FEDERAL TRADE COMMISSION

HEALTH CARE AND COMPETITION LAW

Wednesday, March 26, 2003

9: 15 a.m.

Federal Trade Commission

601 New Jersey Avenue, N.W.

Washington, D.C.

For The Record, Inc.
Waldorf, Maryland
(301) 870-8025

P R O C E E D I N G S

- - - - - -

MR. HYMAN: Thank you all for coming to the second set of the hearings held by the Federal Trade Commission and the Department of Justice on health care and competition law and policy. Over the next two and a half days, we're going to consider a range of subjects relating to hospitals and hospital competition. We're going to start this morning with a roundtable that's going to feature representatives from a variety of hospitals, and I'll introduce the speakers for that session momentarily.

I also wanted to mention a couple of other things. First, later today, we're going to be announcing the agenda for the April and May sessions that we'll be holding in this room, and just to give you a quick preview, April 23rd through 25th and May 7th through 8th, we're going to be holding hearings on health insurers and issues involving health insurers, including monopoly and monopsony issues, and then later in May, the 21st through the 23rd, and the 29th and 30th, we're going to be holding hearings on quality and consumer information.

And similar to the hearings that we're holding over the next two and a half days, this will include a

range of panels, speakers, lots of information gathering, a somewhat similar format in the sense that individuals can submit questions or comments for the record within 45 days of the individual hearings being held.

As previously announced, we're also going to be holding hearings April 9th through the 11th on hospital-related issues. The detailed schedule for that will be released, I expect, tomorrow, that will include a list of speakers and so on. In connection with that, I wanted to mention that on the morning of the 11th, we will be holding the session on Little Rock that was previously cancelled due to inclement weather originally scheduled for February the 28th. It will now be held the morning of April the 11th. So, hearings the 9th through the 11th.

And I also want to -- I'm David Hyman, I don't know if I mentioned that at the start, at the Federal Trade Commission, and Bill Berlin, who is sitting there in the middle, is the Department of Justice representative for this morning's set of hearings. Bill, did you have anything that you wanted to add?

MR. BERLIN: I don't think that I do.

MR. HYMAN: Great. Okay, then, let me turn to introducing our speakers for this morning. Our general

forum here is we're much more interested in what the speakers have to say than in going through lengthy introductions of them, which is why we've prepared this lovely bound volume available outside, that contains a page explaining everything that the individual speakers have done, and it's a very impressive list. I commend it to you, so I will just introduce people by names and titles. We're going to go in alphabetical order. Two of the speakers have PowerPoint and will be speaking from up here. The others can speak here or sit down entirely at their preference.

Then we're going to have approximately ten-minute remarks from each of the speakers, following which we'll have slightly longer remarks from several economists about product markets for hospitals. We will take a short break, and following that, there will be a roundtable featuring as many of the hospital representatives who can stay and the economists and also a representative from the Federated Ambulatory Surgery Association who will also speak briefly. The roundtable will sort of address the issues that are covered across the entirety of the morning's remarks.

So, our first speaker is Ralph K. Andrew, who is the director of government affairs at New York Eye & Ear Infirmary. Our second speaker will be David Morehead,

who is Senior Vice President and Chief Medical Officer for OhioHealth. Our third speaker, and now I have to figure out what comes next in the alphabet are -- is Mike Ryan, who is Senior Vice President and General Counsel of MedStar Health. Our fourth speaker will be Lee Sacks, who is President of Advocate Health Care. And our final speaker in the hospital roundtable will be Denny Shelton, who is chairman and CEO of Triad Hospitals, Inc. And so, with no further ado, Lee?

I'm sorry, Ralph.

MR. ANDREW: Thank you. Thank you, good morning. I wanted to thank the Department of Justice Antitrust Division and the FTC for holding these hearings to learn more about health care, and the competitive marketplace in which we function.

I've been fortunate to have had the opportunity to work in a variety of settings related to both health care policy and the delivery of inpatient/outpatient care for the past 25 years. I spent four years only blocks from here working on health policy on the Hill, and then went to West Harlem for a very different kind of experience in an outpatient ambulatory care facility, and I spent 14 years as a small fish in a very large sea at New York Presbyterian. And Crane's noted last month that the New York Presbyterian system is now the largest

single employer in the entire metropolitan region with over 30,000 employees, surpassing the banks and Wall Street, which are usually so cited.

And finally, I have spent the last eight years in a special care environment at the New York Eye & Ear Infirmary on the lower east side of Manhattan. The infirmary has been loosely affiliated with Continuum Health Partners for the last three years.

The infirmary is a 183-year-old institution. Its mission at that time when it was founded and today is to treat the working poor on the lower east side of Manhattan as a not-for-profit hospital for our named specialties. It is the oldest continuously operating specialty hospital in the United States, recognized in U.S. News and World Report with others as one of the foremost centers of excellence. And that's partly because it is the largest provider of primary eye care in the United States, and frankly we have the only eye care trauma center that operates on a 24-hour basis in the entire New York region.

That, however, doesn't really describe some of the specialty work, as there are very specialized clinics in tumors, retina, neurophthalmology, orthoptics, glaucoma, diabetes, et cetera, and on the otolaryngology side, these include facial pain,

neurophthalmology, neurotology and oral surgery. We have the only head and neck cancer registry in the United States.

Because of our specialized services, frankly, we treat more severely ill patients who often have comorbidities, and I will try and touch on that later. I think it is fair to say that both outside and inside the infirmary, the health care environment has changed radically, just even in the last five years.

For example at the infirmary, we've gone from over 5,000 discharges to fewer than 1,000, in less than five years, and during that time, increased outpatient activity so that we now have more than 150,000 outpatient visits a year, at least 11,000 of those in the emergency department, and about 20,000 outpatient surgeries a year.

A few years ago, you were in for a three to five-day length of stay for a simple cataract operation, today you are in, literally, for three to five hours.

I think to successfully run a New York City hospital, especially, you have to adapt to the unique local environment, and therefore I mention the demographics of our local community on the lower east side. It's 42 percent Hispanic in this case, 15 percent African and Caribbean American, 4 percent Asian, 3

percent Russian and 36 percent other. I mention that because we are an essential community provider by virtue of our status of operating in a health personnel shortage area, and frankly, we're proud of the relationship with the community, because it's one of mutual dependance.

What might that mean? That means that we need to tailor our services to our local community, I think a couple of examples of that would be our OLA service, which is completely bicultural and bilingual speech and hearing service, do thyroid screenings, because it's the home of the largest number of Ukrainians in the United States, for victims of the Chernobyl accident, and there have been extraordinary instances of thyroid cancer as a result of that, and frankly a recently funded NIH study focuses on glaucoma in African-American populations, you may know the incidence in African-American populations is five times that of what it is in Caucasians.

Even the specialties end up having community-directed and specific work. For example, the retinopathies associated with greater incidence of prematurity and multiple births, we treat their eye diseases that are associated with obesity and diabetes. In summary, we are wedded to our local community. It is not that we would never want to pick up and move, but

frankly, we couldn't if we chose. And I think that mobility factor is something that has to figure into this equation. Fortunately, this is a very happy marriage where we depend on them and they certainly, heavily, depend on us.

I did want to look a little bit at some of the global environment that I think has affected almost all of my colleagues in recent years in terms of rise of costs, which are largely beyond our control. Professional liability premiums, about which you have read so much recently, have literally doubled in two years. And you have read that OB/GYN people can't even get coverage and so many have dropped coverage and gone to very limited practices.

Our liability insurance premiums are yet another whole story. Since 9/11, and of course we're on the lower east side of Manhattan, our premiums have skyrocketed, they've increased over fourfold in one year. And then there's the more global picture, too, which is that, you know, the cost of blood is up 31 percent. Some of the discipline-specific issues that we face are that, Visudine, which you may know treats AIDS-related macular degeneration, where there are popped vessels in the eye, now cost $1,282 a vial, a Medicare reimbursement is $868. It's very hard to make

that up in volume.

Similarly, a cochlear implant, the kind which Rush Limbaugh, frankly, made somewhat famous, is a device that costs almost $25,000 with a Medicare reimbursement of $15,000. These are problems that we face during an era of rising costs. I think that the labor costs which have gone up precipitously are related in large measure to the shortages, which are suggested on the screen.

It's very tough to upgrade in an environment where 15 percent of maybe one out of every six nurse positions are vacant, and similarly, the biggest single problem for us has indeed been imaging technicians. I mean, there's a situation where radiology technicians have been going literally back and forth across town. A group of eight moved, $5,000 raise, came back to the institution, another $5,000 raise, and went back for a third time across town. So, there is great mobility in a profession with the kind of vacancy rate that we see.

I mentioned some general specific pharmaceutical cost rises. Overall, this has been one of the largest segments of the cost of health care increasing, and as you can see, when you're doing 25 percent per annum, it doesn't take very long to totally get a budget that's out of whack.

I will talk about uncompensated care, but in the global picture, I think the fact that we're delivering as not-for-profit hospitals, $22 billion a year, and that's gone up even since 2000, says a lot about the mission and the issues that we face.

Obviously, the access to capital has become increasingly difficult. It's very troubling to see that that ratio that there are 160-some, 180-some institutions that have had their bond ratings downgraded in the last three years, while only one-fifth that number have had them upgraded. And frankly, we all face pressures to invest in new technologies, that is part of the business, the Eye and Ear Infirmary just yesterday literally opened a new retina center, and it is undeniable.

Some people say it's not really a medical arms race, and I say it is, because our communities really want the best that we have to offer, and nobody really comes in and says, you know, I want that Lasik treatment that's just a little bit cheaper that you did three years ago, knowing that the new wave technology Lasik stuff is much better, and frankly now it is computer-driven, and so now there isn't even the possibility of the same error of the surgeon's hand on the scalpel. People look for that.

One of the main issues that we faced is competition from niche providers, especially the free-standing ambulatory service centers. Speaking of mission, I mean, they have a different mission, and certainly a different margin. It cannot be described any other way as that they skim and cherry-pick on the front end regarding both the finances of the patient. They don't take Medicaid patients, they certainly don't take charity cases, and medical conditions. The comorbidities come to the hospitals.

So, the hospitals are left with patients with greater acuity. MedPAC cited this, by the way, in its report this month, the first week of March, and then on the back end, of course, if a case goes south, they call 911 and say, we're sending this patient to the local hospital.

Indeed, I think we have the frailest of the frail, and the poorest of the poor. And in terms of topics that are "Most Topical," disaster readiness has been a huge issue for local community hospitals. Whether it was the NBC, (nuclear biological chemical) training, literally building decontamination units, or whether it's the current, you know, crisis of the day, be that anthrax or SARS, the severe acute respiratory syndrome of the -- in the press this past week,

hospitals are the front line in the defense against such.

And were a disaster to occur, and certainly you have to ask the question, well, would the citizens run to a 9:00 to 5:00, you know, a freestanding ambulatory surgery center? Are there societal expectations that they would do so? And frankly, you know, the answer to all these questions is no, and yet if you substitute the word hospital in that sentence, clearly the answer is yes, yes, and yes.

I mean, I have to say, without too much schmaltz, that it was an extraordinary experience to live through the 9/11 disaster. We are in that section of town, we had to close all services, the police cordoned off the infirmary and north, so that only emergency cases and corneal abrasions were treated by literally for thousands of emergency workers, and, you know, we closed down our operations and went for five days on 24/7 at four different locations at the World Trade Center site.

And so it is, indeed, distressing to pick up this morning's paper and find out that yesterday on the Hill, we're debating whether or not hospitals really should be considered, you know, first line providers. And, you know, the emergency service workers who bring

those patients to the hospital are, but not necessarily the hospitals who spent all the dollars in readiness for the disasters that we hope never come, or come again.

So, hospitals, to survive, have had to depend on even government protection and/or subsidy in some cases. Our revenue stream is to provide charity care and to fulfill our mission which are being crowded out by the not-for-profit niche providers, from Park Avenue and physician offices, with increasing amount of surgery is done, to the shopping malls, to keep our communities healthy, we have to be viable as well.

The other sort of challenges facing hospitals, I think in a global sense, include some reimbursement cutbacks. I mean, just this past week, to pay for the tax cut and everything else that's going on, there was a budget resolution authorizing a $93 billion, that's B, cut in Medicaid over the next ten years, and this is over and above all the state Medicaid cutbacks which you have read about which are literally across the country.

So, in terms of payment and equities, I would describe the differences between hospitals and ambulatory surgery centers free standing, and yet for many procedures, they receive up to 40 percent more higher in Medicaid patients. An example being laser surgery after cataracts.

So, the Office of the Inspector General of HHS recently argued that they should pay at the lower rate, I must say she has since resigned, but that, you know, denies all of the quality and other differences between surgical venues. It certainly is an issue to surgeons and physicians who have spent their life in training to be told by an insurance bureaucrat, or a Washington one, where that patient should be treated and all of the differences that exist in terms of coverage and anesthesiology, where they have roving anesthesiologists that are in and out after administering it as opposed to a Medicare condition of participation where you have to have that specialty present, as I believe it should be, throughout the entire, including recovery, process for the patient.

So, now we're finding that we're increasingly threatened, both physicians and hospitals, by the insurers. The health plans are flexing their muscles. Not three weeks ago, most of our physicians received a letter from a major now for-profit, after 40 years in the not-for-profit business insurer, saying that your contract is subject to termination in three weeks, because you take too many of your patients to your local community hospital and not enough to the ambulatory surgery centers.

We believe that this violates contract law in terms of the options that customers or consumers were given when they signed up for their insurance, not to mention the other issues of who should be making that kind of decision for the physician's patient.

So, many hospitals are feeling under attack from many fronts, and frankly, as a very small institution, some of the HMOs have really ganged up on the hospitals, bludgeoning us with, you know, the smaller entities with very unfair pricing options, and I think that is one of the issues that ought to be looked at by the groups before which we speak today.

So, those insurers have been consistent in one thing, their unwillingness to pay for public goods, including emergency care, at cost, charity care and physician training, and we're left to try with deficit financing to pick that up.

So, on the one hand, while HMO profits soar, New York hospitals have negative margins. At the infirmary, we've had a negative margin ranging from 2 percent to 10 percent each of the last three years, and that's very tough. But when your bottom line is continuous quality improvement, and not profit, it makes us a very different entity.

For example, I mean, we spend an awful lot of

time trying to analyze what goes on, what goes wrong, and I think that adopting the failure mode laterality analysis which came from the airline industry, which is sort of a prospectus step-by-step what went wrong here, has led us to some new procedures, and now just on the laterality issue of getting and making sure on a cataract, there are 12,000 done a year, I'm sorry, I didn't see you, we have at least four different professionals, you know, reviewing that, before there is any surgery done. And I think we've all made great strides in this industry to do that.

So, in summary, we provide care on a 24/7 basis, we treat all who present for emergency care, via EMTALA we care for sicker patients who are shunned by others, and frankly, we comply with more extensive regulations from the anesthesiology mentioned to the disaster readiness. The JACHO, the joint commission, the most well-known accreditation body, only six of 100 approved ambulatory surgery centers in New York state are JACHO accredited, and frankly we emphasize quality over the bottom line.

So, we respectfully suggest that the playing field could be more level, that we need comparable quality standards for all surgical venues, payment inequities need to be eliminated, and the work force

shortages, especially in nursing, need to be addressed, and maybe even we should be able to join in our physicians and for-profit ventures.

So, these are more than mere market inefficiencies and imperfect market conditions that occasionally may affect a car dealer or supermarket chain, these are fundamental differences in mission and community building. We're not asking for an antitrust exemption like baseball has been granted or something special like that, but we do want this, our special conditions, to be considered in the backdrop of any future analyses.

One hundred and ninety three of our brethren have not made it in the last three years, as in they have gone under, especially in rural areas. We hope that we've seen the last of that. One Wall Street person asked me recently if I was one of those special interest lobbyists, and I think he was quite surprised at the answer, I said "Yeah, I think it's very special to advocate for health care for seniors and for the economically disadvantaged."

So, we thank you for the opportunity today to come here and learn a little bit more about our industry, and we look forward to working with you in trying to make these hearings and their outcomes a

success. Thank you.

(Applause.)

MR. MOREHEAD: Good morning. I'm Dave Morehead from Columbus, Ohio. Our goal this morning obviously is to describe or paint the picture of the current -- today's hospital market. From OhioHealth, I would like to do that by describing for you who we are, what we've done and tried to do, and the challenges we face.

Now, what I intend to do is to describe for you a particular regional hospital network. Because of the pastoral setting of Ohio, it's going to include both urban and rural hospitals. The system is intended to provide appropriate services at appropriate locations, but at the same time, to reduce as much as possible the inconvenience that is required when a patient cannot receive the appropriate medical services in their home community, and must, in fact, go to another site for that care.

It is a system designed to serve the individual patients, but also the communities where those facilities are located. Let me begin by telling you who we are. I'm going to design or outline for you the framework or the infrastructure that exists. This is a map of southern and central Ohio, where we're located. This depicts the location of seven member hospitals and

six affiliated hospitals. It covers 46 counties in southern and central Ohio, a land mass in our service area of about 22,000 square miles.

Now, that land mass, in perspective, is about the same size as the State of Rhode Island, or the State of West Virginia, and for you international cartographers, it's about the same size as Costa Rica and slightly smaller than the country of Ireland. It's a big area.

Now, we are made up, as you can see, of many sized hospitals, hospitals that are eclectic in many ways, that have a lot of different characteristics, a high variation. For example, our flagship hospital located in Columbus, Riverside Methodist Hospital, 45,000 admissions a year, with 1,000 beds. In 1999, it experienced and posted the fifth largest number of discharges of any hospital in the United States.

Contrast that to Doctors Hospital in Nelsonville, less than a 1,000 admissions a year, a 50-bed, critical-access hospital. Considerable difference.

We also have other variations in our offerings. In terms of breadth, two of our seven member hospitals are staffed predominantly by osteopathic physicians, and five by allopathic physicians. Although some education

occurs at every hospital, from a medical standpoint, the three hospitals in Columbus provide training for 350 residents and for over a 1,000 medical students who rotate through our facilities on an annual basis.

And because, as you can suggest from the size that I've already mentioned, in our urban area, Riverside, the larger hospital, accommodates about 1.2 million citizens, whereas in Nelsonville, the smaller hospital, 9,700 patients. Considerable variation in what we do. And when we look at our model, it's much like a universal or at least a comprehensive model, because of all the activities and the facilities that we provide. Now, we, like others, have responded to this shift, and it is a legitimate and expected shift in the provision of inpatient services to outpatient settings, or ambulatory settings.

This is a map of Columbus, we have depicted the little blue dots, which represent about 13 ambulatory facilities strategically placed throughout Columbus which provide the services to those persons who live within each of those areas.

The 13 ambulatory centers represent about one half of the ambulatory centers that are extant in Columbus, and that number, roughly half, really is consistent with the market share that we have earned in

Columbus.

Now, I described some numbers and some facts to you, but that's not nearly important as what we're trying to do; that is, what are we trying to accomplish with a regional hospital network? And let me state it again: We are attempting to develop a series of both urban and rural hospitals which will serve the needs of the community and the individual patients who live there, allowing us to provide the services, appropriate services, which are appropriate for that rural location, but also to reduce as much as possible the inconvenience and the hardship when a patient must leave a smaller community and go to the big city for the care that's not available locally.

Now, let me go in a little bit more detail, because part of our network includes not only the urban, but also its ambulatory facilities in urban areas and the rural regional hospitals. In terms of our urban capabilities, we have three primary hospitals located in Columbus. Each of those hospitals provides community services, but it also offers some special services.

One of our hospitals is a level one trauma center, a truly fantastic operation. This group has led the efforts to develop a true trauma network for the state of Ohio. Riverside has developed an incredibly

robust heart cardiovascular center, and we are told that they accomplish more heart casts and EP procedures than any other hospital in the world. The osteopathic hospital has been a referral site for osteopathic physicians for over 40 years.

In terms of our urban ambulatory centers, some of them are single service, some of them are multiple services, and they provide such things as ambulatory surgery, imaging, urgent care, rehabilitation, radiation therapy. Again, the notion is to take the services close to where the patients live.

And finally, our rural regional hospitals, and that is a key. And the key is that the rural hospitals provide the focus, it provides the capability for us to continue communication and cooperation with the communities themselves, but also the physicians that practice there. We're able to take services to the rural communities which are appropriate for those areas as they are developed. And we're able to communicate with them about what new services are available at the regional referral centers.

Now, I know, and I recognize even as a physician, who knows a little bit about antitrust, that there's been a lot of concern from regulators' standpoint about mergers and acquisitions. I want to

tell you two stories that have occurred in our system, instances in which hospitals have had to be salvaged by the system, hospitals that would have, in fact, disintegrated had it not been for system input.

The first story I'm going to tell you begins about 20 years ago. There were three disabled hospitals in one community, two of those were days from bankruptcy. They were going bankrupt because of some imprudent investment in those days. The system came in, it was embryonic system at that point, came in, made a loan to those two hospitals, and over the next 15 years, worked with the community in a very painful and a very slow process of converting those three disabled facilities to one very robust one, which today competes not only with other hospitals in the area, but across state lines as well.

Like proud parents, we are really pleased that that hospital recently won the Ohio award for excellence, the first hospital in Ohio to do that, and also was surveyed recently during the Baldridge cycle. They did not win; I predict they are going to win later. It's a great hospital.

The second instance that I'm going to describe for you is a foundering hospital 15 years ago in downtown Columbus. Poor strategy, poor management,

unable to meet their financial obligations. The system brought in a new management team. Over eight years, that team turned their operations around, and in doing so, it preserved a high-quality trauma center and sustained an essential inner-city resource.

I might add, another inner city hospital, within two miles of this one, has closed -- gone bankrupt. They did not have any system associations.

Now, I make it sound or I'm trying to make it sound very positive, and it is, but we also have a lot of challenges, some that Ralph has already mentioned to you. Personnel is -- they're hard to find, they're expensive. The costs are escalating. Not only are things expensive, new technology, but reimbursement is always delayed compared to when the new technology is available. We have drug eluting stents that are due out in another couple of weeks. The reimbursement will not be appropriate for quite some time, until that happens...

Salaries, one hospital has offered or announced a 30 percent raise for nurses over the next three years, 10 percent a year. That's really hard to live with. Shrinking reimbursements, we're at death-hold discussions with our largest managed care plan at the moment. They don't want to pay us what it costs to

provide the care.

And many other kinds of challenges that we face. Let me tell you the one, though, that really is giving us a lot of trouble, and that is the relationships with the physicians. Physicians are so stressed for these same reasons that we have trouble, because they no longer are able to volunteer two or three hours of their time a week to do quality efforts, or to work on committees. And, in fact, it's very, very difficult for physicians now to survive. A lot of distrust, a lot of difficulty with us doing the quality work that we need to do.

So, what I've tried to do is to say, this is who we are, this is what we've accomplished, and what our intent is, it's not been easy. I don't want to whine, but we have a lot of challenges that we need to do, and we appreciate the opportunity of telling our story. Thank you.

(Applause.)

MR. HYMAN: You can either sit there or come up here as your preference.

MR. RYAN: I'll come up. Good morning. I feel like I could do justice to this group by just saying ditto from our first two speakers and sit down, because they have presented accurately and passionately the

situation we're in in the health care industry.

I'm Mike Ryan. As you know from my introduction, I'm general counsel for MedStar Health, which is located in Columbia, Maryland, a small community between Baltimore and Washington. That preserves my right to say that I'm a small town country lawyer, and it usually works well for me. So, you can excuse the simplicity of my comments here today.

I've been fortunate enough to be a health care lawyer for over 30 years, representing a small hospital in Baltimore County, Maryland, and then through a series of mergers, or actually consolidations, because there never was an effective merger, to become in-house counsel for a four-hospital system and then now a seven-hospital system which spans the Baltimore-Washington corridor.

We have three hospitals here in the District of Columbia, we have four hospitals in Baltimore, and they span a variety of types of hospitals. We have a university hospital at Georgetown University. We have a tertiary care center at Washington Hospital Center. We have a specialization hospital, a specialty hospital at National Rehab Hospital. We have four community hospitals in Baltimore. We have teaching programs at all seven hospitals, teaching over 900 residents a year.

We have all types of specialties within the system.

Ralph mentioned 9/11 in the instance in New York and their involvement. If any of you saw a picture of the burning Pentagon, on 9/11, with a helicopter in front of it, that helicopter was a MedStar helicopter which picked up and transported burn victims to Washington Hospital Center. We're very proud of that picture and what it represents as far as MedStar Health is concerned and its involvement in the community and particularly in regard to trauma.

The variety of our hospitals continues. We have two Catholic hospitals in addition to the five lay hospitals, so that adds another element to our variety of things that we have in the system.

What I want to do is comment and supplement the remarks of the first two speakers on some of our observations in regard to the competitive marketplace in which the hospitals provide their services. And I'm not speaking about competition with other hospitals, I'm not speaking in terms of competition with health insurers as far as who's going to pay what rates, but competition down on a level that really impacts on how we do our business.

The elements have been mentioned before. I'm going to talk about the labor market, I'm going to talk

about patients, and I'm going to talk about the technology.

The labor market, in brief, everyone is aware of the nursing shortage. I don't know if you understand how critical that is. In some of our hospitals, we have between 20 and 30 percent vacancies as our permanent staff. We have to retain the services of contract nurses on a daily basis. That means that we are constantly involved in recruitment, we are constantly involved in paying the additional premium that you pay for contract nurses.

Earlier this year we had an opportunity to have a brief meeting with Commissioner Leary, and we talked at that meeting in terms of some of the relationships between the health care industry and other industries, and there were a couple of references that I thought kind of piqued my imagination, and one was with regard to baseball.

