that I think may have actually been discussed at the MedPAC retreat, that the proportion of the GME payments that -- IME payments, which is part of the GME payment, which was identified as beyond the empirically supported level and therefore identified as "subsidy" might potentially be used to help institutions invest in IT to better prepare them to take care of future Medicare beneficiaries. And that IOM recommendation would seem, while not popular in all quarters I'm told, might seem to be relevant to this chapter. It is in a formal IOM report so you might reference that if you think it's germane.

DR. STOWERS: I thought it was a great chapter, good summary. There was a couple little things. I think it might help all of us, having just been on a committee evaluating a moderate size hospital system and a moderate size clinic system, of how much money we're really talking about. The hospital was in the tens of millions and the clinic was in the millions, to make this step. So those

that have made this step, I really pat them on the back because you're talking a lot of money here.

A second thing, just looking at who ought to get the loans and grants, we also saw considerable, I guess the economists call it economy of scale of setting up a practice where you put the system in and then to add on more doctors into that system really wasn't that costly. So this is one area where size makes a lot of difference in the cost per physician to get them into the system. So kind of putting a benchmark on that somehow I think would help us in that need area.

The last thing I want to get to is what Carol said. What's more frustrating than anything is to get a call from a home health agency or from the nursing home where we're trying to provide what we've been talking about all afternoon about chronic care management and all of that, nursing home charts at the nursing home and they're trying to tell me what medicines they're on. I really think this is a great chance for MedPAC to say that the end goal here is that we're going to bring together all providers. If we're really ever going to manage this chronic care or chronic disease thing we're going to have to have access to

not just the hospitals and the doctors offices.

But anyway, great chapter. I thought it was good.

DR. NEWHOUSE: That's a good follow-on to me. First of all, I'm very glad we took this topic on. I think it's very important.

I've been engaged in a small project with some others on doing what we called an IT biopsy of Boston and Denver. We picked those two markets because we didn't have much money to do any more and because we thought Boston was kind of in the vanguard and Denver was probably a fairly typical large market in this regard.

What we found is what goes along with what Carol and Ray are saying. So we looked at the extent of IT diffusion across various sites, and not surprisingly it was actually greatest for pharmacies, and hospitals trailed along and by the time you got to M.D. offices and nursing homes and SNFs and home health agencies and dentist's offices and ASCs it went down to very small numbers. I think we'll be probably coming out with that fairly soon.

The other thing I wanted to say, maybe I should take off my academic hat or turn in my union card, but I'm concerned about the role for federal research here. My

concern is actually under the procurement laws, or alternatively, peer-reviewed grant mechanisms, the time delays are long and by the time money gets out the door and the research is done, technology has probably changed. And there is fairly strong incentives, obviously, for the vendors to try to demonstrate value when they're trying to market their products.

So I'm a little skeptical of, beyond what the feds are doing now, which I think is very good, how much more they should be doing of the kinds of things that we say at one point in the draft -- I was looking at where we refer to catalogs of products and research on value and so forth. I thought there was some reason to be skeptical.

DR. WOLTER: I just wanted to add on to Carol's comment about the efficiency side. I think that it is hard and complex, but Mary and I heard Brent James 10 days or so ago at a rural health workshop she's chairing, talk about InterMountain Healthcare's goals, and they have a specific target of 10 percent efficiency improvement related to their IT installation, and they think that's conservative. They've done a lot of work in this area. Mayo, Jacksonville and Geisinger have also done some analytic work on how they

look at the efficiency returns from their investment.

MR. HACKBARTH: Nick, could I just ask you about those targets? That's for what kind of IT?

DR. WOLTER: Clinical.

MR. HACKBARTH: Including medical records?

DR. WOLTER: Yes, electronic medical record, alerts, medication error improvement, et cetera.

Then also on the grant and loan and finding ways to fund, I'm wondering if it would be worth linking our conversation about that to quality outcomes. And if there were to be federal funding of some kind, whether it's targeted or however it was developed, would it be worth suggesting that that funding be targeted not just to the installation of the systems but to some kind of reporting of outcomes or some value that can be demonstrated? Is that something we should be discussing?

MR. MULLER: Let me also add my compliments to you on the chapter. One of the themes you stressed is the one you learned how to pronounce on interoperability. One of the questions I have is how important this is going to be. Obviously at one level one thinks one should have, especially with electronic communication, the ability to

share information across all sites. Joe just referenced how some areas like hospitals and pharmacies are further along than SNFs and other settings. But we also know that inside even places like hospitals, bringing together various systems such as radiology, labs, physician offices and so forth is very difficult because by and large you get a lot of robustness in each one of those applications and it's very hard to get people to say, I'll water down the robustness to the lowest common denominator so they can communicate to each other.

Now obviously that problem of how to share information in medical practice has been with us for many years before computers and hopefully computers make it more easy to share that information. But that being said, it's still difficult at times for these systems to speak to each other. So one of the questions that I have therefore is, are there advances going on in the way it happened in web-based technology and broadband in recent years that may make the interoperability possibilities greater? And is that likely to occur? Because I really don't see there being common -- I don't see there being systems that speak to each other that easily in terms of common denominators as we know

right now. Gastroenterologists use different categories, and cardiologists use different categories, and radiologists. You can go on and on; a hundred examples like that, 1,000 examples like that.

So how does one really get the information that we want on the patient populations going back -- whether it's questions over time like our previous conversations about chronic disease management, questions across different providers going from Grand Forks to Fargo and so forth, just one part of town to another between a pharmacy and a hospital, nursing home and so forth?

So if you could be thinking a little bit along the lines of, are there advances coming forth in the broader world of technology that makes a more possible for interoperability to move forward? Because I think it's unlikely that it will happen inside the systems themselves, for the reasons I mentioned, because you always want the power of the specific application, whether you're an insurer or a hospital or a physician or a pharmacy or whatever. So I don't see us developing one set of systems that can do all these things.

So the question is, as we keep developing these

hundreds of systems in these various areas, are there ways of bringing the information together in those various setting?

DR. WAKEFIELD: Just a couple of comments. I would reinforce Ralph's comment, or at least his last one, and that is, to the extent you can help inform us a bit about the interface across different systems and the work that's underway there to try to allow for linkages in a more porous exchange I think that would be helpful. Clearly there has been and there is effort underway there. But I guess now that he's mentioned it, I didn't really see that reflected in the chapter and I think that would be a good add.

I want to come back in on Carol's comment and just say that IT is for so much more than just physicians. It's for pharmacists, nurses, dietitians, the whole range of health care providers, and that's absent I think in the chapter. There's a nod here or there to nurses, for example, but pharmacists are just critical when we think about CPOE. Frankly, even patients. We can start to be thinking about how consumers get dealt in in terms of information sharing. So I would try and cast that part of

the content a little bit more along those lines. Carol mentioned the different settings and now I'm mentioning the different disciplines in the team including the patient. So a little bit of that focus I think might be good.

The second is I liked your notion, I'm not sure it needs to be expanded but I certainly want to reinforce it, and that is what accrues financially with an investment in IT to a local facility versus what doesn't? So how do we incent through payment policy IT application. What I know from personal experience right now is my 86-year-old mother, Medicare beneficiary, who twice now has had wrong-sided procedures, one of them that absolutely would have been prevented had there been an electronic medical record available. But instead it was regrettably a physician who had to rely on memory and information that was located about two floors up and some distance away and not readily accessible.

Who paid there? Medicare did. Medicare paid for two procedures. And she paid because she had to go through two procedures. And I paid because I had to take two afternoons off, for example. So it's a little bit that notion of why is it that some facilities may not be stepping

up to the plate, or making sure that we're capturing who is paying, because in some instances I think it's probably pretty clear there is a cost, and Medicare on occasion, at least from my experience, does pay. So you make that point a bit. I just would want to make sure it doesn't get lost or maybe it could be even made a little bit more strongly.

The last point I think I had is that a lot of this is about the hardware and the software. You mentioned changes in work processes and there's a lot of discussion, for example, about physician resistance primarily and then I think maybe a second tier of nurse resistance or somebody else. I think that's really important, how we get the buy-in, and how that might be serving as a barrier.

But in addition, I'd say if we could capture a little bit more, especially when we're speaking to the federal government -- and I don't know how you operationalize this, but it's not just the technology. It is ensuring that whatever Medicare might be paying for, that we're paying attention to the expectation that not only is that hardware put in place but that practice patterns around it change too. It's the culture of the organization, and embedding it within a system of care.

That sounds a little bit trite but I'll give you a concrete example. On page five where you're talking about automated dispensing machines that distribute medication doses and they remove the possibility of pharmacist or nurse error. At least in one case that I know of it actually introduced new error because the automated dispensing machine dispense the wrong drug. Had the nurse who picked it up there not looked carefully and -- so in other words, she was still paying attention to the five rights: right does, right patient, right everything else, and checked the drug. But had she not and had she relied on that solely there would have been an error introduced by that technology that wouldn't have occurred before.

So that is just an example. It is all about the hardware and software, but it's very much too about what's going on -- wrapped around those systems. The AHRQ IT initiatives that are being funded right now, I was part of at least the rural development of some of those parameters, and I'd say now in retrospect we might have paid a little bit too much attention to the IT and what we're trying to drive on that side and maybe not quite enough to what else does the system have to do or the health care infrastructure

have to do to make sure that that application doesn't introduce more compromises in patient safety and so on.

So I don't know how you speak to that but it just struck me so much of this was focused on resistance to the application and a few times mentioned change in work processes, but I think it's more than that.

The only other point I wanted to make is I think I saw passing reference here or someplace else to the role of QIOs, or maybe I saw this someplace else. I'd just say maybe we could think about whether or not there's a lever to pull there to in terms of quality improvement organizations working with health care systems and facilities. They work with hospitals and clinic and nursing homes and so on now. Maybe this could also be a piece of their portfolio in some fashion. I don't know, but I certainly know the reliance on QIOs, at least in our rural facilities. It's an area of expertise that gets brought out to rural areas that they just don't otherwise have access to.

So that's a vehicle for distributing information on quality assurance and quality improvement that maybe the big facilities don't need as much. But it's an entry for our smaller facilities at least and maybe there's a role

there in terms of IT application.

MR. DeBUSK: Mary, I believe those that you're talking about, perhaps for the drugs bar coding will correct all that. Bar coding will take care of that.

We seem to be running around in circles here. Isn't there someone out there in the field, some hospital or for-profit or someone who's got a pretty comprehensive computer system put together to address a lot of the clinical issues?

DR. MILLER: As part of this effort we are talking to people in the field who are doing this, and I myself have gone out and talked to at least a couple of plans that are doing these kinds of things.

MR. DeBUSK: A couple of plans? I believe this is an area where if we really got on it and did some field visits and contacted some people across the country probably we could find a lot of answers to this, because we're just grabbing for pieces in here now and probably there's some real information out there if we'll just go pursue it.

MR. HACKBARTH: There certainly are organizations that have invested a lot of money and a lot of time in this. But even at those organizations you don't necessarily have

answers to all these questions. Some of the things are just very difficult to measure, very difficult to assess. So it's not quite as simple as just going to the right people.

MR. DeBUSK: I understand that. A lot of the areas that I think we come right back to is addressing protocols, really addressing protocols and established standardization in protocols and approaching it a bite at a time, with different applications, taking protocols and eating into the clinical aspect.

Now let me ask you something else. By law, how much of these records do we still have to have a paper copy of that we've got to store in a warehouse and keep for 15 or 20 years?

MR. HACKBARTH: I don't know the specific rules, but once you go to a computerized system it's not like you need to keep paper records, paper copies of everything.

MR. DeBUSK: I think you still have to under some law.

MR. HACKBARTH: Are you talking about the old record?

MR. DeBUSK: Yes.

MR. HACKBARTH: Typically what you do I think, at

least what we did at Harvard Vanguard in Boston is that you backload the data. You just don't start on day one and collect only data going forward. You take the old data and put it into the system. Now I don't know what the conventional practice is for people who are converting from paper records to -- Ralph, you're saying no?

MR. MULLER: Given the under-investment, if you really want to see under-investment, take your back records -- I mean, that will kill the -- I mean, I think you can do it here on some simple stuff, but by and large most people do not, your phrase, backload the data. What they do is they do it going forward.

MR. HACKBARTH: Our situation was unique because we were converting from one computerized system to another which obviously makes that task a lot easier.

Can I just leap into the queue for a second? I think there's a lot of really excellent stuff. It's very thoughtful, very careful look at the issue overall. There was a strong emphasis and I think an accurate emphasis that often the gains are difficult to quantify, and that's an impediment in some cases to people making a very substantial investment in doing this.

But I think equally important is that often the gains accrue to others. There are real externalities here. I think one of the reasons that you see organizations like my old organization, Harvard Vanguard or Kaiser Permanente doing this is that they're fully capitated, so they're at risk for the whole range of services. And if by changing practice over here you can save money over there, the gains accrue within the same system.

Whereas, in the more fragmented fee-for-service system, often the gains will accrue to other people. So I'm worried about those externalities. I think I'm using the word correctly, Joe -- and that that means that the market, left to its own devices, may not solve this problem. That leads me to think that maybe we do need to think about ways that the public sector can help support the development and dissemination of these systems.

DR. REISCHAUER: On that very point. You're right about Kaiser Permanente sort of, but people leave the system, so they don't capture it. One thing that Medicare has to its advantage is, when you leave the system you've left for good and you are joining someone else's system, or at least one with high medical costs.

MR. HACKBARTH; That would be fine though if Medicare were the one making the investment. But Medicare isn't.

DR. REISCHAUER: No, I'm getting to the point which is, the argument is, therefore Medicare should be willing to pony up some of this because eventually it will reflect back in lower fees -- could, maybe.

MS. RAPHAEL: But I think in line with that, that's something that I've been thinking about, because with the externalities you can't really measure the return very precisely. I think it was Jeff Goldsmith who told us, only 40 percent of IT projects succeed.

So given all of those things I agree, how will we see that this really progresses? And the high cost. The costs are really incredibly high. I envy the IT companies. I wish I had that kind of product where you buy the product and they immediately tell you that you have the wrong product, that they can't support, and you have to upgrade it at the cost of $1 million.

MR. MULLER: That's why people don't buy it, Carol.

MR. HACKBARTH: Somebody earlier asked about the

scale of the investment. For Harvard Vanguard, a group with 500 to 600 physicians, when you count everything, software, infrastructure, training, you are talking tens of millions. My recollection is something on the magnitude of a $40 or $50 million investment. Alan may know how much InterMountain Healthcare has spent on this. It's big bucks.

DR. WORZALA: I didn't put it in the presentation but you probably heard me before pulling through papers to get some of these numbers for you on the average cost. I'll just run through a few of them. It totally depends on the institution and the installation and what you're doing, and training and all those things. These are some average costs coming out of the lit review. For the bar coding, $350,000 to $1 million; for PACS, $3 million to $4 million. It can be much more than that if it's a larger institution. CPOE, a range of $3 million to $20 million. And then again, electronic health records, really tens of millions. That's a big-ticket item.

Then the physician EHR is a little bit less expensive but I think in terms of revenue it's the same large investment. They're talking about $25,000 per physician, but again there's a marginal decline in the cost

for additional physicians in a given practice.

I just wanted to say one thing, as part of this work, part of what we built on here was a series of interviews that a contractor did for us with 12 hospitals that are very advanced in their use of IT, and eight hospitals that are less advanced in their use of IT. I can't give you the names of the institutions because we did promise them that they wouldn't be identified, but these are some of the big leaders in IT. They all had a different story, but some of the main threads that I pulled out of here were derived from talking with the leaders in use of IT as well as people who aren't as far along.

One of the observations really does coincide with what you were saying, Glenn, many of these leaders in use of IT are more closed systems, or hospitals that employ their physicians where there's much more internal -- the externalities are internalized because of the size of the organization and the breadth.

MR. HACKBARTH: Even when it turns out to be a success story, it's lots of painful moments on the road to success. It's just not easy stuff to do.

MR. FEEZOR: Just quickly, Glenn. You touched on

exactly what I hoped that we would emphasize, and that is because the investments are disproportionate probably to the returns that I would hope our report would you, as you suggested, explore a bit more either what the actual legal interpretations are in terms of different providers investing for other provider's benefits, or your safe harbor I think is how you mentioned it, or other community ways of funding that.

Second, I would just underscore Carol and Mary's point that IT not just as transfer of information but as decision support, not just for the clinician but I think increasingly for the patient or the would-be patient.

Third is, just ought to emphasize Jack's concern that the costs are so formidable that our small and our not-for-profit institutions may not be able to do that, and I think some greater emphasis on the range of investment and what that would mean in terms of the smaller institutions, total budget might be helpful.

Then finally, Glenn, I think getting back to what I think I heard you alluding to, I think this is so important to so many aspects of other issues that we have been focusing on and that Congress has been -- I hope that

we would take a leadership position, or at least be urging both the Congress and the administration to really focus and try to accelerate the evolution of policy in this area so that there could be both consolidation and stability within the market by which these technologies could be more broadly applied.

DR. REISCHAUER: I was wondering whether there is another country or a Canadian province which is far advanced from where we are which we might use as a description of the potential --

MR. MULLER: The U.K..

DR. REISCHAUER: That's what I was thinking of a weekend trip for you two.

MR. MULLER: The U.K. has done more and they're basically implementing a lot of the work that comes out of Berwick's group who are doing a lot of the design. So obviously, as a system that's more closed they can make these kind of investments and follow it. It's also fair to say that the investment even there is modest compared to what the potential investments can be.

DR. NELSON: I think it's important to at least reference the potential for the future to be less expensive,

less costly as we move to a secured open source electronic health record that's web-based, that doesn't rely on software that people have to buy, and that allows the patients to enter information into the electronic health record and have access to the information in there. So that if they're monitoring their blood pressure or their blood sugar or whatever, they own part of that record and they can enter information into it. I think the field is moving so quickly in this area that software is not going to be a problem in the future.

DR. MILLER: Just to make a couple points. You two are not going to the U.K., so just make sure we put a stop to that right here. But actually as we were thinking through this there's a couple of points. To Mary's point, whether it came through or not, we spent a lot of time talking about the process, and that you can purchase the software but the notion of getting people to use it and working through it and those things was something that we spent a lot of time talking about. We'll make sure that that comes out.

But because of that, because of the uncertainty of the ROI -- we all agree that this is an important

infrastructure, but if we go down the road of thinking about federal incentives we ought to think carefully about those. And because it's so uncertain we might want to think of incentives that have a shared risk to them so that it's not just a one-sided proposition for the federal government.

MR. MULLER: I would say in terms of, the software may be inexpensive, but that's not where the big costs are in system installations. In fact I think for the last year or two, the VA, which has quite a sophisticated system, has made it available to anybody to adopt for free, and as far as I know nobody has yet adopted it, in part because it doesn't connect to the other systems that they have and a lot of the cost, as all of us know, really are in training staff, changing other kinds of systems, people systems, management and so forth. So I don't think we should understate by any means how expensive these installations are.

In some ways, the software may be the cheapest part of this and it's all the other costs that make it so dramatic. It's really changing how people practice. And those costs are interlaced and marbleized throughout the whole health system. So I think it's important to both have

-- I share Glenn's sense that having some vehicle for having Medicare support these kind of investments I think is important. At the same time I do think we should not understate how expensive it is to make these kind of improvements, largely because they're not just cost of software. They're costs of how one run health systems.

MS. MILGATE: Could I just make a comment on that? When we talked to different systems about that, in fact when we talked to the VA and I asked them about VISTA, this isn't a software that others could use fairly cheaply and he said, that's not the point really. The point is everything else Ralph said.

But when we talked to the systems about that, to them they didn't think of that -- I mean, they included it as costs but they said, the real situation is the commitment to doing that, the leadership to doing that, the time it takes to do that. So they weren't as concerned about the dollars. They were more concerned about whether their organization had the capacity to actually make that type of change.

DR. NELSON: I think it's different if we're talking about a big health system than if we're talking

about a two-person physician group. The new generation of physicians are going to demand it, and it's going to be linked to decision-support systems that help them, as well as managing the rest of their practice. In that sense, finding things like an open source electronic health record that is secured as an alternative to what's happening. That's a very practical approach.

MR. HACKBARTH: Okay, thank you.

Next up is dual eligibles.

MS. MUTTI: This presentation follows up on our discussion about dual eligibles that we had in January. At the January meeting, as you might recall we talked about their eligibility requirements and the coverage and payment policy for duals. Today we're going to talk about their demographic characteristics as well as their spending patterns. In April we hope to come back to you then with a draft chapter that incorporates this information and also pulls together some more information on spending patterns as well as quality and access information.

Today perhaps the best way to frame this discussion is to pick up on a question that was asked at the last meeting, and that was, what are the characteristics of

a typical dual beneficiary?

So first let me take a look at demographic characteristics, but I need to take just a moment to talk to you about how we define dual beneficiaries and how we counted them. We included all those who are fully dual eligible, including the medically needy. We also included those people who are qualified Medicare beneficiaries as well as specified low income Medicare beneficiaries. These people are not entitled to the full range of Medicaid beneficiaries. They have help with their premiums and in some cases also their cost-sharing.

