MEDICARE PAYMENT ADVISORY COMMISSION

PUBLIC MEETING

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

Friday, April 25, 2003
9:04 a.m.

COMMISSIONERS PRESENT:

GLENN M. HACKBARTH, Chair
ROBERT D. REISCHAUER, Ph.D., Vice Chair
SHEILA P. BURKE
AUTRY O.V. "PETE" DeBUSK
DAVID F. DURENBERGER
ALLEN FEEZOR
RALPH W. MULLER
CAROL RAPHAEL
ALICE ROSENBLATT
DAVID A. SMITH
RAY A. STOWERS, D.O.
MARY K. WAKEFIELD, Ph.D.
NICHOLAS J. WOLTER, M.D.

AGENDA ITEM:

Comparison of beneficiaries treated in long-term care hospitals and other settings
-- Sally Kaplan

DR. KAPLAN: Good morning. Commissioners have questioned what value Medicare receives by paying for care in long-term care hospitals or LTCHs. During this presentation you'll see preliminary results from our research on LTCHs designed to answer that question. These results will be included in the June chapter on monitoring post-acute care. We'll talk about next steps at the end of the presentation. I'll also take questions and comments on any part of the chapter including the post-acute care episode database. I know some of you have comments.

In addition to meeting the conditions of participation for acute care hospitals, LTCHs must have an average Medicare length of stay greater than 25 days. On average, Medicare represents 70 percent of these facilities' patients. About 80 percent of Medicare patients are transfers from acute care hospitals. Long-term care hospitals are the least used post-acute care setting. Fewer than 1 percent of the beneficiaries discharged from the acute care hospital are transferred to LTCHs.

The number of LTCHs has increased from 109 in 1993 to 287 in 2003. In the last year alone, 21 LTCHs opened; nine of them are located in Louisiana. Spending almost quintupled from 1993 to 2001 from about $400 million to $1.9 billion. That's about a 23 percent average annual increase. Further, CMS estimates that Medicare spending will be $2.7 billion by 2008.

This map shows the location of long-term care hospitals. The location of these facilities is very similar to the high use quartiles that you saw yesterday on Kevin's map, the orange and red sections. Corbin Liu and his associates found that they could describe LTCHs by day of certification. They found some trends in locations, size, type of LTCH and ownership. Old LTCHs, shown on this map by the green dots, were certified before October 1983 or before the acute hospital PPS began. They're located mainly in the Northeast, generally are big hospitals with more than 100 beds, and are freestanding. They're predominantly government-owned or nonprofit. Less than half of their cases come from Medicare.

Middle LTCHs, shown by the blue dots on this map, were certified from October 1983 through September 1993. About half of these LTCHs are located in the South. Most less than 100 beds, most are freestanding, and almost half of them are for-profit facilities. On average, 70 percent of their cases come from Medicare.

New LTCHs, shown on the map by the red dots, were certified after September 1993 and are mainly located in the South. They are generally small with less than 50 beds, and many are located in acute hospitals. Most are for-profits. On average, 80 percent of their cases are paid for by Medicare. Liu and Associates also found that most LTCHs specialize in respiratory care, rehabilitation care, or a combination of the two.

As you saw on the map, LTCHs are distributed unevenly geographically. Because all LTCHS don't have the same amount of beds we looked at beds per 10,000 beneficiaries by state. On this chart, each bar represents one state. Nine states have no LTCHs and are not shown on this chart. Most states have less than 10 beds per 10,000 fee-for-service beneficiaries. Five states have between 12 and 16 beds per 10,000; Colorado, Connecticut, D.C., Nevada and Texas. Three states have more than 30 long-term care hospital beds per 10,000 beneficiaries; Louisiana, Massachusetts and Rhode Island. That geographic maldistribution of long-term care hospitals has led to questions about how beneficiaries similar to those who use LTCHs are cared for. This led directly to our research questions.