Imagine, if you will, that you were the owner or manager of a baseball team that had to field a team for games three times a day, 365 days a year, and you knew that two or three of your players on every day at every game was a free agent. A free agent on a daily basis where you had to go in the marketplace and hire that free agent to play that game that day, or that evening,

or that night.

That's the situation we're in with our nurses. And the nurses are critical to the health care system. They are -- if you've ever been in a hospital, they are the players who provide the link between the patient, between you, the patient, between myself, the patient, and the rest of the health care team, the technicians, and even the physicians, very often.

Critical that we understand that the shortage of professionals, not only nurses, but also other technicians, have a dramatic impact on the cost structure of the hospitals today.

Our other important labor pool, and it was mentioned by the last speaker, is the physicians. Physicians are in a time of stress. They are stressed by virtual declining reimbursement rates and increasing expenses. And we in the hospitals rely upon the physicians, obviously, for our patients, for the care of our patients. We are required, as you know, under the Emergency Medical Treatment and Act of Labor Act to provide care for any patient who comes to our hospital and asks for medical care. And we have to rely upon the physicians to be there when we need them. Many of these physicians are not our employees. We have employee physicians at some of our hospitals, we have totally

independent medical staff at some of our other hospitals, where these are private practicing physicians who we rely upon to come to the hospital upon our call to provide care for our patients.

Those doctors are under stress as a result of the increased incidence of non-insured patients. The doctors know that when they come to the hospital to provide care, there is a relatively low possibility that they will get paid, or a high probability that they will not get paid. We, on the other hand, as a result of restrictions in federal law, are unable to provide monetary compensation for these doctors in many instances.

When I make reference to law or regulation, I'm not here to be critical, I'm just saying that as a matter of fact, those restrictions are in place. Here in the Washington area, we are experiencing something else as a result of the high malpractice insurance premiums, and that is the difference between jurisdictions. In Maryland, there is tort reform in place, it's been in place for a good many years, where there's a cap on noneconomic losses. There is no such cap in the District of Columbia.

We have doctors who will come to us and say, if I practice in the District of Columbia, my insurance

premium is tens of thousands of dollars more than it would be if I moved my practice to suburban Maryland. And yet we need those doctors to stay in the District of Columbia and provide for us.

There is no clear way for us to provide malpractice or professional liability insurance assistance to those doctors under the current state of law, and yet they are hurting, they are our life line.

Let me speak for a moment, too, about the market related to patients. Our hospitals provide care to emergency departments for six out of the seven hospitals. The rehabilitation hospital does not have an emergency room. By law, we are required to provide care for anyone who comes in the door or anywhere on our campus who requests care.

You would think that given that 40 percent or so of our admissions to some of our hospitals come through the emergency department that that would be a good thing. Once again, with a high incidence of uninsured patients, we can find that we have a high incidence of patients who become inpatients for whom there is little or no reimbursement.

It creates a substantial drain on the hospital resources. Yet, there is no way that we can avoid those responsibilities and so we provide care. We have had

instances, I don't know whether this is local to the District of Columbia or not, but we have had instances where individuals from other countries will come here on a visitor Visa, for the sole purpose of being admitted to a hospital. They are savvy enough to know that the EMTALA law requires us to provide care, and that care can cost hundreds of thousands or millions of dollars.

The last thing I would like to comment quickly on is technology. And it's been mentioned before in regard to, and I am going to pick on the cardiac services in regard to the drug eluting stents, which are coming online shortly. Think your way through it, there's two impacts of the stent. One is the intensity for open heart surgery, obviously, is a very high level, meaning the reimbursement level is high.

The stent, the use of the stent can eliminate the need for open heart surgery. So, you're reducing the number of cases that you could do of high acuity by the introduction of stents. The early stents, however, had a problem that they would cause a reblockage or a reblockage could occur called restenosis.

The new stent, the drug eluting stent, will go a long way, we are told, in reducing the probability or possibility of restenosis, meaning it will be used in more and more instances to replace open heart surgery.

So, we are reducing the number of cases we will do, and at the same time we will be paying more for the new stent than we paid for the old stent, as it was mentioned earlier. We're not being reimbursed on that level.

So, we have a double hit from this technology. It's great for the patient, it's great for you, it's great for our bosses, and others who need a stent, and that recently happened in our organization, where a blockage was discovered over the weekend, a stent was installed, the employee was back shoveling snow in February, two days later. Great news for us, but hard news for the hospitals.

We have in our system hospitals that have been providing care for up to 150 years, and they try very hard to do their very best in providing care at a reasonable cost. I hope, however, that the differences between the health care industry and other industries will be fully considered at the time of any action by the Federal Trade Commission.

Thank you.

(Applause.)

MR. SACKS: Good morning, I am Dr. Lee Sacks. I, too, want to thank the Commission and the Department for holding these hearings and giving me an opportunity

to present our perspective. Again, a number of similarities to the earlier speakers, but I want to really try to focus on Advocate Health Care and our marketplace in Chicago, because while there are national trends, there are a lot of things that are local in health care, and uniquely related to the market.

You can read my bio, but I think the thing that's important is I'm responsible as chief medical officer for quality and patient safety, as well as for all of our managed care contracting, so I interface with the economic marketplace every day.

Advocate Health Care is a faith-based, not-for-profit integrated delivery system with an intense focus on providing high quality, efficient care, and we're sponsored by two church bodies, the United Church of Christ and the Evangelical Lutheran Church of America. Although we're the largest provider of care in metropolitan Chicago, our market share is 14 and a half percent, a very fragmented market on the provider side.

For the last five years, we've been ranked among the top ten integrated delivery systems in the country. We have over 200 sites of care stretching all across metropolitan Chicago, including eight acute care hospitals, two children's hospitals, with nearly 3,000 inpatient beds. Our hospitals vary from small

community-based facilities to large tertiary medical centers that serve diverse populations from the inner city to the affluent suburbs.

We have four level one trauma centers out of a total of eight in all of metropolitan Chicago, and with that, the obligation to care for the uninsured and the underinsured who the emergency medical system brings to our door and all the high cost care that they require.

We also take care of many HMO capitated lives. Our latest count is 410,000 small community or large community. Our three teaching hospitals train over 600 residents and fellows, and produce more primary care physicians than any of the academic medical centers in the state of Illinois.

We have nearly 25,000 employees and as such are the second largest private employer in the state of Illinois, an economic engine of itself, and have 4,600 physicians on our medical staffs, nearly 2,600 of these doctors are members of our managed care contracting and care management joint venture, Advocate Health Partners. We also have a full-service home health company.

Advocate's mission is to serve the health needs of individuals, families and communities. We treat the whole person, mind, body and spirit, with high-quality, efficient health care. Our hospitals and the health

centers provide a comprehensive array of services and outreach programs designed to improve the health of the communities. In 2002, we provided over $28 million in unreimbursed Medicaid services, in contrast to the prior year, when it was $13 million.

Our charity care, healthy communities policies community benefit programs total $53 million in 2002 and served over a million people. An example of that is our baby advocate immunization reminder program. We have 62,000 infants enrolled and it serves to get all of their immunizations done in a timely manner up to the age of two. We've been recognized by the CDC and the local and county health departments for that.

Advocate has always had a major strategic focus on what we call clinical excellence. Clinical excellence is the combination of continuous clinical quality improvement and a focus on patient safety. We have a system-wide clinical outcome metric designed to identify the percent of our discharges that meet our needs, which means they're discharged alive, they haven't had a hospital-acquired complication and their admission was not the result of a re-admission for the same diagnosis within the last 30 days.

It's an indicator that we look at carefully, we compare our eight hospitals. In 500 of Advocate's top

managers have a significant part of their incentive program tied to improving that indicator. We have 11 system quality initiatives with measurable indicators, each of which has a physician champion associated with it who is a clinical content expert.

And we have a unique ability to incent participation in quality initiatives and adopting innovative technologies through our private physicians through Advocate Health Partners joint venture. In an example of an innovative clinical technology, in the next four weeks, we are going to go live with the EICU program. We'll be the fourth system in the country and the first in the midwest to link all of our adult ICU beds to a central monitoring station and provide 24/7/365 intensiveness coverage with sophisticated software.

We participate in national efforts to measure and improve quality. This fall we were the second system in the country recognized by the Joint Commission with a certificate of distinction for disease-specific work in asthma and congestive heart failure management. And our community partnerships have done innovative things like bring school-based health clinics to local high schools, improving access to care for adolescents.

Now let me talk a little bit about our local

market and the payor mix. For Advocate Health Care, 50 percent of our reimbursement comes from the government, and when you divide that piece of the pie, 35 percent is from Medicare and 15 percent is from Medicaid. Illinois Medicaid payments rank 46 out of 50 states, and the 46 is low, not high. There hasn't been an increase in those payments since the early 1990s.

Of the rest of our business, 47 percent is managed care, which means patients whose reimbursement is set by a negotiated contract. And 3 percent are commercial or self-pay. So, it's 3 percent of our business that we have the ability to set the price, and the reality is out of that 3 percent, a large part are self-pay, uninsured, who seek charity care or end up being bad debt.

In regards to managed care, today there are five managed care organizations that are the dominant payors for our hospitals. Those five hold 83 percent of our managed care volume, and one of those companies, Blue Cross/Blue Shield of Illinois, has 38 percent of our managed care volume, yet only provides 32 percent of the managed care revenue. You can draw your conclusion.

The other four companies are in the range of 6 to 16 percent, so none of them are even half the size of Blue Cross/Blue Shield. These same payors dominate

the Chicago marketplace with Blue Cross holding a vastly greater market share than any of their competition. In the HMO arena, since 1995, we have witnessed a tremendous consolidation. There were 25 payors in 1995, today there are only ten, and three of them make up 70 percent of the marketplace.

On the PPO market, again, Blue Cross/Blue Shield has 30 percent of the market in Advocate and across Chicago, and the top five payors in the PPO market bring 84 percent of the PPO business to Advocate.

We have tremendous competition, there are prominent academic medical centers, as there are seven medical schools in metropolitan Chicago, in other health systems, the Resurrection System, a Catholic system on the north side, Rush System for Health, the University of Chicago, Loyola University, Northwestern Memorial, ENH, three hospitals in the affluent north suburbs and Provina Health. Each of our eight hospitals has one or more strong local competitor hospitals in its primary service area, not to mention the non-hospital competition from ambulatory surgi-centers, imaging facilities, et cetera, virtually all of which are on a for-profit basis and many of which are owned by national chains with access to the public equity markets.

We've seen, despite increased volume in

outpatient services over the years, a continually eroding market share in outpatient. And based on the reimbursement from managed care companies and Medicare, outpatient floats the ship. It is the profitable business, and that continues to be picked away by this type of competition.

Our hospital costs are rising for a variety of reasons. You've heard many of the specifics from the prior speakers. We're seeing unprecedented increases in patient volume, most of our facilities are running at or above full occupancy, certainly Monday to Friday. It's due to an aging population, an increased demand for discretionary procedures. There's fewer roadblocks to health care from health insurers as there has been a backlash to managed care restrictions.

All of this leads to the shortages of key workers that you saw in some of the slides earlier, which results in greatly increasing wage inflation and the expense of using agency nurses and paying overtime. What I've taken to tell our managed care payors when we negotiate contracts is volume is no longer a blessing. The last patient in our door is our most expensive patient because we're paying overtime, we're paying an agency three times the usual hourly rate to get a nurse to staff that shift.

Increased professional liability premiums. Most of the press has focused on the physician aspect. The hospitals are picking up a disproportionate share of the increased premiums. Our hospital premiums doubled from 2001 to 2002, and in addition, we are now self-insured for the first $15 million for every case with no lid on the number of cases, because nobody wants to provide reinsurance below that level.

We're in one of the crisis states and two of our neighbor states have tort reform and we're seeing a migration of physicians into Indiana and Wisconsin, and leading to access problems.

Increased supply costs, the need for capital investments, the regulatory burdens. We're dealing with HIPAA right now, we all went through Y2K corporate compliance, mandated health benefits both in terms of a provider, but as well as a large employer driving up our costs of health insurance.

Disaster readiness, we haven't seen one extra nickel from anybody for disaster readiness, but we're there if the need arises. And our need to invest in technology and equipment to enhance patient safety.

Hospital margins have been declining industry-wide. In 2001, they were slightly above 4 percent. For Advocate, it was a record year, 2.59

percent. In 2002, our operating margin dropped to 1.8 percent, despite significant cost reductions and efficiencies, $20 million savings from our system-wide supply chain initiative, centralized information systems, administrative services that have taken real dollars in the tens of millions out of our expense structure.

Those narrow margins don't allow us to provide the needed reinvestment in clinical operations, facilities and technologies. Outside experts have told us that you need a 5 percent operating margin average year after year to do that. We're not even halfway there.

Investment income and philanthropy offset our inadequate operating margin until the year 2000, and probably gave us a false sense of security, but everybody knows what's happened in those arenas, and no longer can we count on that for capital investments.

Medicare and Medicaid, we all know what's going on there, and certainly we're not going to see the increases in Illinois Medicaid when the state has a $5 million budget deficit, and Medicare increases are going to be less than the rate of overall inflation, which is way less than the rate of health care expense inflation.

And then let me close with a couple of comments

about what I'll characterize as unreasonable demands from private payors. In many cases, the payment rates fail to cover the costs or certainly fail to provide the ability to invest in needed capital improvements in patient safety initiatives. They benefited from the 90s before Medicare reductions and with robust investment income, and now they're complaining when they're being asked to pay their fair share.

Also, when economic incentives that aren't properly aligned through a clinically integrated organization that's focused on quality, such as our Advocate Health Partners, those incentives can tend to limit care and impact adversely on quality outcomes. The misuse of capitation, the sending patients to freestanding centers, where physicians are investors, and on and on and on.

And questionable negotiation tactics from payors. Blue Cross/Blue Shield of Illinois is exempt from prompt payment laws in Illinois because they're magnanimous. They provide what they call UPP, or university periodic payments. Every Friday they wire transfer to every hospital that has a contract an estimated payment based on the average of the prior three months payments. They've been doing this for a long time as a way of keeping some marginal hospitals

afloat, especially when interest rates are high.

You know, that's not usually an issue for Advocate, but as we headed into our renegotiation for 2003, one, in order to negotiate, you have to send a contract termination, otherwise the contract just rolls over in an Evergreen clause, and they win, because there's no increase. The day we sent the contract termination, they sent us a note saying that they were immediately suspending our UPP payments, even though the contract said they needed to continue until year end.

We received six and a half million a week in UPP payments. In the six weeks that transpired between that termination and signing the new contract, we were out approximately $40 million in cash. At the same time, this was the third quarter of 2002, we all know what happened in the stock market, our portfolio went down another 10 or 15 percent, and on September 30th, we had to make a $50 million cash contribution to our retirement plans to make sure that they had adequate funding. Again, tied to losses in investment income.

Suddenly an organization with a billion dollars in assets and a AA bond rating was looking at our day's cash on hand and wondering whether we would be able to renew our line of credit which came due at year end, and it's not a surprise that we capitulated and signed a

contract on November 15th. We got an increase, but it certainly was far less than all the pieces that were on the table.

And that was a message that was clearly sent to all of the other providers in the Chicago market, if they could deal with the largest one this way, how are they going to deal with organizations that don't have a AA bond rating?

Health care is a complex enterprise. I urge all of you to take the time to really understand all of the various market dynamics. Is our delivery system, and by our, I really mean the United States delivery system, is hanging by a thread, and a little push in the wrong direction could cause it to fall apart. It's critical to encourage collaboration and efficiency between physicians and hospitals and between providers and payors so that we can enhance quality and enhance value for our patients.

Thank you.

(Applause.)

MR. SHELTON: Hi, my name is Denny Shelton, I'm the chairman and CEO of Triad Hospitals. We own and manage 49 hospitals in 17 states. We also manage 208 non-profit hospitals in 43 states, ranging really from all sizes, rural to those in small cities to urban

markets as well.

There's been a lot of talk today, and I know there's been a lot documented in recent weeks and months just about the rising cost and the concerns about malpractice insurance and how to handle additional regulatory requirements such as HIPAA and first lines of defense, the growing labor pressures that we see in this industry, but I thought what I would do is try to take an even more macro look at kind of what the state of the health care is in this country.

I should tell you that I am a hospital administrator, that's all I've ever done. I've been in health care for 27 years, started as a hospital administrator and been in health care solely as an administrator for 27 years. And when I look out across the country with the organizations and the communities that we work with, you know, I'm concerned about what's going to happen. It's really more of a national health policy. It's really a public policy issue, I think, that we as a country are going to face over the next five years. And something that I don't think that we faced, I know we haven't faced in my lifetime, and probably most of you either here listening today, and that is we are not going to have over the next five years enough beds and physical capabilities to meet the

health care needs of people in our country.

This is caused by declining capacity, and also because of increasing utilization as our population continues to age, and we all know that 80 percent of that health care dollar is in the last five years of life. When you have that taking place at a time when you have so many hospitals in this country in trouble, it is an alarming issue that I think that the Justice Department and the FTC need to be leery of when thinking about how to help regulate this industry from an antitrust standpoint.

Today there are about 4,900 hospitals in the United States, about a third of those hospitals are losing money. About a third of those hospitals are what I call financially distressed, meaning that they cannot recapitalize themselves. They're profitable in the sense that they have positive cash flow, but they do not have enough cash flow to competitively stay active and stay engaged in the communities that they serve.

They cannot replace equipment, they cannot upgrade equipment, they cannot expand services, they cannot meet that growing utilization that we're seeing in this country. It's becoming a system of have and have-nots and that's the way I look at it. Most of the people who are sitting here today, including ourselves,

are mostly on the have side.

We either have a network of facilities or regional organization and we have cash flow that's strong. We have access to managed care contracts or contracts with insurers, and that's really the name of the game in our industry. It's about leverage. You have to have enough access points, you have to have the right facilities where the consumer demands your facility or facilities be in their health plans. That's called leverage.

A lot of people don't like to hear that, but we are purely a leverage-driven industry. Either we get the right facilities and services and we network it appropriately and we get leverage with the payors so that they cannot sell a contract in the market without our facilities in their health plan, if we do that, we have great leverage, we become profitable, we become well capitalized and we become one-third of those hospitals in the United States who can effectively compete.

Unfortunately, the other two-thirds of the hospitals in this country, and the vast majority of hospitals in the United States, are community-based hospitals. They're not major tertiary or teaching hospitals. They're community-based hospitals. That's

the vast majority of health care and that's the front line of defense, providing health care to people in this country.

Most of those facilities are in trouble. If they're not making money, if they're losing money or if they cannot recapitalize themselves, if they don't have the right number of facilities, if they can't keep up competitively, they have no leverage. And when they go to contract for services, they bottom feed. They basically are taking whatever rates they can get, and in many cases, they're not even included in contracts, they're excluded.

So, they do not have the abilities to replenish themselves and to meet the growing needs of the communities that they serve. They, in essence, are leveraged out, and they do not have the abilities to participate.

I expect that what we're going to continue to see is closures and consolidation in this country. I think we're on our way to 200 to 300 hospitals closing in the next year to two years. We're going to continue to see that capacity decrease. I think that's the landscape that we live in. I think there are pressures from a number of different sides, but I'll tell you, I think that this is a critical issue for us in this

country.

America's community-based hospitals meet the needs of the people in their community, and one of the real problems that we have is that while we're being whipsawed on rates and labor and all these other issues, these cost issues, we're also faced with the fact that we are being put in line to take care of a growing under-insured population.

A lot of our people fall through and fall to a net and are captured by Medicaid, but a great number of people in the communities that we serve don't have adequate insurance, or they do not have the abilities to pay for the health care that they are provided. America's community hospitals take care of those people.

I know in our organization, a third of our hospitals are sole community providers. If we don't take care of the health care needs of those communities, they don't get health care. So, we have a moral responsibility, a social responsibility to take care of these people, as well as many legal responsibilities to do so as well.

We're also being whipsawed by the fact that we have a number of specialty facilities that are cropping up across the United States. Special services, whether they're orthopedics or cardiology or women's services,

and the wave, the new wave are short-term-stay surgical hospitals, where people stay one to three days, and they may be 10 to 20 beds, but all of these pressures that are coming, are coming at the expense of those community hospitals. Because when it comes down to it, it's kind of like what Ralph said earlier, is that when somebody needs care for that automobile accident or that gunshot wound or when that woman shows up at our doorstep at 3:00 in the morning with no prenatal care and is looking for help and nobody has ever seen the lady and knows nothing about the condition of the child, the community hospital is taking care of those patients.

And what's happening is, is the better paying, selective patients are being usurped off into these specialty facilities, and it is adversely affecting that two-thirds of the facilities that are already in financial trouble. It has an effect on all hospitals, but I am greatly concerned about the two-thirds of the facilities in this country that are losing money or financially distressed, and they cannot afford to lose that paying business.

Now, whether we like it or not, we are also -- people don't like to use the word leverage, people also don't like to use the word "cost shift," but we are an industry of cost-shifting. We have to have paying

patients to cover the bills for the people that we take care of that we don't get paid for, and now in the growing under insured population that cannot pay for the full bill for services that they receive.

So, to be able to have an organization come in and stay open 9:00 to 5:00 Monday through Friday, and take care of the paying patients and do a good job, it's not a question of quality of care or services, but we are killing America's community-based hospitals. I sit here and I tell you that because I put our organization in the one-third. We're the haves, and we are able to spread our risk across a broader geographical base, and so I have hospitals that lose money, I have hospitals that make money, but I spread that risk across a broader base.

The majority of hospitals in the country don't have that luxury. They do not have the abilities to spread that risk. They serve a limited geographical area, and if they fall into the have-not category, or even into the have category and they're sucking off business into these specialty facilities, it is killing those hospitals.

And what we're going to have in this country, and I have said this for the last six months to a year, is over the next five years, we're going to end up not

being able to take care of my mom and my sisters and my kids and yours. We're not going to be able to do it, because American hospitals are not going to be financially able to grow, expand, and to meet that need. And the need is not the usurping of those specialty high-paying services, it's meeting those fundamental health care needs that we as Americans have come to expect and to demand. And we want health care on demand.

So, we have got to address killing off these hospitals. And if you amount to have competition in marketplaces, I can tell you, I'm working in five markets right now with the two-thirds that I just mentioned, Fairmont, West Virginia, Irwin, North Carolina, Palmer, Alaska, Eugene, Oregon. I'm working with markets across the country, non-profit organizations that are financially going down the tubes because they cannot compete with what they face in their local marketplaces. And in many of those markets, you want competition. You want at least two or three healthy health care providers, and that's what's at risk if we don't do something.

I'll tell you this: I was up on the Hill about two weeks ago, and I was talking with several legislators about we can't keep going back to Congress

and asking for more money, but what we can do is ask for some relief in terms of making sure that American health care system is strong and competitive, and these are some of the things that you could look at. I think you need to be looking at specialty facilities and services, who owns them, how do they work, and what are they doing to kill the infrastructure of American hospitals, and too, I think you need to be looking at making sure that certain health care facilities are not punished by not having leverage with the insurance companies and truly becoming nearly bottom feeders or at least asking for a hand-out from the insurers just to stay in a health plan.

And I think that those are real issues that need to be addressed. And I know you guys are looking at some of these things and you've got some other meetings coming up where you are going to address some of these issues. I am fascinated by Little Rock, Arkansas. I do business in Arkansas, I think Little Rock is a great case study for you, and I think that's going to be very revealing.

I will tell you a story that I was contacted by a couple of businesspeople in Little Rock about two weeks ago, very prominent business people, who are concerned about having only one health care system and

one major insurer in their marketplace, and wondering how they're going to be -- how is there going to be competition in that market. This was an unsolicited call from businesspeople, worried about what's going to happen in their markets. I'll be interested to find out how your look at Little Rock happens.

Let me just close by saying that we need to protect American hospitals. We need to protect this health care system, and the first line of defense are our community-based hospitals, and I think these are issues that need addressing and are worth our attention, and that's why I'm pleased to be here today to at least make my thoughts known.

Thank you.

(Applause.)

MR. HYMAN: I think what we're actually going to do is take about a five-minute break, and then we'll bring up the speakers that are next on product market. The members of the hospital panel that are able to stay and wish to participate are welcome to do so, and then we'll continue in about five minutes.

(Whereupon, there was a brief pause in the proceedings.)

MR. HYMAN: We would like to start again, if people could take their seats.

We're going to continue now and the way we're going to do this is to go from my right to my left. And first up is Carol Beeler, who is Vice President of Operations with Health Inventures and is speaking on behalf of the Federated Ambulatory Surgery Association. Seated next to her is Seth Sacher, who is a principal at Charles River Associates and an alumnus of the Federal Trade Commission, and then Jack Zwanziger, who will bat clean-up, so to speak, who as professor at the School of Public Health at the University of Illinois in Chicago, and also a well-known scholar on the areas we're going to be talking about, which we're now going to turn to defining product markets for hospitals. Seth and Jack will have a longer period of time with which to speak than the individual participants from this morning, and then we'll kick around the subject of defining product market hospitals. The trains here run on time, so we will break at noon for an hour and a half for lunch and then commence promptly again at 1:30.

Carol?

MS. BEELER: Thank you. Good morning. I am Carol Beeler, Vice President of Operations for Health Inventures, a company that develops and manages ambulatory surgery centers, known commonly as ASCs. In 1984, I joined the industry as a nurse manager, and over

the last two decades have moved from my clinical care provider to a manager.