We further refined our definition duals by counting someone in these categories as duals only if Medicaid was their predominant source of coverage throughout the year. These definitions are slightly different than the ones that were used for the disease management work so you'll notice some discrepancies but nothing that really changes the fundamental picture here. I should also add that our analysis is based on 2001 MCBS cost and use data, and also that it was largely or completely performed by Sarah Lowery on our staff with the help of Dan Zabinski. Unfortunately, neither of them could be here today.

Now let me turn to the demographic data. Relative to non-duals, duals are far more likely to be enrolled as disabled, and therefore be under 65. In fact they are 2.5 times as likely. They are also more likely to be over 85. So of duals, more than one-third are under 65 and about 14 percent or over 85. These two subpopulations, therefore, account for 50 percent of all duals. The remaining 50 percent is fairly evenly divided between these two age categories.

Relative to non-duals, duals report worse health status. The majority report good or fair status, but just over 20 percent report poor health status and 17 percent report excellent health status.

Relative to non-duals, duals are more likely to have greater limitations in activities of daily living, such as bathing or dressing. 33 percent have difficulty with three to six ADLs. But it is notable that 45 percent of duals do not have any limitations in these activities. Almost one-quarter of duals reside in an institution compared to 3 percent of non-duals. And while a small proportion live with their spouses, a larger percentage live with others, such as family members.

Over 60 percent of duals live below the poverty level and almost 95 percent live below 200 percent of the poverty level. Some of the details on these statistics are in your mailing materials on page two if you would like to refer to that. They are more likely to be female; 62 percent of duals are women, and of a minority population; 43 percent are minorities, and live in rural areas. It's about 27 percent of duals compared to about 23 percent of non-duals in rural areas. Few have other sources of supplemental insurance. Those that do tend to have it through programs like the VA or state-sponsored drug plans.

So the summary that I would like to pull out of these various statistics is that the areas that we see the greatest relative uniformity within the dual populations are with respect to being poor, poorly educated, minority, and having no other sources of supplemental coverage.

We do see substantial variation in other areas, especially in the area of age, the relative level of disability as defined by difficulty with the ADLs, their living arrangement, and even with their reported health status. We see considerable variation with 17 percent reporting excellent and 21 percent reporting poor.

This variation makes it difficult to identify the demographic and health status characteristics of the typical dual beneficiary and leaves us to look at subgroups of beneficiaries as a more useful tool for examining what's going on with duals. We're going to come back to that at the end here.

Next we looked at spending patterns for the dual population. Let's start out with our broadest statistic. While dual beneficiaries account for 15 percent of all beneficiaries, they account for 22 percent of Medicare spending. In this analysis we find that the average per capita Medicare spending on a dual beneficiary is about $8,560, which is about 68 percent higher than non-duals.

Next we looked at the factors behind this higher spending on duals and examined spending for duals and non-duals by service area. We found that average per capita spending for duals is higher for each service area, and in particular spending for inpatient, outpatient, SNF and hospice services are more than twice as high as that for non-duals.

We found that this higher spending average is a function of both a greater proportion of users and higher

spending among users in the dual population. Overall, duals are more likely to use Medicare-covered services; 92 percent used any service compared to 89 percent of non-duals. But the difference can be much more significant by service area. For example, duals are almost twice as likely to use SNF services than non-duals. We also found higher spending among those who use services. This indicates that those duals who use services received a greater volume and/or intensity of services compared to non-duals. The greatest differences were found in outpatient, hospice, and physician services. For example, spending on outpatient service for duals who used the service was about 70 percent than that for non-dual users.

We then examined the distribution on Medicare spending on dual eligibles and found that spending is considerably concentrated on a minority of dual beneficiaries. Looking at the left-hand and the middle columns in this chart you can see that the costliest 4 percent of dual beneficiaries account for over 40 percent of Medicare spending on duals. The costliest 20 percent accounted for about 80 percent of spending, and the least costly 50 percent accounted for about 3 percent of spending.

For these people Medicare spend about $1,700 or less in 2001.

We also looked at total spending on duals, and that refers to the combination of Medicare, Medicaid, and out-of-pocket spending. Average total spending for duals we found was about twice as high as that of non-duals, about $20,000 compared to $10,000. If you look at the right-hand and center columns you can see the spending distribution of total spending. The distribution is similar to that of Medicare spending for duals but is less concentrated. The costliest 5 percent account for 27 percent of spending as opposed to 41 percent for Medicare. Similarly, total spending on the least costly 50 percent is 9 percent compared to 3 percent for Medicare spending.

So to summarize the findings that were just mentioned on that chart, we find that, as with non-duals, there is tremendous variation within the dual population on Medicare service use. Some duals are incredibly costly while many are not, which again undermines our summary generalizations about the typical dual beneficiary's health care use.

Despite this diversity within the dual eligible

population, duals are still, on average, much more costly than non-duals. Accordingly, duals represent the disproportionate share of the overall most costly beneficiaries. Of the 5 percent most costly beneficiaries overall, one-quarter of them are dual. Of the 1 percent most costly beneficiaries overall, one-third of them are dual. Then as we just noted in the last slide, total spending on health care for duals is double that for non-duals and is somewhat less concentrated than Medicare spending on duals.

Now that we have demonstrated the significant diversity in the dual population we hope to shed some more light on the subpopulations that are evidence based on age and type of disability that beneficiaries may have. So we've decided to look at various subgroups and we've identified those, both in the categories of disabled beneficiaries and aged beneficiaries, the following three categories: those that have mental or cognitive disabilities, those that have limitations in two or more ADLs, and those that have limitations in less than two ADLs. So that would be six categories altogether.

For each of these subgroups we plan to look at the

proportion of the dual population they represent, their service use and spending patterns, and compare this to non-dual with the same characteristics. And we'll take a look at the proportion institutionalized.

As I mentioned at the beginning, we also plan to look at data on access and quality of care. I think there's a few other threads that we wanted to pick up based on some of the questions that we got last time in terms are what are the patterns, length of eligibility as a dual and see if we can't find out a little bit more about that. Then we also would like to do a little bit more work trying to parse out, of the total number of duals what percent are medically needy, what percent are QMB only, and what percent are SLIMB only. We just need a little bit more time to look at that.

So at this point I think I'd like to stop and get your thoughts on this analysis and any other questions.

DR. REISCHAUER: Anne, I thought this was very interesting work that you're doing, and your last comment fed right into the one reservation I had about this. That is, it's one group of apples and one group of oranges. Pure duals, QMBs and SLIMBs are all there because of their incomes. The medically needy are there because of their

high expenditures. So in a sense you say, these people cost a lot when you've chosen a chunk of them because they cost a lot and it's hardly a eureka moment.

I think maybe, when you can, separating the two, at least one for some of the purposes would be of interest, because the medically needy come from a much larger population, some of whom then get sick and spend down and there they are. And by definition they're going to have all these characteristics that we're saying, isn't that big?

MS. MUTTI: Right. And it would also be nice to look at their Medicare spending versus their total spending, how much higher too.

MS. RAPHAEL: The other thing I was interest in is when you look at Medicaid for the dually eligibles you find the same pattern, that a small percentage of Medicaid patients account for a large proportion of expenditures and it very much correlates with dual eligibility. I'm wondering if there's anything we can say about that.

MS. MUTTI: I guess I would like to take another look at the data we have to see what patterns we're seeing. Then it might be interesting as we look at these subcategories to see if we see different ratios along those

lines.

DR. REISCHAUER: Run that by me again, Carol. The concentration of Medicaid spending?

MS. RAPHAEL: Yes, if you look at -- this is what I remember and I'm not sure I remember it accurately.

DR. REISCHAUER: But Medicare is a primary payer so people who are dual will have a big chunk of their expenditures paid by Medicare and appear to be, in a sense, relatively cheap Medicaid folks relative to the rest of Medicaid.

MS. RAPHAEL: That's what you would think.

DR. REISCHAUER: Except the ones that are in nursing homes, long-term care.

MS. RAPHAEL: Right. I'd be interested in that.

MS. MUTTI: That's why I think some of the subgroup analysis where we show the elderly versus the disabled or something, those people who are more likely to be institutionalized, what the Medicare compared to Medicaid spending looks like might be interesting.

MR. DURENBERGER: As I have followed the work that everybody is doing, it's a very comfortable progression to lay a foundation under what hopefully will become at this

level a discussion about how to advise the Congress on the future of Medicare payment policy. This is just a report, and Sheila Burke isn't here today, but last week at the Kaiser Commission on Medicaid and the uninsured we spent a lot of time looking at the future of Medicaid and all that sort of thing. One of them specifically was the area of dual eligibles. The similar kinds of issues that get raised by the data here were raised, obviously, and discussed there at some great length, in terms of the fact that the Medicaid program filled in a lot of the gaps in the benefit structure or the cost-sharing structure or whatever. Bob has already alluded to some of the reasons. But some of it is structural.

Secondly, that the failure, if you will, as we looked at it from back in 1988, to build some long-term care coverage in through Medicare causes a substantial amount of the Medicaid dollar to go into it. The challenge there is that so much of that money is directed toward institutional care as opposed to community home-based and so forth one, which one would hope might come if it were more of a social insurance program than a welfare-like program.

Then thirdly we looked at, what's the implication

of MMA, and the fact that in their wisdom the Congress has decided to move the prescription drug part of the coverage for dual eligibles into the Medicare program, but then asked the states to pay for it; the so-called notion of the reverse block grant. It left us as a group in some kind of doubt about where this administration, this Congress may be headed in terms of most appropriate public financing for access for the 51 million now served by Medicaid.

But in particular, where there is this major and expensive overlap for the 7.5 million people who are dual eligibles, what's going on in their heads? Is there anything on purpose about the federalization of the obligation to provide prescription drugs for the dual eligibles? Is there any more to be read into that in terms of using the Medicare program further to serve the health-related needs of people who are dual eligible?

The bottom line when we were asked as a group to look through what was our consensus as to what the staff ought to look at more we said, we ought to look more at the role that Medicare, or an expanded Medicare ought to be playing with regard to your dual eligibles and everything else, period. Nothing more than that.

So I'm just, as a matter of reporting that the commission and those of us who are advisory to the commission are going down a parallel track, and just as one who overlaps the two commissions I'm hoping that at some period of time after we put more of a base under this we can begin to start answering questions at least that we had last week, which is, should not the Medicare program be designed in a different way to cover more of the health-related needs of the dual eligibles? And if so, might that result in more or less economies, efficiencies or whatever if that were to happened?

Nobody at this stage knows the answers to those questions, but because we don't feel that those answers are coming from the Congress, from the administration. Everybody looks at the deficits and says, where's the money going to come from? You look at the states, there's no resources there. Yet there are 7.5 million very vulnerable Americans in this population, as we pointed out, to whom both of these organizations see themselves -- both MedPAC, I would hope, and Kaiser see themselves as having some kind of responsibility to give some advice to the Congress about this large volume of public financing and how it might be

more appropriately used.

MR. HACKBARTH: In MMA, did the administration initially support bringing the drugs into Medicare? I thought they wanted to leave it with the states.

DR. REISCHAUER: The dual eligibles --

MR. HACKBARTH: So it was from the Congress that that idea came and then the administration said okay, with a clawback basically.

Any other comments on dual eligibles?

Okay, thanks, Anne.

Next up is -- as you'll recall from years passed, we need to review the CMS estimate of the physician update which is finally published I think in June; is that right?

DR. HAYES: Our review is published in the June report and then update itself in November.

MR. HACKBARTH: So this is our look at this for our June report.

DR. HAYES: Yes.

Thank you. Our task then is to review this early estimate of the update now for 2005. It's a calculation that CMS goes through according to a statutory formula that compares actual spending for physician services with a

target. That target in turn is determined by what's known as the sustainable growth rate, which is a growth rate for spending on these services.

There has been a new development here in that the Medicare Modernization Act established a minimum for the physician update for both 2004 and 2005, a minimum update of 1.5 percent. So in a sense, the Congress chose to override the statutory formula for those two years.

CMS still, however, needs to go through the calculation and determine whether or not under the formula the update would exceed that 1.5 percent minimum that was in the law. That's the core of what's before us today is their calculation of what the update would be in the absence of the MMA minimum of 1.5 percent. They have done so and have calculated an update under the formula of minus 3.6 percent. So we want to then go over their calculations and review that result.

All of this would be recognizing that the numbers involved in the calculation are subject to change and may be very different between now and November when CMS goes through the calculations that will actually determine what the update will be for 2005.

In your mailing materials for this meeting you had a draft of our review as it would appear in the June report. It is really a technical review of the details of the calculations and the estimates that were used for those calculations. That's pretty much what we have.

So just to review, the process that CMS goes through here with the statutory formula is really a two-part process. First, there is an estimate of that sustainable growth rate which determines the target level of spending for physician services. Then CMS calculates what the update would be under the formula by comparing an estimate of actual spending for physician services with the target that's determined by the SGR.

So looking first at their estimates for the sustainable growth rate, the estimate is as you see it here. It's really a process, given that we're looking for a target rate of growth in spending, the sustainable growth rate needs to account for two things then. It needs to account for changes in prices and it needs to account for changes in the quantity of services. So we have a measure of input prices here that CMS is using, estimating at this point of 2.6 percent.

This would be a weighted average of three types of price changes. One would be from the Medicare economic index which you're familiar with. It's used in our recommendations about the payment update for physician services. It measures input prices for physician services, rents and salaries and that kind of thing. Then we also have considered here, as part of the definition of spending for physician services we have spending for Part B drugs. These would be the injectable drugs that are covered under Part B and often administered in physician offices. So there is a consideration of those price changes in here as well. And finally, changes in payment rates for laboratory services, those services in our and CMS's definition of physician services, services often provided in physician offices. So we get this 2.6 percent here for input prices.

Then moving over to the quantity side we start with just enrollment, the number of beneficiaries who would be using services in Medicare fee-for-service. We see here a minus sign in front of this factor of minus 0.2 percent. We have not seen minus signs in these calculations for several years now, but this reflects an assumption that there will be some shift in enrollment from Medicare fee-

for-service to Medicare Advantage consistent with policy changes that were in the MMA.

Third up we have growth in real GDP per capita. That's the allowance in the SGR for growth in use of physician services per beneficiary. The MMA changed this factor somewhat. It's now moved from what was year-to-year changes in GDP growth to a 10-year moving average. So this is CMS's calculation of a 10-year moving average. It's intended to smooth out changes in this factor and reduce the volatility ultimately in the SGR itself.

When there are changes in the benefit package there is a factor here for changes in spending that would be due to law and regulations. None are anticipated at this point for 2005, so CMS is estimating a factor of zero for this. All this totals up to 4.6 percent, and that would be the target rate of spending growth for physician services of the year 2005.

MR. HACKBARTH: Kevin, let me just leap in a second. I don't want to deny any commissioner the opportunity to review all of the component parts. I for one would be willing to stipulate that 1.5 percent is probably going to be greater than the number that the SGR formula

would produce. Is there anybody who would like -- Alan, would you like to go through all the details? I know you've followed this very closely?

DR. NELSON: I would like to just raise one question because I think that if this is going to appear in our June report we have to appear thoughtful and reasonable. A zero percent for changes in law and regulation denies the impact of the MMA, which includes the entrance history and physical that's going to find a certain amount of stuff as cholesterol screening and so forth.

Now it may be that in calculating the sustainable growth rate that they specifically are looking only at law that's passed in 2005. But in the estimated update calculation there's a 0.8 percent figure attached to that and so I have two questions.

Number one, Kevin, on the bottom of page two you say, MedPAC finds no reason to question CMS's assumptions about factors that determine the update. Then going on on page three we say, an estimate of no change in spending due to law and regulation is valid as long as the Congress, and so forth. I think we should at least qualify the fact that we expect some increase in spending and volume as a result

of legislation that will become active in 2005.

I wonder if the legislative adjustment of 0.8 is a high enough figure. I wonder if we ought not flatly say, yes, we go along with this when there are good and clear reasons for us to express some reasonable doubt about the assumptions.

DR. HAYES: The 0.8 factor that's shown here is a legislative adjustment that was really a carryover from the Balanced Budget Refinement Act of 1999. There were some technical changes made in the SGR formula at that time and there has been a series of these legislative adjustments that have to be incorporated in the calculations over a period of years. This is the final one which is 0.8.

DR. NELSON: I guess I'm back to my original question then as to whether we should express some level of disagreement with an assumption that says there won't be an increase in volume as a result of legislation, when indeed there will. There is certain to be. I think it will probably be pretty substantial as a result of the screening law changes.

MR. HACKBARTH: What's the effective date of that?

DR. NELSON: 2005. The cholesterol screening

applies to everybody. There are other screening changes, but the screening physical for new beneficiaries, as I understand it from the text here, begins in 2005.

MR. HACKBARTH: So we don't need to dwell on the details right now, but on the face of it it seems like there might in fact be some numbers in that slot. Could you just investigate, Kevin, why they're not?

DR. HAYES: Yes.

DR. ROWE: Since we want to be clear and objective and thoughtful, should we comment on the difference between minus 3.6 and plus 1.5?

DR. NELSON: Only to say that we favor it.

[Laughter.]

MR. HACKBARTH: Let me just say a word about how we've handled this in the past, just as a reminder. We've taken this up basically as a technical exercise in the past where we review the basic calculation and, at least to my recollection, have always said it more or less make sense. In the past there have been some occasions where the update was not in accord with MedPAC recommendations and we've said something to the effect that, yes, the calculation is right but we think a modest update for physicians would be

appropriate for the year in question. In this instance, MMA overrode the formula and provided the 1.5 percent update, which I think is consistent with our recommendation in the March report.

So what I would say is we just note that fact and move on, and for example, not use the letter as an opportunity to pound the anti-SGR drum again. We've not used it in the past that way and I think that was a smart move that we ought to continue.

DR. ROWE: What happens going forward since this formula, which we want to get rid of anyway but let's say persists or the ghost of it returns, and it's got these adjustments in it, so that if the physicians were underpaid it adjusts for that, and if they were overpaid it adjusts for that. Now we're going to have two years or at least one year where there's going to be a 5 percent difference between the calculation and what the payment is. Is that going to be corrected for going forward so there's going to be a reduction in the payment increases?

MR. HACKBARTH: We're getting further and further away from the underlying SGR curve.

DR. MILLER: Or to put it differently, to the

extent that volume is growing, that can affect the update, and to the extent that Congress has intervened and given a higher update than the SGR would, that also counts and then gets taken out over time.

DR. STOWERS: I just want to be sure though that this doesn't get interpreted as even though we believe that they're calculating the SGR correctly and we're okay with the update, that we're totally giving up the idea that this minus 3.6 is not enough. Just so that's not interpreted as us -- and I think it almost could be, that, yes, we're going to go with what Congress said but -- we don't want to come across as we've dropped our recommendation from a plus 2.5 to a minus 3.6.

MR. HACKBARTH: I understand your concern and we will write the letter so that it's clear what we're concurring with and what we're not.

Any others? Okay, I think we've covered all the important points. Kevin, anything else from your perspective?

DR. HAYES: No.

MR. HACKBARTH: Great.

Last for today is skilled nursing facilities and

differences in patients between hospital-based and freestanding.

DR. SEAGRAVE: Today I will present results from our ongoing analysis of the differences between hospital-based and freestanding SNFs. I will focus today's discussions on the factors affecting acute-care hospital decisions to refer patients to hospital-based SNFs. This research is being conducted by researchers at the University of North Carolina at Chapel Hill under contract with MedPAC.

The purpose of this research is to examine the systematic clinical differences in the types of patients going to hospital-based versus freestanding SNFs in order to better control for these differences when we look at the differences in resource use and outcomes between the two settings, which we plan to do in future work. For example, we have previously discussed the fact that the average length of stay in hospital-based SNFs is about half the average length of stay in freestanding SNFs, but until now we've not been able to sufficiently control for the patient populations when we look at the statistic, and it's important to control for these populations.

This is the research question that we're

exploring, and the selection factors that we're considering in this analysis are patient characteristics, characteristics of the referring hospitals, and local market area characteristics.

Hospital-based SNF referral patterns differ substantially depending upon whether the acute care hospital the patient is treated in has SNF beds or not. Hospitals with SNF beds refer about 51 percent of their SNF discharges to hospital-based settings. Hospitals without SNFs, however, refer only about 13 percent of their SNF discharges to hospital-based SNF settings. So therefore, having a SNF unit is a strong predictor of hospital-based recall.

This also means that patients fitting the profile of a typical hospital-based SNF patient can be found in both hospitals with SNF beds and hospitals without SNF beds. They could also be found in both types of SNF settings.

The data we use for this analysis come primarily from CMS and they involve merged claims data from the acute-care hospitalization preceding the SNF stay, claims from the SNF stay, and claims from any rehospitalization occurring within 30 days after the SNF stay. Also this information is merged with patient's MDS information and with the facility

characteristics.

We also combined this data with data about the referring hospitals and market level characteristics. We used data from July 2000 to July 2001, and we exclude observations that are less relevant to the question at hand, including swing bed stays, discharges from non-PPS hospitals such as long-term care hospitals, and inpatient rehabilitation facilities, cases with a gap of more than a week between the hospital discharge and the SNF admission, cases referred 100 miles or more from the discharging hospital, and patients admitted to the hospital from a SNF that then go back to the SNF.