We questioned whether similar patients that do not use LTCHs stayed in the acute care hospital longer, indicating that acute care hospitals substitute for LTCHs. We also questioned whether SNFs substitute for LTCHs. We questioned how Medicare payments compare and how outcomes compare for patients who do and do not use LTCHs. We also questioned what kinds of relationships exist between LTCHs and the acute care hospitals that refer to them.

I'm going to run through the study methods very quickly before I present the results. We selected patients who had one of 11 DRGs that are common in LTCHs. The data we used came from the 2001 MEDPARs for acute hospitals, long-term care hospitals, and SNFs, and claims for home health. We also used cost reports. We used the location of long-term care hospitals in a hospital referral region as defined by the Dartmouth atlas to identify market areas with LTCHs. The remaining hospital referral regions became market areas without LTCHs. We used the acute hospital diagnoses and 3M's APR-DRGs to obtain a severity of illness score. We also used APR-DRGs to obtain a risk of mortality score. We defined an episode as beginning with an acute hospital stay with one of the 11 DRGs. Episodes ended with death, readmission to an acute hospital or no Medicare Part A services for 61 days.

First I'm going to show you our results from comparing market areas with and without long-term care hospitals. Then I'll show you the results from comparing post-acute care users within markets that have LTCHs.

To show you the difference between markets with and without LTCHs I'm going to show you some slices of a table with demographic characteristics, clinical characteristics, and care use. I'll also show you comparisons by DRG and severity level. As the tables and figures you'll see demonstrate, there are few differences between the two groups. On this slice of the table, the only difference is that there are more whites in market areas without LTCHs.

On this slice of the table --

DR. MILLER: Sally, can I just say one thing really quickly? What we're first trying to do is just run through and see whether there's something systematically different about the market areas. And then within the market areas, to see how the patients are handled. Which is just a different way to say what Sally is saying.

DR. KAPLAN: On this slice of the table you see two differences; patients in market areas with LTCHs are slightly more likely to use an intensive care unit in the acute care hospital. The other difference relates to using an LTCH.

Now we look at the average length of stay and payment. All the payments you see in this study have been adjusted to remove the effect of the area wage index. The average length of stay for the acute hospital is the same for market areas with and without LTCHs, six days. So is the average length of stay for the entire episode, 21 days. The acute hospital payments differs by 3 percent, and the total payments for the episode differs by less than 5 percent between the two areas.

Now we're still comparing market areas with and without LTCHs. On this slide and the next slide I'm going to show you the distribution of severity levels for four of the 11 DRGs. On this slide are DRG-14, commonly known as stroke, and DRG-127, commonly known as congestive heart failure. As you can see, the distribution across the severity levels and the share that this DRG makes up of the 11 DRGs are identical for areas with and without long-term care hospitals.

Now we see the two DRGs that are related to ventilator care. As I said, many of the LTCHs specialize in ventilator care, 475, respiratory diagnosis with ventilator support, and 483, tracheotomy with mechanical ventilation. As you can see, there's no difference in the distribution of severity levels or the proportion this DRG makes up of the 11 DRGs. The lack of differences between market areas with and without LTCHs is consistent across all 11 DRGs. Based on what we've seen, there are no systematic differences between market areas with and without long-term care hospitals.

Now we're going to look at the results from comparisons of patients who used and did not use long-term care hospitals within the market areas that have long-term care hospitals. Because we are interested in comparing similar patients, we look at post-acute care users in markets with LTCHs. This chart compares severity levels for all 11 DRGs. As we expected, many of the patients using LTCHs are in severity level four. Patients with lower severity levels make up about 30 percent of the LTC patients in the 11 DRGs.

We questioned whether acute hospitals substitute for long-term care hospitals. When we compare similar patients who used and did not use LTCHs by DRG and severity level, we find that LTCH users had longer acute hospital lengths of stay. For 37 out of 44 DRG severity level categories, LTCH patients had a slightly longer length of stay. In 35 categories the difference was less than one day. Therefore, acute hospitals don't appear to substitute for long-term care hospitals.