Today I oversee 12 surgery centers providing more than 65,000 procedures a year, all of whom take Medicaid patients. I am here today as past president of the Federated Ambulatory Surgery Association, or FASA, the nation's largest association of ASCs. FASA is a full-service association representing the interests of surgery centers, their employees, and the physicians who provide the services.

Most importantly, we strive to represent the interest of patients who have their surgery performed at an ASC. To enhance the quality of surgery centers, FASA was a founding member of the first ambulatory accrediting body, started the first nationwide benchmarking project and more recently developed a program in which staff can pass an examination and are recognized for their expertise in the operation of surgery centers.

It is a privilege to share with you some basic information about this industry. Comparatively speaking, the surgery center industry is quite young. The first multispecialty ASC opened in Arizona in 1970. After an anesthesiologist heard from his neighbors about how much they were having to pay for relatively minor

surgical procedures.

That anesthesiologist set out to develop a model of health care delivery that was safe and cost-effective, which became the first surgery center. Today, there are more than 3,300 facilities providing services in all 50 states. More than seven million procedures were performed in 2002. Stated most simply, ASCs are facilities that provide surgery not requiring overnight stay.

There is a great deal of variety in surgery center organization, structure and services provided. Some are small, with only one operating room, while others are quite large, with more than eight operating rooms. The average ASC has three operating rooms. The average annual volume is between 3,000 and 4,000 procedures. Most are locally owned and small businesses.

FASA data indicates that 61 percent have 20 or fewer employees. The industry is almost equally divided between those centers that provide services in only one specialty, called single-specialty ASCs, and those that provide services in many specialties. Half of the services provided in surgery centers last year involved two medical specialties, ophthalmology and gastroenterology. Orthopedics and gynecology are other

specialties that make significant use of surgery centers.

Although a few surgery centers are owned by hospitals, physicians have some degree of ownership in most ASCs. Some are totally physician-owned, others are physician joint ventured partners with private or publicly traded companies, still others are physician/hospital joint ventures. Hospital investors are either for-profit or not-for-profit.

In facilities totally owned by physicians, one physician may have complete ownership or a number of physicians may each have a percentage. Being an investor is not a prerequisite to performing surgery in a surgery center. In fact, in most successful ASCs, a significant volume of procedures are performed by non-investor physicians.

Such physicians are attracted to this environment by high quality care, patient satisfaction, convenience and efficiency. Like all health care facilities, ASCs and their surgeons are subject to federal and often state antikickback laws.

To encourage physician investment, the inspector general of HHS established an ASC safe harbor saying, "Our regulatory treatment of ASCs recognizes the department's historical policy of promoting greater

utilization of ASCs because of the substantial cost savings to federal health care programs when procedures are performed in ASCs rather than in more costly inpatient or outpatient facilities."

Ambulatory surgery centers provide a safe environment for the performance of surgery. To receive Medicare payments, the facility must be certified by Medicare. This is based in part on the physical inspection of the premises, either by a state surveyor or a private accrediting body.

Medicare certification requires compliance with comprehensive set of standards concerning surgery, staffing, medical equipment, provisions for transference of patient to a hospital in case of emergency, and all requirements of state law. Collectively, these requirements are called conditions of coverage.

Like hospitals, surgery centers are primarily regulated by the states. Many state regulations mirror the Medicare condition of coverage. Independent of external controls, ASCs have made a concerted effort to enhance those elements of patient safety in order to re-assure patients and physicians when they have some type of trepidation about receiving and providing services at the surgery center.

Active physician participation and ownership and

management contribute significantly to the quality of services. Surgery centers have very low rates of infection, complications, and medical errors. Data from liability insurers show ASCs have a low instance of claims.

In addition, ASCs increasingly seek accreditation from one or more of five bodies that accredit ambulatory service centers, such as joint commission and the Accreditation Association of Ambulatory Health Care. These accrediting bodies require that the facility maintain standards that go beyond the requirement of state regulation and Medicare conditions of coverage.

Surgery centers continue to seek this additional seal of approval to demonstrate to the public the high quality being delivered. In response to the questions posed by this hearing, surgery centers often compete directly with hospitals in the provision of outpatient surgical procedures, just as hospitals compete with each other.

Many procedures that 30 years ago were so invasive as to require overnight or a stay of several days in the hospital now can be provided by an ASC. This has come about as a result of development of new technology and techniques for both the surgery itself

and anesthesia so that patients can be discharged shortly after surgery.

The outpatient surgery market has three competitors: Ambulatory surgery centers, hospitals, and physician offices. However, the extent to which the same services are offered in different settings varies greatly. For example, a single-specialty ophthalmology ASC will compete with a hospital outpatient department for this one specialty. A multispecialty surgery center will compete with a hospital outpatient department more extensively.

But this is not the complete picture. Surgery centers also compete with hospitals in respect to some procedures that are now performed on an inpatient basis. For example, many hospitals provide rotator cuff repair and laparoscopic removal of gall bladder on an inpatient service. Throughout the country, service centers have excellent results in providing these procedures.

ASCs may face significant barriers to competing on an equal footing with hospitals. Many health insurers will not cover surgical services provided by surgery centers.

We are also aware that some hospitals negotiate with managed care companies to discount their price for their inpatient services in return for exclusive

contracts for the outpatient surgery services. Economic credentialing or the use of economic criteria unrelated to the quality of care or professional competency in determining an individual's qualifications for initial or continuing medical staff membership or privileges has been used by some hospitals to deny or restrict medical staff membership or privileges to those physicians associated with a competing ASC.

Such activity is contrary to the whole purpose of physician credentialing. The assurance of quality of care.

Finally, state certification of need laws are intrinsically anticompetitive and have been used by interested parties in a number of states to restrict competition in the outpatient surgery market.

In closing, the ambulatory surgery industry has thrived in the United States because it has provided quality surgical care at a reasonable cost with a commitment to customer service. This success has occurred despite having to overcome significant obstacles. The industry has played an important role in providing incentives to move surgery from an inpatient to an outpatient setting, improving health, increasing patient productivity, and saving costs.

Surgery centers will be able to continue to

compete with hospitals and reduce the aggregate cost of surgical services, as long as the health care insurers cover their services and as long as insurers do not enter into exclusive contracts for surgical services with one or more hospitals.

Thank you for this opportunity to speak to you today.

(Applause.)

MR. SACHER: In my talk this morning, I am going to focus on three general issues. First, I want to focus on some general conceptual issues in hospital product market definition, and for those of you that are not antitrust practitioners, the standard product market definition that has been used in most hospital cases has been to define some kind of cluster of inpatient services. And then I want to ask two basic questions, and I'm going to address those questions, I don't know if I'm going to answer them, but I'm going to address issues in those questions.

First, is that standard product market definition too narrow? Is there some reason to expand that definition to incorporate other kinds of providers or other kinds of services? And then I want to ask the converse question, is that standard product market definition too broad? Is there some reason to break

apart that cluster?

There are numerous complexities involved in applying the guidelines to hospital services. Well, I guess most antitrust practitioners in the room are going, well, duh, there's always complexity involved in product market definition, but I think when it comes to hospital mergers and health care matters in general, product market issues are something of a forgotten issue.

Geographic market, tons of people are addressing that issue, particularly because so many of the cases have turned on geographic market definition. Competitive effects is always a hot issue in any kind of merger. Efficiencies is the other hot issue. People don't think too much about product market because product market has been kind of settled, as we'll see in a moment of the health care merger decisions that are out there. However, I think there are still a lot of subtleties in hospital product market definition, and as the Commission and the Department seek to reinvigorate its hospital merger enforcement program, I think it pays to be aware of those and not be too complacent regarding those issues.

Where does this complacency stem from? I think there are basically two sources. One is the fact that

hospitals are multiple service providers. I think there are two ways of looking at that, it's not really appreciated in court decisions or in the literature, which I will go into in a moment. And the other is the idea of consumer heterogeneity. Again, the consumers that patronize the hospital have very different medical treatment needs, and then of course there is the issue that bedevils all health care antitrust, the fact that the people receiving the service are not necessarily the people paying for the service.

Getting back to the issues of hospitals being multiple service providers, providing numerous services. As I said, I think we can look at this in two different ways, and there has been some confusion, I think, in the literature, and in court decisions. On the one hand, a hospital combines a whole bunch of inputs in producing a particular output. It takes diagnostic tests, drugs, medical devices, ancillaries, room and board, combines all those inputs to produce some kind of medical service, and in that sense, it's combining a bunch of multiple goods into one output.

On the other hand, there's also numerous services in that the hospital provides numerous kinds of treatments. Treatments for heart disease, cancer, obstetrics, orthopedics, what have you.

How to deal with this fact that hospitals are multiple service providers, that they deal such a multiplicity of services, and the proposed solution, the solution that has been generally used, is the idea of a cluster market, that somehow we're going to combine all these different services, all these different treatments into one cluster market, which has generally been defined as some form of acute care inpatient services. And there basically have been two rationales for that.

Again, one is the concept of complementarities in demand and/or supply, and I think that this rationale is valid when you tend to look at a hospital product markets in terms of the hospital's combining a bunch of services to produce a particular input. In that case, the monopolist provider, the hypothetical monopolist, which is used in the market definition exercise, can raise prices 5 percent of that bundle of services, and the payor is not going to go out and source -- is not going to source nursing and room and board and diagnostic tests from a whole bunch of places. So, in that sense, I think it's quite valid to consider a hospital cluster market when you're talking about a cluster of inputs to produce a given output.

On the other hand, when you tend to view a hospital as being a combination of all these different

treatments, a hospital providing, you know, again, heart disease, obstetrics, et cetera, et cetera, I think that idea of complementarity and demand of supply holds a little less rationale, a little less weight.

First of all, these things are not demand-side substitutes. A patient seeking heart treatment cannot substitute obstetrical treatment for that. Someone seeking orthopedic treatment cannot substitute a gall bladder operation. So, in that sense, it's not necessarily valid. And then of course on the other hand, it might be valid from the supply side, the idea that a hospital that is providing a certain group of services can very easily substitute in providing another group of services.

But that may not always be the case, that's very much an open question and perhaps something that our panelists, our actual practitioners can address later today, but it's not always clear to me. Okay, if you're talking about a disease, perhaps if a hospital is skilled at treating one kind of disease, it may be fairly simple for them to substitute into another disease, maybe they just have to purchase a different array of antibiotics.

On the other hand, if you're talking about a hospital that does not treat cancer, there may be some

very real capital investments involved in switching into cancer treatment. Again, these things are going to be very fact-specific, but to the extent that maybe our panelists can make any kind of general statements about those, those would certainly be useful.

On the other hand, the complementarities argument may have some rationale when you take the viewpoint that the actual payor is not the patient. In that case, there may be some kind of a rationale for this argument of using the cluster market based on complementarities in demand, in that case, the payor may be seen as contracting over this whole range of services, and since he has to contract for this whole range of services, he can't really break apart the cluster. And that might be one rationale for arguing for a cluster market. And my coworker Greg, who is going to talk this afternoon, has written about that and argued about that in other contexts as well.

Again, that is also, I think, going to be a fact-specific issue that you're going to have to address. To what extent is that actually the case? To what extent do payors in a particular region have to contract over the entire cluster? To what extent are they able to break apart that cluster? And again, I think there are other sessions that are going to be on

contracting issues, and this is certainly one to address, to one extent, can people break apart the cluster, to what extent are they breaking apart the cluster and how can we address those issues.

The other rationale for using the cluster market is one of analytical convenience. The idea here, again, is that it's just there are so many different individual services, how to deal with those, that there might be, you know, we can economize on scarce enforcement resources, all of the work of the Commission, the Department, I know there are particularly a lot of times when those resources are scarce, and I think that this argument holds water to the extent that competitive conditions throughout the cluster are the same.

If patient flows for the various services, the various demand-side services that people come in and use, if those are similar throughout the cluster. If the Herfindahl index, which is what we use to measure concentration, what we use to measure the number of competitors in a particular market, if that is similar throughout the cluster, then this analytical convenience argument is definitely a valid one, but again, I think, and I am going to talk about a little bit more later, in some work I have done with Louis Silvia, who is assistant director in the Bureau of Economics, that

again is a very much empirical or fact-specific issue that has to be addressed.

I know the people in the cheap seats probably can't see this, but this is just a table that I reproduced from my paper with Louis Silvia, and even people that hated the paper seemed to really like this table, so I figured I will include it here. And basically it goes through and just lists all the major, or actually all the hospital merger decisions taken by the agencies that have actually reached the courts, and just lists briefly, summarizes some of the product market issues that were involved in each of those decisions.

I think it's kind of neat, because it actually shows, you know, as I said at the beginning, there was this sort of standard product market definition, and that this is some kind of cluster of inpatient services, but in actuality, there actually has been something of an evolution of that definition over time.

If you actually look at some of the earliest decisions, the AMI decision and the HCA decision, the actual product market defined was not acute care inpatient services but all hospital services. They actually included outpatient services provided by hospitals, but not outpatient services provided by

freestanding ambulatory surgery centers.

And if you read the decisions, actually there's some kind of statement in there that since the hospitals competed on this whole cluster, that you somehow included the whole cluster. And then if you look at the HCA decision, there's actually some discomfort on the Commission's part with that, and they kind of say, well perhaps maybe inpatient should be a separate market, but we're going to go with the ALJ's decision on this for now.

Then there's, of course, the Carillon decision and the Roanoke decision, and that, of course, stands apart because that is the only decision to actually put outpatient care services into the market, it stands alone on this.

And then we kind of chug along for a while and we reach this acute care inpatient services market, and that seems to be the standard market definition for several cases. But then if you look at some of the most recent cases, there's actually been a further evolution. There has actually been a tendency to break apart the cluster somewhat, to divide it from an overall acute patient services product market to -- let me step back. There also is a one, like an overall acute care inpatient services market, but then there's also been a

tendency to define within that a primary care inpatient services market. I think that's most clear in the Butterworth decision, but certainly has played a role I think in about four of the last five major merger cases that have actually been brought by the agencies that have reached the courts.

Again, the idea here being that there are different propensities to travel for some of the services within that cluster, that people will travel a great distance for some services, but not those services that are only within the primary care inpatient services cluster. So, there actually has been something of a tendency to move towards breaking apart the cluster in some recent decisions, or some recent cases brought.

Just by way of looking at some background now, I just want to address the first of my two questions. Is the standard hospital product market definition too narrow? I think the first major question that has to be addressed there is one of outpatient services, and as we saw a second ago, outpatient services, with the lone exception of the Carillon decision, have always been excluded from the product market in all cases, and generally, although sometimes the parties will try to bring outpatient services into the market, even sometimes the defendants in the cases will concede that

outpatient services are not a part of the product market in hospital merger cases.

Again, the seminal decision, the seminal case talking about why outpatient services are excluded is Judge Posner's decision in the Rockford case, in which he says that, yes, there has been this evolution over time where many services that formerly could be provided on an inpatient basis are now being provided on an outpatient basis, but the reason that they're shifting from an inpatient venue to an outpatient venue is not because of these small kind of noncost justified price increases that are the concern of antitrust but rather because of technological change, that once a particular service can actually be performed on an outpatient basis, it will be. It will quickly switch from the inpatient forum into the outpatient forum. The economic pressures, the managed care payors, the government through its public payors, will force that procedure from the inpatient venue to the outpatient venue, and that there's not really a margin of decision between the two.

Again, I guess we can have our panelists and others address that, that certainly seems to be something the Commission is interested in, to the extent that still holds water, that's certainly something that

has become very standard in product market definition cases. In hospital merger cases.

Secondly, other exclusions that -- other kinds of providers that have been excluded, include nonacute care patient providers. Here I think about let's say rehabilitation hospitals, nursing homes, chronic disease hospitals, and these have generally been excluded on the basis of there being: A) little demand side substitutability, people with the acute care needs in a hospital certainly could not turn to these to satisfy their needs; and B) the idea of little supply side substitutability as well.

The idea that -- and particularly I guess Certificate of Need laws would be a major barrier in most cases, even if these hospitals had much of the infrastructure in place, Certificate of Need laws would certainly be a major barrier for them.

Another exclusion is that of veterans hospitals and active military hospitals. Again, here, if we're looking at anticompetitive behavior among private hospitals, the extent of the patient base that consists of patients that could switch from these private hospitals to a veterans hospital or an active military hospital is just too small to really defeat that hypothetical price increase that we talk about.

Is the standard hospital product market definition too narrow? I don't think so, personally. I don't think that -- at least the evidence that we've seen suggests expanding that product market to include the outpatient services or the other exclusions. Just stepping back to on outpatient services a little bit, when I was here at the Bureau of Economics, we certainly looked for any kind of economic evidence, any kind of economic literature on substitutability between outpatient services and inpatient services, and I think, you know, there were some papers circling around the bureau from like 1969, 1971 that addressed the issue. There really isn't a lot of research out there that I know about on the issue, and certainly it's much -- certainly something that would be very called for. There are papers that you can kind of maybe surmise that they kind of look at some kind of general issues surrounding substitutability of outpatient for inpatient, but there's not really much literature really addressing the issue.

Is the standard hospital product market definition too broad, and one issue there is that of specialty acute care hospitals. I heard our panelists this morning talking a great deal about specialty hospitals. They do come up from time to time in the

cases that are considered by the Commission. These include things like women's hospitals, children's hospitals, and in many cases they have been included, but it definitely presents challenges for the standard inpatient cluster approach.

You know, if I'm just going to include all of those beds, all of the women's hospitals beds, it might be a large hospital, it might make a merger that -- it might make concentration not look particularly high, but on the other hand, it may be very high in terms of particular services that are outside the scope of what that women's hospital or that children's hospital can actually provide.

On the other hand, perhaps you decide to exclude them, perhaps you consider a merger to be problematic based on high concentration levels, but then there might be issues to consider about payors, what can payors do? Can they discipline the hospitals by perhaps shifting a large percentage of the patients that they currently send to these broader acute care hospitals to some of these specialty providers.

So, there are definitely challenges involved in acute care hospitals, challenges to the standard broad product market approach that have to be considered.

And then, the heart of what I want to talk about

is just the overall hospital product market definition. Is there some reason to perhaps break apart that cluster to look at narrower treatments within that broader cluster? And I'm going to talk about some work that I again did with Louis Silvia back in '98, and looking at that particular issue.

And, again, definitely we're looking at things that are not demand side substitutes. These different kinds of treatments are not demand side substitutes, and as I said before, they might not even be supply side substitutes. So, what does disaggregation necessarily mean? What can it possibly mean for the market?

And what Louis and I did, we focused on two regions in California, San Luis Obispo and Sacramento. We tried to get two different types of regions, San Luis Obispo was an area with small hospitals, I believe there were about -- there were five hospitals, four independent players, and this area is of particular interest to people here at the Commission: A) because it was the subject of a consent in 1997; and B) because it was also the subject of the Commission's very first hospital merger decision in the AMI decision, in which that involved the same two hospitals in both instances.

So, what we did is we looked at how the analysis might have differed if the standard cluster was used and

if various categories within the cluster were used. And then we just looked at Sacramento, this was an area that had larger hospitals offering a broader range of services, and there we didn't consider any particular merger, but just looked at how concentration and patient flows might differ between the cluster and as opposed to the individual service categories.

The data is from 1993, it uses OSHPD data, the California Office of State Health Planning & Development. As many of the health care practitioners in the room know, California has wonderful data. A very disproportionate percentage, probably, of health care studies in this area take place or are focused on California because California does have such wonderful data for doing these kinds of analyses.

The hospital cluster was disaggregated using Zwanziger service categories, Professor Zwanziger wrote a paper, and in that paper, they broke -- they took the DRG, the kind of standard classification system used by many payors, used by Medicaid payors to classify patients, they looked at the various DRGs within a hospital, and basically saying that each of these DRGs was a demand side market unto itself, there wasn't really substitutability from the patient side among the DRGs, is there any way that we can group those into some

kind of broader groups.

And what they did is they looked at -- they emphasized the physician as the key input to the hospital treatments. They said if a physician can treat a particular -- if a physician can treat a particular group of DRGs, then let's combine that into one service category, and again, it was the least specialized physician that could treat a particular group of DRGs. So, if I'm a general practitioner and a general practitioner can treat at least 40 DRGs, let's combine those 40 DRGs into one service category.

If it's a heart surgeon, this heart surgeon can treat ten different -- it's the least specialized physician that can treat these ten DRGs, let's combine those into another service category. And again, Professor Zwanziger can correct me, I don't think he was advocating these as being necessarily distinct markets by any means, just I think it was a useful categorization and certainly one that we relied upon for our paper.

And, again, it's not necessarily clear that just because a physician can treat these different DRGs that a hospital can substitute between those as well. But again, it's just a marker and it's very useful for our purposes. And, again, I'm not advocating these as being

particular product markets either, I don't know what the answer is to that.

The first observation that emerged from our analysis is that the -- it took a -- not a very large amount of these service categories to get to a very high percentage of the hospital's admissions. In San Luis Obispo, it took 17 of these service categories to get to 91 percent of the hospital admissions. In Sacramento, it took 18 of these categories to get to over 90 percent of the admissions as well.

Again, that was an interesting finding, and I think it's something that, again, that further consideration would be wise. This suggests, to me at least, that part of the analytical economy argument for having the cluster market may be somewhat misplaced. I don't think 17 or 18 categories is necessarily overwhelmingly burdensome, especially I think if some of the kinds of antitrust cases that are brought nowadays that are so data intensive, Staples and even the recent cruise mergers investigation, I think that, you know, those kinds of things are certainly not beyond the kind of analytical power that we have here in the Bureau of Economics or in the economists in the Economic Analysis group over in the Department to handle.

Also interesting was that basically about the

same categories of both accounted for the top 90 percent of admissions. There was a couple of exceptions, certainly in both obstetrics was by far and away the largest, and then I think it was followed by general surgery, and orthopedics.

So, what do we do? We compare patient flows and concentration for the entire cluster and for these top Zwanziger service categories. I want to point out, as I'm sure we'll come across later this afternoon, numerous types of evidence are used in merger matters to assess geographic markets. Patient flow data is one of those inputs, and basically there are two kinds of ratios that people look at, and Elzinga and Hogarty, who wrote the seminal article on this back in the mid-seventies, they have some fancy names for it, I won't trouble you with those now, I'll just call them the outflow ratio of the patients in a particular area that received hospital treatment, how many stayed in the area to obtain that treatment.

In-flow rate, of the hospital services provided by hospitals in a particular area, how many were to patients that reside in that particular area. If these ratios are above 75 percent, Elzinga and Hogarty would say that it is weakly -- the particular area can be weakly categorized as an antitrust market, if both of

these are above 90 percent or if the average of both of these is above 90 percent, the area can be strongly categorized as a geographic market. So, again, the rationale for that is never made clear, but it has something that is definitely one input into geographic market definition.

Again, I don't expect the people in the cheap seats to be able to see this, but we compared these patient flows in San Luis Obispo, we hypothesized three different markets that were considered in these markets, a city of San Luis Obispo market, the entire county, and the county of Santa Maria, adding a little area that the defendants argued should have been included that would have added several hospitals.

The city markets really didn't meet any of the Elzinga and Hogarty criteria in any of the categories at the cluster level or at the individual service level categories and basically it was because the inflow ratio was too low. Too many people were coming from outside the city and using the city hospitals.

When expanding it to the county, which is the market that was accepted by the Commission, and the courts in the earlier decisions, we see that the Elzinga and Hogarty was not strongly satisfied, but certainly is satisfied. But interestingly enough, while it is

satisfied at the cluster level, for about four of the Zwanziger service categories (ZSCs), which accounted for about 22 percent of the admissions, the weak criteria were not met. And this was mostly because the outflow ratio was too low, that people were seeking these particular services outside of the county. So, there was definitely some variability in the underlying patient categories.

Just looking at that for Sacramento, as with Sacramento, the city did not meet the Elzinga and Hogarty criteria. The county did. And in this case, the Elzinga and Hogarty statistic seemed to have amassed even more variability. In this case, for about seven of the 18 categories, which represented about 25 percent of admissions, the criteria were not satisfied. Mostly this was because the inflow criteria were not met, again meaning that too many people were coming to hospitals within the county from outside of the county, and in both San Luis Obispo and Sacramento, to the extent that the Elzinga and Hogarty criteria were not met for particular services, this seems mostly to be for the higher level services, things I think most practitioners would categorize as higher level services, but there was one category, GM miscellaneous, which does not seem to easily meet that.

Again, we looked at the Herfindahl statistic, which is kind of the measure of -- kind of a basic measure of how competitive a particular area is, if it's zero, that's great, that's very good, that's very competitive. If it's 10,000, that means it's a monopolist. And in San Luis Obispo, definitely there was high concentration throughout -- throughout the cluster, but there was a great deal of variability in the underlying categories, suggesting that these hospitals, that there was some variability between the hospitals in terms of their specialization, that they weren't all providing the same services.

On the other hand, for Sacramento, we had a fair amount of uniformity throughout the cluster for Herfindahl, fairly well represented the HH is at the Zwanziger service level categories, and just that observation emerged.

So, that was basically what we did. Again, we looked at how many service categories were needed to get to a large percentage of the hospital's admissions. We looked at the patient flows at the cluster level and at the individual service category levels, and then we looked at the Herfindahl statistic at the cluster level and at the individual patient level, and basically these were the observations that emerged. We found that the

disaggregated approach involved relatively few inpatient categories. We found that Sacramento seemed to have a fair amount of variability in the patient flow statistics between -- within the cluster as opposed to the cluster overall, much less so in the concentration statistics; but in San Luis Obispo, the opposite seems to be the case. In San Luis Obispo, there seems to be, again, a fair amount of variation in the Herfindahls, but the patient flow statistics were fairly well represented by the cluster.