The prediction model used in this analysis uses observations for patients discharged from a hospital to a SNF. So we're not looking at other types of patients who might have gone from the hospital to home health or to another setting. We're looking specifically at patients that went from the hospital to a SNF. The dependent variable is, one if they went to a hospital-based SNF and zero if they went to a freestanding SNF. So in other words, all of the patients in our sample went to either one type of SNF or the other.

The independent variables that we're using in this analysis, or you might call them the explanatory variables are, as I said, patient, hospital, and local market area characteristics. This table gives you an idea of the types of variables that we looked at in our analysis to help explain whether patients were referred to a hospital-based SNF.

The model ended up predicting very well the probability of hospital-based SNF referral for patients coming from hospitals with SNF beds. We found that different criteria appear to affect referral decisions in hospitals without hospital-based SNFs. So for this reason we focused our analysis on just the population of people coming from hospitals that had hospital-based SNFs because this seemed like the clearest decision-making group, where the hospital was making a very clear decision on where to send the person.

This chart gives you the data breakdown of the number of observations in each group. Let me first explain the left-hand column. We sorted patients in the sample according to their predicted probability based on all the independent variables that you saw in the previous chart,

their predicted probability of being referred to a hospital-based SNF.

So in other words, the less than 20 percent probability group, those are patients that looked most like patients who end up going to freestanding SNFs. So those are patients that have a low probability of being referred to a hospital-based SNF. Although I want to point out that in all of these categories there are some patients who did go to hospital-based SNFs and some patients who did go to freestanding. So these are the characteristics of the patients themselves and how those predict the probability that they will be refer to a hospital-based SNF rather than a look at where they actually went.

Then when you get up to the 80 percent or greater row there you see that those are patients who look most like patients who are typically referred to hospital-based SNFs. You can see that the observations ended up clustering themselves at both ends, where patients were either very likely to look like patients who go more often to freestanding SNFs or they were very likely to look like patients who more often go to hospital-based SNFs, and there were fewer patients in the middle who could have gone either

way.

This chart gives you the results of our analysis. As you can see, the patients in the 80 percent or greater probability of hospital-based SNF referral in the next-to-last row, these are patients who look a lot like patients who go to hospital-based SNFs. As you can see, they're more likely than patients who go to the freestanding SNFs, the top row of numbers. They're more likely to have no cognitive impairment; 63 percent versus 19 percent for freestanding SNF patients. They're very likely to be identified as people who are likely going to be discharged from the SNF within 30 days. This variable is assessed by the SNF staff on the patient's first MDS assessment, the five-day assessment.

So in other words, these are patients who are just identified by the SNF staff right off as being short-stay patients, and they're very likely to go to hospital-based SNFs.

They're also much more likely, if they go to hospital-based SNFs, to have support available at home, probably to take care of them when they're discharged from these short stays, and patients expressed a desire to return

home. So all of these factors are found more often among the patients who are more likely to go to hospital-based SNFs.

On the other hand, they are less likely to have do not necessitate orders on their charts.

Patients who are more likely to be referred to hospital-based SNFs also tend to be younger. As you can see by comparing the pink column with the light purple column, people age 65 to 74 fall more commonly in the 80 percent or greater row that represents patients more likely to go to hospital-based SNFs than those more likely to go to freestanding SNFs. And the reverse is true for patients in the category age 85 to 94 who are less likely to look like patients referred to hospital-based SNFs.

Finally, we looked at the most common reason for the patient's acute-care hospitalization. As you can see, patients hospitalized for joint replacement appear to be more likely to go to hospital-based SNFs, or to be referred to hospital-based SNFs than patients with other diagnoses. But we did not see that same trend with any of the other diagnoses that we looked at.

So in a sense our conclusion from this is that

patient prognosis; i.e., what the SNF and the hospital predict is going to be the outcome for the patient has a greater effect on hospital-based referral than the actual diagnosis of the patient. We found that hospital-based patients tend to be identified by the SNF staff as likely short-stay patients, they tend to have a support at home, have a desire to return home, and be younger.

However, this does not necessarily mean that they are less clinically complex. If you consider a younger patient who may have joint replacement and might be in the early stages of their recovery and they go to a hospital-based SNF, they might still be more clinically complex at that stage in that they require more IV medications, more RN nursing time, and maybe substantially more rehabilitation therapies than you might think of an older beneficiary who perhaps doesn't have support at home who might end up in the long run going to long-term care in a nursing home. This patient might have lower needs for some of the RN services and the rehabilitation services, although still they need skilled care so they would still qualify for a SNF stay.

Finally, we found that joint replacement patients do have a higher likelihood of referral to hospital-based

SNF, but we didn't find this pattern with any other diagnosis.

We conclude from this that the presence of a SNF unit in a hospital is a strong predictor of referral to a hospital-based versus a freestanding SNF, and that patient selection appears to play an important role in whether SNF patients are discharged from the hospital to a hospital-based or a freestanding SNF.

Lastly, we conclude that controlling for patient selection is very important when we're going to try to assess the differences between the two settings in outcomes and resource use.

The next steps for this project are just that, we plan to try to use some of this information that I just presented to you to control for patient selection when we look at outcomes and resource use between the two settings. Then we also plan to look at the difference in costs using cost report information between the two types of settings.

So I welcome any questions or comments you have.

DR. NEWHOUSE: I thought technically this analysis was well done but I have been puzzling about the difference in the margins and what light this all sheds on that. Since

at first blush the things you showed us wouldn't seem to explain that, which could lead back to an accounting kind of explanation again. But what I was wondering was, if I have a hospital-based SNF on another floor of my hospital versus I don't so I have to send them over to a freestanding SNF, will I, conditional on diagnosis, age, et cetera and so forth, discharge earlier in the stay? In other words, is what we are seeing in the hospital-based SNFs a form of unbundling that goes on differentially in hospitals with hospital-based SNFs?

So I would be interested in not the simple, just the propensities as you showed them on the other ones, but if you control for the key things what happens to hospital length of stay in the low and high probability groups, as shedding light on whether there is differential unbundling or not.

MR. HACKBARTH: Any others?

So potentially if we took that joint replacement patient, same age, everything, and matched them up, one in a hospital without a hospital-based SNF and they're being transferred to a freestanding, another identical patient in a hospital that does have a hospital-based SNF, what you're

saying is those exact patients may cost different amounts in the skilled nursing care because in the one instance they're actually an early hospital discharge?

DR. NEWHOUSE: Earlier; exactly.

MR. MULLER: Aren't they one of the transfer DRGs?

DR. NEWHOUSE: Some of them are is the answer. They have to be less than the geometric length of stay in the DRG and a minority of them are, as I recall.

DR. WOLTER: Joe, I don't know the answer to your question. In our place we do have a SNF. It is actually staffed by an internist. A lot of the decisionmaking, I believe, by our physicians is clinical. Hospitals, by the way, don't make the decisions about these transfers, although I know there's a complex interaction between hospitals and what they make available and what physicians end up doing. But I think often times the decision is clinical. I think these are patients who are seen as patients who can go home, in the case of joint replacement in particular, but they're seen as more fragile and needed a little more rehab.

To your question, I don't know what the length of stay differences might be but it would be worth looking at.

Maybe they're a group of patients who reach the mean length of stay and then are sent to the SNF so they wouldn't necessarily fall out into the transfer policy. I've also done a little work since the January meeting at least looking at our own margins and accounting practices which I would be happy to visit with you about later, but I think that there's a loss in the SNF on many of these patients in Medicare, but perhaps the total of the payment you do get in the SNF plus whatever you get out of the DRG is a little better than what you'd otherwise have. I think that's why many hospitals have stuck with SNFs, although as we all know there's been a huge exit in the last three or four years.

DR. SEAGRAVE: Just to follow up on Joe's point, we are looking intensively at the hospital length of stay in many ways, in this study and in the other study that we're doing.

MS. DePARLE: I was just curious, in looking at your independent variables I didn't see anything about the socioeconomic status of the patient. Some of these aspects made me wonder whether some of that was going on. That you happened to maybe, in the case of the patients who were referred to a hospital-based SNF, have patients who happen

to have a higher socioeconomic status, therefore -- I mean, some of the other factors that we do have data on I think tend to go along with that -- have more support at home, the desire to go home, et cetera. I wondered if that accounts for any of this.

DR. SEAGRAVE: You hit the nail on the head in terms of, we had a long discussion about is there any piece of the puzzle that we're missing in this analysis? Is there any data that if we had it we would really want to include? That was not only the number one but just about the only thing was we said socioeconomic status is exactly -- and we just don't have the data on those people. We're trying to figure out some creative ways of figuring that out.

DR. MILLER: Susanne, you do enter into the model the Medicaid buy-in, right? Isn't that the best proxy that we have?

DR. SEAGRAVE: That's the proxy that we have. As you know, the limitation of that is that it does not include the medically needy. That is just the state buy-in.

MR. HACKBARTH: Any others?

MR. SMITH: Susanne, I also had a question about the variables. There was no density measure of availability

of freestanding SNF beds when you looked at the market variable. I would assume that there's variation and that it would matter.

DR. SEAGRAVE: The analysis does include that. I think the reason that it wasn't -- it was actually left off of the chart in part because we're trying to construct an instrumental variable approach to look at outcomes and resource use, and it was inadvertently left off the chart. Actually I should have put it on there, because we were thinking about using that, and we're still thinking about using that as an instrumental variable, so it can't be in the first part of the model.

MR. HACKBARTH: Okay. Thank you.

So now we are to the public comment period. Actually a half-hour ahead. So we will have a brief comment period with the usual ground rules. Please keep your comments brief, and if somebody in front of you has made the same comment, just register that you agree and you don't need to repeat the whole thing.

MS. MARONE: I'm Barbara Marone and I'm with the College of Emergency Physicians. But I wanted to make a comment really on behalf of the physician community and the

alliance for specialty medicine. I wanted to echo some of concerns that Dr. Nelson raised about a lack of any kind of recognition of increased costs due to the coverage additions both from the current law and the national coverage decisions over the last few years. There's also been even coverage that was passed in BIPA that's really not been recognized as increasing the cost.

I think particularly if CMS is making an assumption that enrollment is going to go down on the fee-for-service side but no concomitant notion that there will be any increase in costs due to the increasing coverage and benefits and screenings, we'd like to see a little bit more in-depth analysis of what that really might entail.

Thanks.

MR. CONNOLLY: Jerry Connolly on behalf of the American Academy of Family Physicians. I was counting on somebody else to talk about the SGR, so I want to talk about something else.

The academy has provided the staff a very important and timely paper that they will provide to you. It's entitled, the new model of primary care, knowledge bought dearly. This particular document, which was just

completed in the last couple of days, was authored by the Graham Center on Policy Studies in Primary Care and Family Medicine. It has relevance to three issues that you spoke about and discussed this afternoon.

We appreciated very much the rich discussion that you had relative to the issue of chronic care, disease management, and even to the issue of electronic health records. This document speaks to and embraces all three of those concepts as well as going beyond that. We think that this document, and hope that this document will help inform some of your discussions and deliberations with respect to those particular topics. But I'd like just to take a couple of minutes to underscore some of the points that were made by the commissioners today.

Primary care physicians do a lot of care coordination right now that goes unreimbursed. As you continue to observe and consider whether or not to weigh in on some of the aspects of this Section 721 and the demos and whether or not you weigh in on the evaluation process, we would encourage, as some of you already did today, to make sure that there is a doctor in this movie. Physician involvement, we believe, is integral. We think it should be

instrumental rather than resultant or remedial. That is, kind of picking up the pieces or pulling things back together in terms of a coordinated fashion once some other type of intervention has fallen short of comprehensive care.

So as you will continue to be interested in this particular project and how the scale of the project, how the risk, how the randomization, all those issues that you spoke about and other issues that you raised today are operationalized, particularly in terms of our goal, we would be hopeful that the physician would not only be in the movie but would be a principal actor and not a supporting role.

Thank you.

MR. HACKBARTH: Okay, thank you very much. We reconvene at 9:00 a.m. tomorrow morning.

[Whereupon, at 5:01 p.m., the meeting was recessed, to reconvene at 9:00 a.m., Friday, March 19, 2004.]

MEDICARE PAYMENT ADVISORY COMMISSION

PUBLIC MEETING

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

Friday, March 19, 2004
9:05 a.m.

COMMISSIONERS PRESENT:

GLENN M. HACKBARTH, Chair
ROBERT D. REISCHAUER, Ph.D., Vice Chair
AUTRY O.V. DeBUSK
NANCY-ANN DePARLE
DAVID F. DURENBERGER
ALLEN FEEZOR
RALPH W. MULLER
ALAN R. NELSON, M.D.
JOSEPH P. NEWHOUSE, Ph.D.
CAROL RAPHAEL
JOHN W. ROWE, M.D.
DAVID A. SMITH
RAY E. STOWERS, D.O.
MARY K. WAKEFIELD, Ph.D.
NICHOLAS J. WOLTER, M.D.

AGENDA PAGE

P R O C E E D I N G S

MR. HACKBARTH: First up this morning is a continuing discussion of long-term care hospitals. Sally?

DR. KAPLAN: Good morning. This presentation has two purposes, first to use results from our qualitative and quantitative research to answer a series of research questions that we've been asking throughout our study of long-term care hospitals.

The second purpose is to bring you results from a policy analysis designed to answer the question how can we better define long-term care hospitals and the patients appropriate for them? At the end of the presentation we'll ask you to discuss the results of the policy analysis and the draft recommendation.

The research results I'm presenting today address the three questions on the screen. As you remember in the last June's report when we looked at long-term care hospitals using descriptive statistics and controlling for DRGs and severity level, we found that patients in market areas with long-term care hospitals had similar acute hospital lengths of stay whether they used long-term care hospitals or not. We also found that long-term care hospital patients were

three to five times less likely to use skilled nursing facilities, or SNFs, suggesting that SNFs and long-term care hospitals may be substitutes.

We also found THAT long-term care hospital patients had higher mortality rates and that Medicare pays the more for their care. We concluded that more research was needed.

To better answer the research questions, we conducted two qualitative and two quantitative studies. In the first qualitative study, NORC and Georgetown conducted 34 interviews with physicians, hospital administrators, nurses and discharge planners in market areas with and without long-term care hospitals.

For the second qualitative study, physicians from 10 long-term care hospitals presented profiles of patients in a grand rounds format. We talked about the two qualitative studies at the January meeting.

The first quantitative study compared patient characteristics on a market level. The second quantitative study examined the impact of long-term care hospital use on Medicare spending and outcomes.

I want to briefly tell you about our methods for the quantitative studies. The unit of analysis is an episode. Episodes begin with an acute hospitalization in the first

half of 2001 and end with death, readmission to an acute hospital or 61 days without acute or post-acute services. We had 4.3 million episodes in the full dataset. We also created two subsamples to examine if the results differ for patients who are more likely to be admitted to long-term care hospitals. One subsample had patients with a high probability of using a long-term care hospital in the top 5 percent probability, about 226,000 episodes. This subsample is more likely to have severity level three or four, mortality risk three or four, prior hospitalization, ICU use, and to have certain APR-DRGs such as osteomyelitis, endocarditis or tracheostomy.

The second subsample had patients with an acute hospital diagnosis of tracheostomy and ventilator support for 96 or more hours, about 20,000 episodes. There is some overlap between these two subsamples. To control for patients severity of illness we used every clinical variable available from administrative data. We'll be presenting results today for all patients and for patients with a high probability of using a long-term care hospital. You should know that even among patients with a high probability of using a long-term care hospital, actual use is relatively rare.

Last year, controlling for DRG and severity level, we found that long-term care hospital patients had higher mortality and Medicare spending compared with patients using alternative settings. To be as conservative as possible, this year we used three different methods to control for severity of illness. We used ordinary Lee squares regression and two methods that control for unmeasured severity of illness, an instrumental variable approach and the Heckman model.

Our first research question concerns the role long-term care hospitals play. If long-term hospitals are present in some areas and not others, this raises the question of their role. You've seen a map similar to one on the screen several times. This map is updated to include the new long-term care hospitals established in 2003. The red triangles represent the long-term care hospitals that have opened in the last decade, since 1993. You can see that the long-term care hospitals are concentrated in some areas. For example, look at Louisiana where you see 35 long-term care hospitals.

Physicians and long-term care hospital administrators told us that long-term care hospitals provide post-acute care to a small number of medically complex patients. These patients are more stable than ICU patients but may not have

all their underlying problems resolved at admission to the long-term care hospital. Fewer than 1 percent of acute hospital patients are admitted to long-term care hospitals. A diagnosis of tracheostomy with ventilator support is the single strongest predictor of long-term care hospital use. Nevertheless, patients with tracheostomy represent only 3 percent of long-term care hospital cases.

As severity level increases, the probability of long-term care hospital use increases. Regardless of diagnosis, severity level four quadruples the probability of using a long-term care hospital.

As the patient's proximity to a long-term care hospital increases, the probability of using one also increases. Being discharged from an acute hospital that has a hospital within hospital quadruples the probability that a patient uses a long-term care hospital.

In answer to our second research question, in areas without long-term care hospitals we found that clinically similar patients are principally treated in acute hospitals or SNFs. In qualitative studies, physicians told us that patients without access to long-term care hospitals stay in the hospital longer and others go to the relatively few SNFs who have the capacity to care for patients with multiple

complex conditions.

Our quantitative results support what physicians told us. Our multivariate analyses, regardless of method, support that clinically similar patients who use long-term care hospitals have shorter lengths of stay in the acute hospital compared with patients who don't use these facilities. Among all patients, long-term care hospital users have a six day shorter acute hospital length of stay. Among patients with the highest probability of using a long-term care hospital, long-term care hospital users have a nine day shorter length of stay.

Short acute hospital lengths of stay for clinically similar patients who use long-term care hospitals suggest that acute hospitals and long-term care hospitals are substitutes.

Our multivariate results also support that freestanding SNFs are a principal alternative to long-term care hospitals in areas with and without long-term care hospitals. Overall, 24 percent of patients with the highest probability of long-term care hospital use actually use freestanding SNFs. For long-term care hospital users in this group, however, SNF use drops 33 percent. Long-term care hospital users' sharp decrease in SNF use suggest that SNFs and long-

term care hospitals are substitutes.

On average, long-term care hospital users are more costly to Medicare compared to clinically similar patients who use alternative settings. This is true when we use multivariate models regardless of the method used. In 2001, long-term care hospital patients saved Medicare money for the acute hospital stay because of lower outlier payments. But the same patients cost Medicare more money for post-acute care and for the total episode.

For patients with the highest probability of using a long-term care hospital, there was a positive but statistically insignificant difference in Medicare spending for the episode.

These findings are based on actual Medicare spending in 2001 before the long-term care hospital PPS was implemented. It is possible that the combination of the PPS rates and improvement in coding could result in patients with the highest probability of long-term care hospital use having higher Medicare spending under the PPS than in 2001.

Regardless of the method we used, we found that long-term care hospital users had lower readmission rates than similar patients treated in alternative settings. This is what we would have expected considering that long-term care

hospitals must meet the acute hospital conditions of participation. Comparison of mortality rates generally raised statistical issues for all researchers and they did for us. For each method we used to compare death in 120 days we got a different answer. Thus, the results are inconclusive.

The main conclusions from our study are that when admissions to long-term care hospitals are largely unrestricted, long-term care hospitals tend to cost Medicare more than patients treated in alternative settings.

DR. ROWE: [off microphone.] Let me interrupt for a second. Does that include the effect of the reduction in the readmission?

DR. KAPLAN: No.

DR. NEWHOUSE: No, if the readmission is in the same episode?

DR. KAPLAN: No, the readmission ends the episode so the money for the readmission is not in the episode.

DR. MILLER: [off microphone.] If you go from episode to episode --

DR. ROWE: [off microphone.] Their point, of course, is that they're preventing readmissions and so we should just be clear what this includes.

DR. KAPLAN: One can conclude on the basis of logic alone that long-term care hospitals need to be limited in the types in patients they can admit so that these facilities treat medically complex patients that cannot be treated in less costly settings. Three issues make limits even more logical under current policies, growth in number of long-term care hospitals, payment rates for these facilities and the financial incentives of the long-term care hospital PPS.

Let's briefly take a look at the rapid growth in long-term care hospitals. You've seen some of these numbers before. In 1993 there were 105 of these facilities. That number more than tripled by the end of 2003 to 318. From 1993 to 2001 Medicare spending quintupled from $398 million to $1.9 billion.

CMS estimates spending to be $2.8 billion this year but that estimate does not take into consideration the number of long-term care hospitals that have opened since 2001. As the number of long-term care hospitals continue to grow, these facilities may find it more difficult to fill their beds with appropriate patients.

Long-term care hospitals are very expensive. On the screen is a comparison of 2004 per discharge rates by

setting for five diagnoses common in and long-term care hospitals.

In addition, the financial incentives of the PPS for long-term care hospitals encourage these facilities to admit patients with the least costly needs within a DRG.