We also questioned whether SNFs substitute for long-term care hospitals. We found that patients who use long-term care hospitals were three to five times less likely to use SNFs. If LTCHs do not substitute for SNFs we'd expect the same proportion of patients to have used SNFs whether they used an LTCH or not. We found that 60 percent to 90 percent of patients with severity level four who didn't use LTCHs, used SNFs. Therefore, SNFs

appear to substitute for LTCHs for many patients. However, I want to remind everybody that these are descriptive statistics so therefore they are not definitive. We will be doing multivariate analyses.

We questioned how total payments compared. Pre-PPS total payments are generally higher, were generally higher for patients who used long-term care hospitals. The difference in total payments for lower severity patients is greater, up to 156 percent higher for patients who used LTCHs. For patients with the highest severity level, total payments were 44 to 90 percent higher for patients who used LTCHs. DRG-483, tracheotomy with ventilation, severity levels three and four are exceptions. Between patients that did and did not use LTCHs, total payments were only 10 percent different for severity level three and 2 percent different for level four. However, these are pre-PPS payments.

We questioned how outcomes compare. We looked at death rates and readmission rates by DRG and severity level. The death rate was higher for patients who used LTCHs. For example, severity level four patients in most DRGs who used LTCHs had a death rate that was 10 to 45 percentage points higher than patients who did not use LTCHs. It is difficult to know what to make of the difference in death rates. It may be an unmeasured indicator of severity of illness. It may indicate that LTCHs provide end-of-life reflect care.

Readmission rates present a mixed picture. At the highest severity level, LTCH patients are less frequently readmitted than post-acute users of the same severity level, from 6 to 37 percent less frequently. At the lowest severity level they are more frequently readmitted, from 7 to 76 percent more often. In the multivariate analysis we will adjust readmission rates for death.

The maldistribution of LTCHs, SNFs apparent substitution for LTCHs, LTCHs admitting patients with lower severity of illness, that LTCHs are more expensive but have mixed outcomes, means that we need to drill down to be able to say whether the quality of outcomes justify the greater expense of LTCHs.

Now we change the subject a bit to try to answer the question about what kinds of relationships LTCHs have with acute hospitals. We looked at the share of cases LTCHs received from their primary referring acute hospital, which basically is the acute hospital that refers the most cases to the LTCH. We looked at the share of cases LTCHs received. On this chart each dot represents one LTCH. On average, long-term care hospitals located in acute hospitals, the blue line, receive 61 percent of their cases from their primary referrers. Other LTCHs represented by the fuchsia line, on average receive 42 percent of their cases from their primary referrer. There are LTCHs in both groups that receive as far as 10 percent of patients from one hospital and as much as 100 percent of patients from their primary referrer.

Then we examined what the primary referring acute hospitals look like. This table compares the primary referrers to the nation's hospitals. Primary referrers are much more likely to be urban and more likely to be teaching hospitals. In addition, not

shown on the table is that the primary referrers are more likely to have a volume of more than 10,000 cases per year, so they are pretty large hospitals. The Medicare inpatient margin for primary referrers is 28.8 percent. That compares to a Medicare inpatient margin of 10.8 for all acute hospitals.

These are some of the next steps for the research on long-term care hospitals. We want to model total payments under the PPS since that's what LTCHs are operating under now and will continue to operate under. We want to compare Medicare's costs and quality, controlling for other factors; determine other provider types are converting to long-term care hospitals; and examine financial performance for these facilities. We plan to be back in September with those results.

Now I'm happy to take any questions or comments, either on this section of the chapter or the section of the chapter on the post-acute episode database. Nancy is ready to join me if the questions get beyond my capability.