What does it all mean? I think it means the cluster can mask details in the underlying demand side markets. What does that ultimately mean for the reinvigorated enforcement programs of the Commission and the Department? I'm not sure it has any predictable effect on whether or not a particular practice or transaction will be viewed as anticompetitive. On the one hand, statistics at the cluster level that do not appear problematic may mask anticompetitive issues in the underlying categories.

Just because it looks problematic at the cluster level doesn't mean that there might not be problems underlying that, so it's something that the Commission has to be aware of in its enforcement mission.

On the other hand, issues in the underlying

categories might complicate a case that looks problematic at the cluster level. I think if you've got a strong prima facie case at the cluster level, if you've got high Elzinga and Hogarty statistics, if you've got high concentration, I'm willing to bet that there's at least a fair amount of services in the underlying cluster where you're also going to find the Elzinga and Hogarty statistic is high, then concentration is high, but it's going to complicate your story. You're going to have to look at some additional issues. Can payors break apart that cluster? What are the contracting practices like in that particular area? So, it's something that we have to do a little bit of extra homework just to make sure that there's nothing like that going on.

Concluding thoughts? I'm sorry, my concluding thoughts are questions, rather than answers, and I know the Commission invited us here for answers, but I'll try to answer them to some extent as I go along.

One observation, again, was that we found that it didn't take a heck of a lot of services to get to a large percentage of the hospital's admissions in these two particular areas. Is there anything we can say? Is there any way we can find out if that's generally the case, that we can perhaps just look at a limited group

of services? Something I think would be amenable to, you know, just general anecdotal evidence or actual research that could be found out.

One question here that I'm sure is troubling those of us that or those of you that are in charge of reinvigorating the enforcement program, okay, great, Sacher, you found some area of variability, but we're not just going to always have the data to look at that. You know, California is great. California has got all this wonderful data, but not every state does that, and we've got some really troubling things on our plate here and we're not going to have that kind of data.

Well, I mean, it's one thing to think about what to do, but maybe I would argue that maybe there is always information available to address those issues. Again, it may not be this nice, neat, state data that you get in a little CD-ROM and you put it into your computer and write a little status program and get your answers one, two, three. Maybe it's going to be the kind of messy data that you're getting and dealing with a lot more now in these kinds of cases that you're bringing, the cruise cases and again the Staples cases. So, again, maybe the data is out there and maybe you can get it. And of course it's all kinds of -- it's not just data that goes into finding geographic markets.

Three, can rules of thumb be developed for when concentration and patient flows at the cluster level accurately represent concentration and patient flows for services within the cluster? Again, we looked at two different kinds of areas. How representative are they? Are there rules of thumb, you know, based perhaps on urban areas, rural areas, types of hospitals, the providers that are there. Maybe sometimes, you know, you can just blow this off.

And one thing I left off here, I think, another wide open issue that definitely calls for more research is to what extent can supply side substitutability justify aggregating across the cluster. Again, I'm not saying that those particular service categories that we looked at would necessarily be antitrust product markets. Maybe the ones you've already been using in cases like the Butterworth matter where a primary inpatient services cluster is the right one, and actually I think the article by Dr. Zwanziger actually implies that, because they actually advocate agglomerating up these Zwanziger service categories into bigger or broader categories.

So, in conclusion, even though, you know, product market definition is not the hot topic, I think there are definitely things that the health

practitioners are going to have to be aware of as we look at, again, hopefully at hospital merger enforcement, and not to be complacent and to take these kinds of issues -- give these kinds of issues serious consideration and to make sure that you're aware of them.

Thanks.

(Applause.)

MR. ZWANZIGER: Thank you. I want to thank the Commission for inviting me here. I really appreciate the opportunity to present my thoughts on these areas. I was starting to gather my thoughts. I realized what a theme this issue of antitrust enforcement has been in my work for a long period of time. In fact, looking back, I found an editorial that I wrote in 1989 for the Wall Street Journal which said -- which was entitled, A Dangerous Concentration in Hospital Markets, so there are perpetual themes as we go along in health care policy.

One of the issues that I did want to explain is that if you really are focused solely on product market definition, then this will be a somewhat disappointing talk, because as I discussed with the staff earlier, I really am more interested in the geographic side, and they assured me that as long as I did spend some time on

product market, I would be allowed to continue on.

Okay, let me get to the point right away and then we'll try and support some of these statements. I think that, you know, and this was one of the issues that I raised in the editorial in 1989, is that the concern that I had is that the Elzinga-Hogarty approach really is poorly suited to hospital markets. I understand that there are no prices, so we do have to look at patient origin data, but the problem is that Elzinga-Hogarty does not recognize the underlying heterogeneity on the supply side, and especially on the demand side, and we'll talk a little bit more later on about what the sources of that heterogeneity are.

And as a result, the product markets that -- the markets that result are too large and they do not accurately reflect the actual empirical effects of the mergers that are taking place.

All right, let's go back to sort of how I get there. The first thing I would want to say is -- and I think this is empirically pretty strongly supported, that selective contracting by managed care plans has promoted possible price-based competition, and that prior to that, that the source of competition was really nonprice, quality-based, cost increasing competition.

And, therefore, and I think this should also be

relatively uncontroversial, therefore part of the antitrust enforcement effort must be to protect this capability of selective contracting to function effectively.

Now, this third part probably is not quite as uncontroversial, and therefore, market definition as part of an antitrust analysis must assess how this transaction would affect selective contracting.

All right. Now, going back to sort of the basic issue that antitrust -- that managed care plans have to do, when they put a network together, they have a fundamental trade-off which they have to deal with, and that deals with what is the value of each hospital to the network that they -- and ultimately to their beneficiaries? And therefore they have to trade off the access of services, the travel time that patients prefer, quality perceptions, and low prices. And all of those are factors that they have to use when they put together a provider network.

Now, one of the things that's important to realize is that if you have an individual hospital in your network that wants a somewhat higher price, because they have some desirable characteristic, such as the fact that they dominate a particular part of your market, then you're likely to give that, because if you

actually go through the calculation, you know, hospital services are 30 percent of your total premium dollar, you know, that one hospital may be less than 10 percent of your hospital market.

So, once you go through the calculation of the difference between a 5 percent and a 10 percent price increase to an individual hospital, it really probably doesn't pay if you're going to alienate part of your -- an important part of the market in which your beneficiaries reside.

All right, why don't we get to hospital products to actually, you know, pay for my invitation. What I want -- I think it's important, and this is really the area where I have done some work, is looking at the inpatient side. And it's important to recognize that the bulk of hospital revenues are still on that side of the market. And that, in fact, recent treads suggest that that part is starting to grow again.

So, where for a long time the inpatient part was shrinking, absolutely, that trend seems to have been reversed, and as time goes on, I would expect that the aging of the population and increasing severity of the diseases that they're treating would mean that this is going to be a stable growing part of hospital services.

Now, again, I'll go through this quickly,

because Seth has been kind enough to go through this. If you look at different ways of splitting up these services, if you look, then you come up with basically 50 different categories if you look based on supply side consideration.

Now, if you look on the patient side, it becomes even more disaggregate, again, as Seth said. I think from the plan point of view, they don't look at it quite that finely, and they probably look at primary, secondary and tertiary centers. In fact, you know, we have looked at some data looking at contracting patterns, and it does suggest that, in fact, that is the way they view things.

So, for example, in every market that we looked at, where there is a tertiary center, then every plan, without exception, had at least one tertiary center in their network. So, I think that, you know, this is not coincidental. I suspect that that's because they really regard having one tertiary center at least is an important part of their ability to compete effectively.

On the outpatient side really, I'm reluctant to spend very much time, because I haven't done very much work, and this is purely sort of my impression, but I do think that there probably is a distinction between the primary care, the ED, to a secondary degree, and the

primary clinics from the specialty clinics, where the primary clinics really provides more of a service to vulnerable populations, and the specialty clinics probably less. And, you know, is much more competitive with some of these outpatient facilities that we've talked about.

Now, why don't we -- and actually it does make a difference, and the way we calculated the Herfindahl, I'll get back to, but if you look, if you just have all of the inpatient services aggregated as a single service, versus the three, it doesn't make much of a difference of the Herfindahl, but if you actually go all the way to the 48, then it really does make quite a difference, and that suggested that this may be a problem if you try to do that.

Now, just to make it clear, the source of this data is National Medicare Discharge Data. So, in some of the categories like obstetrics, obviously it's going to be totally unrepresentative of the general population.

All right, why don't we get to sort of an overly simplified view of patterns of hospital markets. As you look at -- if you look at patient origin data and you trace through where they get their patients, then you see this, you know, this obviously simplified view where

they're partially overlapping service areas from which they get their patients.

Now, the point of -- the point of that is that, you know, this becomes incredibly messy in urban areas where you have two-dimensional overlapping, some are much bigger, some are much smaller and so on. So, what does that mean? It means that when you try to define hospital service markets, then it becomes difficult because you start noticing that there's overlapping markets, and you could argue that that doesn't really matter, that you would have arbitrage across markets, and so therefore you would have this huge unified market that antitrust analysis tries to create.

Now, the problem is that that assumes that a patient is a patient. Okay? It's saying that, you know, if a patient comes from an area to a hospital, then we're going to count them all equally. It doesn't really reflect the fact that patients choose hospitals for very different reasons, and it doesn't -- it does -- now part of that is really the product market issue.

So that if you have product markets, maybe you'll be able to distinguish some of these things where people travel further for more complex tertiary services for more basic services they would want to go -- they would want to stay in a more local area. But even in

those cases, it doesn't deal with unmeasured severity differences.

So, for example, you have a patient who has a pretty simple hospital service needed, but they're a complicated patient because they're highly diabetic, because of other complications, and therefore they have to travel quite a ways to a tertiary center to actually take care of the service. It doesn't measure differences in patient preferences, so some patients are much more willing to travel really long distances because of quality differences that they perceive, or because of religious affiliation.

So, no matter how you deal with that, you're going to have this sort of -- this squishiness that you're going to have to deal with when you come to hospital markets. And as a result, when you do the Elzinga-Hogarty approach, you're going to see these patient flows in and across boundaries that suggest that these really are very large markets.

Now, the problem is that, you know, that doesn't -- those size markets are really incompatible with a lot of our knowledge about, for example, the fact that patients really do not want to travel very far. I mean, any study of patient choice of hospitals finds that travel distance is by far, by far, I mean, you

know, if you've done these studies, you see how much bigger travel distance is as a selection criteria than any other thing that you can put into that model.

And, in fact, we see that managed care contracting really reflects that preference, because there have been several studies, including mine, that looked at how has travel distance been affected by managed care contracting. Now, you would expect that if it wasn't really an important factor, then managed care contracts would require people to travel a lot further.

Now, surprising, if you look in California, over a period of time when managed care penetration went from about 20 percent to about 90 percent, the average travel distance almost did not change, no matter what the level of the competitiveness of the market. Now, that suggests that there's a very strong preference for the local hospital, and that's something that the Elzinga-Hogarty analysis totally misses when they create these huge markets.

Now, so how would we approach this? This would be, I agree, a totally different way of viewing it, but the thing that we would say is, because of the fact that we're dealing with managed care contracting, and the fact that they have to satisfy the needs of their beneficiaries, then what they have -- what you should

start with is looking at what are -- in as small geographic area as possible, what are the actual hospital alternatives that are available to these patients, and how competitive are these alternatives? And practically speaking, because of the way the data is, we use zip code areas as being our unit of analysis.

The second aspect that we would suggest is that you really have to create hospital-specific markets and hospital-specific measures of concentration, okay? And, you know, important to say that, because, you know, Elzinga-Hogarty has become sort of sanctified, but it's really a theory which is supposed to connect these concentration measures and these measures of actual behavior. I mean, what Elzinga-Hogarty markets, as any markets in this analysis are supposed to do, is to say this is a prediction as to how these actors will behave.

Now, what we found is, you know, and this is the most clear-cut cases, the paper that Len Melnick and I published in 1992 in the Journal of Health Economics, that in fact, if you put side by side the hospital-specific measures of concentration, and counter based ones, which are generally actually a little smaller than the Elzinga-Hogarty one, then the hospital-specific measures of concentration are much better empirical behaviors of price differences.

And what that suggests is that you really do have to go back and say, what is the meaning of going through these mechanical Elzinga-Hogarty calculations if in the end you end up with a measure which doesn't really predict what prices are going to look like? And, you know, if you think about it, it makes a lot of sense, because what you're really saying is if you have these huge markets, then every hospital within that huge market has the same concentration level that they're acting under. When they contract with the managed care plan, that's clearly not true.

Now, in terms of the description of how we would approach it is being published in several of the papers. I don't want to go into the details, but the point of it is that then you would be able to calculate a Herfindahl, which is the weighted average for the service area that each hospital serves. So, you would end up with a hospital-specific measure of the Herfindahl.

Now, you could then generalize that for either actual or proposed mergers to see what the effect of the merger would be on measures of concentration. And just to give you a sense of how that -- using again national Medicare data, that if we started looking at what are the Herfindahls over time, you can see that there has

been some increase in actual hospital level concentration, forgetting about the fact that these mergers have taken place, just because I think of closures.

So, you have some increase in concentration, but by 2001, you have a very substantial increase in concentration, because of this increase in this merger activity. I think just to go back to this issue of systems, there's clearly, you know, there's a lot of anecdotal stuff in the newspapers about the impact of mergers. There have been some papers that have been published. I think the results are really inclusive in the sense that there's a lot of variation. Part of that is because of definitional differences, part of that is just because analytical approaches were somewhat different.

I think that, you know, clearly, this is where the researcher in me says that more research is needed and, you know, obviously we are going to look for some agency that's willing to fund it.

Just a couple of final points. There is a lot of variability which I suspect really exists at the strategic level as to how -- you know, the other thing I would say, this is preliminary data, I'm not willing to be cross examined on the numbers here, so, but I think

that they are pretty close to being right.

There's a lot of differences in terms of how systems affect the competitiveness of member hospitals. So, this one is, for example, the one in a relatively small MSA where it has had a fairly small effect on the HHI. If you look at Cleveland, Cleveland system, you have a much larger urban area, and yet it's resulted in a huge increase in the relative concentration of the markets, because I suspect that if you looked at these, if you disaggregated the hospital-specific markets, of the hospitals in there, they're tightly clustered. And there's a lot of overlap in the services in the geographic areas and service areas that they serve.

One last point, managed care by itself does not result in cost savings. There has to be an interrelationship between the managed care and between hospital competitiveness. If you have concentrated markets, then managed care will not provide substantial savings.

Thank you.

(Applause.)

MR. HYMAN: I would like any of the hospital witnesses that would like to participate in the roundtable to come up. We had hoped that at least one or two of them would still do that.

MR. HEYER: I thought I would start by trying to help Professor Zwanziger cover his travel expenses by asking a question that links some of his discussion more tightly to product market. He got a lot into the Elzinga-Hogarty issues, and I was wondering whether it might be fair to analogize the Elzinga-Hogarty test's flow data, let's say, for the geographic markets, to perhaps concluding that when it comes to product market, if we saw 10 percent or 15 percent for a particular DRG, let's say, being handled outpatient, rather than inpatient, it might under the logic of the Elzinga-Hogarty spirit suggest that outpatient is in the same relevant market with inpatient.

MR. ZWANZIGER: Well, you know, DRGs are only assigned generally for inpatient services. You mean sort of --

MR. HEYER: Let's say a same sort of procedure, right. And I would be interested in hearing from Ms. Beeler, also, whether there do, in fact, seem to be lots of procedures that have a nontrivial amount of provision in both inpatient and outpatient at one and the same time, maybe getting into what Professor Posner was suggesting that it's either all one or all the other.

MR. ZWANZIGER: Well, I guess, you know, I'm reluctant to go in that direction. I think to the

extent that you do observe that, I mean, I think that there's a couple of hypotheses you could make. I mean, one is that for whatever reason, the people in that market are sort of slow in adopting state-of-the-art technologies. I think part of it might be a technology adoption issue.

So, for example, you know, we were talking about, you know, cataract surgery. So, at one point it was not inpatient, now it's not outpatient. I think that if you have a cataract surgery that's not inpatient now, then there's generally something very different about that patient.

And, you know, it may not appear obviously just from the secondary data, it will show cataract surgery, same procedure as the outpatient, but no patient would be operated on as an inpatient unless there were something seriously wrong with them and that the outpatient facilities didn't really feel comfortable, they thought it would be too risky to actually treat the patient that way.

MR. HEYER: So, in that sense, a similar criticism might be made as is made in the geographic context of just saying something is in or out based on some fraction of people seeming to use one.

MR. ZWANZIGER: I think that there is a period

of time where both types of services would coexist, you know, so as -- but, you know, as surgeons become comfortable with different ways of dealing with it, then I think, you know, I mean it's amazing, if you look at, for instance, defibrillators, you know, those are the things that if you go into an arrythmia, that shock your heart back into. So, if you go back eight, nine years, it was a major operation to implant the defibrillator, and now it's done on an outpatient basis. And I don't think that very many patients would want to have their chest cut open, you know, because you can actually do it now where, you know, where that's not necessary.

So, I really do think that these are more deterministic than sort of competing.

MS. BEELER: I agree. We'll use cataract surgery, 95 percent done on an outpatient basis today, but those are done on an inpatient basis because the patient has another disease level. I think the move from inpatient to outpatient clearly has been changes in technology, changes in anesthetic agents, changes in pharmaceutical agents, and look forward to seeing more and more of that development.

MR. HYMAN: Yeah, this is for Mike and I think to a lesser extent, I think, for Ralph, and it's more of a geographic market question than a product market

question, but I think you can speak to each of those. The question would be in your negotiation with payors, to what extent does sort of the distance of the patient population from a particular facility enter into discussions about what will be included in networks or is it sort of you offer a -- you have to take all of the individual hospitals? And I guess the sort of related point is they already know how far they can push people so there isn't much negotiation about that. I would just ask the extent to which any of this enters into your contract negotiations.

MR. RYAN: Not very much. And because we have our hospitals in two geographic areas, one of which in Maryland is covered under the health services cost review commission, so that there are fixed rates for -- each hospital has fixed rates, and those, I guess in Maryland, because we have rates and we're not negotiating rates with managed care companies on individual bases, there is some geographic. They want to have -- they want to make sure that they have geographic coverage of the hospitals, but I think that's about the extent of it there.

Here in the District of Columbia, where there are fewer hospitals, we do have more of geographic leverage I think by having a very large tertiary

hospital in the university hospital that they want to have in their systems.

As far as where the patients come from, they are attracted based upon the services we offer, and the managed care companies have to take those into consideration. Washington Hospital Center has a very large heart institute, Georgetown, of course, is associated with Lombardy cancer center. Washington Hospital Center also has a cancer center, so those are attractions. And Union Memorial in Baltimore, we have the upper extremity hand center, which is widely known as a trauma center and also a referral source for a large geographic area. So, those things are taken into consideration, but they're really specialty things.

And most of those, I'm having a hard time identifying with all the antitrust conversation. One part of me says I would like to have an HHI as high as possible, because it sounds to me like I've got a lot of leverage, just below the threshold of the Justice Department, obviously, but, you know, in our experience, and Ralph probably -- well, he's got a specialty hospital, but my experience is the patients are controlled more by the physicians, and some patient preference, but an awful lot by physicians and their referral patterns. And this comes home to us frequently

when a program which we will have helped develop around a particular physician shows great shrinkage when someone else recruits that physician away. And it's almost an automatic thing.

So, when you're doing your statistics on a hospital, you're doing your statistics on a pile of bricks and mortar with a group of physicians that happen to be there at any particular time that can show significant change by the transfer of a couple of physicians.

Example, we opened a heart surgery program at a hospital in Baltimore several years ago, and brought up to that hospital a physician from Washington Hospital Center, where they have very large heart program. We estimated and anticipated 200 or 250 cases in the first couple of years. By the end of year two, they were at a run rate of around 500 cases.

This particular physician in his reputation and his service to the public and his quality of service built that program from basically zero to a thousand cases in less than five years. So, it's really physician related in our institutions.

MR. ANDREW: I'm not directly involved in the contracting process, but I would certainly agree with the comments made both by my colleague from the

ambulatory surgery association with respect to the shift in venue from inpatient to outpatient and the reasons therefore, and similarly predict there will be even more of the same.

With regard to Dave's comments, I, too, am not really into all the nomenclature of the antitrust business, jokingly we originally thought that HHI was a kind of hospital health index of some sort, and so, you know, a high index has to be a great thing. But that's only because I know that a minus 10 percent negative margin is not a healthy hospital index.

With respect to patient origin, there are just enormously different markets that relate to the specific -- what you would sometimes say DRGs, but on the outpatient side we say APCs, ambulatory payment classification system established by Medicare, and that is, in simple English, if you are doing a standard cataract, then geography and locality, people do come from, you know, neighboring communities. There are only 11 specialty ophthalmology hospitals in the country, two of which are in New York, and therefore, when you're treating Graves disease, when you're treating, you know, a very specific disease entity with significant specialty, then Dave's comments are that's physician-driven.

I mean, they go and they look, whether it's on the Internet or it's through a local network affiliation for a referral, for a specialist in that, in spacial plastic reconstruction of, you know, after a severe trauma or accident of restoring the, you know, the orbital bit, those patients come literally from across state lines and in some cases, only 3 percent, but from across the country.

So, they sort of fall outside of the other analysis. It's not dissimilar to your earlier comments, gentlemen, on, you know, obstetrics and gynecology admissions versus other more specialized medical cases. The same is true, I think, in the specialty care.

MR. BERLIN: Yeah, I'll pose this question to the two remaining hospital representatives, but I think the point was made by Mr. Shelton. He called on the antitrust agencies to address the hospitals' lack of leverage in negotiating with health plans. I assume that hospitals would want greater scrutiny of future health plan mergers and consolidation, but my question is, what about the existing status quo? Do either of you two gentlemen, and I'm sorry to follow up with a point somebody else made with a question to you, but would you have the specific recommendation to resolve the current situation or the lack of leverage, if you

see that, that's existing right now, vis-a-vis hospitals versus health plans?

MR. ANDREW: I think these issues are all in their infancy, and obviously are headed for the courtroom, among other places, as to what are the boundaries with respect to the -- what some have described as extortionist or other tactics of the health plans. You know, if there's economic incentive on the credentialing side, for which hospitals have been criticized, rightly or wrongly, then certainly there is going to be a sort of review in the very immediate future, whether you can summarily cancel the contracts of physicians if they send their patients to hospital, and per the aforementioned comments, we think on some of the quality control issues, those are going to go right to the court to say, well, we're not going to pay for the pathology to look at it to see whether a specimen is really deceased or not. You know, I don't think that that's going to stand up to public scrutiny.

So, I don't certainly have the answers in the short run, because I think this whole area is in flux, or if it's a cop-out to say it depends, but I believe that there will be some new definition.

I just heard a variety of people, you know, giving a very important overview, and while that says

the hearings on health care and competition, I find most of the focus to be on hospitals. Now, maybe that's because that's just this particular session, but I haven't heard about the, you know, dozens or whatever of retrospective reviews of these health mergers. I mean, it was Aetna, then it was Aetna/U.S. Health Care, then it was Aetna/U.S. Health Care/Prudential. Now you put those three together, and the marketplace has changed, at least in New York I can say that matter of factly.

MR. RYAN: I'm not directly involved in the managed care negotiations, but we seem to have a sufficient number of managed care companies here that we do have some competition still.

MR. HEYER: One other question that I would like to get Seth involved, also, and also for Jack, you did some looking in your studies and your work at what the change in concentration might be, if you looked at cluster markets versus if you looked at individual procedures. Getting at whether that makes any difference, other than we get to put down different HHIs in our memos of whether to investigate, is there any evidence as to what the relationship is between HHIs, whether for cluster markets or for individual specialties, and the actual performance of the marketplace?

MR. SACHER: Sure. I mean, there's certainly literature out there that relates concentration to prices, and --

MR. HEYER: In hospitals or in subspecialties?

MR. SACHER: Hospital matters, and generally I think it looks at kind of overall hospital prices that might be measured for a particular managed care plan, what their kind of contracting rates are, or maybe just some kind of overall charges measure. There's certainly, I think they've generally found that competition matters in hospital markets, that there are, you know, some kinds of price increases with that. Of course you can always call into question these kinds of studies, ours is called into question quite often. Market definition is an issue with those, and other kinds of econometric issues come into play.

And if I might do a plug, there's a great paper by Sacher and Vita which actually looks at a case study of one particular merger, an even better methodology of looking at one particular merger, and doesn't give -- it kind of obviates the need for some of this market definition and did find actually some significant price increases.

MR. HEYER: And what was the range, I mean, that one you probably know a fair amount about, but I don't

know whether you could generalize to other studies as to where you tend to get these effects. It's presumably not going from ten to nine competitors, presumably you didn't look at merger to monopoly, that would be a little more obvious, you might get an effect. I was wondering where you --

MR. SACHER: We did, we found very substantial price increases where it was basically a three to two or maybe even two to one kind of situation. I think some of the -- again, I'll let Dr. Zwanziger and those other experts here, I think, I mean, you might be looking at four to three kinds of mergers, getting 10 percent kinds of price increases and maybe the drop of one or something of that nature rings a bell.

MR. ZWANZIGER: We didn't really find any. We looked for thresholds, but generally we found that, you know, that a continuous, you know, concentration measure was appropriate and, you know, there would be, you know, there would be price increases at every stage --

MR. HEYER: So, it wasn't clearly driven by, say, two to ones, you could maybe remove those and you would still see an effect you're saying?