Now Carol is going to talk to you about suggestions for better defining long-term care hospitals and the patients appropriate for them.

MS. CARTER: We had several goals in mind in developing examples of criteria for long-term care hospitals. First and foremost, we wanted to clearly distinguish long-term care level of care from other settings. We wanted the criteria to be feasible to administer and monitor, both for the hospitals and for CMS. The criteria should establish clear expectations and hold providers accountable for their actions. The criteria should also reinforce provision of high quality of care. And in the longer term, the criteria should facilitate adoption of common patient assessment tools and a classification system across all post-acute care. Further, the criteria must be consistent with the payment policies of other PPS's.

During our site visits and numerous interviews with clinical and administrative folks from various long-term

care hospitals we were consistently told about the features of long-term care hospitals that distinguish these facilities from other settings, notably SNFs and rehab facilities. They told us that they have sicker patients and that the majority of their patients were likely to improve. They frequently use admission criteria to screen patients who need this level of care.

Many told us that they require daily physician involvement with all of their patients. Active physician involvement was a key distinguishing characteristic of this level of care. The level of nursing care that they provided was fairly intensive, ranging from six to 10 hours of licensed nursing hours per day. They had respiratory therapists available 24 hours a day. They had physical, occupational, speech and respiratory therapists on staff.

Finally, they told us about how the care in their facilities was organized, that they have multidisciplinary teams who prepare and carry out treatment plans.

Building on these, we developed examples of facility and patient criteria that could be used to ensure that long-term care hospitals treat medically complex patients who have a good chance of improvement.

You can see we've outlined the kinds of criteria we

think are reasonable for facilities to have to meet in order to be paid as long-term care hospitals. Each hospital would have to have a patient review process that screens patients prior to admission, periodically assesses the patient throughout the stay and assesses the available options when the patient no longer meets the continued stay criteria.

The purpose of this is to ensure that each facility has a clear and uniform process for evaluating patients.

Another criteria would state that all long-term care hospitals move towards using a uniform patient assessment tool that is valid and clinically reliable. Many facilities already use an assessment tool. So what we're talking about is moving the industry towards using the same tool that emphasizes a clinical assessment of the patient.

The Secretary could evaluate these various assessment tools and choose the best one that determines whether or not the patient is appropriate for placement in a long-term care hospital. The purpose of this criteria would be to the extent possible to ensure consistency across facilities in how patients are assessed.

Another criterion requires multidisciplinary care treatment planning that establishes patient-specific care plans. Given the patient population, these hospitals would

be expected to have would care experts, respiratory therapists, end of life counseling and home ventilator training depending on the mix of the patients that they treat.

For the near term, we think that the current average length of stay requirement should be retained. Over time the patient criteria would clearly start to delineate the patient population appropriately treated in these settings and it would make sense to reevaluate this criterion.

Another criterion would state that there would need to be daily physician presence in the care of patients. This criterion would delineate the kinds of activities that would be expected for physicians to play. For example, care planning, daily patient assessments, and if needed, performing medical interventions.

Another criterion notes that facilities should wean the majority of their ventilator dependent patients. A criterion should be developed regarding a weaning success rate.

Facilities specializing in rehabilitation or psychiatric care should not be long-term care hospitals and we'll come back to this when I discuss the patient criteria.

Up on this slide you see examples of patient criteria.

National admission and discharge criteria would be developed for each major category of patients. Examples of major categories are medically complex patients and respiratory patients. These criteria would specify clinical characteristics such as blood pressure, respiratory insufficiency or the presence and severity of open wounds. They would also delineate the need for specific treatments such as IV medications, fluid administration, telemetry, pulmonary monitoring, ventilator support, TPN feeding or GI suctioning, depending on the patient category. Patients who do not meet the admission criteria should be admitted to a different level of care.

Discharge criteria for each type of patient would be specific to the discharge destination. Criteria for patients headed to SNFs would be different for those patients headed home. The purpose of this would be to ensure appropriate patient placement.

Another patient criterion could be to require that a high share of patients, for example 85 percent, must be classified into major categories of patients. The major categories could include things like respiratory, complex medical, wound care, ventilator weaning, infectious disease and cardiovascular patients. A long-term care hospital

could not have a high share of patients classified as rehabilitation or psychiatric.

A severity criterion would ensure that long-term care hospitals treat the most severely ill patients. For example, a criterion could require that a high share, again say 85 percent, of patients in each DRG should have a high severity level, something like the APR-DRG level three or four. Again, we're trying to make sure that patients are treated in the most appropriate and cost-effective setting. Patients who are less sick can be treated in other less costly settings.

Our last example criterion has to do with the nursing hours per patient day. This criterion is another way to ensure patients require an intensive level of care. The minimum should be comparable to a step-down unit in a hospital, something like six-and-a-half hours of nursing hours per patient day.

I should probably note that some of these criteria would need to be updated over time as practice patterns change.

On this slide you can see the draft recommendation. Long-term care hospitals should be delineated by facility and patient characteristics that ensure that patients

admitted to these facilities are medically complex and have a good chance of improvement and cannot be treated in other less costly settings.

Facility level criteria should characterize this level of care by features such as staffing, patient evaluation ad review processes and the mix of patients. Patient level criteria should identify specific clinical characteristics and treatment modalities.

Before you begin discussing this material, I wanted to make a couple of closing comments. First, we understand that developing criteria is one way to ensure that long-term care hospitals that are already out there treat the kinds of patients who need this level of care. But we also want to point out that it will be important in the longer term to make refinements to existing PPS'S for acute care hospitals and SNFs. As currently designed, these payment systems may have had the unintended consequence of encouraging long-term care hospital growth. Refinements to both acute care hospital PPS and the SNF PPS are needed to more accurately match payments to patient resource requirements. This will help reinforce decisions about where patients are treated being made on clinical factors and not financial considerations.

On the inpatient side, there are three policies that warrant further analysis. The single most important feature of a payment system to ensure that payments match patient resource requirements is the classification system. In the hospital PPS, a classification system that reflects the severity of patients would improve the accuracy of payments and make hospitals financially neutral to treating the complex cases that they currently may transfer to long-term care hospitals. This is also likely to lower the number of outlier cases that get transferred to long-term care hospitals.

The second policy that warrants examination is the current outlier policy. That is the threshold level and the cost-sharing requirements. These may contribute to hospitals unbundling care to long-term care hospitals. Adjusting the outlier threshold and/or the cost-sharing arrangements could make hospitals less prone to transfer cases that they could treat themselves. These refinements warrant further examination.

Third, strong rules regarding hospitals within hospitals are needed to ensure that hospitals do not discharge patients prematurely for financial gain. CMS has expressed concern about hospitals within hospitals and we

look forward to seeing what they do to ensure that these facilities facilitate appropriate clinically based decisionmaking.

On the SNF side, we and others have noted the shortcomings in the current RUGs classification system. Refinements that better target payments to medically complex patients and away from being driven by the provision of therapy services may increased SNFs to admit certain types of patients who could be more appropriately treated in a lower cost setting.

This ends our presentation. I'd like to open it up for discussion.

DR. NEWHOUSE: I had a number of technical comments that I gave to Sally and I don't want to go into here, but I do think the question Jack raised is important. And I think that what it implies is that the data defining the episode should be changed so that the episode ends with either death or no institutional care for 60 days. That is, it would conform to the Medicare spell of illness definition so it would pick up the readmission expenses.

And I'm going to assume that this change won't affect the results, at least the qualitative results, and what I say next. But if it does, we'll go from there.

I'm fine with the draft recommendation. I think we should say that it's similar in spirit to the regs on rehab use where we've defined that the patient using the rehab has to have three hours of active therapy a day. That's the one I'm thinking of in particular. I don't know if we want to go to 75 percent have to be in one of 10 diagnoses or not. I think that some reference to that might be helpful.

Beyond the recommendations that you are proposing, I'd like to see us be a little more aggressive what you're calling the longer run agenda. I don't see any reason why we shouldn't recommend a moratorium on the hospitals within hospitals. That seems to me to be just a device to game the system and I'm with CMS and the text here. I just would go stronger on a recommendation.

And then finally, assuming that the finding that areas with LTCHs have shorter acute lengths of stay is still there once you account for the readmission, I think we should put in a longer run agenda some consideration about both bundling the post-acute care and about debasing the PPS, which would be implied if care is shifting out of the hospital by unbundling.

MR. MULLER: Sally, Carol, I find this a very helpful elaboration about what we know about these populations. Yet

I'm still struck by what we discussed last year and what you had in one of your earlier slides about the concentration in a few states. So when you think about these criterion and this population, you ask yourself why is this not happening everywhere? So there's a variable here that we're not getting at, which is why is it happening in Louisiana and Indiana and a few other states like that?

Because if, in fact. these patients needed care -- I think there were like two triangles in California in terms of new facilities and I think you said 37 in Louisiana. So there's obviously some overarching variable here in terms of why they're going on in certain settings with I think probably has to do with certain groupings. I'm trying to remember what we knew about ownership and so forth but my guess is there's a concerted thrust to go into certain settings irrespective of patient needed.

So I'll ask you to comment on that because it is so puzzling that essentially I think there's very few triangles, to use the code for the new facilities, west of the Mississippi aside from Louisiana. So what's going on here that is kind of irrespective or not tied to patient need at all?

DR. KAPLAN: I'm not 100 percent sure about what's

going on. I think that it's possible that the areas that don't have long-term care hospitals either -- in some areas it's an issue of population. One thing we heard when we were out in the field was at least some of the long-term care hospital major players required a density of Medicare population, Medicare beneficiaries in an area before they would set up a long-term care hospital there. So that may be one factor.

These are predominately for-profit. The new ones, in particular, are for-profit facilities. The most recent growth has been in hospitals within hospitals which may indicate that a certain type of acute hospital is opening these facilities more frequently than others.

We haven't really looked at that yet.

MR. MULLER: [off microphone.] Obviously you have density in LA, in San Francisco, in Chicago and New York. And we can just go around the country.

MS. DePARLE: But I think the industry also says, in some cases there are CON requirements in some states and not in others and it kind of parallels -- for better or worse, I think it kind of parallels the growth we've seen in other newer providers or newer services. For better or worse.

But I don't think you can just assume based on -- I

agree the number in Louisiana is curious, but I don't think you can assume based on where they've developed that there are not appropriate patients. I think that one thing they've said, as Sally said, is that they need to have a certain density of the Medicare population in order to ensure there are enough appropriate patients.

MR. MULLER: But there's more than five states with a density of Medicare population --

DR. REISCHAUER: But they'd be all over the board if that were the case.

MS. DePARLE: That has very difficult CON requirements. I asked that specific question and that's the answer I got.

MR. MULLER: Half of the states have CON, half don't. I just find it puzzling that five states have all this and 45 don't. So it strikes me the overarching variable here is something else aside from characteristics of a patient and I think we should -- whether it's Joe's recommendation on not having a hospital within a hospital but basically there's something else going on in 45 states that indicates they don't see the patient need for this.

So I think we should keep trying to figure out what it is. My guess is there's nothing in the patient characteristics of those five state that explains why they

developed there versus not having developed in the other 45. So there's something else going on here than patient need.

MR. DeBUSK: I certainly disagree with a moratorium on the hospitals. I think they serve a special need for such a group of people and I think we're in an evolutionary process where the care for these sick patients is getting better. That's probably what we're seeing. I think the certificate of need states and that play is having an effect on it but I think it's an evolving situation.

In the examples of facility level criteria, Sally could you expand a little bit on the comment no specialization in rehabilitation?

DR. KAPLAN: There are a few long-term care hospitals that specialize in psychiatric care. They have more than 50 percent of their cases that are psychiatric. I believe it's about five long-term care hospitals.

MR. DeBUSK: Psychiatric, I'm not --

DR. KAPLAN: Also, there are a few hospitals that also -- or not also but that respectively specialize in rehab, where 50 percent of their cases are rehabilitation cases. Our thought is that those should be rehab hospitals rather than long-term care hospitals.

If you look at the difference between major joint

replacement in a rehab hospital and a long-term care hospital, the payment is $50,000 a case. And there is definitely an incentive with no restrictions to have these people go to long-term care hospitals rather than rehab hospitals. So we feel that not only is patient criterion needed but that we need to basically say these should be rehab hospitals. If that's what they primarily do is rehab, they should be rehab hospitals.

MR. DeBUSK: Thank you. I understand.

DR. NELSON: One of the things that seems to characterize these institutions is a greater level of physician and nurse direct involvement on a daily basis. It may be that if they have indeed better outcomes, that we need more rather than fewer.

So my question is I know that you referenced outcomes with respect to readmission rates and death rates. But are there any data on the clinical outcomes such as success at weaning from respirators, would healing, endocarditis cure rates, functional capability after treatment for joint replacement? Do they have clinical outcomes that are superior as a result of the increased professional involvement?

DR. KAPLAN: None of that data is available that you're

talking about. There is no assessment instrument for these facilities at this time. To get the kind of information that you're talking about it you'd need either a patient assessment instrument and/or a medical record abstract basically, to see whether there was a cure rate or whatever.

The only outcomes that we really could measure from our data that we had were readmission and death.

DR. NELSON: It seems to me that one of the recommendations that we might consider is that there be, without undue burden, that we try and have a few of those measurement characteristics collected. We do for our other delivery systems and it seems to me that if we're going to make a case one way or another against these we have to determine whether the increased investment results in improved outcomes.

MR. DeBUSK: I like your approach where you ended up.

DR. KAPLAN: Thank you. That's really our intention when we talk about having a standard patient assessment instrument. Part of the assessment instrument would be to determine whether these people were appropriate for admission. But also if you assess them at admission and at discharge, you then could measure quality.

One of the criteria that we did mention was a weaning

success rate so that they would be required to have a rate above a certain level.

DR. NELSON: [off microphone.] I would make that very explicit.

DR. MILLER: Could I say just one thing about that? It may be early to say what the criteria should be on a weaning rate. I think what we are more saying and to follow up on these outcome measures is to say that they need to be developed. But there's not actually a lot of standards out, I don't think, on a lot of these specific outcomes. So you would use this assessment instrument to try to get the information and then drive the criteria, I think would be the process.

DR. ROWE: I'm not a pulmonologist and maybe somebody else can help here, but I'm a little concerned about the weaning success rate requirement because it may be that that will lead these institutions to select against certain patients who, in fact, could get optimal care in this setting because of the resources available in this setting and the expertise of nurses to deal with patients on ventilators with tracheotomies, et cetera. We don't want those patients to have limited access to these resources because they're judged to be chronically dependent on

ventilators and not to get weaned. Where are they going to go? Where else are they going to go?

I don't know, Nick, if you have any thoughts about this. You have more experience than I, but I'm a little concerned about that and how we would deal with that.

DR. WOLTER: I do think it would be very hard up front to categorize the patients to be compared because they're chronically quick critically ill to start with. And so some of them are weanable and others aren't. It would be almost hard to do the compare group.

I would say in the institutions we visited, they have wean rates. They track all of this stuff. They have their own institution-specific information.

What we can't really do very well is to compare that with a patient who might stay in an acute care setting and has sort of the same approaches taken. We just don't have databases to allow us to do that.

DR. MILLER: Could I just add one thing? From our visits I think they are making these assessment on patients. They will look at a patient and say I think this patient does have a good chance and so we'll take one, and other patients not. So I think we're trying to recognize what is happening there and then bring a little more...

DR. ROWE: Thank you.

DR. REISCHAUER: But even if they're doing that, the incentive that Jack raises isn't there now but would be there after you set this criterion. That's the issue, not that they have the capacity to do this evaluation.

DR. MILLER: Let me go back to the comment I was making a second ago on the outcomes in general. It's very murky on what the guidelines and standards are at this point. What I think we're really try to say with this criteria is to begin to collected it so that you can look at the outcomes of patients and begin to ask whether there is a big difference between this setting and somebody who goes to a different post-acute setting or stays in the hospital. To Nick's point, the ability to compare to a different setting.

I don't think we would say the criteria has to be a 60 percent wean rate. I don't think we would end up saying something like that. We would say this is something that the industry should drive towards, I think is what we're thinking.

DR. KAPLAN: I think the concern is we don't want long-term care hospitals, which are very expensive facilities, to become warehouses for people who are on ventilators and have no opportunity to be weaned. The long-term care hospitals

clearly told us in our site visits that they basically do assess patients and only take patients who have a good chance of being weaned. And they don't represent that they always succeed, but they do represent that they -- at least most of the facilities that we visited -- that they succeeded more often that they failed.

DR. ROWE: Where would the patients go who are judged--

DR. KAPLAN: They go to the SNF. The patients who do not wean go to SNF.

MS. RAPHAEL: Where we also think they're not being paid for --

DR. KAPLAN: Basically we did say that that's why the SNF PPS needs to be fixed. We don't think this is just one little fix that we have to do. We think there are lots of fixes that have to go on.

DR. NEWHOUSE: I want to come back to the reimbursement issue and the moratorium issue. Let me remind people how we got this category. It's not like a new category of hospital came onto the scene. It's that when we started the PPS we decided to use a per stay reimbursement method through the DRG. And there was a group of very heterogeneous hospitals out there that existed at the time that had very long average length of stays. And they were going to get creamed

by paying them an average per case payment that was averaged over all short term general hospitals. So we said all right, we'll just kind of set them aside and try to deal with them later. And later has been later and later and later, and here we are. But in the meantime, this group has seen some entry.

That's how we got there. Now the question is what would happen to these patients or does happen to these patient when there's not one of his hospitals available? The answer is presumably they're treated in, Sally said, the SNF. But also there's nothing that stops treatment in the acute care hospital of these patients. And I would assume that in an acute phase that's where they are in the white areas that Ralph is talking about on the map. They are therefore in the PPS in those areas.

And implicitly, the base rate for the PPS includes these patients. And there's nothing that I can see that precludes the same clinical care in the acute care hospital that is going on in the long-term hospital.

So the reason I was asking for a moratorium would be analogous to the specialty hospital moratorium is that I don't see any economies, in fact I see costs, in paying for this care in a separate facility, let alone a separate floor

that I relabel a long-term hospital within a hospital instead of just calling it a unit of the acute care hospital like the coronary care unit where we pay, in effect, as part of the PPS.

MR. MULLER: Empirically, it's the ones in the acute care hospital, in the two hospitals I'm very familiar with, this was the DRG with the biggest loss by a factor of about five. These obviously are the patients who stay there a long, long time and it's at the far end of the distribution of losses by a major factor.

DR. NEWHOUSE: So maybe we need to fix the PPS for that reason because there is this loss in those other areas.

MS. DePARLE: When you say the biggest loss, is it the ventilator patient? Is that the DRG you're talking about?

MR. MULLER: DRG, I think it's 483 or 283, I'm trying to remember, but the losses are five or six times.

MR. DeBUSK: The hospitals are making plenty of money. They can take some more loss then, can't they?

MR. HACKBARTH: Nick, is it on a specific point? If not, I've got a number of other people in the cue and I'll put you in. Can you wait?

Ray?

DR. STOWERS: My maybe reaching redundancy but I think

it kind of wraps up what Joe and the others are talking about. I think we need not to lose track of this one paragraph on page 16 that talks about the mandated fixed loss that happens with these outlier patients and why that might have brought about what we're talking about today.

And I think that loss goes way above what that fixed loss is with the outlier on these respiratory patients may be the three or four times that. I think maybe a policy question for us here is are we better to have in the future a continued proliferation of these in-hospital long-term hospitals or to work towards fixing how we're going to take care of these patients under the DRG system with the outliers? Which is better in the long run for the patients? Which is better cost to Medicare? That kind of thing.

Because I think our payment policy is what is brought about these hospitals and maybe very justifiably so, because we've induced this big loss on this group of very needy patients.

So maybe that's where we ought to be going, which would be better, to work on that or to work on continuing to support these hospitals with all of the details that go with that?

MR. FEEZOR: Ray just made some comments that I thought

were right on target. And then the other thing my namesake, Dr. Nelson down there, in terms of focusing our standards on the clinical outcomes and the patient is where we should -- even though we have to be mindful of the payment side.

I wonder if, following up on Ray's comments, I wonder if we really aren't facing the ultimate intergovernmental conundrum here, the fact that states whose monies are at risk, significantly at risk in the availability of SNF beds try to restrain. And on the Medicare side the only alternative may be to develop these new capacities since there is a shortage, I think, in many areas.

I think we're on the edge of a real boom. I think Joe's comments and admissions about what is likely to be facing us, given some lack of either restrictions or real consideration. My point is I think not just for-profit, not just in certain geographic areas, Ralph, but I think the pressures among a lot of the hospital systems are to really look very, very favorably on these.

I think in addition, particularly in those states where there has been some excess capacity leftover from the late '90s, I think those are tinder boxes waiting to be ignited. And in fact, have seen a couple of sales promotions aimed at hospitals that have some excess beds, particularly in

certificate of need states, that suggest this is a way to help your existing hospital as well as use some unused capacity.

So I think it certainly would be the recommendations of staff, I think, to move for some standards, standards that should though be focused more closely on the patient outcomes are in order. I do think that we, in April, ought to debate Joe's comments about some sort of restriction or moratorium on growth very seriously.