MR. HACKBARTH: Can I just ask a question, Sally, about the inpatient Medicare margin for the primary referrers versus the other acute hospitals? The inpatient Medicare margin is dramatically higher for the primary referrers, yet if you go back a number of charts the acute hospital length of stay is essentially the same in the areas where there are long-term care hospitals. The inpatient Medicare margin difference could well just be a function of the fact that they're teaching hospitals and are they're receiving IME and DSH, as opposed to anything to do with long-term care hospitals; is that true?

DR. KAPLAN: Yes, it could. We actually asked for -- there are two things I want to say about that. First of all, the Medicare inpatient margin for teaching hospitals is 22.9 percent, so this is considerably higher than that. Second of all, we did ask for the margin information taking out the IME above the empirical level and DISH. I don't have that at this point so that I can compare what we found that's represent in the March report. I'm not sure that we've use the same methodology so I need to go back and check that. So I was reluctant to present that information.

MR. DeBUSK: Now with LTCHs in the post-acute arena we've been going to a prospective payment system phased in over a period of time. This actually started last October for LTCH, right?

DR. KAPLAN: That's right.

MR. DeBUSK: Now, Sally, the phase-in period of time for LTCHs is what?

DR. KAPLAN: It's a five-year phase-in, but they have the option to go to 100 percent PPS immediately.

MR. DeBUSK: So actually, to see where this is going to lead this whole situation, we need some of that data before we can really judge where this is headed, right?

DR. KAPLAN: I think we can model the PPS payments. That's why I want to model the PPS payments. I think that will give us a clearer picture of what the total payments are for these types of patients if we modeled the PPS. CMS estimated that over 50 percent of the LTCHs would pick up the option to go to 100

percent of PPS immediately.

MR. DeBUSK: As I understand, that hasn't happened, right?

DR. KAPLAN: They do that by their fiscal year. So in other words, if your cost reporting year started on January 1st, you had to let CMS know that you were converting to 100 percent PPS right away.

MR. DeBUSK: The reason I bring that up, I think there's two national chains that own better than 50 percent of the total LTCHs in the country and one of them in phased-in and I think the other has not even started yet, so a significant number hasn't hit the chart yet, right?

DR. KAPLAN: I don't know.

DR. REISCHAUER: Just a little bit of education for me. Am I right that the acuity is about the same in the areas with and without, and for these selected DRGs the total episode payment is only 5 percent difference?

DR. KAPLAN: When we look at the areas with and without --

DR. REISCHAUER: I'm trying to reconcile this with how much more it is --

DR. KAPLAN: I think it's because there are so few -- don't forget that less than 1 percent of the patients discharged from an acute care hospital go to a long-term care hospital. It's because there are so few long-term care hospital patients, only 72,000 admissions.

DR. REISCHAUER: But this isn't just -- I thought you were selecting a set of DRGs that were particularly --

DR. KAPLAN: Yes, but even so it's not that many cases. For example, 483 --

DR. REISCHAUER: Even in areas where there are -- I mean in Louisiana or Texas --

DR. REISCHAUER: I haven't looked at Louisiana separately although it's been suggested that I do that. But, no, I have not looked at states individually. We looked at basically market areas with and market areas without. We didn't look at states. I can do that.

DR. REISCHAUER: It just surprised me. I would have expected to see a much bigger difference and I thought, are we looking for a problem that doesn't exist?

DR. KAPLAN: I think the fact that you have 72,000 cases in 2001 and if you looked at -- you have 1.8 million patients in markets with long-term care hospitals, so that's getting very diffused.

DR. REISCHAUER: By the way, I think this is a tremendous piece of analysis. I really like it.

DR. KAPLAN: Thank you.

MS. BURKE: Sally, can I just follow up on Bob's point, because I'm struggling with the same question. If I turn to page 10 of your charts and the numbers that Bob was referring to, I'm not sure I fully appreciate what those numbers mean in the total episode cost. Because it seems at odds with the suggestion that there are enormous differences. To Bob's point, I'm trying to figure out, is there a problem or is there not. Are these patients in fact resulting in the same cost for the entirety of the episode involving both the acute and the use of LTCHs as

compared to people who use acute and a sub-acute unit, a SNF or something. I'm just struggling to understand where the problem is, if these numbers suggest that to date at least our experience suggests that the costs are the same.