MR. ZWANZIGER: No, in fact, we actually tested to see if you -- if it makes sense across the whole range, and it did. It seems pretty uniform, actually.

Going to your initial question, I've never done that comparison. I've never actually sort of -- the way we did looking at county-based versus these hospital-specific market as to which one would be a better predictor. I've never done one which is, say, all discharges and the 48 service category base, so I don't know what the comparison would be.

MR. HYMAN: This question is for Carol. I mean, in the earlier panel, there was, I think, not invariably, but a significant number of concerns by almost I think every panelist about the competition from new entrants, both specialty hospitals and the ambulatory surgery centers, and I wanted to give up the opportunity to respond to that directly, especially because words like "unfair competition" and "cream-skimming" were used, and so I would just like you, if you could, to just say a few more words on that subject.

MS. BEELER: Sure, I would be glad to. First, on the cream skimming, if you look back to when Wally Reed started the first ambulatory surgery center, in his article, that's been going on, you know, that comment has been going on since 1972. We take healthy patients, there is no doubt, and I think that indeed the reimbursement should be, some day, somehow, that the

reimbursement is for the acuity of the patient. If the patient is ill and belongs in the critical unit of the hospital, then that's what the reimbursement should be. If indeed it is a well patient that happens to need surgery, then I think that's what the reimbursement should be. And that's what's happening in the surgery centers. We're looking at fairly healthy patients, class ones, twos and threes, and with that we've been able to decrease the cost of surgical care for those patients.

Now, the one part I will contradict is, I do, in my centers, do Medicaid patients. If a physician approaches me and it's to do an indigent patient, we do do indigent patients. So, I think that reputation and just taking the cream of the crop, is somewhat unfair.

MR. HYMAN: And if I can just follow up with that. Ralph, you commented unfavorably on the proposal to pay at the lower of the rate as long as the same service was being performed in multiple locations. But it is an acuity adjusted in either direction at this point. So, I guess the question is, if it were acuity adjusted in some fashion, would you be equally unfavorable to an approach of paying at the lowest rate that the services could be obtained from whomever, or does this implicate your larger question about public

goods?

MR. ANDREW: Well, I think it definitely implicates the larger question about public good. I think that acuity should be taken into account, we do it in the classification of many other things, except that we don't often look at these secondary comorbidities and so on to which Carol has alluded. I think that the notion of competition or when Crane had said, you know, you could expect to have almost a 20 percent lower cost in a freestanding ambulatory surgery center, many came to the hospital and said, is this true, is this possible? And I think instead of being defensive, it was, most certainly, I think there were -- there was a -- it was not a great surprise. I think if you just look at the questions that were raised, the issues that were raised this morning about infrastructure and operating 24/7, and, you know, paying extra for the nurses who come in on the late shift who are there for -- and actually if those costs are spread across all procedures and all patients, if you're going to hire social workers to deal with patients' needs upon discharge, then by definition, if you're going to have the anesthesiologist on staff instead of roving.

I don't need to go through the whole list or make it again, but I think those things have to be taken

into account and then finally, I think we do have the questions that Denny raised at the end, which is what do we want? Do we want to preserve our community hospitals in this country? Especially in areas where they're nearly the only service providers, and I don't think there is any economic model that could suggest if you take whatever the percentage is, two-thirds or 75 percent of a particular kind of cases away from that community hospital and do it in another setting, and this applies to physician offices as well, which are even less regulated and there are even bigger questions being raised, especially with regard to plastic surgery, where I think for the first time there have been some quality questions, and I don't question the quality in these other facilities at all.

So, I think that we're in that -- currently in that never-never-land where we have to decide what is the value of our community hospital and what do we want to do to preserve it.

MR. HYMAN: Well, I would like to thank all of our panelists for an excellent session, and we're going to break until 1:30. There are suggestions for lunch possibilities on the table outside, if you don't know the area. And can I please get a round of applause for all of our panelists.

(Applause.)

(Whereupon, at 12:01 p.m., a lunch recess was taken.)

AFTERNOON SESSION

(1:30 p.m.)

MR. HYMAN: I now just want to turn this over to Sarah Mathias, my partner in crime, who is going to run the session on geographic markets.

MS. MATHIAS: Actually, I am joined here by Ken Heyer at the Department of Justice antitrust division, so we're actually corunning this, I think, it would probably be the better term. Like David said, welcome to this afternoon's session. We are going to be looking at geographic markets, and hopefully starting the controversy and hearing with some good ideas and ferreting out new ways or better ways or if we already have the right way to look at this to continue with what we've been doing.

We plan to go until about 5:00 this afternoon. We hope you can stay with us, although we do understand if anybody wants to dart out quickly after what David just announced. We could spend a lot of time talking about the qualifications of all of our panelists, but we would actually rather spend more time focusing on the issues. So, we do have a hand-out for everyone with everyone's biographies, but I would like to run through our distinguished panelists quickly so that everybody knows who's here, give a short introduction, and then

we'll move on with the session.

First we have Meg Guerin-Calvert, she's a well-regarded economist and a principal at Competition Policy Associates. Meg has had practice before both the federal antitrust agencies as well as in private litigation.

Greg Vistnes is Vice President at Charles River Associates here in Washington. He specializes in economic analysis of antitrust and competition issues. Greg is a recognized expert in the health care industry.

Barry Harris is currently a principal at Economists, Incorporated, and has offered expert advice in numerous proceedings involving health care issues.

Ted Frech is a Professor of Economics at the University of California, Santa Barbara, and an adjunct scholar at the American Enterprise Institute in DC. Ted has served as a consultant and as an expert witness for both government as well as private parties.

Finally, Greg Werden, on my far left, is a Senior Economic Counsel at the Antitrust Division at the United States Department of Justice. Greg has published numerous articles on antitrust policy, including market delineation and hypothetical monopolist paradigm.

The agenda for this afternoon is quite simple. We want to listen and then ask a lot of questions. We

hope that as we go along, the panelists will feel free to ask each other questions. We do want to have an interchange of ideas here and think that you all are eminently more qualified at least than me to ask each other good, deep questions, and I hope you will feel free to do that.

And as we have a lot of speakers, one way that will help Ken and I moderate this and to figure out who should go first, if a lot of people want to speak on one issue, if you just kind of turn your name tent, that way I'll make sure you get recognized. It seems silly, but it's something that has worked in the past for some of our panels.

Actually, I would like to start and ask Meg to start off and then we'll proceed in this order.

MS. GUERIN-CALVERT: While we're waiting for the fancy technology to actually work, I want to thank Sarah and Ken in particular for moderating the panel. It's a great honor to be on the panel with these other panelists who cover many, many years, if not to date us all, decades of experience working in mergers generally, but particularly in the health care area on today's topic, defining geographic markets.

And just to give you my perspective is that while I think there is a great deal that is unique and

specific about health care and hospitals in particular, the same kinds of principles and the same kinds of fact-intensive analysis that is used in all other industries is the approach that I think works best for analyzing competition and the effect of particular transactions in the hospital industry.

What I would like to do, after having talked with Sarah and David Hyman, is to give a brief overview of the issues that we're going to be talking about today, which I know my colleagues are going to be talking about in much greater detail, as well as in the discussion.

What's the controversy? As you can see laid out on the FTC/DOJ website, there really are three basic kinds of issues that are in controversy. First of all, what are the principles of market definition that should be applied and that are being applied in the hospital area? Second, what are the relevant empirical tests or the ways of testing those particular hypothesis, hypotheses relative to facts and data, and then obviously one of the reasons why we're here as well looking at this issue is, what have been the results of that application, not only in work before the agencies, but particularly in the courts.

And to go to the first one, the principles of

the market definition, and I'll get into this in somewhat more detail, one of the most interesting issues that I think arises in the hospital context is why isn't the automatic default that we're going to be applying the same basic principles of the merger guidelines that we apply in every other industry? Why is it even an issue?

The second and a related one is critical analysis, which I know Barry Harris, since he authored it, or coauthored it, will be talking about probably a great deal, is a useful analytical tool for market definition and analysis in a merger context that, again, gets applied in a lot of industries. It has been applied in the health care industry, but it's much more controversial there than in any other area.

And then lastly, what about Elzinga-Hogarty analysis? It's a particular mode of market definition which has been used extensively in the hospital area, much less so recently in any other industry area, other than as a way of organizing information and presenting information. It however is at the center of controversy in hospital geographic market definition.

On the one hand, large group of people say, it's too static, it's too plaintiff-oriented, it gets you markets that are way too small. By the same token,

there's another group of academics and individuals who say, no, it ends up making it too broad, it's overinclusive, you've got this problem that there are hosts of patients who actually won't move who are silent and will not travel. And it's actually a problem of being too inclusive.

So, where do we go? Another area of controversy is the test. There is not consensus as to what the relevant tests are. How one evaluates consumer choice among competing hospitals, among competing physicians. There's not even consensus on who are the relevant customers in the principal or agents that are acting on their behalf. There's controversy about that, that affects the decision making.

What is most central is that there is not a consensus on what the key factors are that discipline hospital pricing and what the mechanisms are that are being used today in today's environment to drive and constrain hospital pricing, and that sets the terms of competition by which hospitals are competing with each other, not only on price, but on quality, to attract more patients to fill up more beds, and as a result to be able, at a minimum, to break even.

So, there's an issue as to what the tests are. There's also an issue as to how they're being applied,

and one of the most controversial areas is how payor testimony and payor actual behavior is being evaluated by the courts as well as by the agencies and the parties, and then lastly, there's a great deal of controversy as to whether transactions data. There are these enormous data sets that tell you historically where every single patient in every zip code in an area in a state went for health care and exactly what service they bought.

There's a lot of controversy over how useful those data are for evaluating hospital markets, whether it's product, but particularly geographic.

So, that sets out two major elements of the controversy, what the principles are, how you apply the tests, what data you use, but the biggest controversy is probably the results. And I would say the broad question is have the courts actually used the right principles, have they used the correct tests, and as a result, are the results that they have reached, their decisions, are those sound?

And there's a lot of controversy and claims that what the courts have done is messed up somewhere, found markets that are too broad, included too many hospitals that are too distant to be relevant as competitors for the merging hospitals.

So, what I would like to do to set up the discussion for others is to say, what at least are the common questions that we can all agree on that should be examined to see where the issues, where the differences are. I think the first and most important is what principles of market definition should apply to hospital mergers, and should these be any different from those that are applied in other industries?

What data and information are actually available there, and then how are the courts and everyone else doing in terms of applying those principles to the facts? I would say in terms of the principles, where I would come out is to say, one ought to use the merger guidelines. It's a sound analytical framework that has been tested, not only in the health care area, but in a number of other areas.

In the hypothetical monopolist paradigm, which I'm sure Greg Werden can speak to much more elegantly and correctly than I will, so I will defer to him on that, but that is an analytical tool for both product and geographic market that works very well and should be applied to the hospital context.

I think the most important thing in terms of applying those principles, though, is before one can get to geographic market definition, you have to have

identified what the product of concern is. And I think this is actually accounting for about 50 percent of the differences or the disagreements about the outcome of the analysis, because there has not been an agreement or a consensus as to what the product or the services are, which specific inpatient service or group of services is at issue in the merger.

And then secondly, what is the mechanism, premerger, by which the price and the quality and the innovation in that service or service is disciplined. How is it that hospitals are constrained prior to the merger? And if you understand both of those elements, identify the product, identify the mechanism, then it's much more straightforward to be going on and looking at geographic market.

In terms of product market, again, I think it is looking basically at the services that are being purchased and consumed. If you do it right, you end up with basically having identified all possible suppliers of that product or products in an area that could be relevant, the geographic market question, then, is, which ones of those are relevant to the analysis of the merger, and to constraining the merging parties?

Some will be, some won't be, the task of geographic market is to decide which of those belong in

and which of those belong outside.

The next two slides, what I've done is just briefly set out what approach is set out in the merger guidelines to analyze geographic market. And essentially what it is is a hypothetical monopolist test that essentially says that all of the suppliers who would be necessary to constrain a small but significant and nontransitory increase in price are those that should be included in.

And it said more eloquently, at another section, in terms of posing it very specifically as a hypothetical monopolist, to determine that if in response to the price increase the reduction in the sales of the product at that location would be large enough that the hypothetical monopolist that you set up initially, producing or selling that firm would not find it profitable to impose such an increase in price, then you have to add in the next best supplier. And keep doing that until you can answer the question in the negative.

And as I'm sure Barry is going to talk about somewhat more so, one of the principles that gets used a lot in terms of deciding what is enough? How much is a sufficient amount of business to be lost so as to make that price increase unprofitable, who you need to

include in, who you don't need to include in, is the critical loss analysis?

The reason why I wanted to just touch on it briefly is that in the hospital case, if you're starting with the merging hospitals, and looking at where they draw their customers, their patients from, who are all of the patients and the customers that are filling up their beds and what do they need to do in order to maintain profitability?

That's your good starting point for identifying who are the other hospitals that are capable currently of attracting away patients from any or all parts of the service area of the merging hospital or hospitals?

And again, this is not anything new, in terms of looking at basic kinds of facts and information. The guidelines that set out that one ought to look at what buyers have done in the past, which other hospitals are they using, or have they used, when prices or quality or other factors have changed? What do we know about the business decisions of the sellers, including the merging parties and others, and what do we know about the ability of individuals to switch among buyers?

Let me jump very quickly, because I think this is the heart of what we're going to be talking about today. One of the key elements of data and facts is

where does the merging hospital get its patients from? One of the facts that I have found over and over again, and I have worked largely in a lot of urban markets, is that a very large proportion of merging hospitals' patients come from areas that are as close to or closer to other hospitals.

Not all of a merging hospital's patients come from the center city or the zip codes right around it. They typically get, perhaps, 40, 50, or in some cases, as much as 60 or 70 or 80 percent from a given area immediately surrounding them, but in the vast majority of fact patterns, particularly those involving urban areas, they are getting very large proportions of patients from outside of the core area of a city, particularly if they are located in the downtown area.

This shouldn't come as a surprise to any of us, because in almost any product that we look at, whether it's banking services, whether it's other kinds of retail operations, consumption patterns and business patterns for suppliers, it is often the case that they are successful and profitable primarily by selling not only to people who are sitting right next door to them, but people that they are able to attract away from more distant firms to come to them.

And what I would mention in brief part is the

data that hospitals look at to identify where they are getting patients from is the patient flow data. They look in great detail as to exactly how many patients they're getting, from which areas. They are also looking at how best can they compete for those patients. What are the competitive variables?

What I have seen time and time again is a center city, large hospital, puts an outreach clinic of physicians right next door to a large suburban hospital, hoping to divert patients from going to that suburban hospital for OB/GYN services, for general surgery, for elective procedures, to bring them in to fill up their beds, because they simply cannot subsist or survive on the patients that are sitting right next to them in the center city.

What other hospitals are used by similarly situated patients? One of the things that we will need to talk about is as you saw in the guidelines, if it is not possible to discriminate against people by their location, then you have to take into consideration that the loss of a patient who is sitting on the outskirts of a city is as important a loss as the loss of a patient sitting right next door to the hospital.

While the patient right next door to the hospital may have a lower probability of going somewhere

else, it could be as much revenue walking out the door from the far away patient as the close in. And historically, it has been the case that hospitals have not been able to charge a higher price to the person who either sits right next door or who for some reason really wants to go to Washington Hospital Center, really wants to go to Georgetown, and even with a 50 percent price increase, would never switch to Sibley or to Suburban or to other hospitals.

So, what, then, are the mechanisms by which payors can take advantage of the fact that there might be: A) some patients who do not have these strong preferences who are more on the margin among various hospitals that are in the network; and B) the fact that there may be some hospitals that are offering much better and lower prices. Do they have mechanisms and how much does it take to discipline their pricing?

Let me kind of highlight here something that I'm sure we'll be talking about a lot, is that in analyzing those last two questions that I have posed, some people argue that patient origin data is fundamentally not usable, that it has all sorts of problems and you can't use it, that there aren't mechanisms for steering, payors cannot divert patients, the only game is to keep people in the network or kick them out, and that payors

have not accomplished what they need to accomplish.

Let me briefly go through what those myths are, and where I think some of them can be fairly readily dispelled. First, the concern is, if you look at patient origin data, it's small numbers. It's very few patients, most of them are people who were visiting their Aunt Minnie, got in an automobile accident, ended up in the ER, and so they are not relevant to the merger, or they may have other idiosyncratic patterns that are not representative.

Briefly put, I think all of those are workable and dealable with, first of all, you can very easily exclude ER visits from the data. Second, this is very far from small numbers. Other than banking, where there is a huge wealth of deposit flow data, patient origin data are enormous databases.

When I worked on a case in California, the relevant number was that there were about 18,000 patients, a huge proportion of which actually traveled to and used other hospitals. So, it was not a conclusion that depended on whether or not it was three patients doing something or ten patients doing something. Fortunately for economists, the analysis can be based on hundreds, if not thousands, of patients making choices.

Again, different fact patterns have different assessments. There are definitely fact patterns out there where what the data show is that the vast majority of people are using just the merging hospitals, and that there are very few, if any other choices available to them, so it can be used effectively to show problems as much as it can do to show alternatives.

The second area is that somehow patients should be treated somewhat differently from other consumers of other products, that somehow we should be focusing somewhat more so on consumers who state these very strong preferences for, as I mentioned earlier, I want to go to Georgetown hospital. That's true in every industry. There are people who, due to their physical location or their personal preferences, are highly unlikely to be the customers on the margin between various suppliers. But this is an industry where there are increasingly a lot of customers on the margin.

And then a last point that I want to mention, because it comes up very often, is that somehow the patients who are coming in from the suburbs, passing by five, six, eight, ten, 15 independent hospitals to go to one of the merging parties somehow are different from their neighbors who for the same service decided to go to the hospital next door or the hospital five miles

away.

Again, I think as we get into this discussion today, what we will see is that comparable to many industries, it actually is not the case when you evaluate the evidence that somehow those customers are not representative of what could happen in the event or the kinds of choices that could occur on the part of payors or consumers in response to threatening price increases.

And so, very quickly, let me also say that one other problem that comes up is a concern that patient origin data do not have prices in them, and so as a result they're not usable. They are, nonetheless, data that are routinely used by hospitals, and that you can use to do natural market experiments to see when a hospital has expanded with outreach clinics and tried to attract patients in, what happened? When a payor tried successfully to steer patients away from one hospital to another for a specific service, what happened? You can use the data even without prices to do natural market experiments and to test whether or not sufficient numbers of patients can be shifted.

This next one, and I think I will try to wrap it up here, is probably the single most important difference among people working on hospital mergers as

to the definition of markets and the competitive effects of mergers. As to whether or not the primary way in which discipline is exerted on a hospital is including them in the network or excluding them from the network, or whether there is some additional mechanism to divert sufficient sales so that competition can be protected.

And I think this is a central question that we've heard in the panels already, and I commend the FTC for having these panels, because so much has changed. If you looked at health care markets even just five years ago, the vast majority of payors were using a mechanism to play offsets of hospitals against each other.

Consumers were willing to have very narrow networks, and so the name of the game was you either give me a good price, and in exchange I will give you certainty of large volumes so that you will be happy to give me a discount. And one hospital would stay in, the other hospital would go out, that was the primary mechanism by which prices were determined.

That's no longer a relevant world in most of the cases, because what we have now is that consumers are demanding choice. And if you go to virtually any market in the United States, what you have is virtually every payor has almost every hospital in their network. If

they do that, how, then, are they constraining choices? They no longer have this in/out tool, so what they have is mechanisms to move enough patients on the margin to enough lower cost hospitals so as to make it unprofitable for the hospital to charge too high a price.

That can happen in round one, in which a hospital that risks that diversion says, I don't want to risk it, and therefore I will give a significantly low price so that I don't risk that diversion, or in round two, if they have been foolish enough to set too high of a price and the diversion has occurred, then in round two they go ahead and lower price.

So, that, I think, is very important. I think with respect to Elzinga-Hogarty, how I would include on that is that I think it's an interesting and a useful way to organize the data, but I think that there are so many issues and so many problems, if it is the only tool that is being used, that it blurs everyone's vision as to who really are the competitors and the alternatives that matter. You can get different answers depending on where you started, you can get different answers depending on how you sort the zip codes. It's fundamentally a static analysis, and so as a result, in and of itself, it leads to circumstances in many cases I

think we have all seen where one party says that the market basically has a tight ring around a set of hospitals, and that there are these hospitals that are on the outside of that ring that somehow are going to be excluded from the market because they fail to have a high enough current amount of usage by patients from within the market to be regarded as relevant to include in under the Elzinga-Hogarty test.

And I think in that context, it is inconsistent with the guidelines, which is a much more dynamic view, which is to ask, what would happen to whom plausibly could some patients be diverted, because in most of these markets, we're not looking at just diverting to one hospital, but to many. And I would note that in general, what the courts have done is to treat the Elzinga-Hogarty analysis in hospital cases fundamentally the same way that they have treated it in other cases, which is as a tool, but not necessarily the be-all and the end-all.

So, what's the bottom line? In my experience looking back for today through all of the cases, including the seven cases that have been discussed at some length in this proceeding, in these hearings, as well as the other cases, what it appears to me is that the courts indeed have been applying the standard

principles of the merger guidelines to the salient facts. They have been posing the questions as to where are consumers going, where are payors moving patients to, who do the hospitals in their documents regard as competitors, and in particular, to me, one of the most interesting facts is that what has come out in litigation is that it is at that point that the strategic plans of the competing hospitals become available to everybody. And in all of the cases that I have been in, those strategic plans show that the competing hospitals have a number of strategies for taking patients out of the merging parties' beds and putting them into theirs.

So, the inclusion of the specific hospitals has been based primarily on actual facts. And I think there, in particular, what the courts have found is that the payors have -- the facts have shown that payors have actually in many cases done something different than they claimed. Most of the testimony of the payors has been we need to have these hospitals in our network.

As I mentioned, that's perhaps necessary to putting a patient in those beds, but it's not sufficient to give those hospitals market power over prices. If you can move enough people away from them, then the fact that they needed to be in the network is not enough to

give them power over price.

And I think the other part that is important in that circumstance is that what the courts historically have found is that they do not need to get to the issue of do people need to be moved from right next door to the hospitals, to these hospitals 80 miles away to discipline pricing.

It is oftentimes enough to move hospitals from -- patients, rather, from 20 miles away, from the other hospitals, to discipline the pricing because the merging hospitals are so dependent on those. But I think if you look at the cases where the government won, there are two fact patterns that are different: One is where there were not enough patients to shift to make a difference. The dynamics and the facts of the marketplace were such, or where you had a compelling coordinated effects story. And that's, I think, the Chattanooga case, where there was a case that was put forward that there could, indeed, be post-merger coordination that the court found convincing.

That has not been prevalent in any other recent cases, and usually what the courts are finding is that they don't buy unilateral effects, and basically come out to saying, we have so many hospitals, so many that can be turned to, they have independent incentives, they

have excess capacity, it's enough to discipline.

In conclusion, each case, as with every industry we work on, is going to be fact-specific. And there will be cases where applying the basic principles of the merger guidelines, using all of the messy facts, the data, the documents, and applying them to the specific facts of the case, is going to get to a result where it says the merging parties have market power, or coordination is possible, and identifying the terms of coordination. But there will also be, as in most other industries, a very large number of cases where there is not going to be that compelling story and there will be sufficient competition.

Thanks.

(Applause.)

MS. MATHIAS: Thank you, Meg. Next we'll hear from Greg Vistnes.

MR. VISTNES: Well, thank you very much. I'm going to be talking about the same thing everybody else is talking about, geographic market, and I want to cover in a sense the whole panoply, first of all talking about the theory of competition, and how that affects or relates to geographic market definition, then talk a little bit about the empirical evidence that goes to geographic market, talking both about some of the

academic studies that have been done and a little bit about loosely called merger retrospectives.

And I'm going to start out first with the theory. And I guess probably the best introduction to it is for a long time I've been a little bit confused or puzzled as to how to be looking at some of these hospital mergers the government has been looking at. On one hand for a long time I've heard and read and even participated in some of the cases the government has brought against hospital mergers and thought, boy, these arguments and this evidence really sounds very compelling. It looks like it's right.

And then on the other hand, I hear a lot of the evidence and the facts and the arguments made by the hospital parties themselves, and I have to admit, I can't dismiss this evidence, I can't dismiss the fact that hospitals look very carefully at patient origin data. I can't dismiss the fact that hospitals very clearly care about outpatient clinics and all sorts of evidence that fairly looked at does indicate, in some sense, very broad geographic markets for hospitals.

And so, there's been a lot of confusion on my part, at least, as to how do you reconcile these facts, how do you reconcile the arguments between them. And I think part of the answer, at least what I will put out

for you folks to consider, is that there may be in a sense two theories going on, or two types of competition. And these two types of competition may in a sense, people may be talking about different types of competition. The government may be talking about one type of competition, where the government is saying this hospital merger may reduce competition, and the geographic markets associated with that competition may be, in fact, relatively small.

The hospitals may, on the other hand, be focusing a little bit more on a different type of competition, and the evidence that they present is equally correct, but it's focusing on a different type of competition, and it may well be that to some extent, at least in my view, that the two sides are talking a little bit past each other, and that understanding the two types of competition, we can at the very least reconcile the types of evidence that are put before the Court, hopefully in future cases, if it goes to the court, whether we're talking about the courts or the ultimate decision makers at the agencies, it can help them understand how to evaluate these two different types of competition.