MS. DePARLE: Thanks. I want to thank the staff for all the work that you've put into this over the last year and the visits that were made to the LTCHs because I think that's important in developing our understanding of this.

I think the recommendations are good. I really liked Alan Nelson's idea of doing everything we can to move more in the direction of both collecting information and trying to get to some sort of outcomes measures that would move us in the direction of better quality of life and functional capacity for these patients. So I think it's great.

We have to start somewhere. As Mark says, we have nothing right now. We have a type of hospital that Joe has described the genesis of, but where the only criteria -- it's where it's very expensive and the only criteria is a 25

day average length of stay for Medicare patients. So we have to go somewhere. I think this is a very good start.

I'm not prepared at this point to say that I think there should be a moratorium on this because I don't think I have enough evidence that that's what needs to happen, but I do think these recommendations are good.

I'm not clear and I guess I should be, Mark, on what -- does CMS have the authority to, if we were to make recommendations, to just do these things? Or does this take a change in the law?

DR. MILLER: We were thinking through that issue and I guess I'll take a shot. I thought that there was probably some mix here of both legislative and administrative actions. I think lots of this can be done administratively but there's probably pieces of it that cross over into legislation. I'd take a nod or a shake of the head down there if anybody wants to...

MS. DePARLE: It seems to me the assessment, they could just say we're going to start doing this. It's not easy to do that but you could develop that. New criteria, I'm not so sure whether they could do that.

DR. MILLER: I think the criteria -- and I really don't know the precise answer to your question. But I think if

you start getting into criteria on from these DRGs, proportions of your patients, that kind of thing, I think we may be then crossing over into legislation. Again I think probably the best answer is we've raised this question for ourselves. But we have not drilled through it.

MS. DePARLE: One more thing, this PPS was supposed to be budget neutral; correct?

DR. KAPLAN: Yes, ma'am.

MS. DePARLE: So what does that mean? You made the point, Sally that the 2004 projections did not take into account the growth in the number of facilities. I thought I understood what budget neutrality meant but then I started thinking about it. Does it mean budget neutral versus those projections?

DR. KAPLAN: It means budget neutral with what would have been paid under TEFRA but it does not take into consideration growth. It takes into consideration growth in beneficiaries and the market basket. But it does not take into consideration opening new facilities or more patients and more beds.

DR. NEWHOUSE: [off microphone.] Or the unbundling of the PPS.

DR. KAPLAN: Exactly.

MS. DePARLE: So if spending is, in fact, higher than what was projected though, just like everything else there's not a mechanism to go back and say oh, but wait a minute.

DR. KAPLAN: No.

MR. DURENBERGER: First, I would just like to add my complements to the staff because I know how much work really went into this, and Mark, you two.

I have two questions that I didn't hear addressed and then I associate myself with the comments relative to the moratorium by saying I do believe -- and I don't know what the answer is either -- I do believe there's a distinction between co-located and independent. I wouldn't be prepared to vote on it today because I think we ought to have more information on it, but I think it probably ought to be here and we probably ought to have a specific recommendation to make.

My two questions relate, one to patient safety and employee safety issues. I don't recall hearing anything about either of those. I don't know the degree to which in a qualitative or a quantitative study those issues get raised and whether you're comparing an LTCH with a regular acute care hospital. But my experience tells me, particularly with the nature of some of these patients -- I

recall on one of my visits seeing a 450 pound man, and the challenge that just that particular issue presents.

So I say both employee and patient safety issues because I'm making some assumptions about the more specialized hospital perhaps having a much better record but I don't know the answer to it.

The second one, which I recall from way back in the mid-'80s when I piggybacked on Joe's explanation to sort of expand a little bit the definition of an LTCH, at that time the admissions were being reviewed by the PROs, as I recall, in their scope of work. For whatever reason I don't think it's any longer included. So I think we have fiscal intermediaries doing the review? Could you comment on both of those, please?

DR. KAPLAN: First of all, in the patient and employee safety, I have no information on that at the moment.

As far as PRO or they are now called QIO review, they really are not reviewing admissions. They are reviewing a randomly selected, starting this past January, a randomly selected sample of 116 claims to review because of coding and a review of medical necessity. And that's basically it.

There's very little review by the FIs of these. In fact, I was at a meeting of the FI Medical Directors and was

told by the medical director of one of the primary FIs that has long-term care hospitals. And he said that they had received a letter from CMS, double-signed, whatever that means -- telling him not to review the claims. I don't know what that means. It had two signatures on it instead of one.

DR. REISCHAUER: Sally and Carol, I think this is both an interesting and a sophisticated piece of analysis and I would hope when a few adjustments were made to reflect both Jack and Joe's concerns that you try and publish this into a peer-reviewed journal because I think it has the elements of an interesting contribution to the literature.

I just want to piggyback on what they were talking about and ask a bit about how we should be judging costs when we compare these hospitals with acute care hospitals and wondering whether we should be looking at patients with the same diagnoses who stay in acute care hospitals more than 20 days versus this set before we jump to conclusions about how expensive they are.

And then when we talk about the patients in these hospitals are more expensive than they would be if they were treated in acute care hospitals. When we reflect on the fact that a large fraction of them would be outliers in the

acute care hospital and they might look a lot cheaper in that form because somebody else is paying part of the cost here and we should be really concerned about sort of total resource use in the two settings, not the anomalies of a payment system. And we've reflected on the fact that the payment system really isn't "fair" maybe for these kinds of patients in acute care settings. But we say all oh, but they're cheaper than that unfair system and make a policy recommendation on those grounds.

The other thing that I was interested, just a comment on Ralph's, you know, where these things are. I don't know if the little diamonds within states are located sort of where the actual hospitals are, but there's a lot of the these that are in nowheresville. So the notion that you need sort of large population -- oh, excuse me, Mary. I forgot Devil's Lake.

But they're out in the middle of the Plains in Texas and things like that which sort of makes you think that this isn't large concentrations of Medicare eligible folks.

But I was wondering, I might have missed it in the chapter, but what's the average bed size of these things? Particularly the hospitals within the hospitals? And are there admissions from other hospitals to a hospital within a

hospital? Or is this just channeling all of the people from that hospital on to another floor of that hospital?

Because you might judge these things very differently if they're taking admissions from a catchment area of some kind, and you might want to know sort of are there real economies of scale here because you laid out a set of services and competencies that many acute care hospitals just can't have, particularly smaller ones. They might serve a valuable function.

DR. NEWHOUSE: [off microphone.] How would they get to 20 days in the first hospital? Wouldn't they be transferred right away?

DR. KAPLAN: Let me address a couple of Bob's questions if I may. First of all, on the map the diamonds and the squares and the dots are where the hospitals are located. That's their ZIP code. So that's one question

Average bed size, I can tell you hospitals within hospitals have fewer than 50 beds. And some of them have considerably less than that. Some of them have only 10 or 20 beds. It varies quite a bit.

DR. REISCHAUER: Should one of the criteria be a minimal bed size because it suggests that if it's 10 beds then you are really using resources that are probably dual

functions and are operating within the other hospital as well, I would think. It is just uneconomical to run something like this at that small a level, I would think.

DR. KAPLAN: Let me answer your question on the primary refer. With the work we did in the last year for the 2003 June report, we found that hospitals within hospitals receive 61 percent on average of their cases from the primary refer, which is the host hospital. The long-term care hospitals have a relationship, even the freestanding ones have a primary refer. On average they receive 40 percent of their cases from the primary refer. So there is a stronger relationship with the hospitals within hospitals but there is a relationship for the freestanding, as well.

MR. HACKBARTH: Sally, what proportion of the triangles are hospitals within hospitals?

DR. KAPLAN: I don't have a percentage on the tip of my tongue for you now. I will have that in April. But the majority of the new hospitals are hospitals within hospitals. Almost all of the hospitals established -- in fact, CMS made a comment in this most recent proposed rule that all of the long-term care hospitals established since the PPS was implemented are hospitals within hospitals, but I can't give you a firm percentage.

MR. MULLER: But go back to my previous point in the questions that Glenn and Bob are now raising, if there were that incentive to create them within the hospital, that incentive should be nationwide, as a way of clustering those patients that I referred to earlier. So again, I'm puzzled as to why they're just here, because insofar these are the expensive patients and the real outliers. And we know the outliers basically pays 34 percent of the cost of outliers cases. So there's a real incentive to go in that direction.

So why don't 50 states do that? Almost every acute hospital in some sense, of any scale, would have this kind of incentive.

DR. NEWHOUSE: But wouldn't it also have the capability? That is, Bob seems to be an envisioning some kind of specialized unit that what have an economy of scale. But if that were the case, then I would have thought we would have seen transfers very early in the stay of such a patient like we might see a transfer of a patient to a hospital they could do angioplasty from a hospital that didn't have that capability.

But as I understand these patients, they are in the hospital they're admitted to for quite a few days. And then they're transferred to the long-term hospital within a

hospital or a separate hospital. I think some of the hospitals since '93 are separate stand-alone hospitals.

And I agree with Bob that the issue should be the total resource cost here. But just on the face of it it would seem that if you have a separate bricks and mortar building, separate from the acute care hospital, that that's going to cost more in resources. And if you have just a separate unit within the hospital, in principle the PPOs was set up to encompass those resource costs in its reimbursement.

Now the incentives are screwed up as Ray said, but then that goes to working on the PPS incentives rather than trying to, in effect, give the hospitals incentive to game the system by relabeling some floor as the long-term hospital within the hospital, or even worse building another building down the block.

MR. HACKBARTH: But Joe if the rapid growth of the hospital within hospital is a byproduct of flaws in the inpatient PPS system and/or an effort to unbundle, how do you respond to Ralph's point that if that's what's driving this you would expect it to be evenly distributed across the U.S.?

DR. NELSON: Glenn, I think it's a mistake to consider this as a homogenous group. There are almost certainly some

of these facilities that say that they provide a different service, that fixing DRG for long-term stay in the traditional hospital setting doesn't get at what they do, which they may purport to be multidisciplinary teams of experts in a relatively small number of tough kinds of clinical conditions.

I'm not saying that that's the majority of them. But I am saying that some of that will make that case, that they are not providing the same service that a longer say in an acute hospital would provide.

MR. HACKBARTH: And I'm very open to that. Just instinctively I'm open to the notion that there are new ways to do things and some specialization. You may come up with something that's better for patients. So I'm not reflexively closed to it.

I am concerned about the set of issues that Joe raised early on about whether, in fact, a lot of this is a function of payment failures in inpatient PPS in an effort to get around that. But then I think Ralph has made a very compelling -- and about SNF.

But I think Ralph has made a very compelling point that the geographic distribution doesn't seem to be consistent with that.

MS. RAPHAEL: Glenn, has there been any change in geographic distribution except for states that have CON in the recent years? Have we seen any spread? Or are the newer facilities concentrated in the same areas as the older facilities?

MR. MULLER: Why would California have three and New York have none? I mean, there's a big Medicare beneficiary population in those two states. I think Joe's point has some intellectual appeal but then you start seeing the behavior and it's inconsistent with that because, in fact, that should be -- and I agree with Alan's point, this population -- and maybe Carol and Sally know what proportion of this population really could also be in an acute facility versus needing this kind of care. But the geography still puzzles me.

DR. NEWHOUSE: Why is it inconsistent? Why is the geographic concentration inconsistent with this?

MR. MULLER: Because then, if that incentive were there, it would be an incentive around the country not just in a few states.

DR. NEWHOUSE: But that's true of the clinical side, also. If you want to say there's a specialized capability that's better, then why is that concentrated?

MR. MULLER: I'm not following your point. There's geographic concentration but you'd expect to see something in Missouri and California and New York and other states, as well, not just the ones we're listing here. If this provides a special clinical need, then it should provide a special clinical need around the country.

DR. NEWHOUSE: I agree with that. So that suggests it's not providing that and that these other areas are doing -

MR. HACKBARTH: But you could imagine that the diffusion of the new clinical approach might take time and it would sort of concentrate, but the PPS incentives have been in place for a long time.

We are rapidly running out of time and we have Nick and Alan Nelson, did you have another point to make? Okay, and Dave Smith?

MR. SMITH: [off microphone.] No, my confusion has largely been expressed.

MR. HACKBARTH: Okay Nick, you've got the last word.

DR. WOLTER: I would just say Montana is white on that map. I have no experience with LTCHs and had not been in one prior to these visits. I was interested to see that North Dakota is an entrepreneurial state now, too.

A few comments. On the hospital within a hospital thing, it might be worth clarifying that there are some governance and ownership rules about what those actually mean, if I remember right. It's not that they're operated by the acute care hospital. And so that at least creates some arms length relationship, although one might question how really arms length is it. But it's probably worth clarifying that.

It also would be interesting to see if data can suggest that utilization of the hospitals within hospitals is different in some way. Is the length of stay on the acute care side less there than it is -- before we make judgments. I think it might be worth getting that data.

And then a clinical comment. At the best places we visited, and in visiting with my pulmonary critical care colleagues, I was very impressed with the sincerity of their belief that they were providing care that served patients very well, that in many cases they didn't believe was as well provided on the acute care side because of the organization of the team around the chronically/critically ill really wasn't as well put in place as it was in the LTCH. Now that was in the best of the places that we visited.

I also had not seen the quantitative analysis until this report came out. And if I'm remembering what's in the paper, if you look at the top 5 percent of patients most likely to receive this care and compare the cost to those who did go to LTCHs, it's a wash or maybe a slight advantage to the LTCH. So we don't really have good information yet that this is more costly care if you try to normalize it for the types of patients being cared for.

When you add the readmission differences to that there is at least one thing suggesting that maybe there's some benefit being provided.

I also hadn't seen the draft recommendations until today and I just think you guys did an outstanding job coming up with a balance of trying to tighten up the criteria so that indeed the right patients, if that's at all possible, get into these settings. And that the patients who really don't need this care, hopefully the criteria can help us with that.

And clearly, the importance of adjusting PPS in the other settings, the acute side and the SNF side, is really critical. Unfortunately, the recommendations on revising RUGs have been out there for how long. That hasn't happened yet. But I think that is really critical as well.

I think you really did a nice job packaging those recommendations.

MR. HACKBARTH: Thank you. I think that's a great summary of where things stand. Nick, thank you for the time that you spent going on those visits. It was very helpful.

And Pete, I'm reminded you also invested some time in that. So thank you.

Next up is implementing the new Medicare drug benefit.

DR. SOKOLOVSKY: I would just like to provide a little context before Cristina and Vivek give us the presentation for this morning.

Now that Congress has enacted a Medicare prescription drug benefit to start in 2006, policymakers will have to make a long series of decisions on how the program will be implemented. These decisions will determine the cost, the efficiency and the quality of the benefit.

While legislators were debating the scope and structure of a prescription drug benefit, researchers conducted analyses that would enable them to better estimate the cost of the benefit. So work focused on things like estimating drug coverage of beneficiaries, figuring out expenditures for different categories of beneficiaries, and evaluating strategies adopted in the private sector to help control

drug costs.

However, there's been much less research done to inform policymakers on the issues they're likely to encounter now as they implement a drug benefit. Yet issues like formulary systems that we'll hear about today, eligibility determination and enrollment and beneficiary education are complex issues that require careful planning based on solid information.

Large health plans report that implementation of a new drug benefit design typically requires lead time of at least one year. None of these plans would approach the size and complexity that will be involved in the implementation of the Medicare drug benefit.

In the next couple of months CMS intends to begin releasing a series of regulations related to implementation of the benefit. For a chapter in our June report we plan to focus on what we see as just some of the beginning key implementation issues to help prepare MedPAC to advise both Congress and CMS.

Next month we'll present the results from a series of structured interviews with present and former state Medicaid officials, directors of state pharmacy assistance programs, health plans and PBMs about what the key issues are for

implementing the low-income drug benefit. Issues here include things like outreach and education, methods of eligibility determination and particularly the special problems relating to dual eligibles in long-term care facilities.

We also plan to present the results of a study on issues that arise when health plans sponsors switch from one pharmacy benefit program to another. We've conducted a number of site visit, focus groups and structured interviews looking at best practices and also some of the problems that both plans and participants have experienced following the change.

Today Cristina and Vivek will present findings from our work on formularies. This work is designed to educate the policy community about formularies and lay out what we see as some of the key policy issues for Medicare around formulary development and utilization.

MS. BOCCUTI: To learn about formulary issues that policymakers are likely to encounter when implementing the new law we consulted available publications and interviewed experts and stakeholders on the topic, including representatives from health plans, PBMs, drug manufacturers, Medicare plans, the Veterans Health Administration, the

Academy of Managed-Care Pharmacy, U.S. Pharmacopeia and consumer advocacy groups.

We have not yet completed all of our interviews and plan also to talk with physicians on their experiences with formularies.

Our presentation today and your mailing materials are designed to give you background information on formularies and begin to introduce some of the policy issues that policymakers and the commission may face in the future when formulary implementation regulations are being drafted.

The major questions we addressed are what are formularies and how do they operate? What does the new law say about formulary implementation? And what formulary related issues will Medicare and the Congress face when implementing the Medicare drug benefit?

Vivek is going to start with first bullet.

MR. GARG: A formulary is a continually updated list of drugs approved for coverage by a health care payer. A formulary is one component of a plan's overall formulary system which includes a set policies and procedures used to design, implement and update the formulary.

For example, there may be policies concerning the selection of drugs or how information about the formulary is

communicated to physicians and beneficiaries.

Formularies can help educate physicians and enrollees on appropriate prescribing and utilization by identifying drugs proven to be a effective and safe for a plan's population. They can also help contain costs by directing use towards cost effective drugs and by giving plans the ability to negotiate for manufacturer rebates based on a market share a plan can shift towards a particular drug.

The majority of US workers with employer-sponsored drug coverage are in health plans that use formularies and formulary systems.

Formularies are composed of therapeutic classes which are the categories in which drugs are classified. There is no single way to classify drugs and they can be based on a mix of their therapeutic indications, the pharmacological mechanisms through which they act or their chemical structure. For example, antihypertensives lower blood pressure but include drugs with different pharmacological mechanisms such as those shown on the slide. And each drug which those groups has a distinct chemical structure that may affect its effectiveness and safety profile.

Most classification systems aim to place together drugs that produce similar therapeutic outcomes and have similar

adverse reaction profiles. Plans we interviewed agreed that the classification system used can greatly affect a drug benefit as the therapeutic classes provide a framework for reviewing, selecting and inducing price competition among drugs. Many different classification systems exist and plans may create their own or adopt systems available commercially.

In addition, drugs can often be classified in more than one class. For example, beta-blockers are primarily used to treat hypertension by decreasing the heart's output of blood. However, some can and are used in the treatment of several types of heart conditions, migraines and anxiety. Although beta-blockers act through the same pharmacological mechanism, differences in their chemical structure alter their appropriate uses, effectiveness and safety profile. Based on these differences it would be possible to classify beta-blockers in one of several different therapeutic classes.

As these examples show, decisions about classification depend on the interpretations of medical experts in the formulary system which can differ significantly.

Formularies are developed and maintained by a body of experts known as a pharmacy and therapeutics committee, or

P&T committee. All plans we interviewed relied on the input of a P&T committee in selecting drugs for the formulary.

The composition of P&T committees vary but generally consist of a majority of physicians from different specialties with some input by pharmacists. Our interviews show that physicians usually hold the majority vote on the committee, and in one case pharmacists were members of the committee but could not vote.

Some P&T committees vote on each drug being reviewed while others seek a consensus to determine drug coverage. Some plans emphasize the independence of their committee, drawing members from academia and expecting or requiring disclosure of conflicts of interest.

P&T committees determine whether a drug should be placed on the formulary and in most cases what level of coverage it should have. To do so they review assembled information on the effectiveness and safety of available drugs. While effectiveness and safety are the primary factors for a drug's selection, our interviews revealed that cost becomes a factor at different points in the formulary process. Some plans take cost-effectiveness, price and pharmacoeconomic information into account while reviewing drugs. Others may first decide which drugs are

therapeutically superior, equivalent or inferior and then negotiate and consider pricing among those determined to be equivalent in effectiveness and safety.

Most P&T committees meet at least yearly with many meeting quarterly. Meetings can vary from three to four hours to over the course of a few days. Some committees stagger their review of therapeutic classes across meetings, effectively canvassing the formulary over a year. Others may review the entire formulary once a year or set their agenda based on manufacturer contracts up for renewal. And most plans indicated that P&T committees reconsider drug selection as needed when new drugs or information becomes available.

Most formularies are variations of open or closed. In an open structure the plan covers all drugs in the therapeutic classes covered, whether listed on the formulary or not. Those that are listed are preferred by the plan for their quality or cost-effectiveness although there is no financial incentive for their use.

In a closed structure, only the listed drugs are covered and prescriptions can be shifted to these listed drugs to a greater degree.

Individual therapeutic classes may also be open or

closed. For example, the statin class may be closed and restrict coverage to the listed drugs while the antihistamine class remains open with coverage of any available antihistamine. In practice, most formularies are a mix of open and closed classes and most plans do not cover particular classes of drugs, such as drugs proven to lack sufficient advocacy by the FDA, over-the-counter drugs, weight-loss, cosmetic or other lifestyle drugs.