DR. KAPLAN: That's what I was trying to say to Bob. I think it's because you're taking 72,000 patients -- actually less than that because you really are only taking the 11 DRGs out of those 72,000 patients.

MS. BURKE: Right, but they're the most frequent.

DR. KAPLAN: But if you think about the fact -- actually, we end up with 21,000 patients in this group of patients that use LTCHs in 2001 when we look at the 11 DRGs, and you compare that to 600,000 patients in market areas with LTCHs that use post-acute care. The higher cost of the LTCH, basically you don't see it as clearly as you would if these patients were more numerous.

MS. BURKE: Again, just taking it to the next step, because I think the analysis you're doing is exactly the right analysis. Do I understand you to suggest that you believe upon further analysis that we're likely to see a greater divergence in the per-episode cost between the two settings?

DR. KAPLAN: For the next analysis what we're planning on doing is making sure that cell sizes are the same when we do the multivariate analysis, so that we will randomly select from those 600,000 patients and compare.

MS. BURKE: But your fear is that what we're going to see is the cost that are essentially incurred as a result of the use of this particular method of delivery is in fact going to be substantially higher.

DR. KAPLAN: Yes.

MR. HACKBARTH: Given that it's less than 1 percent using the long-term care hospitals even where they exist, then this difference, this 12,000 versus 11,500, that may be very large, because the difference is diluted by including all the patients.

DR. KAPLAN: Yes, that's compare 1.1 million patients to 1.8 million patients.

DR. MILLER: I wanted to say this a little bit differently. In a sense, looking at the with markets -- with and without long-term care hospitals -- is not the answer to the question of, are you seeing large differences. In a sense, the numbers on page 10 end up being kind of a distraction. We were first trying to go through and say, are these markets systematically different? Actually -- and I want to say this carefully to make sure this is true -- you are already seeing large differences in the cost inside those markets. When you look at a given severity level for a given DRG, you are finding large differences. So you're already finding what you are asking but --

MS. BURKE: But we don't see that here.

DR. MILLER: You don't see the numbers. What you see is -- it is in the tables of your paper, but the conclusion on page 15 is drawn from those tables that are in your --

MS. BURKE: I was trying to reconcile --

DR. MILLER: If you go inside the marketplace and you say, I'm now going to look at a person who used it versus didn't, in a DRG at a given severity level, you do in fact find a difference.

Is that correct, Sally?

DR. KAPLAN: That's right.

MS. BURKE: So the 156 percent variance is what you're seeing on a case to case, which is what is contained in the text.

MR. DeBUSK: Severity comes into play.

DR. KAPLAN: Yes. We are controlling for DRG and severity, because we are only comparing DRG-14 severity four to DRG-14 severity four. If you look at table 5-11 in your mailing material you'll see the mean total payment for five of the 11 DRGs. Basically the reason I picked these DRGs, since I was limited on the number of DRGs I could show on a table so that we don't have a chapter that's all tables, is that stroke and CHF are very common, hip replacement is very common, and then the two ventilator DRGs, because of number of these facilities that specialize in ventilators.

If you look at severity level four you see that patients who use LTCH, their total payment was over 36,000, whereas those post-acute users who didn't use LTCH had a case payment of 21,000. So there's a very big difference in the total payment. If the payment were the same we would not be concerned.

MR. HACKBARTH: Page 15 is comparing patients within the markets where long-term care hospital exist.

DR. KAPLAN: Exactly.

MR. HACKBARTH: So I guess that always creates the possibility that there's some selection process that's ongoing that isn't is captured by the severity adjustments and so on. Methodology stuff is way of over my head but it would almost be better to compare markets without long-term care hospitals with those that do.