So, the competitive framework that I want to introduce is the notion that hospitals really compete in

two different stages, and that these two stages of competition are going to be a little bit different from each other. The first stage of competition is going to be focusing mainly on the hospitals somehow trying to get into health plans, whether it's an HMO or PPOs, trying to get in their health plan work to be a preferred provider.

The principal element of competition, or at least a very significant element of competition, to get into that customer's health plan will be price. They're trying to make themselves attractive to the health plan.

Once they get into the network or even if they don't get into the network, there's a second stage of competition. And that second stage of competition is trying to get the individual patients. And the form of competition, the means of competition at that patient level of competition will be very different. It can take the form of perhaps outreach clinics, it can take the form of advertising, trying to make themselves popular to the individual patients.

And while both of those levels of competition are interrelated, and each of the types of competition will affect both the levels, they're going to affect it differently. And so the ultimate conclusion about market definition or effects may well differ between

those two. The two stages of competition are going to differ potentially in some very important areas. Who is the "customer" from the antitrust perspective, what are the means by which the hospitals compete? As I said, the hospital geographic markets, and as I said, the evidence, the relevant evidence as to all of these factors, may be a little bit different between the two stages.

So, let me focus first on the first stage of market definition, and here what I would propose is that when the hospitals are competing, say, who's in the network, who is out of the network, the customer from the antitrust perspective is the health plan, it's not the individual patient, but the health plan. And the health plan is trying to figure out who do I put in, who do I take out. And the prices the hospitals offer are being constrained by that decision. Who's going to go in the network and also once you're in the network, how many patients you end up getting.

And the geographic market definition, as Meg was saying, should be driven, principally if not exclusively, by the Merger Guidelines. Their question is would a plan end up diverting enough patients to alternative hospitals in a different region in the event of a price increase, as to make that price increase

unprofitable.

And I could go at great length as far as some of the details of that question, for example that the market definition needs to focus not on patient locations but instead on the hospital locations. The location of the patients is important, but it's an indirect element, and secondly, I would strongly urge that folks focus on what the Guidelines talk about. Is a pricing increase by not all of the hypothetical monopolist hospitals, but any or all, including a subset of those hospitals, because that can dramatically impact, I think, the answer as to proper geographic market definition.

So, when we're focusing on plans, as the customer at this first stage, the first question is, what do plans want? Well, hospitals would probably say something very differently than an economist might say, but essentially what plans want is they want a marketable product. They're going out in the community and they're trying to compete. And they're competing on saying, hey, guys, sign up with me, my plan is a good plan for you guys to be enrolling on. They're saying that to the individuals, they're saying that to the employers who are choosing health plans. And the hospital network is an important part of what any health

plan offers. The health plan wants to offer a hospital network that's attractive, not to an individual patient, not to every single enrollee, but to a big class of potential customers.

As far as what is a marketable hospital network? Well, there are a bunch of different factors. One is, you don't want it to be too expensive, because that's going to drive your product out of the market, it's not going to be price competitive. You want hospitals that are in some sense attractive to your potential customers, the enrollees, that is you may want the specialty hospitals that people care about, if you've got a children's hospital in town, that may be an important hospital to have in there. You'll probably want, and I'll call it local hospitals, because the question is still how local is local? And you probably want hospitals with good reputations. That's how you're going to sell your product.

You probably want hospitals that are included by the physicians in your network. It doesn't do much good for your network if your physicians don't admit to the hospitals in your network because that just upsets everybody. And you also probably don't want confusing access rules to the hospital. If you have rules that say, well, you can only go to this hospital under these

certain circumstances, it ends up confusing enrollees, enrollees go to hospitals they're not allowed to go to, but they thought they were allowed to and it creates a lot of ill will.

Now, faced with a price increase, if we take the previous slide, the underlying objectives of a health plan, a health plan faced with a price increase from whether we're talking merged hospitals or from our hypothetical monopolist, faces a trade-off. They either have to pay higher prices, basically accept the higher prices, or somehow they try to get patients away from those higher priced hospitals. And they can do it in several different ways.

One is, as Meg was saying, they can absolutely drop the hospital from its network completely, and that's a fairly Draconian solution. Alternatively, they may be able to divert patients, keep the hospital in the network but use certain instruments or mechanisms to send some patients away to other hospitals. That's the form of price discipline the plans can bring to bear.

And the health plan in trying to choose between these two options, is going to say, which one is going to leave me with a better plan? Am I better off just selling the same plan I used to sell but with a higher price, or should I, in fact, somehow offer potentially a

less attractive plan, because either it has these diversion techniques or not what the hospital folks want, but it's a lower priced plan. Well, that's going to be the issue as to whether or not they divert hospitals, that's fundamentally going to be deciding what the geographic market is, what are health plans going to do?

Two issues associated with these choices. One is when a hospital price increase is imposed, the impact on the plan, and that's the marketability of the plan, may be relatively limited. The hospitals are only one component of the health plan's total price. Secondly, the price increase may only be a five or 10 percent price increase, it's only five or 10 percent under the market definition test. And secondly, typically a plan's premiums are going to be -- whether it's community-based or for an employer who is doing self insurance, those single hospitals won't be the full population of hospitals. You can end up having effects where a 10 percent price increase may ultimately only impact the premium by say half a percent or less. So, that's going to be one option facing the plan, well, do I want to increase my premium by a half a percent, and the alternative is if I do, and the hospitals impose these diversionary tactics, my product may be less

attractive. Which one do I want to do?

Well, let's focus on the possible diversion strategies that the plan may have in order to get patients away from the hospitals imposing the price increase. And I've listed a few of the possibilities. There are as many possibilities as imagination can have. But I think these are probably the most commonly discussed. One is, the health plan can simply drop the hospital. Again, the Draconian solution. Secondly, a health plan can end up diverting patients by adding additional hospitals to the plan and in a sense diluting the number of patients who go to the merging hospitals. Given more choice, more patients are likely to say, hey, I won't go to the merging hospitals anymore, I'll go to this newly added hospital.

Possibility of backfire on that one, as much as it may reduce patient volume in all the network hospitals and so all the other network hospitals may say, hey, if we're not getting as many patients, we're not giving you as good a price.

The plans may create incentives for the patients to switch hospitals. There's a real possibility. The incentives may be things along the lines of, we'll reduce your copay by $100 if you go to this other hospital. That would be the carrot form of an

incentive. You can use the stick form as well as saying, well, gee, if you go to the merged hospitals, you're still entitled to go there, but we're going to charge you an extra $150. And lots of other financial incentives that you can think of.

Similarly, you can create financial incentives for the physicians to divert their patients to other hospitals. You may put them under some sort of a risk sharing contract, where the physicians pay more out of pocket for the higher prices, you may threaten the physicians with dropping them from the network, you may impose penalties on the physicians for using higher-priced hospitals. There's lots of possible mechanisms.

And again, these diversions can be absolute, or they can be partial diversion. I would stress that with all these diversionary tools, that in the particular hospital merger you're looking at, in the particular market that you're looking at, careful distinction has to be made between could and would. All of these diversionary tactics could be imposed, and they could be extraordinarily effective at diverting patients, but it gets back again to would the customer go that route. And that's going to get back again to how is it going to impact the profitability of the plan, how will it impact

the marketability of the plan, and that's going to vary, market to market, and it's going to vary between the hospitals that you are considering at possible alternative hospitals.

All these strategies will differ in effectiveness, the financial cost and the enrollee acceptance of the plan.

Running through some of these quickly, again, I would point out that even some of these diversionary tactics can be financially costly to the plan. So, when they're considering, do I want to divert patients in order to avoid a price increase, well one of the factors is if I give my patients carrots, basically bonuses to use other hospitals, well, that's coming out of my pocket, am I ultimately going to be saving any more money by giving bonuses for folks to be using other hospitals, than just saying to heck with it, I'm going to pay the hospital's higher prices. And much of the answer here will depend on can the health plans effectively, I'll call it target, or discriminate between their enrollees.

A lot has been said in other cases about there being customers or the marginal patient who might be very indifferent between using the merging hospital versus a hospital outside the market. And certainly, if

those individual patients could be given bonuses to go to another hospital, that tactic might be a very effective one for diverting, but working it through a little bit further, and the health plan is saying, well, gee, I'm going to give all of these patients $100 if they use the hospital outside of this arbitrary geographic market, what's the health plan going to do for all the patients who are already using that hospital outside the market? Is it going to tell the coworkers, one who is on one side of the hall, one who is on the other side of the hall, one guy who is always using the hospital outside the market, the other guy who is being incented to go outside the market, that one of them gets the $100 bonus and not the other?

If they can't distinguish, and maybe they can, but if they can't, then you create the seeds for unrest by discriminating between these two folks, or alternatively, you've got to give this big financial carrot to people who are already using that hospital, it's just sort of a massive outlay of financial expenditures.

Financial sticks, imposing penalties on folks for using the "wrong hospital," that may be costly in terms of enrollee dissatisfaction, and the other factor is when you're considering diversion to another

hospital, it seems obvious, but oftentimes not checked, you've got to make sure that other hospital you're diverting folks to is cheaper than the one you're trying to divert them away from. It's not always going to be the case. Especially if you're trying to divert them with the lure of sort of a high prestige hospital, saying, you know, travel the extra 50 miles, because ah-hah, then you get to go to the university hospital. The university hospital may be more expensive than the merging hospitals. So, you need to at least be careful of that.

Diversion techniques may be unpopular. Again, it depends on how you're trying to divert patients, and how far you're trying to divert the patients. You need to be careful about how diversionary techniques are going to affect patient/physician relationships. And I think it's probably fair to say that it's easier to get an enrollee to change hospitals if they don't have to change their physician, than trying to get them to change both as well.

So, looking at fact patterns like physician overlaps may be a relevant piece of the evidence on geographic market definition, as well as, again, asking and requesting, gee, even if the -- excuse me, even if the physician doesn't currently have privileges at the

other hospital, would they be willing to, trying to get into the issues of would the patient -- would the physician be willing to drive, whether it's ten miles or 50 miles a day on daily rounds. Alternatively if they're in a group practice, can they share the rounds and reduce that burden?

All of the answers to these questions, I think, will potentially vary dramatically market to market. In some markets these diversionary techniques can probably be extremely effective; in others, perhaps not.

Moving then to the second stage, patient competition. This is once the health plan has derived its network of hospitals, what do hospitals do then? Well, here, price competition is of really very little importance. Patients don't care what price a health care plan is paying for a different hospital, they're saying, hey, is it in network, is it out? What's my copay, what's not my copay? And so the price competition has very little effect.

Instead, what the hospitals are doing is here they, at least my sense is, there is much more scope for targeted patient competition. That the hospital is going to say, ah-hah, here are some patients maybe in another town or a specific community where we can really target our competition, try to get those patients,

without really impacting competition in other areas.

Here's where I think evidence, for example, of a hospital opening an outreach clinic 50 or 100 miles away is very clearly evidence of competition between those two hospitals. The hospital is saying, hey, I want to try to get some patients over here by offering my outreach clinic, by offering, you know, whatever it is to get the patients over there.

That doesn't necessarily impact, or at least significantly impact, the first stage competition, the price competition for the health plan, but it is a very real way where an individual hospital can try to get additional patients into its hospital.

Other forms of this non-price competition, at the second stage, will include, for example, as I said, the physician or the hospital staff, the outreach clinics, things like image, community appeal, advertising, all sorts of this competition are ways in which hospitals do try to steal hospitals from other hospitals potentially far afield.

I think it is particularly here that the discharge data, or what's sometimes called the patient origin data, may be particularly relevant. As I said, it's very clear. Hospitals do look at this stuff. It's a little bit facile to argue, as I am sort of to say I

have at times in my past, that hospital discharge data is completely worthless. These guys look at it a lot, they pay a lot of money. But the question is what is the relevance for what type of competition?

And I think in terms of second stage competition, trying to figure out, gee, where are we not drawing any, for example, OB patients? Where are all our rival hospitals getting the Hispanic population going to? Trying to figure out sort of the strengths, the weaknesses and the opportunities. The patient origin data very clearly can help them address that. They can say, well, one of the reasons we're not getting any admissions from zip code 12345 is we don't have any patients there. Come on, guys, let's try to get some patients in that zip code.

That's an effective means of this inner-hospital second stage competition, may have very little impact at the end of the day on how health plans can divert patients back and forth in response to a price increase.

So, comparing the two stages, I would emphasize that you really are focusing on two different customers with two different objectives, and because of that, the competition, the means of competition, the effects of mergers, and the market definition may very well differ. Again, prices are going to be -- or are a key element of

this first stage competition, very little effect on second stage competition. A lot of forms of non-price competition may be very important for second stage competition, but yet have only limited impact on first stage competition, and again, because of that, the relevant evidence in trying to assess the competition at the two stages may be very different.

Implications are that geographic markets may differ, as I said, the effects of the merger may differ between the two stages of competition. There may be a big effect at one stage, but not the other.

I would put forth that in the government's efforts, they don't need to have to show an effect at both stages of competition. Showing a diminution of competition at just one stage of competition should be sufficient, absent efficiency considerations, to warrant challenging a merger. And if it's true, as I tend to think it is, that the government has been focusing primarily on the first stage competition, then even if the evidence is compelling that second stage competition is vigorous and will be largely unaffected by a merger and the geographic markets at the second stage are very large, I would suggest that the government's challenge for first stage effects is still warranted.

Now we're going to move to the empirical

evidence, and I am going to go quickly over this, just because it tends to be a lot dryer and more dull and economists have enough strikes against them without going into dull data without being charged as being dull.

I think most of the empirical work, the research, tends to be supportive of narrow geographic markets and limited competition between hospitals. There are three pieces of work that I think go to this most directly. One is a piece that I have co-authored with Bob Town that's in the journal of health economics. There are a couple of working papers done by a series of folks by Cory Capps, David Dranove, Mark Satterthwaite and I think Shane Greenstein have all been involved in some empirical research. And also, most recently, although I haven't had time to look carefully at it is some work by Marty Gaynor and Vogt, and his first name is Bill, Bill Vogt.

All of these papers, I think, tend to confirm that markets seem to be relatively limited, that hospital competition tends to be relatively limited, that mergers will tend to have -- can, not all mergers, certainly, but you can certainly tend to have merger effects in many cases, even in urban hospital mergers.

Especially with regard to what does this mean

for market definition, relying on patient origin data? To me, patient origin data almost always ends up giving very broad geographic markets. Geographic markets in which especially in urban contexts, merger related effects would be very implausible. So, to the extent these studies are suggesting that even urban mergers, and I'm talking about mergers in the Los Angeles, San Diego and Chicago areas, are suggested to have price effects. I think it calls into significant question whether or not large geographic markets have plausibility associated with them.

I'm going to skip over -- I was going to talk a little bit about my own paper a bit, but let me skip that and finish up with a discussion of the FTC's merger retrospective. First of all, I applaud the FTC for doing it, I think it's an extraordinarily useful, hopefully not just an exercise, but study. I would say it's a long time coming, but certainly well worth the wait, and I look forward to seeing the results from it.

I think it offers significant opportunities to learn. I have my expectations as to what it will show, but I am going to be extremely interested to see if I am going to be wrong all the years. I am going to be particularly interested in seeing to what extent the patient diversion tactics and strategies, I should call

them strategies, of health plans, have ultimately proven themselves effective.

I think it's very important to see the merger retrospective as a test to see all of these counter strategies by the health plans that have been offered up. Are they -- do they fall in the camp of would or could? I suspect it's going to be in the camp of they could do these diversionary tactics, but in fact they haven't. And I think in large part, this comes from my anecdotal sense, from at least a few hospital mergers, where we've heard that the hospital mergers have, in fact, led to some significant post merger price increases, despite court findings that the geographic markets are extremely large and that there is, in fact, a lot of competition remaining out there.

And I think if post merger effects are found by the FTC's merger retrospective, then I think one of the most important uses of that finding will be really to position the agencies for saying, hey, these strategies that have been put forth in the past for saying why geographic markets are, in fact, really very broad, you need to second guess those. You need to reconsider those strategies as being effective diversionary tactics, because we see price effects. How can those price effects have taken place if, in fact, the markets

are as large as have been postulated, if these patient diversion strategies are as effective as have been postulated.

So, again, closing up, it's very obviously a very fact-intensive and market-specific question as to whether or not these diversionary strategies are effective, and I certainly don't mean to be suggesting that they are never effective or that they are rarely effective. I think in some markets, they are probably very effective. But I think it needs to be questioned very carefully as to how broadly those claims of patient origin strategies, in fact, hold up in every market.

Thank you.

(Applause.)

MS. MATHIAS: Thank you, Greg.

Barry?

MR. HARRIS: A couple of preliminaries. One is this is the first time that I have appeared at an FTC proceeding since I spent four days being cross examined by Rhett Krulla, so if any of you know Rhett Krulla, you will know that this was much more pleasant than the last time that I was involved in one of these. The second thing, as Meg suggested, there's a certain similarity between the talk Meg gave and the talk I'm about to give. Meg and I have been working together on and off

for 20 years, so I suppose that's not a big surprise, but I'll just read you the first paragraph of my notes.

There appears to be a perception that geographic market definition has been controversial in recent hospital cases. This controversy stems in part from the broad geographic markets identified by the courts in some of their recent cases. While the scope of the geographic market may vary from case to case because of different fact patterns, broad geographic markets are often the natural consequence of applying the merger guidelines when the merging hospitals have broad service areas and cannot price discriminate based on the residential location of their patients.

So, sounds fairly familiar. So, what I've been doing, and I was listening to Greg with one ear, but with the other ear I was kind of crossing things out on my outline, and what I think I will try to do since so much of what I had planned to say was already said very clearly by Meg, is go through certain specific points and in a sense just adopt her testimony or her presentation.

First thing is, just to -- maybe this is putting the cart before the horse, but let me tell a story about broad geographic markets. Roughly ten years ago, I worked simultaneously on two hospital mergers, and I

apologize to Greg Werden, I told this story at a conference we were at together about two, three months ago, but one was in Manchester, New Hampshire, and one was in Pueblo, Colorado, and both involved merger of the only two hospitals in a city.

It turns out that the Department of Justice was looking at Manchester hospital merger and they let that through and the Federal Trade Commission was looking at the Pueblo hospital merger and that was challenged. In Modern Health Care, which I presume most people here read, wrote an article about this, and the nature of the article was the two different antitrust agencies have very, very different standards for analyzing mergers.

Well, the reality was, in Manchester, New Hampshire, that was a -- they had a broad -- relatively broad service area, and while there was not a whole lot of competition for the patients that lived in downtown Manchester, there was a lot of competition for the patients that lived in the rings outside of it. And I, from memory, I would say 50, 60, maybe 70 percent of the patients clearly had choice, actually lived closer to other hospitals, even though they provided a good chunk of the service area for the Manchester hospitals. And why that wasn't part of the decision making process, my presumption is Justice let that through because it

concluded that these other hospitals competed for enough of the Manchester patients to make it unlikely that the merger would harm competition.

By contrast in Pueblo, I've never been to Pueblo, but I'm told that it is surrounded by mountains and plains and there's not much of a population outside of Pueblo. So, when you looked at patient origin data, what you saw was, is that Pueblo got its patients from a small number of zip codes, and when you looked at each of those zip codes, the Pueblo hospitals joint share in those zip codes were in excess of 90 percent, time after time.

So, I went in and I helped the lawyers I was working with on the Manchester matter, because in my mind the economics said that the market should be extended. By contrast, I never went in on the Pueblo matter, and apparently the FTC agreed with me, they brought that case, and as I understand it, the merger never took place.

And, again, it came down to the facts of the case. So, there's no notion that patient origin data always provides broad markets, or that -- and I'll get to that, that critical loss type analysis always provides broad markets, it depends on the facts of the case. And these are two stark examples, but the same

types of things show up in other matters.

Now, before I get specifically to geographic market, one thing that has to be said, and that is the concept of geographic market only makes sense when it's used in conjunction with a properly defined antitrust market. Now, Meg, and I think Greg as well, identified antitrust market for you, but it basically consists of the group of providers who, if they acted collectively, could profitably raise price or would profitably raise price.

They want to exercise market power. They're raising a price above competitive levels. But what that means is, you need a mechanism by which to do that. It can't be a lot of hand waving and saying, these are only two of a small group of hospitals, and therefore it's a problem. You have to focus your analysis on a way in which the market power is going to be exercised.

Let me give two examples that get a lot of use, I think, in the analysis of hospital mergers. One is the so-called cluster market. Well, my experience is that no one's ever been able to define a cluster market. It's sort of an unspecified group of services that hospitals offer. Underlying it is some notion of economies of scale or scope, but they never tell you what the services are. It's just that hospitals have to

provide a cluster.

Well, it may be true that you can raise the price for people getting obstetrics or people who need heart surgery, but you can't raise the price for some unspecified cluster of services. So, if there are services in which there's a lack of competition due to a merger, well then that's where you focus. But the notion of a cluster market where the services are unspecified makes no sense. It may come in the back door when you're identifying who are the parties that are participants in the market, and that may or may not be true. You may or may not need to offer a variety of services in order to be a provider of obstetrical services. You may or may not need to have a variety of services to be a provider of cardiac services.

That's an empirical question, but the market itself focuses on the demand side, and that's for the specific service.

The same problem exists with regard to the so-called anchor hospital theory, where the logic is managed care plans need a specific -- a small group of specific hospitals to anchor their network. There's two things wrong with that. One is empirical, and that is that nowadays, as Meg said, most hospitals are in most networks, so that notion, I don't think, any longer

applies. But I think the more important reason is there's no mechanism, bar none, in which you can exercise market power as an anchor hospital.

And what do you mean by an anchor hospital? You have the quality OB service or you have the quality cardiac service. Well, then, that means that you can raise the price of cardiac services or obstetrical services. You need a mechanism in which to exercise the market power.

The one difference, the one exception to what I just said, though, I've never, ever seen this, would be if the so-called anchor hospital kept their prices that they charged when patients actually come in the front door at competitive levels, but that said, you want me in your network, give me $1 million up front.

That would be a mechanism by which an anchor hospital could extract -- exercise market power, but by actually affecting the individual prices of services, no, because you still must compete with those services.

Let me move to the second category that Meg left open for me. And that ultimately comes to the mechanism by which you're going to define the geographic market. Let's assume you have the product market taken care of, let's use obstetrics, just as the example. Well, the guidelines definition of a market, again, asks the

question, is a price increase going to be profitable? And that naturally leads to the notion of critical loss.

And, again, to understand why that is true, let's go back to the definition of what you mean by a market. It's the group of competitors that could profitably raise price. What's the logic behind that in well, if you can profitably raise price, you're not going to lose too many of your patients, so the competition that takes place involves the group of hospitals within the market.

Okay, how do you answer the question of whether or not you can profitably raise price? Well, think what happens when you raise price. Presumably, some people are going to leave and some are going to stay. Well, again, let's use the frequently used 5 percent price increase as an example, and the key here is when you do critical loss, you want to ask it for the range of prices. There's nothing special about a 5 percent price increase or a 10 percent price increase. But let's just use the 5 percent price increase as the example.

When you raise price by 5 percent, you're going to lose some patients, and you want to know, is that enough patients to make this 5 percent price increase unprofitable? Well, for those patients who stick around, with a 5 percent price increase, profit goes up

to reflect the higher revenues. Costs haven't changed. But what happens to the profitability affected by the patients who leave?

Well, when a patient leaves, you lose the revenue you would have received at the lower price, but all that is not profit. You would have had costs to serve this patient. So, the cost of the patient leaving is the difference between the revenues you would have collected and the cost it would have taken to serve these patients.

Well, so, how do you go about finding out just what is the critical loss? You're looking for the number of patients that balance these two numbers. The increased profit for people who stay, the lost profit for people who leave.

Well, you need two different numbers in order to do that. One is the size of the price increase. The second number is something very specific to the market you're dealing with, and that is what is the variable cost associated with serving the patients who are leaving?

So, that has two aspects to it. One is obviously what's the cost, but there's a time aspect to it and there's a quantity aspect. When I and people I work with have gone out and tried to estimate variable

costs of hospitals, we always seem to get a number that's fairly similar, and that is the variable costs lead to a contribution margin of roughly 60 percent. I've seen it as low as roughly 40 percent, I've seen it as high as roughly 70, 75 percent.

But what does that mean and why is that true? Well, you have a contribution margin of roughly 60 percent, which means you have low variable costs, because there's so many fixed costs in hospital services. You obviously have the building, you have the equipment, but a big source of fixed costs that sometimes get counted as variable, but in the real world are fixed, is there's a lot of labor, human service costs that don't vary in a hospital.

In an obstetric ward, you have nurses, and I think you need four of them, and it doesn't matter if no one comes in the front door, that is fixed, at least in the range up to roughly 15 -- a census of 15 babies in the OB ward.

When you work through this, and find out that the contribution margin for hospitals runs 50, 60 percent, what you learn is that the critical loss associated with the 5 percent price increase is only about 7, 8, 9 percent. What that means is that if you lose as few as 7, 8, 9, say 10 percent of your patients,

a 5 percent price increase is unprofitable.

Well, where this leads to the broad geographic markets is, and goes back to what Meg said, you ask where does the hospital get its patients from? Well, it gets it from throughout its service area. It doesn't get it from the downtown, it gets it from throughout its service area. And it risks losing patients anywhere in that service area. And you cannot, as a hospital, I've never seen this, and I don't know how you would do it, you cannot price discriminate based on residential location.

So, what happens? The hospital has to worry about losing patients throughout the service area, and if there are enough people outside of the downtown who are presumably a two to one merger is going to matter, and not matter, but it's going to be less choice there, then the people on the outside of the downtown area that's going to be the tail wagging the dog and it's going to prevent those hospitals from exercising market power.