Incentive-based formularies use cost-sharing differentials to direct use toward certain drugs on the formulary. The most popular form places drugs into three tiers and induces consumer price sensitivity while preserving access to a broader range of drugs. The first tier contains generic drugs which have the lowest level of cost-sharing. The second tier contains brand name drugs that are preferred by the plan and these have a middle level of cost-sharing. The third tier contains non-preferred brand name drugs with the highest level of cost-sharing.

In addition to cost-sharing differentials, formularies may contain other mechanisms to direct use. A plan may require a drug to have prior authorization. In this case, the prescribing physician must provide evidence of the drug's medical necessity before the plan will cover it.

A plan may also establish step therapy for a certain condition. In this case certain first-line drugs must be tried and proved unsuccessful in treating the condition before other drugs are covered. Prior authorization and step therapy are often implemented when higher cost drugs are available that have limited value over lower cost drugs.

All plans we interviewed, though, had a medical exceptions process to cover drugs determined to be medically necessary by the physician subject to adequate support and approval by the plan.

Some plans stress the importance of such a mechanism to a well designed formulary. In most cases, claims were resolved in under 48 hours. One plan allowed pharmacists or physicians to prescribe a three day emergency supply of a drug if they believed it was medically necessary while the claim was being processed.

Now Cristina is going to continue.

MS. BOCCUTI: In implementing a formulary, the new law allows plans to establish their own classification system. However, it may not be designed to discourage enrollment of beneficiaries with high expected drug costs.

The law directs a model classification system to be developed by U.S. Pharmacopeia, which is an organization

that sets and publishes quality standards for prescription drugs such as correct molecules and dosages. Plans are encouraged through safe harbor provisions to use USPs model, but again plans may develop their own classification system.

The specificity of a therapeutic class determines the mix of generic and brand name drugs available in a given class. The MMA requires that plans with formularies cover at least two drugs in each of its therapeutic categories. Plans may list a drug in more than one category. For example, we're recalling Vivek's diagram, plans may cover a beta blocker in two therapeutic categories, one for hypertension and the other for migraines.

Some of the plan and PBM representatives we interviewed indicated that if they use a formulary with narrow therapeutic classes, it minimizes their ability to contain costs for two reasons. First, narrow drug classes are more likely than broad classes to have no generic or moderately priced drug available.

Second, narrow drug classes are likely to reduce the degree of market competition within each class because fewer drugs are eligible for coverage in the class. This could consequently raise costs for plans, beneficiaries and the Medicare program if rebates and discounts are diminished.

Consumer advocates and representatives of the pharmaceutical industry expressed concerns that a broad classification system with too few classes could limit enrollees' access to medically necessary brand name drugs particularly those which best serve subpopulations who experience adverse side effects to lower cost drugs.

I'll just provide one example that compares narrow and broad classification structures which has received some attention in recent years and that is the classification of nonsteroidal anti-inflammatory drugs, NSAIDs, and Cox-II inhibitors. If a plan or PBMs classification system broke down NSAIDs into the subclass of Cox-II inhibitors, then under MMA the plan would have to cover at least two Cox-II inhibitors. At this time, only brand name Cox-II's are available.

If instead a plan's formulary did not classify Cox-II inhibitors separately from other NSAIDs, then the plan would not have to cover Cox-II's specifically and would likely choose to cover considerably less expensive NSAIDs within the broader NSAID category. In these cases, coverage for a Cox-II could occur through the medical exceptions process, potentially for people with gastrointestinal sensitivity.

So you can see the formularies are affected by the

interplay between the plan's therapeutic class structure and the number of drugs covered per class. What we don't know yet is U.S. Pharmacopeia's model classification system and how plans, PBMS and physicians will respond to it.

In some cases, a beneficiary enrolled in a drug plan may need a non-formulary drug either because a formulary drug is not effective for them or because the formulary drug causes adverse side effects. The MMA requires the plan to have a process for enrollees to request coverage for non-formulary drugs or to change the drug's cost-sharing terra status. But first, a prescribing physician must determine that a non-formulary drug would be either more effective or cause less adverse side effects.

If beneficiaries are unable to obtain a non-formulary exception, they will have to pay high cost-sharing, up to the full retail cost of the drug. Moreover, their cost for purchasing non-formulary drugs will not count towards the out-of-pocket spending thresholds calculated for deductibles and stop loss in the Medicare drug benefit.

If non-formulary requests are denied, beneficiaries may appeal the decision in a process like that in the Medicare Advantage program. As Vivek mentioned, our interviews and research revealed the plans use a continuum of methods for

reviewing non-formulary exceptions. Some are rather informal and ad hoc, say by telephone, while others require complex paperwork and proof that the beneficiary experienced either an adverse reaction to the drug or the drug failed as a treatment alternative.

Consumer advocates contend that if the process for obtaining non-formulary exceptions is too burdensome, then physicians may be less willing to participate in the non-formulary exceptions process which could affect beneficiaries' access.

Alternatively, plan and PBM representatives expressed concern that if non-formulary exceptions were too easy, the class control and drug management mechanisms built into the formulary would be greatly undermined.

As Vivek mentioned, formularies are frequently modified to reflect the introduction of new drugs in the market, updated clinical information and changes in market competition. The new law allows plans to change their formulary at any time during the plan year but they may only change their formulary's therapeutic classification categories at the beginning of a plan year.

Prior to removing or changing the tier status of a drug or the drug itself, plans must notify affected enrollees,

physicians, pharmacies and pharmacists. Notifying enrollees about formulary changes is important because it can reduce those instances in which beneficiaries first learn at the pharmacy counter that their drug is no longer covered or has a higher cost-sharing. At the minimum, plans may post this information on an Internet web site. Consumer organizations comment that web site based communication can be useful but it's not sufficient to reach most beneficiaries.

A formulary change can have health and financial implications for beneficiaries because it requires that they either switch to a new drug or continue to use the original drug and pay for it themselves. Recent research published in the New England Journal of Medicine suggests that when copayments for drugs increase, some patients stop taking the drugs rather than switch to cheaper ones.

Some plan representatives we interviewed noted that for a limited number of drugs and illnesses grace periods or grandfathered exceptions for the removed drug may be granted automatically, such as for psychotropic drugs treating mental illness. However, when plans do not anticipate safety concerns, they are less likely to grant non-formulary exceptions based simply on a formulary change.

As you know, a large share of Medicare beneficiaries

take multiple medications for chronic conditions. The new law does not stipulate that plans provide prospective enrollees with a list of covered drugs by name nor does it require the Secretary to disseminate formulary comparison information. However, upon enrollment and annually thereafter plans are required to provide information on how to request and obtain more specific formulary information. Note that it's common practice in commercial insurance to provide the actual formulary only to enrollees. This scenario means that beneficiaries cannot select plans based on the drugs they cover.

Note that for beneficiaries taking multiple drugs, formulary comparisons may be quite a complex task and plans may well change their formulary after beneficiary enrollment.

As is current practice, MMA requires that plans have or contract with a P&T committee to develop and review their formularies. The law stipulates that the majority must be practicing physicians or pharmacists or both with at least two members of the committee considered independent experts. Representatives we interviewed were mixed on the issue of P&T committee member independence. Some stress the importance of total independence from the plan and from

other intermediaries such as drug manufacturers. Others stated that including plan affiliated physicians and pharmacists on the P&T committee is important to formulary acceptance and compliance. In general, plans indicated that they would not have difficulties satisfying the P&T requirements in the new law.

Currently, two drugs are rarely tested against each other for effectiveness in treating the same condition which has led health insurers, providers, consumers and policymakers to advocate for independent head-to-head drug comparison studies. Single drug or placebo controlled studies are far more common.

Drug-to-drug trials could provide physicians and P&T committees with improved evidence on drug selection. The pharmaceutical industry contends that current research methods, which require considerable resources, are generally sufficient for physicians, plans and beneficiaries to make informed choices. The new law authorizes funding to the Agency for Health Care Research and Quality to conduct and support comparative research on health care items and services, which may include prescription drugs. As yet these funds have not been proposed in the President's budget nor by Congress and no amount was delineated specifically

for prescription drug research.

MMA also notes potential for private partnerships in this regard. An alternative to the Congressional appropriations process could include funding a research institute through a percentage of drug sales. The independence of drug-to-drug comparison research is essential to its success. The study methodology would need to be transparent and subject to peer review to gain stakeholder respect.

In sum, conducting head-to-head studies would be very expensive and depending on the research design results could vary. So at issue, therefore, is who would conduct these tests and who would pay for them?

So in conclusion, we designed this presentation to give you background information on formularies and begin to introduce some of the formulary issues that policymakers and the Commission may face in the future as implementation regulations are being drafted.

We welcome your comments and suggestions on the content, balance and usefulness of this information.

Thank you.

MR. FEEZOR: I would just like to compliment you on I think a great primer. I wish I'd had this at CalPERS when I

was trying to get my board to understand as we were making a move from one PBM to another and we had just placed about 300,000 people from an open formulary to a closed. I'll give a couple of comments that I think we drew from that rather painful experience.

The first is, and Glenn, there were several states led by Kitzhaver and some of his staff were trying to put together an institute comparative drug studies. Do you know where that is?

The point is I would like to have us keep in front of us and in front of the decisionmakers here in Washington the need for at least a stimulus on the comparative effectiveness studies capacity, some sort of independent capacity.

A couple of comments growing out of our move at CalPERS to move from an open to a closed formulary at the same time we went with the three tier. think what is absolutely important is that, in fact, the formulary be posted. I know there is a selection issue there but I think individuals have to be able to try to make intelligent decisions, as confusing as it may be for people on multiples. So I think the open formulary is something that should be pursued.

If you allow the formulary to change at any time I

think there are some real issues. I think the benefit -- particularly we found in our beneficiaries -- of saying that the formulary can only be changed once every benefit year in the case of commercial or perhaps quarterly or something like that. So it's more routine, it's sort of normal and there's an expectation that they can check.

Finding also that when there is a major change that having a transitional period, when we had 300,000 people that we changed PBM on, 50,000 of our folks who were on maintenance drugs were affected by that. Quite honestly, if I had known that, I would have been a little bit more reluctant to recommend it to my board. And I know if my board had known those precise figures, they would have been, I think, disinclined to go along.

We made a very concerted effort to make sure that there was a communication to all of those individuals affected, and you can identify them ahead of time, that that communication went in redundancy both to the patient and to the prescribing physician. And that's the only way to do it.

So I think that having some rules that require that there be a communication to both parties affected and that there even be, I think the appropriate way would be a three-

month transitional period in which I am held harmless if I still use my old drug instead of the one that it's been changed to. And during that period of time I get a warning and then after three months...

We did that and we were able to move about 40,000-some of those 52,000 folks to a new drug benefit. We forego a great deal of the savings by having allowed a lengthy -- we did a six-month transitional period in order to minimize the outcry and a heck of an educational job. But when all was said and done we got good buy-in and ultimately ended up saving about $9 million a year.

DR. REISCHAUER: A couple of observations. One is you mentioned in the presentation, but I don't think it was in the written material, the beneficiary perspective with respect to formularies which is what counts towards your movement up the progression of basic coverage, doughnut hole, catastrophic. And in most plans that doesn't make any difference because you're in the same system throughout. But in this peculiar benefit that we've designed, it's terribly important.

And remind me whether if you have a tiered system and you choose a high tier copayment whether the copayment above the first tier counts towards your spending? I don't think

it does.

MS. BOCCUTI: If it's a covered drug then your cost-sharing counts. But if you try to get it moved up to -- well, your cost-sharing counts, am I correct, Joan? current job.

DR. SOKOLOVSKY: There's nothing in the law as I read it that would say that if you purchased a drug at a higher tier, if it was on the formulary, that it wouldn't count as part of your out-of-pocket spending, as opposed to a drug that was not on the formulary.

MS. BOCCUTI: It's non-formulary drugs.

DR. REISCHAUER: Non-formulary drugs don't count.

DR. NEWHOUSE: I have a question. As I read the law, this was the default cost-sharing. And that if you used a formulary, you just paid X dollars per scrip, as happens in the commercial world. It's not that you've progressed on into a doughnut.

DR. REISCHAUER: Go through that again.

DR. NEWHOUSE: Maybe I misunderstood your question but I thought your question was are the copayments going to be in effect be reimbursed by some other policy that has this $250 deductible followed by 75 percent reimbursement and so forth and so on? Is that what you're asking?

DR. REISCHAUER: If you had a standard benefit and you were bring reimbursed for 75 percent, 25 percent for formulary drugs would go into your out-of-pocket number which would sort of make you eligible for catastrophic, eventually. If you bought non-formulary drugs the total spending -- you wouldn't would get reimbursed for anything and none of the money would push you up towards the catastrophic eligibility.

DR. NEWHOUSE: You may be right but that wasn't how I read the law.

MS. BOCCUTI: It's our understanding that that's what's written in the law, that if you purchase a non-formulary drug it does not count towards your personal out-of-pocket spending. It's called incurred spending and it's not an incurred spending.

But if you do get a non-formulary exception, then that's a different story. Then it's as if it were a covered drug.

DR. NEWHOUSE: Ah, but that's if the plan is using this cost-sharing structure of $250 deductible, et cetera. But suppose instead they're using $20 per month copays? Then what? And $50 if you're off formulary?

DR. SOKOLOVSKY: If you were using that structure, the

$20 would count. But the $50, if it was off formulary would not count towards your out-of-pocket limit. I think there are a lot of things about the law that will be revealed in regulation.

DR. REISCHAUER: That's another issue which I wanted to bring up which is you've gone through a series of things that are not required by the law. But some of them could be in the regulations, I think. And we have a set of regs applicable to the discount drug card which, in some respects, are more stringent than the implications of what could happen under the basic benefit.

And I thought some description of how these are handled in the regs for the discount drug card, because I would think it's going to be hard to back off of some of those. They have to put their formularies on a computer accessible form where you can go in and see what it is and calculate what your drugs are. That's not precluded as being, I think, part of the regs that the Secretary could issue on the basic card. And I think it would be hard to take a step back from that level.

MS. BOCCUTI: There's two issues that I would bring up about the drug discount card which is set to begin in June 2004 and it runs until the beginning of the drug benefit.

So it runs to the end of 2005.

About your first comment on the posting say of the drugs that the sponsor determines to be giving the discount. I think they do have to list that. That is not the case for the Medicare drug benefit.

Keep in mind that there is a distinction between the drug discount card program and the Medicare drug benefit in that the drug discount card program has a classification system and that is not really the formulary. Think of it a little bit differently than a formulary.

And what the sponsors are going to be offering is a discount of at least one drug within each therapeutic category. That's what's required. But the therapeutic categories have been predetermined.

I can talk a little bit more about that if you want but I want to feel it out here and see.

DR. REISCHAUER: No, I was just thinking of including some description of that in this discussion.

The third point that I wanted to bring up was the discussion of comparative drug study effectiveness. It's sort of almost a footnote at the end of this presentation.

I think this is an issue that is sort of larger than drugs. As you point out it's how do we evaluate the

effectiveness, the cost-effectiveness of medical interventions of all kinds? And our lack of current knowledge and the need for some kind of institutional reform that would devote more resources to this and provide what is basically a public good for the world more broadly rather than have Aetna do its little studies and Kaiser do its studies.

I think, I would hope that whatever we say here doesn't preclude the possibility that we would get into this in a much more serious way with sort of an overall kind of study. So that's just a plea.

DR. MILLER: There have been internal conversations on this and I think what we would be like to do is when we bring it back is talk about a broad range of ways these things could be dealt with because you could think of public and private partnerships and that type of stuff. This has been discussed inside, We just didn't think that this was quite the --

DR. REISCHAUER: Finally, I need some education. What actually is U.S. Pharmacopeia? Is it non-profit? is it for-profit? Is it a membership organization?

MS. BOCCUTI: It's a non-governmental organization that works -- their mission is on quality of prescription drugs

and they set standards.

DR. REISCHAUER: But General Motors is a non-governmental organization.

DR. ROWE: [off microphone.] Only recently. It used to be a governmental agency.

MS. BOCCUTI: It's non-profit and they publish books that pharmacists and other --

DR. REISCHAUER: Who funds it?

MS. BOCCUTI: They fund themselves through the publication of this book which is a resource because it's like recipes. It tells you what the requirements and the standards are for the drugs.

MR. DeBUSK: It's an encyclopedia of drugs.

MS. BOCCUTI: You could say that.

MR. DeBUSK: It's been around for years.

DR. REISCHAUER: What gives it its authority?

DR. ROWE: It's authoritative.

DR. NELSON: It's like Good Housekeeping seal of approval, Bob. Bob, for vitamins and things of that sort, if they meet USP standards they state that. So they have production standards and so forth that don't apply as much to the prescription drugs, although their compendium covers anything. But if you buy a USP vitamin, for example, you're

assured that they met certain standards in production.

MR. SMITH: Is the drug industry equivalent of the Underwriting Laboratories for the insurance company.

DR. ROWE: But they don't test the drugs themselves.

MR. SMITH: They don't?

DR. ROWE: That's my understanding.

MS. BOCCUTI: That's correct.

MS. DePARLE: There's more than one, the blue book and the red book, right? Which one is --

MS. BOCCUTI: I don't know the color. There's more than one.

DR. ROWE: I'd like to get back to this question that Bob raised for another minute if we could. Have you heard enough about the USP, in terms of what you need to know?

DR. REISCHAUER: I believe that no one knows more than I do, so I can continue to speak on the subject.

DR. ROWE: Maybe not as authoritative as I thought.

I want just to reflect on this idea that Bob brought up, which is mentioned on the next to last page and you talked about it, about basically the evidence based, the need for evidence-based research comparing the efficacy of these drugs, which is apparently not really done is the FDA approval process of comparing one to the other. It's just

whether it's safe and effective qua the drug itself.

I think it's really important for us to consider this more broadly than just drugs and there, of course, are bridging things like drugs eluding stents. Well, is that a drug or not? I guess it's a stent but it's a drug, too. So there are lots of technologies.

Health plans, and I'll try to speak from the point of view of a health plan for a minute. Health plans function best when there is evidence in the literature to permit or to guide decisions with respect to copayments, deductibles, availability, coverage, et cetera. And the BlueCross BlueShield Association has a group brought together of distinguished people like Barbara McNeil and others are on that.

And then, as Bob pointed out, each of the company's larger independent for-profit company has its own kind of mini Office of Technology Assessment, if you will, mini-OTAs, all doing redundant, sometimes conflicting analyses on what literature is available.

And every time there's a difference between one company's coverage and another company's coverage then that provides a source of irritation and justifiable complaint amongst consumers, et cetera. It goes on and on.

We don't have an OTA anymore for whatever reasons. And I think that -- I can't speak for the organization, which is now called the America's Health Insurance Plans. It used to be called AAHP HIAA but recently changed its name to AHIP. That organization, I think, strongly feels that we need some sort of full thickness assessment organization that can do meta-analyses or bring various data together to be considered in a public forum in an independent way. I think this is in everyone's best interest.

If we could, as MedPAC, find it within the scope of our agenda for Medicare beneficiaries to comment on that or think about it -- I'm not trying to add another study to an already overburdened staff -- I just think Bob is right on. We feel a critical need for this.

DR. NEWHOUSE: Two different kinds of comments. First, on the exchanges that Bob and Jack were just having I certainly think that we underinvest in this kind of research so I'm comfortable with trying to push it along. But I'm a little more tempered than this might seem at first blush. There's two different kinds of issues I have.

One is the lifetime usefulness of this research is limited if a new drug for a condition comes along that makes the old treatments obsolete. And that happens frequently

enough that it would limit the amount of investment one might want to make.

And the second is a similar kinds of issue. Here I'm thinking of, in particular, cancer drugs and to some degree AIDS drugs, which are both frequently combinations of drugs.

And second, at least in the cancer case, it's frequently the case or will be going forward as we get away from the maximum tolerable dose into more targeted drugs, that the optimal dose will become uncertain or will be refined over time. This happens even now. There's been a major improvement in childhood leukemia survival with really no new agents because dosing has improved over the last couple of decades.

Then the issue becomes what combination do you test and at what dose levels and so forth? And that adds another level of uncertainty beyond that a new agent may come along and render what you did not that useful.

So I think just in the text maybe something that painted a picture about what the payoff from the research might be.

Then the second, I'd still like to go back to the question I was having with Bob earlier and Joan. As I read

the law, the law said government was going to pick up 74.5 percent of the cost of the private plan and the rest would be paid by the beneficiary in some combination of cost-sharing and premium.

Then the 74.5 percent in turn, and now I can't remember whether it was either 80 percent or 95 percent, but if you got over I think $5,100 or some such for those people the government would act like an outlier or a reinsurer and the government would pick up some high percentage of those costs. You can tell me if it's 80 or 95.

DR. SOKOLOVSKY: The government picks up 80 percent.

DR. NEWHOUSE: And then the remainder would be put into the subsidy to the premium. So the government was putting in 74.5 percent and they picked up these outlier costs and the remainder went toward a premium subsidy. And then there was this cost-sharing structure that everybody has remarked upon. And then what couldn't be made up in the cost-sharing structure from the consumer's share would go back to the premium. That was how I read the law.