DR. KAPLAN: We did that too. You just didn't see those results. We did do that. We compared and we found basically that you had the same kind of difference in total payment, and the same type of difference in length of stay in the acute hospital. Interestingly, when you add up the people in market areas who you LTCHs and those people who use SNFs, the proportion is the same up as the people use SNFs in market areas without LTCHs.

MR. DURENBERGER: Normally when I look at a map like this and see everything flowing to the South I think about the Civil War and how this is the Confederacy's revenge and all that sort of thing. But I have a different kind of a question as relates to the research as between the -- if I look -- let me just ask it this way.

Is it possible that you can look at this so-called other Midwest market, which is fairly new -- I mean, there's one here in St. Paul which is, I don't know, somewhere in the late '80s. Then there's, it looks like Bismarck and Fargo, North Dakota, and Sioux Falls, South Dakota, and couple in Nebraska. If you took a part of the piece of the country like that, is it possible to do an analysis principally of the impact on the hospital market, whether it's the hospital market, the SNF market, something like that, of the arrival in a community like that of the long-term care hospital?

Do you understand the question I'm trying to ask which is,

most of this is macro. Much of this is picking up Texas, Louisiana, a lot of concentration and then trying to make comparisons with traditional -- like SNF or hospitals and so forth. But I just am wondering out loud whether or not it's possible to take a different kind of a geographic subset and do some kind of an analysis there that --

MR. HACKBARTH: So before and after within the market?

MR. DURENBERGER: Yes, if that's possible. Or is it too complicated?

DR. KAPLAN: I think it is possible. I think it's actually outside the scope of what we've tried to do here, but it is possible. We actually at one time thought about taking just Louisiana and comparing it to Oregon and seeing how different those two areas were, but then we got concerned about the usual representativeness of the data throughout the rest of the nation. But if that is what you would want me to do, we could do that.

DR. MILLER: I was going to say, our hypothesis here is that we don't think they're substituting for inpatient. We do think they're substituting for skilled nursing facilities. Another way to test it would require assembling some time series and knowing when they entered the market and saying, do you see the percentage of SNF patients changing between two years. Whereas right now what we're doing is we're seeing it geographically within marketplaces.

The only problem would be collecting a time series and identifying the markets where you had a big enough impact that you could tease something out. But we can take a look and see whether we could do something like that. Because a narrow case study may also help color some of this.

DR. STOWERS: Sally, I just had a question and this may get back to this SNF substitution as opposed to acute. But you said in the aggregate the length of stay was the same, but for these primary referral hospitals do we know if the length of stay is shortened, or especially in these 11 DRGs is it shortened? Do we know how that varies?

DR. KAPLAN: We didn't really look at the acute care hospitals length of stay and whether it changed. We really looked at it on a patient level basis, by DRG, by severity level.

DR. STOWERS: That might give us a little deeper look into the substitution issues.

MR. FEEZOR: Sally, as I look at that map population obviously plays a little bit, but any correlation between certificate of need states and recent growth?

DR. KAPLAN: We thought we would put that in the multivariate analysis.

MR. HACKBARTH: Sally, if one of our main hypotheses is that long-term care hospitals are substituting for SNF care, I guess that then raises the question in areas where SNFs are providing the care is there anything different in terms of the characteristics of the SNF, the services that they offer, their financial performance, when they're picking this up as opposed to SNFs in states where there are long-term care hospitals that aren't substituting? If in fact we're were moving patients from one setting to the other, presumably the providers organize

themselves differently in terms of their characteristics. It might be interesting to know what the bottom line effect is for the SNFs then.

Any others?

MR. MULLER: What is roughly the payment rate differential between the SNFs and the long-term care?

DR. KAPLAN: The base rate for a long-term care hospital as of July 1 is proposed by CMS to be $36,000 per case. The SNF is a per diem rate so it's a little bit hard to compare, but I would say if you were guessing you'd say about $350 a day, let's say $300 a day times 20 days, 22 days.

MR. MULLER: That goes to Glenn's point about there's going to be a lot of cost absorption going on. Either there's a difference in severity or there's a lot of cost absorption going on.