In terms of defining geographic markets, a critical loss analysis has two steps: One is what I just defined, which defines the critical loss, what is necessary? How many patients can you lose before a price increase becomes unprofitable? The second step

involves actually calculating how many patients will leave.

Now, typically let's say in a non-hospital market, just to pick a market out of the area, we'll say cruise lines, you can often get data that includes prices, includes quantity, and you may be able to define the quality of the service relatively well. And that type of data lends itself fairly well to a more formal econometric type of work.

That doesn't play out very well with hospitals. I have never seen data sufficient for a specific hospital to do very good econometric work. There are a host of articles out there that do look at these sorts of things, but if you read the articles carefully, they often, in a sense, define away the results. Sometimes they'll define the elasticity and tie it to market share. You see this in some kind of simulation models. While it may or may not be tied to market share, that's a fact to be learned, not to be assumed.

So, how do you go about answering the question will enough people leave? Well, we've heard, again, from Meg, and from Greg, you look at patient origin data. Well, the way I prefer is to look at patient origin data. Let's look at the merging hospitals service area, but not broadly, as in the Elzinga-Hogarty

test. The Elzinga-Hogarty test goes, and it's basically a summary of what's going on throughout the service area.

It asks how much outflow exists and how much inflow exists, but it never asks the question for specific patients or groups of patients. And there's a lot of danger of gerrymandering when you're dealing with Elzinga-Hogarty, and as Professor Elzinga has mentioned, it tends to be plaintiff oriented, it tends to define markets that are too small.

And there's two Elzinga-Hogarty tests, a weak one and a strong one. The problem with the weak one is that they think the standards are 75 percent. What that means is 25 percent of the patients in a sense aren't even being considered, and when you think going back to what I talked about with critical loss, that you only need a diversion of 8, 9 percent, in typical Elzinga-Hogarty analysis, you're not even addressing the question. You can pass an Elzinga-Hogarty test and you still have enough patients who you aren't analyzing, they alone could prevent a price increase from being profitable.

So, what I would prefer to do rather than relying on aggregate data like in the Elzinga-Hogarty test, I think the way to use patient origin data is to

go zip code by zip code. And, again, this should be for a specific service, obstetrics, cardiac, whatever. And the advantage of going zip code by zip code is you learn when you do that that you're looking at a zip code, and this zip code is located halfway between -- just to pick a merger out of the air -- halfway between Poplar Bluff and Cape Girardeau in Missouri. Well, it may be that Cape Girardeau and Poplar Bluff are 70 miles apart from each other, but there's a town halfway between that provides substantial patients to the Poplar Bluff hospitals, and people there not only could, but already do, exercise choice.

So, the way I have used patient origin data in the past is to look at each of these zip codes, ask the question, do enough people already exercise choice for the same services, and if so, I would call that zip code a zip code that is an at-risk zip code, meaning if you raise price, they're at risk of going somewhere else.

Do this zip code by zip code, and then think of it as putting a little check next to zip codes in which there may be problems for the hospital to exercise market power. And at the end of the day, go add up those zip codes and ask yourself the question are there enough patients who are exposed, who are at risk, that if you try to exercise market power, it would probably

be unprofitable.

You want to make sure you're not going to say if the critical loss, let's say is nine, if there's 9.1 percent of the patients in these at-risk zip codes that it's an extended market, it doesn't mean they're all going to leave, but if you learn, as we learned in Poplar Bluff, that roughly, say, 40 percent or 50 percent of the patients come from at-risk zip codes, and you only need ten, then what you're saying is, if only one in four or one in five of those patients who live where people are already using other hospitals, actually exercise this choice, well then that alone will discipline the hospitals.

Since my time is short, let me just jump ahead to the notion of incentives for using specific facilities. And again, it's been covered by both Meg and Greg, but I guess to have maybe one and maybe two points to add to that. Number one is, and I hate to be honest, I haven't completely thought this through, it was a reaction that I had when I was listening to them. But it seems to me if you're going to bring a case, you need -- if you're the government or if it's a private case -- you need to have some kind of mechanism by which the managed care plan or the patient is going to have a reason for changing hospitals. Because if you don't

have this kind of mechanism to create incentives for patients to go to different hospitals, well, then it suggests, I think, that you don't have the competition in the first instance.

And that is, the merging hospitals are not competing. If there's no sensitivity to price, or no sensitivity to quality, at the patient level, well they're going to go to the same prices even after you raise your prices. Of course you get into the problem of, you know, what stops you from raising price? You have the Cellophane type problem. But you need -- there has to exist a mechanism by which patients can choose between hospitals, and that same mechanism can exist that exists between the merging hospitals, can exist between the merged hospitals and the hospitals outside of the merged area if the patients are willing to go there.

Which brings me to my last point, and that is what are the mechanisms? Well, people have -- I mean, historically, we've had those mechanisms, and it's not just in or out of networks, although we do have HMO plans and PPO plans and point of service plans, all of which have networks, but as Meg points out, those networks are getting more and more filled with almost everybody.

Well, there are other plans that use copayments, differing copayments and differing deductibles, and actually we observed that in Poplar Bluff, and that was one of the things that I testified in Poplar Bluff that I testified to. But we also have newer things that have been talked about for a long time but are becoming much more popular. There's tiered plans, there's cafeteria plans. And the essence of these, while they change from instance to instance is, I'm a managed care plan and I'm going to sell my broad product to an employer. Let me use my own firm.

We were given health care plans, and we're using Blue Cross/Blue Shield of the national capital area, but and the firm's picking up a basic policy. I don't remember now, I made the choice months ago, I don't remember what's in the policy, but there were five or six or seven alternatives that we as employees had to pick up other plans that were more inclusive.

And if, as a result of a merger, some plans priced themselves too high, the only -- it's a relatively easy matter to just have one more tier and have those hospitals in the higher-priced tier. And those patients, or those subscribers who are willing to use the higher-priced hospital, well, they're going to sign up for the higher-priced tier and pay for it

themselves. Again, I left that out. If I want the higher-priced tier, I pay a surcharge. So, if you want the higher-priced tier with the hypothetically higher priced merged hospitals, you now have to pay the money itself. It's like any other market. The patients in that world will sort themselves out.

Let me just give you two clues, and then I'll turn over the podium. There are two recent articles, there's been a host of these articles, many of which are in Modern Health Care, but two recent ones which I have just seen in the last two weeks. One is in a journal called Health Services Research, this is the February 2003 edition, and it's called "An Empty Tool Box: Changes in Health Plan Approaches for Managing Costs in Care." And let me give you my email address, and if you -- I can give you the site if you ask, it's harris.b@ei.com.

And the last cite is in a -- I won't call it a journal, it's in a magazine called Medical Economics, if anyone reads Medical Economics, and I hope I don't insult anybody, it's not economics like in the American Economic Association, it's more like if you have a successful medical practice, which kind of car do you want to buy or what kind of stereo system do you want, but from time to time they do have interesting articles.

And this appeared in the March 7th edition of it and it's called "What's the Fallout of Patient's Pay," and it's sort of a chatty article, but it runs through a lot of the mechanisms, the tiered mechanisms, different kinds of cafeteria plans, et cetera, that can be used to affect choice in this way.

Anyway, just to sum up quickly is, I agree that the merger guidelines provide a very robust mechanism by which to define markets and to analyze the exercise of market power. And I haven't seen anything in doing this for a long time, I'm not sure I may be the oldest person on this panel, that suggests to me that health care markets in general and hospital markets in particular cannot be analyzed under the principles outlined in the guidelines.

Thank you.

(Applause.)

MS. MATHIAS: Ted?

MR. FRECH: I'm working on a project on Elzinga-Hogarty tests and market share in hospital markets for our coming issue of the antitrust law journal with Jim Lagenfeld, and so this conference came at a perfect time. The paper is not far along, but I've done a lot of background work sort of getting up to speed, and that's sort of the basis for a lot of what

I'll say.

First, just sort of general background, mergers in health care and hospitals in particular are really booming. And in a recent paper, a paper by Dranove and three other guys, he said there were a thousand mergers, hospital mergers in the seven years between '93 and 2000. And the antitrust agencies have been remarkably restrained and have only challenged a few of these things. And in the early period, up until '93, they almost always won, and then as most of you know and some of you have been involved with, since then, the FTC and the DOJ or zero for six, and the state of California lost a really important one in the Sutter health case.

So, there has been an enormous U-turn in the way these things have been treated in the courts. And I think the biggest source of this, intellectually, this U-turn, is the treatment of geographic markets. So, I think in terms of what really has leverage for the courts, this is the most important session. And I'll discuss some of the reasons I think why the courts' ideas of geographic markets have expanded so much in recent years. And I'll also, along the way, give the impression which is certainly true that I don't think it makes sense that they have expanded in recent years.

So, the earlier cases, hospital markets were

almost always considered local, and one of the classic statements of this is by Dick Posner in the Rockford Memorial case, which the 7th Circuit infirmed a decision to enjoin a merger of the two biggest hospitals in Rockford, Illinois. And Posner wrote, and this is a famous quote, so I am going to read the whole thing, and I'll tell you in a minute why it's famous.

So, Posner says, "For the most part, hospital services are local. People want to be hospitalized near their families and homes, in hospitals in which their own local doctors have hospital privileges." And in doing this, the court upheld a three-county area, with a radius of about 30 miles, explicitly rejecting a ten-county area.

Now, this has become a famous quote, because it hasn't been followed, and it marked the way the law didn't go. Now, obviously the older antitrust tradition was following this quote, and this quote sort of is a culmination of it, in looking at these markets as quite local.

Also, most of the economic research on hospital competition has looked at these markets as quite local. And typically used things like SMSAs, single counties, smaller areas than counties, sometimes pure distance measures have been used, and the distances used have

been commonly in the ten to 20-mile range.

If there's a trend in the research literature, it's towards smaller geographic markets, not bigger ones. In the more recent models, particularly the ones using logit approaches have suggested areas that are definitely smaller than counties. And there's this paper by, I should mention all of them, I guess, Capps, Dranove, Greenstein and Satterthwaite. It's forthcoming in the Antitrust Bulletin. Greg Vistnes and Robert Town's paper in the Journal of Health Economics are examples.

More recent cases are going absolutely the opposite direction, the opposite of the original legal tradition and the opposite of the research tradition. And the markets have gotten, I would say, remarkably big. In the FTC versus Freeman Hospital in Joplin, Missouri, hospitals as far away as 54 miles away in Springfield, Missouri, were considered to be in the market. So the market was considered to be 17 counties. In U.S. versus Mercy Health Services, the market around Dubuque, Iowa, was expanded to include hospitals 70 to 100 miles away.

Now, so this is really a radical change. It's hard to exaggerate, it's so radical. So, what are the arguments that have been accepted that have led to this?

Well, I think there's a few of them that have been kind of too casually and uncritically accepted by the courts. One of them is that managed care has led to people being willing to travel much farther in response to small price changes. And this is the way the courts distinguished what they were doing from Rockford. Because obviously the government brought up the Rockford case and Judge Posner's very sharp statements about it.

So, they distinguish it by saying, well, now we have aggressive managed care that's going to send people all over the place geographically in response to price changes, price differences. If this argument were true, it should have left some empirical evidence in terms of actual distances traveled. They should have gotten much bigger over time, and they should have been -- they should be greater for managed care customers than others.

Some research, some of which has been done by Lee Mobley and me, some of which has been done by Jack Zwanziger, and some by Morissey and White, has shown this not to be true. And I want to show this in some detail, partly because it comes out really nice in graphs, and partly just to show that I think basically Posner had it right.

Here's the cite of our paper, the citation part,

which will also work for focusing. Here's just the summary of the distances. You can see it's from the California OSHPD data, which is this absolutely enormous data set. In our biggest version, we were running regressions of over a million observations.

So, you can see the mean distance traveled in 1984, kind of back in the old days, in terms of old antitrust, we were a little less than six miles for either managed care or nonmanaged care. This is for 15 counties kind of in the middle of California.

In '93, after this huge growth of managed care, the distances have gone up a very little bit. They're still quite sure, and you can get some idea of the distribution from the percentiles, but the distribution graph came out so nicely, so I'll show you the actual distributions.

That's just the distribution of people by distance traveled for HMO patients in the early period, and you can see you get to -- well, 15 miles, that's really minor. The people are just not going very far. Okay, that's supposed to be the old days.

Look at this HMO patients in '93, there's almost no difference. In fact, there's a version of this paper that we presented at the American Economics Association meetings a couple of years ago where we had the exact

same scale, and my co-author, Lee Mobley, could flip these things up and superimpose them exactly, and you can see the differences are actually minuscule. Now, I practiced that for hours and I could never do it. So, I'm not going to try it. It's a coordination issue.

Now, for non-HMO patients, in the old days, not much traveling. Slight -- very -- almost the same as HMOs. Then in the new days, it's almost the same. That is, people just aren't going very far. And this includes some counties that have big distances, have easy wintertime travel.

So, the managed care revolution did something, but it didn't lead people to travel further and it doesn't lead people to travel longer distances than people who aren't in managed care.

So, that, I think, just didn't work. It's an argument the courts accepted and it just isn't right. Or if it's somehow left, it left no traces in the world, in the observable world, which I find hard to understand.

The next thing was a critical loss analysis that was suggested by Barry Harris and Joseph Simons in his 1989 article. And the idea there is you start from perfect competition, and you have a hypothetical collusion of all the sellers in what's called a

candidate market. And the critical loss is the sales loss that would just defeat a price increase, just make it zero profit.

Then you compare the critical loss to the expected actual loss. And if the expected actual loss exceeds the critical loss, then you're not going to make money from raising the prices with this hypothetical collusion, and that means the candidate market is too narrow, and needs to be broadened out.

As typically implemented, this approach is problematic and tends to produce implausibly large market areas. And Ken Danger, who is in the room with us, and I wrote a paper in the Antitrust Bulletin, it was published in the Antitrust Bulletin, in a small symposium. There's also a paper there by Jim Lagenfeld and Wenquing Li, so I'm not going to go into that -- well, anymore, really.

But the predicted actual loss is an important part of the way this is really implemented. And that's implemented by what are sometimes called contestable zip codes or at-risk zip codes, were just described, or sometimes overlapping service areas. And the courts seem to have gone along with this pretty completely.

In FTC versus Tenet, the 8th Circuit blessed Barry Harris' analysis, this was looking at the merger

of the only two general hospitals in Poplar Bluff, Missouri, and Harris defined a contestable zip code as a zip code where over 20 percent of the customers migrated somewhere else, and found that 25 of the 31 zip codes in the service area were contestable in this sense, and then he argued that these customers were willing to travel to other hospitals in response to small price changes.

In California versus Sutter, the District Court used a similar logic, but the term used here was overlapping is service areas, but it's fundamentally the same concept. And she again interpreted overlapping service areas as meaning people would easily travel to defeat a small price increase.

So, those are two arguments that have been accepted by the courts, I think too easily. The third one is Elzinga-Hogarty. I think that's the biggest cause of expanded markets. The test proposed by Elzinga and Hogarty. Now, patient flows have historically been used in antitrust cases, going back to the very first ones. They're based on the loose idea that a geographic market should be sort of self-contained.

The Elzinga-Hogarty approach takes that kind of mechanically and literally, and this is sort of odd, because market flows are not closely related to market

definition and economics. And the Elzinga-Hogarty test takes a logical leap from some arbitrary level of migration, either in-migration or out-migration, to the idea that consumers would respond to small price differences.

Now, there's nothing in the economic analysis to justify this leap. And we have actually two of the people who have criticized this in the literature, Greg Werden and Greg Vistnes here, but you can see their papers in more detail on why this is a logical leap, why there's a gap in this.

So, I think using patient flows as a background issue, you know, one thing to look at as part of an antitrust case makes perfect sense, using it as sort of an up or down bright line test doesn't make sense, and I think that's how it's been taken.

Elzinga-Hogarty starts with in-migration, the area responsible for some arbitrary percentage of sales, sometimes called LIFO. This arbitrary percentage was originally in the first article 75 percent, later it became 90 percent for a strong market and 75 percent for a weak market.

Hospitals sometimes call these areas their service areas or their catchment areas. Well, you can get to these lots of different ways, but three main

ways. They come from first ranking geographic areas, by one of three criteria. It's usually zip codes, because that's where the best data we can get usually, ranked by distance from the hospital, by the total number of patients from that zip code, who use the hospital, or by the hospital's market share within that zip code.

So, whichever way you do it, you add up the zip codes until you get to 75 percent. Say if you're doing the 75 percent level one.

As the paper with Jim Lagenfeld will demonstrate, although we're not at the point of being able to do it yet, it makes a lot of difference which one you would use. It's not -- it's very sensitive to these things.

Further, the second method -- sorry, the -- yeah, the second method, the method by absolute numbers, especially likely to give you noncontiguous market areas, market areas with gaps and holes. Now, this is not literally impossible in terms of the economics, but it does kind of constrain common sense to have gaps in your markets.

Also, ranking zip codes by the number of patients usually gives the largest market areas. In particular, it picks up distant zip codes because they're very large. The hospital may not get a very big

share from some distant zip code, but if it's a really big zip code, by the accident of how they're drawn, will be swept into the market area. And that's why you get noncontiguous areas easier.

So, for example, a zip code that has 20,000 people, that's 40 miles away, might get included if the hospital gets 50 patients from there, whereas ten zip codes that are closer that only have a thousand people each, might send 40 people each, they would get excluded. So, that's how you get the gap.

Further, these distant zip codes that are large, and this has to do with the history of zip codes, they tend to be in cities where there's a hospital. So, you're particularly likely to pick up a hospital by ranking it this way.

And the courts have gone along with this, this level of detail, in the recent cases. In California versus Sutter, the judge explicitly endorsed it, saying the method of ordering zip codes by actual numbers of patients more accurately reflects the importance of a zip code to the area from which a hospital draws its patients.

In FTC versus Freeman, the District Court again approved the method of building up the service area by including zip codes according to the number of patients

each one contributes.

So, so far we've only been dealing with in-migration, then there's out-migration, that's another part of it, the other part of it, called little out from inside, or LOFI, and if we are looking at a 75 percent Elzinga-Hogarty model, then you would see if you have 75 percent of the people within the service area, who live within the service area, are going to your hospitals.

So, less than 25 percent out-migration. If you find that to be true, you have in Elzinga-Hogarty terms a weak market, 75 percent market.

These tests often suggest market areas that are improbably large, and even more so using 90 percent, of course. And so I'm going to give you some thoughts on why Elzinga-Hogarty markets tend to be so large. One is that some customers migrate from small towns to larger cities for idiosyncratic reasons, which we heard about earlier today. Higher quality, more sophisticated services, family connections, things like that.

So, some migration, especially in this predictable hierarchical direction from the small towns to the big cities, so more sophisticated hospitals, would unlikely be price sensitive. This is where the logical leap of the Elzinga-Hogarty test is most clear. It's the migration, especially in this pattern, this

hierarchical pattern, Elzinga-Hogarty is implicitly assuming if you see a lot of that migration, those people are price sensitive.

So, this indicates that Elzinga-Hogarty is especially problematic for hospital markets, which is kind of curious, because that seems to be the biggest area of application for it.

One indicator that something is wrong with Elzinga-Hogarty is that sometimes it can't be satisfied, indicating that markets will just keep expanding forever. What happens here is, as you expand the area to get to a high enough percentage to call it a service area, you keep picking up more hospitals, and that keeps making it more difficult and you have to expand it some more.

According to Barry Harris' report in FTC versus Tenet, this was true in that case, even at the 75 percent level, that they just could find no cut-off for Poplar Bluff. Now, this doesn't make economic sense. Poplar Bluff hospitals compete in some geographic market. We may have trouble fixing the boundaries with any accuracy, but it competes in some geographic market.

Now, let me make a few comments on some other problems. One is there are special problems with these flow-based measures in urban areas. It's especially

difficult to find a boundary. It's very helpful, in actual cases, if there are natural boundaries, bridges, farmland, things like that, separating sellers.

In a metropolitan area that's more amorphous, at least at the level of detail that we can really understand. It's hard to find the boundary. But it seems clear that hospitals at one end of Los Angeles are not competing -- are not seriously constraining the decisions of hospitals at the other end. It's very hard to fix where the boundaries would be in there.

Another issue is the question of who's making the choice, and that's Greg Vistnes' point about the two stages of competition. This used to have a simpler answer when I first started doing this stuff, because there wasn't managed care. And then obviously the consumers were deciding because the unmanaged care just wrote a check, wherever you went, it wasn't -- I call those the bad old days.

Well, this survives today, only in Medicare, which is kind of like a prehistoric fossil that's somehow been preserved. In the good new days, there are two levels. There's managed care deciding if you're in the network and then there's the competition among the hospitals in the network that Greg has talked about, and who has written about the most, and I would recommend

that you look at his work.

This bifurcation of choice leads to a couple of problems in market definition. One is that if you look at competition to get in the network, you'll typically get a smaller market, as Greg has said and written about. This also suggests that how managers of plans see the market is really important. The second thing is that actual patient flow data from which we do the Elzinga-Hogarty and any other patient flow analysis typically reflects a world where there isn't the first stage competition in an active sense.

And what I mean by that is that the networks don't change very fast. So, we get a few years of patient origin data, we're going to be picking up only the second stage of competition in a period where there were very little changes in the networks.

Let me get an example of this from this paper by Vistnes and Town, where they had proprietary data, wonderful data, from two HMOs in Los Angeles. One over a three-year period, one of them that averaged 51 hospitals only added two hospitals and dropped one. That big of a network. The other one, a slightly smaller network, had 34 hospitals, and over that period it added four and dropped two.

So, what this means is our patient flow data

only reflects the second stage competition. The first stage competition moves more slowly in a sort of more jumpy way, and you would have to have a really long panel and know in detail who was in what networks to be able to get that kind of information from that data, which typically doesn't happen.

Another thing that I want to talk about briefly is price data. You know, in a sense, people will say, well there's no price data in hospital markets. Well, in a sense, that's actually backwards. The problem is there are millions of prices. There's too many prices. Okay, first there are thousands of services that are individually priced on the fee for service side, and the definitions aren't even perfectly standardized.

The second point is a typical hospital will have at least tens, and maybe hundreds of payors with different prices. Not only that, the prices -- they're not only different, the very bases of the price, what gets priced, is different. You'll have charges, fee for service, you'll get discounts off of charges, that's two things that can happen. You get price per admission, DRG system, like Medicare, and you might think, ah-hah, now we have something that's comparable across different payors, but different payors have different outlier -- different ways of dealing with outlier groups in that

system.

Medicare's adjustment is largely based on charges, which is a very poor design, it leads to gaming, and most recently, Tenet was sort of found to have been gaming that massively by charging very high list prices.

Then there's the other way prices can be defined is per day, per diem charges. That's really tricky, because the same per diem rate really means different prices with different populations. So, if your group has, say, younger healthier people with the same per diem as another group, your prices in effect will be different.

Further, per diem systems also have outlier payments, at least the ones I've seen. And they're all different. The way they do that is all different. So, we've got -- it's not that we don't have prices, but that we have too many prices.

So, just in conclusion, I would say the scientific literature and the early court cases had hospital markets as being pretty small and pretty local. The courts have made a tremendous U-turn, I think, from uncritically accepting some arguments that I have just tried to outline, and I think the intellectual idea behind it is they want to create a bright line with an

Elzinga-Hogarty test or a contestable zip codes or something like that, and there just isn't such a thing.

So, I will leave you with that, maybe depressing, thought.

(Applause.)

MS. MATHIAS: Thank you, Ted, and next we have Greg Werden.

MR. WERDEN: Well, there hasn't been much disagreement today, so I thought I would start with a little disagreement. Ted talked about radical changes since Posner's Rockford decision and attributed some causes to that. I want to start by disagreeing a little bit with his analysis of why things changed.

In the first place, I think the main change is that Posner wrote that decision, the HCA decision, and since then we haven't had Posner. I think that accounts for a lot. Secondly, I think the main cause is the application, in some cases, the erroneous application, of the hypothetical monopolist paradigm, which was not really applied much at all in the earlier era. And I want to disagree that the use of the Elzinga-Hogarty test was a prime mover here.

The Elzinga-Hogarty test was used in the earlier cases, it was used less successfully, perhaps, but I don't think it's been used all that successfully in the

more recent cases either, although it has been used. I don't think the courts have relied on it that much. In one of the cases where the FTC lost, it was the party relying on the Elzinga-Hogarty test, I think wholly inappropriately, and Barry is nodding his head, he was on the other side, and the court didn't -- the court of appeals didn't go for it much either.

What everybody has agreed on, although Ted didn't actually weigh in on this, is that the right approach is the hypothetical monopolist paradigm, or the merger guidelines. I certainly go for that. I've been writing about the hypothetical monopolist paradigm for 25 years now. If you do the math, you'll see that's well before the 1982 merger guidelines were released, and I have been criticizing the Elzinga-Hogarty test on the basis of hypothetical monopolist paradigm since 1978. So, nothing I say will be all that new or different, unfortunately.

What has changed a little bit is that the hypothetical monopolist paradigm tends to be applied in a quantitative way. More quantitative in some cases than others. And the typical application involves the use of what I call the standard formula. These are the critical elasticity demand formula and the critical sales loss formula.

And there's two variants on each of these themes, there's the profit maximization calculation and the break-even calculation, which is, in fact, the only one that has been referred to today. Up until now.