But then there was a clause that said plans may use formularies. The question was how that -- this was the exchange and Bob and I had -- how that played against this cost-sharing structure if at all? Since the formularies

obviously had higher cost-sharing for stuff that's off the formulary -- this could be pick up in regulation but I didn't read anything in the law that specified that the higher cost-sharing stuff would be folded into this strange deductible and doughnut and so forth structure. Was that misreading the law?

DR. SOKOLOVSKY: I think we're talking about two different issues here.

DR. NEWHOUSE: That's why I'm asking.

DR. SOKOLOVSKY: One of them is an issue that is perhaps the toughest issue out there right now and that we're not really ready to say -- we're not ready to produce research on it, but it's the issue of actuarial equivalents which is that the cost-sharing that's set up in the standard benefit plans don't have to use. They can come up with another benefit as long as it's actuarially equivalent. And there seems to be very little consensus about what that means but it means they can change -- I mean, everyone agrees they can change their cost-sharing as long as for a standard population the amount of costs that the government would pay would be approximately the same.

DR. NEWHOUSE: Exactly. So I read that to mean that as long as you were actuarially equivalent you could have $20 a

month copays and $50 a month copays or whatever the copays came out to be. But then it wasn't the case that there was some other thing that was going to reimburse 75 percent of these copays for a region and then nothing and so on.

DR. SOKOLOVSKY: There is an additional piece of the law that says that if a drug is not on the formulary, as opposed to having a different kind of cost-sharing system, if it's not on the formulary, then the beneficiary not only pays the full cost of it but it doesn't count for their out-of-pocket limit. It's not part of the government subsidy. It's not part of what the plan pays.

DR. NEWHOUSE: That's separate from the lifestyle drugs that the law specifies that are outside coverage altogether?

DR. SOKOLOVSKY: Yes.

DR. REISCHAUER: But also, while you can set up your own cost-sharing structure there are limitations. You have to have $250 deductible and you can't have spending over $5,150, right?

DR. NEWHOUSE: [off microphone.] I don't think that's right.

DR. REISCHAUER: And the catastrophic has to start at the same dollar out of pocket; is that right?

DR. SOKOLOVSKY: Yes, there are a bunch of different

places, limitations, on what you can do. But it still seems to be -- Rachel and I have been going to a number of conferences where actuaries talk about these issues and the thing we've found is how little consensus there is on what can and can't be done.

DR. NELSON: I think it's important to give some attention to how disruptive changes in formularies can be for the patients and also expensive. The patient is on a stable program with a cholesterol-lowering drug, for example, and a beta-blocker and so forth. And if that's changed then they have to be monitored and make sure it doesn't negatively impact their control and that they don't get muscle pains or other side effects that they weren't having when they were on a stable, satisfactory management program before.

So whatever we can do to build stability into the formulary so it's not changing at just whims will be important from the standpoint also of saving money, I believe.

The second point is that physicians are being driven nuts by multiple formularies that they are expected to know which of 2,000 drugs are on which formularies. And to the degree that Medicare can make it easier by providing them

some simple software that lets them know if a Medicare patient is prescribed a certain drug whether it's covered are not and that provides updates, that is updated periodically, I think not only just for reducing the hassle but also to assure that physicians don't have another incentive to just say to hell with the Medicare patient anyway. It's important then from the standpoint of access, in my mind.

MS. BOCCUTI: I mentioned that the presentation yesterday got into a little bit of some incentives in the law regarding e-prescribing that may -- this is something very much in its infancy and is just starting in some places and some places are finding it to work well and others not at all. So that's something that could be an offshoot of what you've brought up. And we'll touch on that a little in the chapter.

MR. HACKBARTH: Okay, thank you very much.

Next up is work plans for the IRS 990. This is a topic that a lot of people have been waiting eagerly for.

MR. LISK: We're going to be talking about our work plan for two studies that were in the Medicare Modernization Act that have a very short time frame. They're actually due this June 1st. So they didn't give us very much time to do

these studies. The work plan will be reflecting that in some cases. So both David and Jeff and I are working on this project, so I'll be giving the presentation today.

We have two Congressionally mandated reports. The first one is on the use of the IRS Form 990 to report on investments, endowments and fundraising activities of hospitals participating under Medicare and their related foundations that may be also related to the hospital. And the use of the 990s also to examine hospital's access to capital financing. I'll tell you a little bit more in the next slide about what the 990s are.

The second study is on the need for and sources of current data to determine the solvency and financial circumstances of hospitals and other providers of Medicare services.

While the Congress is interested, from this request, in total performance this study does provide us the potential opportunity for us to also examine data needs that we have for Medicare financial performance measures that we use in our payment adequacy framework, for instance. The Commission does not really focus on total financial performance when we're looking at payment adequacy. We're looking mostly at performance under Medicare and other

factors that we see there. So this provides an opportunity to potentially use the study to do that as well, if we want.

Again, as a reminder, these reports are due June 1st of this year.

So what are the 990s? The IRS Form 990 is an information return that tax-exempt organizations with revenues of more than $25,000 a year must file annually with the IRS. Such organizations include foundations and hospitals, different charitable organizations, and even school PTAs. So it's a wide variety of organizations that file these forms. It's an information return. So it's not used for any tax purpose in determining what taxes they may need to pay because these are tax-exempt organizations. So it just is used for information.

The form was designed though by the IRS to help the IRS and state charity regulators ensure that non-profit organizations remain true to their charitable purpose.

The 990s contain unaudited financial information on not-for-profit organizations. Thus, private not-for-profit hospitals generally file 990s. Their parent organizations and the hospitals themselves, their related foundations as well.

So this means about 60 percent of hospitals would be

filing 990s. The data on the 990s include revenue and expense information, asset information, a statement of functional expenses broken into program services, management cost, and fundraising and a balance sheet. And that other set is again looking at the charitable purposes of those foundations, of those organizations.

The form also includes information on related organizations in terms of transactions that take place between different organizations that may be related between one another. The data is available about one year after the close of the organization's fiscal year.

The data is actually publicly available. The GuideStar produces 990s and actually you can see the raw copies on GuideStar, which has a web site, and the National Center for Charitable Statistics, which is an organization within the Irwin Institute, actually does digitize much of the information on the 990s.

In terms of the major issues on the 990 study, the primary issue is would information on the 990s help to provide a complete picture of a hospital's financial condition and the available resources that they may have available to them to supporting their operations. This is the primary interest that the Congress appears to be

interested in, to provide a more complete picture of a hospital's finances by identifying investments in endowment and fundraising activities of hospitals and their related foundations.

The 990s, for instance, may be able to identify related foundations that hold assets for the hospital which may not appear on the hospital's balance sheet, for instance. It also could identify transfers of revenues from or to the hospital from other related organizations which could alter the total financial picture outlook that we would view for the institution.

The basic issue is whether the 990s can help provide a more complete picture of finances with this information.

The second issue, though, is whether it's practical to systematically use the 990 data for collecting this information. And as I'll go into with this next slide, hospitals are complex organizations and this is just one example of one hospital. And it's important for us to take a look at the organizational structure because this also affects the information that we see on the 990s.

The 990 data can be difficult to track for hospitals when we take into account the entire organization. First, an individual hospital's 990 generally does not provide a

complete picture of the organization's finances, since endowment and fundraising activities are often reported by one or more related organizations that also file, if they're not-for-profit, separate 990s.

The above organizational chart shows how a hospital may fit into the organization with a parent company that contains the hospital and a nursing home, for instance. In some cases, the parent company may hold more than one hospital. A separate foundation that raises money and holds money for the hospital for charitable purposes, and also supporting the hospital's operation, and other business entities that may be for-profit, for instance, or that the organization has some partial investment stake in.

So financial support can occur between, with treasures of funds going between a parent organization and the hospital, between the foundation and the hospital, or even between the hospital and a nursing facility, for instance. These types of transfers occur and the 990s can help shed light on this.

But again, each of these non-profit organizations within this framework are potentially filing separate 990s. Now there's other cases where you also have a university that may file just one 990 and there's no information

actually on the hospital in that case but the university holds it and there's not necessarily a separate 990 filed. So you would have different circumstances that occur here.

MR. HACKBARTH: Craig, on that point, are they indexed, if you will, in a way that you can readily accumulate the 990s of related organizations?

MR. LISK: No, that's part of the problem. That actually gets to the second issue, one part of the second issue, that reporting on the 990s is that much of the information is contained in attachments. And those attachments are not actually digitized. So the information on the related organizations is included in the attachments, for instance. So you actually also need to figure out from that then what other organizations are related to that hospital and then go back and look at those 990s to get more information on those facilities.

So it's possible that we can look at the 990s and it takes a lot of effort. And we'll be going into more of that at the next meeting when we will have more information presented specifically from these forms.

So the study we are planning to conduct will examine the feasibility of using the 990s to collect information on investments, endowment and fundraising of hospitals and

related organizations and the use of the 990s to assess hospital's access to capital. For this analysis we have Dr. Nancy Kane at Harvard School of Public Health who is conducting an analysis of the 990s for us. Dr. Kane has used the 990s in a variety of studies and is a recognized expert on hospital financial analysis. And she'll be presenting her findings at the April commission meeting.

For a small sample of hospitals, she'll be examining the relationship of investment, endowment and fundraising to hospital's total financial position, examine financial transactions among hospitals and related entities such as affiliated foundations, compare 990 financial data with other sources including audited financial statements and Medicare cost reports.

And that part of the analysis will also be relevant to the second study that we're talking about, too, in terms of what does Schedule G on the cost reports tell us on the hospital side. Schedule G, which is the part that gives us the total financial information about hospitals and how do these different forms compare.

And then finally, evaluate the level of effort that would be required to systematically collect this data on a larger group of hospitals.

Now we are looking at a small sample of hospitals and because of the time frame, just to give you fair warning, it's more of a convenient sample in terms of hospitals that she has more or less looked at in the past with some additions. So it's not going to be purely 100 percent representative sample across the country.

Next, I want to move on to discuss the data needs study. Again, we have a very short time frame for this study, again due June 1st. The Congressional request for the data needs study, as we previously mentioned, is focused on the need for current data and sources of current data available to determine the financial circumstances of hospitals and other Medicare providers of services.

Thus, for this project we could focus only on the data needs for measuring total financial performance of providers but obviously we'll also suffer from data needs for looking at Medicare financial performance, as well. Thus, we could use this study to report on both sets of issues.

Again, the Commission's principal focus in terms of what we need data for is on looking at Medicare. So the question that Congress is asking is different from what the Commission normally looks at, whether Medicare payments are adequate to cover provider's cost of caring for Medicare

beneficiaries.

The Commission, though, needs timely, accurate and consistent data to support its payment adequacy framework and also help in evaluating the distribution of payment. Thus, it's probably value to consider data needs for measuring performance in total as requested by the study and under Medicare to fulfill our needs.

For this analysis, we will be examining different measures for analyzing provider's financial circumstances, margins, change in cost, utilization, cash flow, and other financial measures. We will examine the strengths and weaknesses of the available data that we have, and how that data could be improved. Some of the issues that we come up with here are issues that, for the cost reports for instance, and we're looking at it, the data is not audited, for instance. So is there any gain that we would get from auditing , in terms of getting more accuracy in their cost allocation issues, charge setting practices and other types of things we could be considering.

We plan to examine data needs for hospitals and other providers of Medicare services, including home health agencies, skilled nursing facilities and dialysis facilities.

So in terms of the timeline, we are going to be meeting with some government and other experts who use the Medicare data in looking at financial performance and also in terms of total financial performance to get some of their input in terms of ideas of what concerns they have, as well, with the Medicare data but also in terms of what they find best is for measuring total financial performance as is requested by the Congress.

We will be presenting findings from our analysis of the 990 and data needs studies at the next commission meeting with a draft report to follow, with a final report to be submitted to Congress June 1st of 2004.

So with that we'd be happy to answer any questions or take whatever comments you have.

DR. NEWHOUSE: I want to comment on the second study and push an old recommendation of mine.

If I think about what the Congress wants here at a generic level and what they actually get now, what they get is stale data. If they want it audited it's even staler. And then, with respect to the 990s, Craig, and the separate operations and I think in accounting terms what one would say is they would want a statement of consolidated operations.

It seems to me those, as you say they're not going to get that out of the 990s and they're not going to get it out of the current system at all. That we should say that they should do is there should be some kind of sample of hospitals, pay them if need be. And these hospitals would have reports, financial statements that would be signed off by an external auditor within 90 days and would include consolidated operations.

I'd be interested in Jack and Ralph and Nick's views. I assume your hospitals have, in the end, audited financial statements within some period of time. I don't know what that period of time is.

MR. MULLER: It's general faster than the 990. So the audited statements usually would be three or four months after the end of the year. Obviously much faster, therefore, than the Medicare cost reports. And the 990s usually lag about a year. So in terms of timeliness, audited is the most timely, 990s second, and Medicare cost third.

DR. NEWHOUSE: What I'm thinking of is basically the analog to a 10-K in a publicly held corporation. It seems to me it ought to be available to the Congress and it would answer what they're asking for here, at least would get us

along the road much further than we are now.

MR. MULLER: I do know there have been efforts made over the course of the last couple of years to have more timely information and which the Hospital Association, among other groupings, has made that information available. I don't know whether some information is available from the for-profit hospitals but obviously in all of the Congressional debates as well as here, having more timely information -- we commonly talk about the three-year lag. I mean, obviously any kind of timely information we're better off having it.

I don't know what the percentage compliance is but Craig you may know, on the AHA database what are we getting, 30 or 40 percent sampling now?

MR. LISK: On the AHA? It's more than that, 65 maybe.

Actually in terms of what Joe is talking about though, is one concept is Schedule G on the cost reports, which is the part that measures the total financial performance, predates even the PPS for hospitals and has not been revised. One idea is some form of standardized audited financial statement to replace that, for instance. And Joe raises a good point in terms of whether it's a consolidated financial statement for the entire organization, in terms of

capturing all of those pieces. Or is it better just have the individual hospital, independent of those other pieces, is another issue, too. Or some information that provides both.

DR. NEWHOUSE: -- this to the analog of FASB, I would think.

DR. WAKEFIELD: Craig, on the data needs study, are you looking at both for-profit and not-for-profit categories of Medicare providers?

MR. LISK: Yes.

DR. WAKEFIELD: You mentioned four categories of Medicare provider that you're going to focus on, ESRD, home health, SNF and hospitals. Is there a reason why -- maybe it's just timing, since this has to be done so quickly -- why ASCs are not included? Or is it some other reason?

MR. LISK: We can probably write a little bit on the ASCs and saying that there are no cost reports for the ASCs. So we actually don't have any information. And that might be where we leave it at. And the same is true, as Sarah just said, for physicians, too. Ideally we might have something on physicians, but again we don't actually have that.

DR. WAKEFIELD: Be mindful of the difficulty we had in

coming to our decisionmaking related to ASCs. It seems to me it would be helpful to at least identify those difficulties with that category, too, if you have the time.

MR. LISK: But there is this timeframe issue, too.

DR. WOLTER: On the 990, and I am certainly no expert, but in addition to the multiple entity issue just the definitions around what goes in what line, I think, create enough variation from one institution to another that often times it's difficult to compare apples to apples. We do occasionally pull 990s of other institutions and look at them and try to compare ourselves for one reason or another. It's difficult.

MR. LISK: That's a very good point and that was an issue that Nancy Kane raised with me about the digitized portion that NCCS does is that there are times where people change what actually is reported on a line. But the people who are digitizing it don't take that into account. So realistically, to really get the full flavor, you have to look at the raw form.

DR. WOLTER: Just the other point I would like to make, I think that if out of this we could create some momentum toward our own Medicare data that would allow us to have a better understanding of margins, inpatient, outpatient, SNF,

I think it's been very appropriate that we have begun emphasizing overall margins. But once we get beyond that it's very, very hard to make update decisions because of the issues we have about really understanding those other payment systems. So that may be difficult in this timeframe, but it would be nice if it at least created a platform for ongoing work in that regard.

DR. MILLER: To that point, Nick, I was hoping that beyond things like actually assessing the instruments what could you know from these things? And what kind of state are they in? Are they actually really workable? We do see this as an opportunity to articulate the principles and issues that in a perfect world -- and timeliness is part of this. And I think the notion of a sample will come into this discussion. But to try and talk about for our own work what we would ideally have. So I think that that thought is contemplated.

MR. MULLER: I think it's important to note that for most of what we're interested in here, the 990s are very clumsy instruments. It doesn't have a level of granularity and so forth.

So I think we're going to find it's not very helpful. And it doesn't have anywhere near the level of detail you

need to really understand cost structured and so forth. So we'll see what you find.

MR. HACKBARTH: That may make the report easy to write. Thank you very much.

And now we need to move on to our last item, an update on hospice care.

MS. THOMAS: I'll try to go relatively quickly since this is the last presentation.

In brief, just to remind everybody, hospice is for beneficiaries who elect to forego curative care and whose doctors certify that they have six months to live if the disease follows the expected course. Once a beneficiary elects hospice, the hospice can cover palliative care, that is which focuses on managing the symptoms of disease but not curing it. The benefit includes nurse visits, prescription drugs, respite care for families, inpatient care as needed and bereavement counseling.

Palliative care is not the focus of today's presentation, but I did include at your seats an article that was recent in the Wall Street Journal about palliative care units in hospitals which, if you're interested, we could certainly consider in future work.

The Commission is on record with two sets of

recommendations on payment for hospices and on quantity from reports in 1999 and 2002. We haven't looked at hospice for a couple of years. There's been dramatic growth in the use of the benefit which prompts reviewing those recommendations again and some of the issues that are raised.

Hospice is something of a black box, so with all of the growth we want to take another look at the payment system and the status of quality measurement for hospices.

First, I'm going to review some trends, bringing our data up through 2002, and then we'll review your recommendations and some of the recommendations that have been made by others for improving payment and other policy.

Overall growth in the use of the hospice benefit has been dramatic. For beneficiaries who died while they were in the fee-for-service program, it's grown from about 16 percent in 1998 to 25 percent in 2002. This can be thought of as a success story in that many have been concerned that hospice with important benefits targeted towards improving care the dying has been underused.

This graph shows the increase in the use by age group. You can see that there's been a large shift in the age structure of users over this time period. In 1998, the group of decedents with the highest rate of hospice use was

beneficiaries between 65 and 74. There is much higher use among all groups of aged beneficiaries now, including the very oldest.

This pattern of growth among beneficiaries at all age groups is consistent with reports that MedPAC and others have documented of growth in the use of the benefit by beneficiaries with diagnoses other than cancer and beneficiaries who live in nursing homes.

Another issue I wanted to take a look at, following up on some of the questions that Jack raised at our September meeting was the use of the benefit by race. Both researchers and providers have noted historically lower use of hospice among African-American beneficiaries. Indeed, while decedents of all races are in hospice more over this time period, gaps in the use continue to persist, most notably for Asian beneficiaries. Researchers attribute differences to different attitudes towards among different ethnic groups which reflect complex belief, religious, cultural and education issues.

DR. NELSON: Sarah, on that previous slide, to the degree that Asians represent a smaller percentage of the population, would they actually have a higher percentage of Asians using it?

MS. THOMAS: This is among people who died, what percent of them died while in hospice. So yes, the numbers would be smaller but the relatives should be the same.

DR. ROWE: The number of Asians who died who were in hospice has gone from 10 percent to 14 percent but it's still a lower percentage.

DR. NELSON: Got you, thank you.

MS. THOMAS: As others have found in earlier work, we find persistently higher use of hospice among decedents who were enrolled in managed care plans. In 2002 more than a third of decedents in managed care plans used hospice compared with a quarter of beneficiaries in fee-for-service.

Some have speculated this may be because people in plans or their physicians are more accustomed to receiving a variety of types of services from a single source so there might be a proclivity to use hospice among those folks.

It's also consistent with the incentives of the payment system which allows beneficiaries to stay enrolled in their plan when they receive hospice care. When the plan and enrollee elects hospice, Medicare makes a partial capitation payment to the plan to cover non-Medicare benefits that the plan was offering and also pays for hospice care and any non-hospice Part A and Part B services on a fee-for-service

basis.

Although one might expect a higher use of the benefit among decedents in managed care to signal a better referral system, and thus earlier referrals to hospice, we actually don't find earlier referrals to hospice. In fact, the referrals are very similar if not slightly later if you look at the distribution of days of length of stay.

On this table we show that the average length of stay has grown since 1999, however the median length of stay declined and then has remained relatively flat. As you can see, more than 25 percent of beneficiaries stayed less than one week in hospice and the growth in the mean is really being driven by longer stays at the high end. You can see a particularly large jump at the 90th percentile between 2001 and 2002.

Length of stay is an important issue in hospice for a couple of reasons. One is that short stays mean that beneficiaries and their families have relatively little time to prepare for death while using the benefit. Of course, an explanation for the large number of short stays is that acceptance of death and the decision to elect hospice may be relatively concurrent with death.

It's also true that prognosis is very difficult, as

many have written about in research. It's very difficult to predict when someone will die.