MR. DeBUSK: We're talking about this here and not for one minute do I hope that we think that there's no difference in severity of these patients. You can go into an LTCH -- for the ones of you that haven't been in an LTCH, go in an LTCH and look at those patients. Then you go in a SNF and look at those patients. Folks, there's a whole different level of personnel taking care of these people, there's a whole different level of quality. For one minute, to think that a SNF will substitute for an LTCH, there's no way.

MR. HACKBARTH: In a lot of states like my state of Oregon, there isn't a long-term care hospital so somebody is doing it.

MR. DeBUSK: Somebody is doing it. At what level is the quality is my question. Of course, we're taking these numbers here and I sometimes think you can make numbers look however you want to make them look, but just from observation there's got to be a whale of a difference. Now as you drill down, Mark, and get into the severity and the classification system and what have you, I would look for something to show up there. I have no doubt that perhaps there's a lot of things that both of them are handling now that could be handled in the SNF, but for those real, real sick patients that LTCH is really performing a service that is beyond a SNF.

DR. MILLER: The only thing I was going to say is that I agree with you. I think what we're trying to do is figure out what they're doing different and if those outcomes are different, and could you see that perhaps down the road once we've done further analysis if we can focus on what the mission is of these facilities that may be something that this commission ends up commenting on. I think that's what we're trying to get at. In that sense, I completely agree with what you're saying. What are they doing? Which patients? And what do they do better?

MS. RAPHAEL: This is a completely different topic. These are my reflections on your chapter on monitoring post-acute care and your post-acute care episode database. I agree overall in terms of where you're headed with showing that the use of post-acute care has increased and there's been substantial declines in home health care; 46 percent decline for home health care only, 13 percent decline when it's combined with SNFs.

Where I have some concerns are when you move to say that the

use of home health care has declined more for people who had a low probability of using it. First of all if you look at your data, actually there was a substantial decline even for those who had a high probability of using it, because people from the community, only 54 percent of those who had a high probability even accepting your methodology actually used home health care, 46 percent did not. So to me that dropped out of where you're headed, and I thin kit's important not to lose that.

I went back to Chris Hogan's study and I think he made some key points which I thought also were missing from your analysis here, because he says that the need for those people where the declines were proportionately larger, he said the need for post-acute care was less clear, or to be technically correct, less evident from the diagnosis present on the physician claim. And he says that the declines in post-acute care were highest for medical conditions, possibly indicating frailty, COPD, pneumonia, heart failure, et cetera, that had had a high proportion of home health care use prior to '96.

To me, that is a group where we really -- it is harder to clarify their need for post-acute care. It isn't as simple as a stroke; you need rehab. When you have congestive heart failure it is less clear from the diagnosis that you need post-acute care. I think, again, there's this dichotomy that's made which I think -- I was talking to Mark about this -- it goes back to the whole issue around the benefit, the home health care benefit and the lack of clarity about that benefit, and the attempt to make it a post-acute care benefit focused on restoration and rehabilitation.

However, it's really hard when you look at clinical patterns to do that because people who have CHF go into the hospital on average two or three times a year, and then they come back out. You try to get them to a maintenance level and then they're going to have another acute exasperation and they're going to come back out. So it isn't as if for this particular set of frail patients you can make that clear dichotomy.

So I just don't want any inference in here that we really know that people who have a low need for care are the ones who actually dropped out of the system, because we really don't know that. We're making certain assumptions as to what underlies this decline, the change in venapuncture, the emphasis on looking at fraud and abuse, the attempt to really move and restrict the benefit. But I just think that it may be, if we looked at the over-85 population which tends to be the highest users of post-acute care, that there are a group of people who aren't getting this benefit, and maybe it's not all of the percentage that dropped off but it may be some percentage that really need this and have been lost to the system.