Some researchers have found that hospices report higher costs associated with the first and last day of a hospice stay, for instance the intake procedure on the first day can be resource intensive. So if you have a longer length of stay, then you could spread those costs over more days of care.

However, on the other hand, people with short stays may be less likely to be the ones who require intensive and expensive palliative treatments, including drugs and radiation kinds of therapies that we've heard from hospices that are expensive, but are palliative in nature

Not surprisingly, given the growth of the use of the benefit, Medicare spending has risen from $3.5 billion in 2001, to almost $6 billion in 2003. This is 30 percent growth in spending for each of the last two years.

In the next few slides I'm going to go over some of the issues that we highlight in the chapter. The first and fourth bullets are areas where the Commission has made recommendations in the past. In 2002 your recommendations on payment were in our report on access to hospice and in the quality improvement it was in 1999, the June report.

Just as a quick review of the payment method for hospice, hospices are paid per diem, four possible rates. The vast majority of care is for routine daily care where the daily rate is about $120 a day. The alternative payment rates are continuous care, which is pretty much someone is there throughout the day; inpatient care which can take place in a hospital or a SNF or if the hospice has its own unit it could be in hospice unit; and inpatient respite which is provided to provide respite for family members who care for the patient. From this payment hospices provide a large number of palliative services which I mentioned at the beginning.

A policy that I wanted to highlight for you is that for the managed care enrollees who elect hospice. This may have something of a dampening effect on plans' incentives to develop innovative coordinated approaches to end-of-life care, as I'll get into in a minute.

Another point I wanted to mentioned briefly, in one section of your mailing materials I summarized for you a recent article that was published in the Annals of Internal Medicine by a group of researchers from Rand. In September, Jack had asked about the evidence on savings of hospice to Medicare. This study that just came out last month shed

some light on that question.

It's more rigorous than some of the other studies that have been done recently in that it controls for beneficiaries' propensity to choose hospice and their age and their diagnosis. And the finding, the bottom line is they found that for people who have a diagnosis of cancer there are program savings to Medicare from the election of hospice but the reverse is true for beneficiaries with other diagnoses where the hospice program increases spending.

Last, I'm going to go over your recommendations on quality and bring you up to speed on where you are in terms of measurement. In 2002, you recommended that the Secretary evaluate hospice payment rates to ensure they are consistent with the costs of providing appropriate care, Research differences in the and in resource needs of hospice patients, and study case-mix adjustment and an outlier policy. I just wanted to point out hospices, like other providers, can choose which patients they decide to take so there are likely to be differences in the resource costs they experience as a result.

Other researchers have suggested a number of other payment refinements that could be made to hospice payment rates including a higher per diem for the first and last

days of the hospice stay.

Another idea has been to look at the differences in the cost for hospice travel cost to determine whether costs are higher if there's more travel involved. For example, to rural locations.

Related to the outlier policy, the hospice industry folks that we've talked with have told us that drugs and other palliative therapies are important drivers of cost their experiencing. So it would be interesting to take a look at this.

Another issue that some people have put on the table is whether costs might vary by whether beneficiaries live at home or in a nursing home. It may be possible that a hospice visiting a nursing home who has several patients there, there may be some economies of scale associated with seeing five patients in the same place rather than having to go to five different locations.

In April, Cristina and I will bring you some data on the costs and variation in cost for hospices, but to assess all these payment issues probably we will need to see some more data on the services that are provided to different patients.

Options for thinking about more data include adding

field claims, for example, that might show numbers of visits that took place, perhaps beefing up detail in the cost report or collecting data through a sample as in a demonstration. Of course, improving any payment method and collecting data to do so would have to be balanced with the burden on providers and CMS of data collection, so it should be considered carefully.

Coming to the policy for managed care enrollees, you may want to discuss this issue which is sort of the advantages and disadvantages of the current policy for managed care enrollees. If a plan enrollee elects hospice they receive all -- just review one more time, they receive all the Medicare benefits on a fee-for-service basis but continue to stay in the plan and Medicare pays for the non-Medicare benefits through a reduced capitation rate.

Some disadvantages of that policy are that it deters some plans from thinking about end-of-life care as a more continuous benefit and integrating it with the other Medicare Part A and Part B benefits that they are responsible for providing. However, I should be fair in saying that we have heard about examples from some plans, notably Kaiser, Sutter in California, and some of the BlueCross BlueShield plans that have developed interesting

and innovative palliative care programs. So there are some lessons, I think, that we would be able to learn from these for perhaps our chronic care management which has got to be tied into end-of-life care.

Some other thoughts about the policy are its administratively complex. CMS has to figure out for each plan what the partial capitation rate must be based on the difference between the payment and the benefits the plan offers. It does raise Medicare costs, as demonstrated in a study that was done several years ago by some folks at CMS. And it does single out hospice from other Medicare benefits.

It also explicitly pays for non-Medicare benefits for a group of beneficiaries, which is unusual.

On the other hand, you do see that plans and hospices have the incentive to increase use of the hospice care, which is an important consideration as well.

This brings us to quality. As I said in the 1999 June report on improving care at the end-of-life, you recommended that the Secretary make end-of-life care a national quality of care improvement priority and sponsor projects to develop and test measures of the quality of end-of-life care for Medicare beneficiaries.

Private foundations and the hospice industry have made

progress in developing measure sets for capturing quality among many domains of hospice and palliative care more broadly. The hospice conditions of participation don't right now include any requirements for measurement or improvement based on measurement. Three organizations do accredit hospices and they do make the requirement that quality be measured and improved. And most hospices are accredited by these organizations. So including that in the conditions of participation probably is realistic. The National Association of Hospice and Palliative Care has been at the forefront of a number of voluntary quality improvement and reporting initiatives.

Like other beneficiaries, those using hospice are vulnerable and measures are being developed and tested and probably many could be reported if data could be collected. There is a fair amount of agreement over the important domains of care for hospice quality, which include issues of whether the patient was comfortable and safe and whether his or her choices of place of death were followed.

A path to moving in this direction of measuring quality could be the one that is being used for hospitals where you start with quality measurement for internal improvement in the conditions of participation and then perhaps with

support by the QIOs, and then move to a public reporting as data collection and other issues are worked out.

Another path would be the example of home health where there's a research contract that's let to a researcher who developed the measure set and measures their validity. Again, as with refinement of payment, any data collection on quality should be balanced with the burden on CMS and the hospices themselves.

So now I'm going to turn to Cristina, who's going to talk about the work we're going to bring to you in April.

DR. ROWE: I'm sorry, can I interrupt? I have to leave and I wanted to make one comment about this. And I apologize for interrupting.

This is excellent. Thank you very much. It's a very important population.

I think one of the concerns that we should have in Medicare has to do with the requirements for participation on the part of the beneficiary. The beneficiary has to basically give up all attempts for curative care. And I think that in many patients that's very difficult.

The care providers find themselves in a situation where they really want to say to the patient, and the patient wants to hear, we haven't given up on you but we're are at

the point where you should start thinking about how you're going to handle things if things continue along the way we think, but we're not giving up all hope. But to get them to sign that they're giving up all hope, you know, sort of the Medicare hospice program has got a sign over it abandon hope all ye who enter here.

I think that that is a significant issue. I think it influences length of stay because it keeps people out of the program until a point in their term when it's not advantageous.

Hospices, while we like short lengths of stay in general in health care facilities and Medicare, in hospice we want long lengths of stay. The longer somebody's in a hospice the more benefit there is. And there's very little benefit to a very short, a six-day length of stay in a hospice is basically the last rites. It's not taking advantage of the hospice and what it has to offer the family as well as the patient.

And I apologize again for interrupting. I'm sorry that I have to leave but I did want to make that point.

I may be alone in this, but I think that it would be helpful to speak with some experts, which I'm not, in the care at the end-of-life and get some views from CMS and

others about how important this requirement is and whether there's any room anywhere to loosen it up.

Clearly the benefit is being much more used. It's not like nobody's taking advantage of it. But the length of stay data concern me and I think that that's one of the issues there. It may not be that we're going to increase the number of people that use it but they would use it earlier and to greater benefit.

Again, I apologize for the interruption.

MS. THOMAS: Just a quick clarification, the requirement that they must decide to forego curative care is in the law.

DR. ROWE: I know.

MS. THOMAS: So that would have to change.

DR. ROWE: [off microphone.] I'm not suggesting it's your requirement, Sarah.

DR. REISCHAUER: But what are you suggesting, that you say well, I'm going to forego some curative care? Or I can have a little of both?

DR. ROWE: I suggest you do what Aetna does. The health plans, and I think to my knowledge all of the health plans have a much more flexible definition. If the physician believes that it's appropriate at this time for

the patient to get hospice care, they can hospice care. And you don't have to sign something saying that you will not consider any additional ongoing curative care. It's just forcing the patient to do that, we find it counterproductive. So we don't have that requirement.

DR. MILLER: One thing that we could do is we can look at some of the plans that you were identifying and ask how they control this issue.

MS. DePARLE: I think that's true and it's a concern. I mean, obviously when this benefit was put in I'm sure that part of the cost of it was estimated by CBO depending on whether people were -- it would have been much more expensive if they had assumed that people would continue to get everything.

I think Mark's idea and your idea of looking at what other plans of doing. And do you find that once a physician and a patient elect hospice that, in fact, the other spending is restrained? That they are more going that route? It would be interesting to look at.

DR. ROWE: [off microphone.] Unfortunately, I come armed with an opinion but not with any data which is not unusual. But we'd be happy to share our experience. I think it's a more user-friendly approach.

MS. DePARLE: I think we agree on that, yes.

MS. RAPHAEL: I think there are different dimensions here, because I think we're confusing -- one thing is foregoing curative treatment, which is very difficult to do. And then we get into whether there's some sort of aggressive pain management, which sort of falls over the line.

A second is the six-month prognosis, which is also difficult to do.

A third is whether it's upon the physician's recommendation or whether the patient has to really be engaged in making this decision.

So I think there are a number of different requirements here that we need to separate out as we think about this.

DR. REISCHAUER: I wouldn't disagree that Jack's approach would be a more humane and better approach, but we've already been told that, according to the Rand study, this is a benefit that now is costing more than if it didn't exist.

DR. ROWE: [off microphone.] Only for non-cancer patients.

DR. REISCHAUER: But on average is the thing.

DR. ROWE: [off microphone.] But cancer patients are the majority of patients. And so for the majority of

patients --

MS. THOMAS: The aggregate is a cost when you consider all the cancer and non-cancer patients together.

MS. DePARLE: How much of a cost?

DR. ROWE: [off microphone.] Who are we going to take better care of if not these?

MS. THOMAS: I think it's 4 percent in the aggregate. Depending on the diagnosis of the patient you look at it can be anywhere from 11 to 30 percent higher for the non-cancer group.

DR. REISCHAUER: As I said, I'm not opposed to a better benefit but we should view it as that and weigh it against other ways to increase the quality of the benefit.

DR. ROWE: [off microphone.] Let's look if the criteria for the benefit are, in fact, counterproductive. I'm not trying to increase the cost. Let's just see what we buy for that extra cost, if anything.

DR. NEWHOUSE: But the fact that the private market supports it suggests that --

DR. REISCHAUER: But the private market supports it because there are very few people who are affected in Jack's plan compared to Medicare. I mean, Medicare everybody is going to be affected.

DR. ROWE: [off microphone.] I think that's right. As I leave, I'd like to agree with something that Bob says.

DR. REISCHAUER: It's taken five years.

DR. ROWE: [off microphone.] Because the average age of our beneficiaries in the commercial plans is in the 30s or early 40s and so that's certainly the case, yes.

MS. BOCCUTI: Let me just go over the little bit of what we plan to bring you in April, but I think that discussion is very much about the genesis of the benefit, too, and ways that maybe the Commission wants look at it.

We're also, in April, going to be bringing to you our analyses from cost reports. And as you may know, hospice cost reports are a relatively new endeavor. And so we're just getting to the point where there's enough data there to analyze. So potentially our analysis may shed some light in areas where you might want to look into regarding hospice payment refinement.

We plan to examine components of hospice costs such as nursing costs, drug costs, transportation costs and ways that they vary by facility, characteristics, size type, et cetera.

And we also will be discussing the limitations of the cost reports. We'll bring to you some discussion on changes

in the composition of the industry over time. That is growth in for-profit, not-for-profit, freestanding, hospital-based, home health based, and nursing home-based hospices.

And I leave you saying if there are any particular cost reporting issues that you want us to focus on for the April presentation, please let us know.

MS. RAPHAEL: I just was at an investor conferences in which I found out that investors who look at home health at all are most interested now in hospice, which I wasn't fully aware of. Because there are a number of public companies now in hospice who are doing very well.

And so I'm seeing an industry where you have one group now with high earnings and you have this other group that somehow can't even break even. And I'd like to better understand the industry and what's accounting for the distinction.

MS. BOCCUTI: I hope that we will be able to provide some insights into that to the best of our ability and see what we can come up with in April, if we can look at different types of hospices and those issues.

DR. REISCHAUER: Sarah, I think you said that there had been a rather rapid growth in SNF related participation in

nursing home. I'm not arguing that this is wrong or bad or anything, but is this a situation in which we have individuals in nursing homes being paid for by Medicaid and towards the end of their lives by switching them into a related inpatient hospice facility the average payment can be both shifted to the federal government from the state and increased? That might explain some of it. And it's not irrational, it's not necessarily wrong.

MR. HACKBARTH: Although I think that's the sort of thing that the earlier requirements we were discussing were designed to prevent. It was to put barriers to the growth of this, of just that sort.

MS. THOMAS: We have talked to the folks from the hospice associations about this. CMS and the associations have been very careful to try to let hospices know that even if people living in nursing homes are sort of entitled to some of the same services through nursing homes, that they are to provide the same sort of care, the same kinds of care plans to beneficiaries regardless of whether they're in the nursing home or in their own home.

Also, we're told that states are aware of some of the overlap in the benefit and have sort of scaled back what they're providing on their side for beneficiaries in

hospice, not providing the same degree of drug coverage, for example.

DR. REISCHAUER: On that score, do we think the Medicare drug benefit is going to affect the attractiveness of this?

MS. THOMAS: I think that's a very interesting question. I think that there's some issues around coordination of -- making sure that the drug plans know that the person has elected hospice, obviously, and is receiving palliative drugs. But they still should be able to get their non-palliative drugs. And sometimes it might be hard to tell the difference by classes. I think there will be some interesting issues there.

MS. BOCCUTI: We've been talking about this a little bit in the policy question of to what extent the patients see this as an opportunity -- we don't know. Finding out if they're looking for the hospice benefit to help them with some pain medication issues, in addition to the bereavement and the other kinds of counseling that are part of the hospice benefit. That's the added bit that the Medicare benefit provides.

But also the Commission might want to look into ways to refine payment based on the new Medicare hospice benefit.

So I think there might be an interplay -- what did I say? Oh, the drug benefit. Thank you

So it may be an issue that we want look into if there is any overlap there.

MR. HACKBARTH: Okay. Thank you.

We will now have a brief public comment period.

MS. DePARLE: We didn't have a chance yesterday to thank the staff for the work on the March report. But I just wanted to say that it was really well done. And maybe it's just because I've been through it now more than once but the process also, I thought, went very smoothly. And Sarah, in particular, facilitated that.

MR. HACKBARTH: Thank you for saying that.

MR. CALMAN: My name is Ed Calman. I'm general counsel to the National Association of Long-Term Care Hospitals.

I would like to again thank staff and the two commissioners, Nick in particular, that traveled around the country as part of the study. I think they were very diligent in what they did. They were only limited by the data and certainly not by talent or will to do justice by the issue.

I do have some comments which I'd like you to hear on the recommendations that I think are important.

I think that in going through this issue you should be keenly aware that some of these recommendations may create gaps in care. I'd like to go over that very briefly with you.

Some long-term care hospitals admit patients with respiratory failure that may not wean. They will give them a chance to wean. These are spinal cord injury cases, some strokes, but they give them a chance. Some long-term care hospitals do not admit that population. For the long-term care hospitals that do admit that population a number of them fail and they are at the long-term care hospital. At that point they are usually not a Medicare liability. They are a Medicaid liability because they've used days in a spell of illness before they've gone to a long-term care hospital.

These patients use a lot of resources. It's not just nursing, it's deep suctioning which they do not get in nursing homes except in the state of California which does have very robust high intensive nursing home system because MediCal pays for that.

Some patients, even in California, can't go to a nursing home because of the adjustments that they need to the ventilator and the type of ventilator.

So I think that it's important that these hospitals be allowed to continue with their mission. This is not a matter of money because they are all outliers and long-term care hospitals lose money on outliers. And believe me, in most states most long-term care hospitals lose money on Medicaid.

So I think that with respect to your recommendation that it ought to be that instead of that they cannot be treated in a nursing home, because I'm very familiar with theoretical leveling I call it, that a nursing home can do things, it should be that they cannot as a practical matter be treated in a nursing home in their locality.

Secondly, I think this rehabilitation issue is one that requires examination. There are long-term care hospitals that do comprehensive rehab, that is acute rehab. They admit the same patients that rehabilitation hospitals admit. And they have the resources to do that. Some of them are very well known in the United States.

They also admit medically complex cases. And if it's 50 percent, as Dr. Kaplan indicated, you know they cannot qualify to be a rehabilitation hospital because it has to be 75 percent. So they cannot be a rehabilitation hospital. And when their medically complex long-term hospital patients

get better and can withstand three hours of rehab a day, they give it. They do not transfer to an IRF.

The Medicare program makes out on that deal. Those hospitals do not make out on that deal because they make less money and they have issues with their 25 day length of stay because a rehab case is a 14-day event. It's not a 25-day event.

I do understand and appreciate the issue raised about rehabilitation and I think a thoughtful way to approach that is to allow long-term care hospitals -- and I would put a bed minimum on it because there are larger long-term care hospitals, to have rehabilitation units. Currently CMS does not allow long-term care hospitals to have a rehabilitation sub-unit.

I would further recommend that once a case comes into that hospital that it's one payment, that they wouldn't be able to be transferred between a long-term care hospital unit and a rehabilitation hospital unit so we do not recreate problems and that it's bundled once they enter. It's bundled now. I'd like to keep it bundled. I think that that's appropriate with the proper payment.

Physician visits is also another problem. Patients admitted to long-term care hospitals are at a hospital level

of care and they need daily physician visits when they enter. They do not need daily physician visits necessarily thereafter. Some hospitals organize themselves differently. We have head trauma cases in long-term hospitals, we have various types of cases in long-term hospitals. And a physician is there. A physician may have to intervene three times a week but not daily and physician extenders are used.

If the government was to require daily physician visits, the government would get daily physician visits and Part B expenditures would go up. So I think you ought to be concerned about that.

I also think it's very important that you understand, on the issue of criteria, that QIOs and PROs before them were not funded to review long-term care hospitals. So while they did have screening criteria to screen the medical appropriateness of admissions, continued stays and discharges they did not exercise that authority.

CMS this year has opened the door a small bit by allowing, I think it's 1,400 cases to be reviewed. And QIOs are establishing criteria for long-term hospitals. Our organization clearly endorses that. We've made that known to Commission staff. And I think that many of the problems

that are correctly perceived can be addressed into a good way by the QIOs because their process is one of medical screening criteria if a case fails a physician-to-physician review so that it is fair to the patient and fair to the provider.

I would also note, I was interested in the comment on budget neutrality. The PPS rules provide for a six-year look back and a budget neutrality adjustment. And you should know that. It's not defined as to whether that will account for volume. That is, increase in the number of cases. I think more about increase of cases that in the number of hospitals.

So that authority does exist and I would love to know how CMS is going to go about that calculation. Perhaps you could ask them how they're going to do that.

I would also like, you may or may not know that our association ran a study concurrent to the Commission's study which was conducted by Lewin Group. Many of the findings were the same. But there was one finding I'd like to point out. And that is that on one analysis it was found that Medicare beneficiaries that went to long-term care hospitals used acute hospitals less. I believe that statistic was 7.4 percent less utilization. And that would be important or

should be thought about in terms of the financial analysis of these facilities.

We are also concluding a multicenter study with 23 hospitals, 1,400 patients on ventilator weaning, which will hopefully be published later this year or next year. And that is available to the Commission and we have shared that data with staff. So we have weaning rates in long-term care hospitals. We're not able to do a comparative study with acute hospitals.

I will say finally, I want to comment about APR-DRGs and the recommendation to use them. I am a lawyer but I have had to get to know something about coding. What I find out about APRs, as with DRGs, is that you do not know the code when the case enters because the coating is changed by comorbidity and procedures. And if you have a case with respiratory failure, with ventilator support, it will get a severity level four with APR-DRGs. If you add a minor amputation of a finger, the surgical procedure is coded first and drops the severity of illness.

So if this is going to be used as a measure of certification for long-term care hospitals I would like staff to consider whether that's material. I do not know whether it's material, but it's certainly a reaction that I

have to that recommendation.

Thank you very much for listening to me, and I look forward to your final recommendations in April.

Thank you.

MR. HACKBARTH: Okay, thank you very much.

We are adjourned.

[Whereupon, at 12:11 p.m., the meeting was adjourned.]

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