The other point that I think we need to look at as a policy issue is, you chart a shift from the use of home health care to SNF. I don't know whether that's good, bad, or indifferent. I have no way to comment on that. But you have to ask yourself, from Medicare's point of view is this good public policy to send someone who has pneumonia to a SNF when that person could be cared for in the home health care environment? So I just think

that whole issue of substitution of service needs to be looked at more closely.

MR. HACKBARTH: Carol, what I hear you saying is that are patients with certain diagnoses like CHF that it's not going to be clear that they all need home health but there might be a subset of them for which it's critically important.

MS. RAPHAEL: Right.

MR. HACKBARTH: Now if in fact fewer of those people are getting needed home health care, would that be attributable to the payment policy and design for home health, or would it be more likely the result of decisions about restricting coverage, or oversight activities where physicians are worried about certifying patients and then having somebody second-guess it?

MS. RAPHAEL: I think it's a combination. I think the payment policy is a contributory factor in the sense that the incentives now are to really take people with a defined diagnosis and a predictable use. If I were going to really maximize my profits in the system I would want someone who I knew needed rehab for a certain amount of time and didn't need home health aid. That's where you want to really try to minimize your use.

Also, you want people whose use you can predict. You don't want frail elderly with lack of support in the community, possible cognitive impairments. These can end up being long stay, hard to maintain patients with an unclear discharge point. So I think in that way the payment system does lead you to try to look for things you can package and predict. The people who fall out are those who are harder to predict. But it doesn't mean they don't need the service. It's just that the payments lead you to try to carve those out to the extent you can. They also can be the medically complex.

So I think that's part of it. I think the other part of it is that when you look at a diagnosis it's hard to know sometimes whether someone needs the home health care or not. You get congestive heart failure, it's unclear; do they have a skilled need? They may not. They may need some monitoring by a nurse because of their complications.

So I think it's a combination of an attempt to really clarify coverage as well as some of the incentives in the payment system.

MR. HACKBARTH: Any questions for Carol or reactions?

MR. SMITH: Carol, Sally, Nancy, we've talked about this question, the characteristics of or what has happened to the folks who dropped out. We've come back to it a lot. We often end up simply concluding that we don't know very much. Is there any way to get a handle, any of you, on the characteristics of that population and some attempt to take that data and try to make some judgment, Carol, about how many of these folks ought to be getting a service and aren't, or are and shouldn't?

All we know is this very large number, and your suspicion, which I suspect is right, is that they are complex, harder to predict, folks with multiple conditions and likely to be frail and expensive. But we don't really know that. Is there any way -- I know we don't have a data set that describes these folks because they're not in the system, but is there any way to get at

some more understanding about characteristics?

MS. RAPHAEL: I'm not saying these people definitely need the service. I have no way of knowing that. I'm just saying, I don't want to be facile and say that for all 46 percent of the high use people who dropped out that they don't need the service. I just want to step back and take a closer look at this.

DR. MILLER: I think you're going to answer the second half of the question and I just want to say something about the first half of the question. I actually do -- I want to throw a little defense out here. I think we do know more than we -- we used to think it was just a million and we knew nothing about it. I think actually the analysis that was presented last meeting and will be in the chapter actually is, maybe not a giant step but it is a regular step forward in the analysis. We took apart these episodes, looked at the shift pre and post, made assumptions about the acuity of the patients as best as we could and found patterns that one would expect.

I think what you're saying is that for a selected group of that population, the people who had chronic conditions, there may have been below that level a population that needs to be looked at. I think we can agree with that. But I don't want to just blow past the notion that I think this analysis was a big step forward in trying to understand what happened pre and post.

Now having said the easy part, I'm wondering if Nancy can say anything about trying to get inside that population. Is there any way to do that?

MS. RAY: Getting inside the population of people who dropped out? That's an area that I think Sharon will be coming back to you at the retreat and proposing to attempt to study that. I know she is particularly interested in trying to come up with a study methodology that we can try to look at that issue.

DR. MILLER: Okay, thank you.