The critical elasticity analysis is fairly straightforward. It hasn't been mentioned, but it's basically the same thing as critical loss analysis, just a slightly different way of looking at things. There's the profit maximization version of the calculation that asks: "What is the maximum elasticity demand a profit maximizing monopolist could face at the premerger prices and still want to increase price by some significant amount, for example, 5 percent?"

The break-even version of the calculation asks: "What is the maximum elasticity demand the monopolist could face at premerger prices and still not experience a net reduction in its profits by a given price increase, say 5 percent?"

Critical loss calculations, the two variations, again. The profit maximization variation in the calculation asks what the maximum reduction, hypothetical monopolist could experience in quantities sold and still sustain a -- want to sustain a given price increase. And the break-even version asks what is the quantity sold that the monopolist could lose and

still not experience a net reduction in its profits.

There are some potentially important differences between these two. I say potentially, because in practice, there probably isn't much. The calculations that implement the hypothetical monopolist paradigm in the merger guidelines are the profit maximization calculations, but unfortunately they are sensitive to the unknown shape of the hypothetical monopolist demand curve.

The break-even calculations are quite close to the profit maximization calculations if you look at small price increases and you have high margins, which are fairly normal circumstances. And the critical sales loss calculation is the one calculation that's independent of the shape of the demand curve, which is nice, that's one less thing to speculate about or argue about.

I don't need to go into these slides, but I described all these calculations, they're simple algebraic formula for implementing each of these calculations for linear demand curves and for isoelastic demand curves. As I said, the shape of the demand curve matters. These are the demand curves for which we have these handy-dandy formula. Those were critical elasticity, these are critical loss calculations.

You see here in the last column here the break-even critical sales loss calculation is the same for linear and isoelastic demand curve. The reason for that is that that's the one calculation that's insensitive to the shape of the demand curve.

Now, as has been mentioned, there's some recent literature on problems in applying these calculations, ways to go wrong. I refer to these as pitfalls in applying the formula, because I don't think there's anything inherently problematic in this analysis, but there are ways that one can go wrong in trying to apply it.

First, typical applications posit small price increases, but profit maximizing monopolists might impose a large price increase, as might the merger, and that can be a real issue in hospital mergers, and I'm going to talk about a case where it definitely was a real issue.

Second standard formula presumed constant marginal cost and no avoidable fixed cost, but that isn't necessarily the case, and it's not necessarily the case with hospitals.

And third, standard formula implicitly assumed proportionate increases in all of the prices. In hospitals we have a lot of prices. But profit

maximization may involve highly disproportionate price increases, so these handy-dandy formulas really don't quite give you the right analysis. Probably they don't go far wrong, but they can.

Now let's talk about some actual cases. The critical loss type analysis has been used in a lot of hospital merger cases. There are three cases that in which there are interesting, noteworthy applications of this analysis, beginning with the FTC versus Tenet, a case in which the District Court accepted the FTC's contention that the relevant market was limited to a 50-mile radius around Poplar Bluff, but the Court of Appeals did not.

While the Court of Appeals did not specifically endorse critical loss analysis, I think it's fair to read the court as having been persuaded by it. It did reverse the District Court, it did reject the FTC's market, and it did hold that there were practical alternatives for many Poplar Bluff consumers. There's no doubt in my mind that the court was influenced by the critical loss analysis.

The second case I want to talk about, one of the Department's cases, Mercy Health Services, this is the Dubuque Hospital merger case. As you can see by the citation, the Court of Appeals opinion was vacated as

moot when the hospital merger was called off, because we managed to drag the thing out long enough so that they couldn't keep the merger together, so we chalked that up as a victory for truth, justice and the American way. Bottom line is all that matters.

Now, this case is interesting in a lot of ways. For one, there were three different critical loss analyses in this case. If you read the District Court decision, there's actually three sections that do critical loss analyses, three different critical loss analyses postulating different price increases.

The defendant's preferred analysis, and these numbers may sound familiar from Barry's talk, was to impose a 5 percent price increase for which the break-even critical loss was 8 percent, and for which they were able to argue, my God, 8 percent, of course they're going to lose more than 8 percent of their patients.

But that's not the only analysis the court used, although it did kind of like that analysis. And it's an analysis that doesn't have much to do with the theory of competitive effects in the case, because what the Department of Justice argued was that the merger would eliminate managed care discounts, which were pretty good size. So, a 5 percent price increase is way out of the

range of the postulated competitive effects in the case.

And the court did consider price increases sort of in the range the government was talking about, but it actually did the math wrong and still didn't consider price increases that were as big as the ones the government was alleging.

The court figured for these larger price increases the critical loss would be in the 20 to 35 percent range, the right number, which is in our court of appeals brief, but not otherwise in the case, is 46 percent. That's the break-even critical loss for the price increase the Department of Justice actually alleged in the case.

You may notice 46 percent isn't very close to 8 percent. And so it makes a whopping difference which one of these analyses you use, and it wouldn't be all that hard, I think, for the Department of Justice to convince the trier of fact that they're not going to lose 46 percent of the patients, even though we couldn't convince him that they weren't going to lose 8.

So, the level of the price increase postulated makes a big difference, it seems clear to me that the price increase you should consider in a case is one that has something to do with the competitive effects theory of the case. In this particular case, 5 percent didn't

have anything to do with our competitive effects theory.

On more or less that same subject, we have California versus Sutter Health Systems. This case has been mentioned several times. A hospital merger challenged by the state of California, also unsuccessful. Interesting case in that a major point of contention between the litigants was whether there was some magic about the 5 percent. And I don't know exactly how, but the defendants convinced the court there was.

As far as I'm concerned, this is the most serious and clear-cut error ever made by a court in applying the hypothetical monopolist paradigm. It's also inconsistent with precedent in the 9th Circuit which previously had held that there wasn't any magic to the 5 percent. In the FTC's Olin case, in order to affirm the FTC's alleged market of pool sanitizing chemicals in that case, it was necessary to use a larger price increase, and the 9th Circuit said, okay, no magic to the 5 percent. But apparently nobody knew that in this case, because nobody did their homework.

What the 5 percent had to do with the competitive effects theory in that particular case, I don't know. I don't know a lot about the facts of this case, maybe there was some reason in the context of that

case to use 5 percent. But in general, there is no magic to it, and certainly, contrary to what the court said, the guidelines don't say that's the number you should use. They plainly don't.

The guidelines ask whether a hypothetical monopolist would raise price at least 5 percent. And there's a lot of numbers bigger than 5 percent that are at least 5 percent.

I think it's useful to talk about an actual example. It's a hypothetical, but it looks a lot like some of the real cases. In fact, it looks a lot like the world as Meg described it in their second or third slide, although I've got a little more specific.

I've got two hospitals in some small city out there on the prairie merging. These hospitals serve 10,000 patients from the city, and these patients aren't easily shifted to other hospitals. These two hospitals also serve 5,000 patients from the region, don't worry about what the region is, just a defined term here. But these 5,000 patients are from outside the city.

And these are different patients. They're more easily shifted to other hospitals. And I want to assume that geographic price discrimination is infeasible, several of the speakers have suggested that it is, I think that's a pretty good assumption, at any rate, I'm

going to make it.

Now, how could you apply the Elzinga-Hogarty test here in well, for starters, the Elzinga-Hogarty test says that the market has to be bigger than the city, because the LOFI percentage is only 67 percent. What that means is that only two-thirds of the hospital's discharges are to the city, and that's not enough, even under the so-called weak version of the test, which by the way Elzinga-Hogarty detracted in a subsequent article, so it's nonexistent.

You don't have to worry too much about what LOFI means exactly, it's "Little Out From Inside," and you don't have to pay much attention to the curious convention that discharges of patients are treated as shipments in the application of the Elzinga-Hogarty test to hospitals. I don't know who's responsible for that, but it was done in the earliest applications to hospitals that I encountered.

So, we already know that the market is bigger than the city by the LOFI test. To figure out how big it is, we have to add some more facts, so I will throw in some more. The in-region hospitals outside the city, there are some scattered out there, as there always are in real cases, annually serve 5,000 patients, all from within the region, but outside the city.

Hospitals outside the region get 7,000 patients from inside the region, a thousand of which are from the city. Now we have all the numbers we need for the full Elzinga-Hogarty matrix, and we can conclude that the market is larger even than the region, because the LIFO, "Little In From Outside," is only 74 percent in this case, which means the region hospitals account for a little bit less than three-quarters of the patients discharged to that region.

So, the Elzinga-Hogarty test says big market. Now, as several of the speakers have mentioned, this is typically what happens when you apply the Elzinga-Hogarty -- when I have seen the Elzinga-Hogarty test applied in hospital cases. One interesting difference of opinion we've heard today is that several speakers said the Elzinga-Hogarty test tends to produce very large markets, and several said it tends to produce small markets. Well, my experience is it produces very large ones. At least if you use the 90 percent, which generally is used. I constructed that example, so it didn't make any difference whether you use 75 percent, 80 percent, 90 percent.

It turns out in the Rockford test it made a huge difference whether you used 88 or 90 percent, huge difference. And it's hard to explain why the 90 percent

is right and the 88 percent is wrong.

Okay, now let's talk about what I'll call a naive application of critical loss analysis. I want to emphasize that it's a naive application, because you can apply this correctly and get the right answer, but you can also apply it incorrectly and get the wrong answer. And, in fact, I think that's done quite a bit. Sometimes on purpose.

Now, in order to do this, we need a margin, Barry talked about that, and I'm going to postulate 50 percent, which is in the range Barry said is true for hospitals. The numbers I've seen, like the numbers Barry mentioned, tend to run slightly bigger than 50 percent, but 50 is a nice, round number.

This gives us a break, even critical loss, for a 5 percent increase of 9 percent. So, the argument would go, they only have to lose 9 percent of their patients when they raise price 5 percent to make that price increase unprofitable.

Now, how many would they actually lose? That's the hard part, and the interesting part of the calculation. The way I have postulated the numbers, if they were to lose even a little less than a third of the at-risk patients, patients from outside the city but inside the region that are going into the merging

hospitals, then the actual sales loss would exceed the magic 9 percent. So, this naive critical loss analysis says the relevant market has to be larger than the city.

Now, what's the right application of the hypothetical monopolist paradigm? Well, it's what I call modeling the hypothetical monopolist. Of course, the naive critical loss analysis is a model of the hypothetical monopolist, but it's an overly simplistic model with some unreasonable assumptions. That's why I call it naive.

If you want to be more explicit about modeling the hypothetical monopolist, then you have to be more explicit about the assumptions that are being made. And you have to start making some explicit assumptions about what cost curves look like and things like that.

So, I'm going to assume constant marginal costs and I'm going to assume that all of the fixed costs are unavoidable, which is the usual kind of assumption, and typically a fairly reasonable one. And it's the assumption that is embedded in the critical loss analysis anyway, so there I'm not departing any from the naive analysis.

But these assumptions now allow us to construct the hypothetical monopolist marginal cost curve from the margin. One piece of data, the margin, and these

assumptions give us the cost curve.

Now what are we going to do on the demand side? Well, as I said, these calculations are sensitive to the shape of the demand curve, so we have to make an assumption there, and I'm going to assume linear demand, tends to be a fairly conservative assumption, but I don't want to defend it, it's just an illustration. And I'm going to assume that each of these two patient groups have linear demand. Remember I have the patients from inside the city and I have the patients from inside the region but outside the city. Two different patient groups, each with linear demands.

And now that I've assumed this, I need very little more in order to construct the hypothetical monopolist demand curve. I need to know something about the premerger elasticities and demand of these two patient groups, and I'm just going to make up some numbers consistent with the stylized facts. I'm going to say that the patients inside the city have highly inelastic demand and postulate a demand elasticity of 0.25. And I'm going to say that the patients outside the city but inside the region have very elastic demands and postulate a demand elasticity of 6.

Now, what I have assumed is enough to fully model the hypothetical monopolist and to calculate the

post-merger price in this case, because the hypothetical monopolist is, in fact, the merged firm. And under these assumptions, the merged firm would raise price by 175 percent. That is, by the way, more than 5 percent.

And, so, this isn't very sensitive to whether 5 percent is the magic number, use 10 or 15. 175 percent. Notice that this is way out of whack with what we got in the Elzinga-Hogarty test, and what we got in a naive application of critical loss analysis. So, what's going on here?

This is, in fact, a graph of the profit function of the hypothetical monopolist. And it has this double peak, because we've added together two demand curves, created a kink demand curve as the aggregate. The kink gives you some double peaked profit function, and depending on the assumptions being made here, either of these kinks could be the global maximum. But given the numbers of patients I have assumed from in the city and outside the city, and given the elasticities to demand, it turns out that the global maximum of the hypothetical monopolist profit function is way up on the inelastic segment of its demand curve. Its profit-maximizing equilibrium is to give up all of these patients that were migrating in from the outlying areas and just jack the price up to the patients who aren't going to go

away. It will serve a lot fewer patients, but it will make a lot more money.

Now, go back to the critical loss analysis and ask, well, what went wrong? And the answer is, we only considered a 5 percent price increase. Had we considered any price increase between 31 percent and 319 percent, doing the break-even analysis, we would have found that the price increase was profitable. And I didn't do a slide for this, but we can also do a revisitation of the Elzinga-Hogarty analysis, and what that would say is that the patient origin data is indeed useful, because knowing how many patients are from inside the city and how many patients are from outside the city, that's useful.

I use that information in my analysis. But it's not enough. It critically matters what the elasticities of demand are for these patient groups, which, in fact, I wrote in an article in 1978, so I'm not saying anything different today and you need to know that. You need to at least know something about that, or speculate something about that, in order to apply the hypothetical monopolist test.

Here, I also have a graph of the critical loss analysis. This is a graph that considers price increases all the way from zero to 400 percent, and you

can see that the actual sales loss, this kinked curve here, lies below the break-even critical sales loss for this broad range of price increases from 31 to 319 percent, but for these small price increases below 31 percent, you see that they're unprofitable, as are the really big ones, higher than 319 percent.

So, the moral of the story is if you're going to apply the hypothetical monopolist paradigm, you have to take some care, think carefully about what the facts of the case are, and not blindly apply formula, even if those formula are perfectly reasonable in certain contexts, you have to consider the context of the case.

A few more notes on the application of critical loss analyses or the hypothetical monopolist paradigm, whichever you prefer. Barry talked a little bit about how you go about thinking on these margins in these cases, and it's an important subject I want to touch on for a moment, as well. I don't think quite enough attention has been devoted to it in a lot of these cases. I don't think we at the Department of Justice have devoted enough attention to it in some of our investigations. But there is something to be said here about how to do it right, and what to think about, conceptually, in deciding what the right concept of the margin is in a particular case.

First of all, the relevant cost concept is avoidable cost. Just like in the predation context, it's not useful to think in a sterile way about fixed and variable costs. What is crucial is to think about the relevant experiment. What costs would be avoided if the hypothetical monopolist raised price by some amount and therefore lost some patients? And what is that going to depend on? Well, it's going to depend on how big that price increase is, and it's going to depend on how big that elasticity of demand is and therefore how many patients are lost and it's going to depend on the time period over which you do the analysis, because some costs may be avoidable over a longer period of time and not over shorter ones.

These things you have to think about. And you also have to think about some other institutional details on how the product is sold and things like that, because that may actually define what costs are avoided in a particular context.

And some important issues, I put this in the context of hospitals, so some of the ones that have come up in other cases I didn't put on the list here, but I think all of these are important in hospital cases. First, there is the possibility that fixed costs can be avoided, and I noted about ten minutes ago that I think

this possibility comes up in hospitals. And it comes up in the form of shutting down some capacity. A whole hospital might be shut down, that's not unknown. And more likely, a department or a floor of a hospital might be closed down.

If you do that, then you save staffing costs and other costs for that department or that floor. These are costs that probably would have been considered fixed costs in a simple kind of costing analysis, but they're avoided for this large change in output that you might get after the merger.

Secondly, there is the question of essentially opportunity costs in economic terms. And the way that comes up in hospital mergers is to ask whether some of the capacity that's currently being used for whatever it is we're talking about, which is probably some kind of inpatient acute care services, could some of that capacity be diverted to other profitable uses. You might switch an entire hospital to non-acute uses, I have actually seen that happen. And of course you might switch some beds to non-acute care uses.

If you can do that, and make revenue on those other uses, then that revenue has to be taken into account in thinking about margins.

And, finally, you have to think about what is

the margin being earned on the patients that are being lost. The hospitals may earn very different margins on different patients. For example, they have managed care patients and non-managed care patients. And they may have more favorable terms in some managed term contracts than other managed care contracts.

You have to give some thought, you may not be able to figure it out, but you have to give some thought to what the margin is on the patients that would actually be lost. It is perfectly possible that the margins are so drastically different on different patients, that you get very different answers, and it may very well be that they lose the most or least profitable patients in a particular case.

So, it's something that merits some consideration. Thank you.

(Applause.)

MS. MATHIAS: Thanks, Greg. We're actually going to take about a ten-minute break and then we'll come back for a moderated roundtable, give everybody a chance to breathe.

(Whereupon, there was a recess in the proceedings.)

MS. MATHIAS: I hate to interrupt all the great conversations that are going along, but this has been

about a ten-minute break, and let's keep moving on. All right, Ken is going to open with the first question or two and then I'm going to follow on and then we'll open it up to the panel to ask questions of each other.

MR. HEYER: I had one question I wanted to raise for the -- I don't know, I don't want to necessarily characterize people as camps, but one question for Barry and Meg and one question for Greg.

For Barry and Meg on the -- leaving aside Greg's point about how maybe you have some inframarginal customers who are inelastic, let's say we were just talking about how plausible it is that you might lose 8 percent or 9 percent given a 50 percent margin. Do you think it inherently plausible that you would lose that large a share, or does one, and can one, actually go out there and test for whether eight percent would leave?

And the reason I ask is because 8 percent seems to people, well, it's not all that much, but when you think about the elasticity that is implied by that, you know, it's a nontrivial elasticity to lose 8 percent for a 5 percent price increase. And, you know, with 50 percent margins to begin with, it's not obvious that the hypothetical monopolist would have such a large elasticity of demand.

So, that's sort of my question for Barry and

Meg. And then for Greg, on the point about this kind of inelastic marginal group, I think the example you put up did a pretty persuasive job of demolishing the naive critical loss analysis, and by implication maybe the Elzinga-Hogarty test as well, but I was curious as to how one might try, in practice, to get at whether there was this inelastic group that's inframarginal, given what people say regarding patient flows, why shouldn't we think that that inframarginal group is closer to a six elasticity than a 0.6 elasticity? So, anyway.

MR. HARRIS: I mean, the answer in a sense is almost tautological, and that is it's not clear that they will move. Something is keeping them there, the interesting question is whether or not it's just the merged hospital, you know, the two merging hospitals, vis-a-vis each other, or is it a broader group. So, in that sense, you're trying to understand, you know, how the elasticities stack up against each other. Is it just the merging hospitals or a small group of hospitals that are going to cause this.

I don't know that there's any magical way of doing it. Ted Frech said that there's a multitude of prices. What I think he means is there's a multitude of kinds of prices, but what it does, it does make formal econometrics in a merger context very, very difficult.

There are these papers, the academic papers, that purport to do this kind of analysis, but again, if you dig deeply into it, you find out that, as Ted said, they sort of predefine the market, that's number one, and they frequently have rules that tell you what the elasticity is, and that's usually what cases are litigated over.

So, I find these papers to be enormously helpful for understanding what things look like and understanding how health care works, but I don't find them to be particularly useful in something that you could use in a specific case.

So, what this means, and I think in the practical world is, you go back to the usual questions: What shows up in the documents? The documents don't make something correct, but if the documents are strong in some ways, they give you a notion of what the world looks like. You go to testimony, and that can be important, but I always hold out that testimony just like documents can be wrong, and that's why we have cross examination.

There was one employer or two employers in the Poplar Bluff case who testified strongly that none of my employees could ever use anyone other than the Poplar Bluff hospitals, and it turns out that the Poplar Bluff

hospitals accounted for something like 30 percent of where his employees went when he was actually cross examined.

So, you use testimony, but you use it carefully. And, you know, anything else you can use, I mean, you use the patient origin and you use the usual set of circumstances. Meg had a long list of the kinds of things that she has used, and I agree, but I don't think there's anything magic. I think you take what you have and you try to answer the question. But I do think, again, it would be nice to do something, some informal econometrics, but I've never seen a situation with hospitals where that's possible.

MS. GUERIN-CALVERT: I think just to add on to that, and probably one of the things and why doing retrospectives are helpful, but even more so having hearings like this to understand what the nature of current competition is is even more valuable, is looking first of all as to what happens in a premerger context in the particular marketplace, and also what is happening in other marketplaces as to not only what are the mechanisms that induce people to move that are actually already employed, and/or already threatened. Because in many cases that I have seen, in premerger context or in marketplaces in which there is not a

merger going on, the mechanism by which pricing is being disciplined is the threat to move patients.

And I think it's also particularly important to recognize that in the vast majority of marketplaces, it's not just the merging hospitals that have the 50 or the 60 percent margins, it's all of the hospitals. These are fundamentally high fixed cost firms, and I think there it's understanding to Greg Werden's point, what is the evidence or the facts on the relative elasticities of demands of the patients for one and both of the merging parties relative to each other as well as relative to other hospitals.

Our stylized fact fits a certain number of cases, two hospitals, center city, everybody else, you know, 50, 60 miles away. Many of the most interesting cases and the ones that are getting studied are ones where you have a hospital every mile and a half. And where you have very tough battles among hospitals. And it's I think as useful to look there to see fundamentally to answer your question, what is the plausibility that some number of patients who historically have been going to the merging parties, one or both, could likely be induced to go elsewhere.

And I think, as Barry says, you don't necessarily have the pricing information, you need to

grub around in the documents and the data to see what has actually happened.

One of the examples that came up in the Sutter/Summit case, in a similar example in the Long Island Jewish North Shore case, is that there were, in each of those cases, very good solid community hospitals within five miles of the merging parties who had been the beneficiaries of very substantial diversion by one or more payors in the past.

But I think you have to hold it up and check to see, could it happen, and not assume that it could happen.

MR. WERDEN: Obviously it can be difficult to pin down what the elasticities of any of these patient groups are, particularly so because of the complex way these markets are organized. There's a lot in what Greg Vistnes was talking about with which I completely agree, and obviously in a market organized in this complex way, thinking about elasticities of demand is a problem, and estimating them even a bigger problem.

But people have tried to do that sort of thing and it might work out that you can estimate a choice model with some kind of coefficient on travel cost, and of course if you can't do any of that, then there's the old fallbacks, employer testimony, managed care

testimony. The economics will get you far enough to identify which patient groups you want to talk about the elasticities for, and how big those elasticities have to be before you don't have a localized market.

And then at least you have a yardstick to hold the testimony up to. And then you can explore what the likely reactions of managed care plans and employers would be to postulate price changes, not necessarily across the board price increases, but various strategies that might actually occur after a merger, and then you do the best you can.

As with these kind of issues, in many antitrust cases, we don't have the kind of evidence that we would ideally like to really pin these things down, and we have to do the best we can with what we have.

MR. FRECH: I would just like to add that with some assumptions and some simple theory, we can get some bounds on the elasticities. I was thinking of suppose the 50 percent margin is -- and this is just for the sake of argument, suppose that's really the rate and that's really the relevant margin for hospital decision making. Well, then we know from the inverse elasticity rule that the elasticity of demand at the level of an individual hospital is minus 2. Okay? That's what you get from the inverse elasticity rule. And it's got to

be less elastic when you start aggregating hospitals if there are substitutes at all.

So, we know it can't be that the whole market at the market level is bigger than two. If 50 percent is really the margin, and that's really the right margin for economic decision making. So, we can get some bounds on it from this kind of real simple aggregate theorizing.

MR. WERDEN: I happen to think that that kind of analysis tends not to be very useful. And particularly in this context: The simple calculation that you describe presumes a particular model of competition, which may not be the right model at all. You have to talk about what the right model is before you can draw inferences like that, and here the right model is probably pretty darn complicated, and so it may not be so easy to figure out what the pricing rule would be in that model and what inferences you can draw from margins. And of course there's an awful lot of subtleties in thinking about what the margin is in the first place.

So, while thinking along these lines can prove useful, it's a lot of effort, and may, in the end, not get you very far.

MS. MATHIAS: I have one question for Meg, and

also I want to, after Meg has a chance to respond to my question, if anybody else wants to jump in on that question, they can. I also wanted to recognize that we pulled Jack Zwanziger up to the table, who earlier today spoke some about the geographic markets. We thought it would be useful to employ him on this panel as well, and I think he had some questions or ideas that he wanted to bring to the panel. So, I wanted to recognize that he's at our table as well.

And, Meg, for you, if I understood Greg Vistnes correctly, he seemed to imply that you could only look at the first stage of competition, that competition for the health plans to get into the market to determine what's right to weigh. And I was wondering if you agree that you can only look at the first stage of competition between the -- to get onto the plan, or whether or not you need to also look at the second stage. And if I misunderstood Greg, he can correct me.

MR. VISTNES: Let me jump in.

MS. MATHIAS: Sure.

MR. VISTNES: Just to clarify a little bit. What I was trying to argue very quickly is that there are two stages and they should both be viewed as part of figuring out how the market is working, that the first stage the hospital is getting to is trying to get a

price, they are competing against each other for the managed care plan. A big part of that is competing to get in the network, but also simultaneously the threat of other forms of diversion. And then secondly, there is the patient level. Look at both of them, assess the relevant evidence for both. It's not that just one of them is important.

MS. MATHIAS: Okay.

MS. GUERIN-CALVERT: I guess overall, my sense is that I don't think it's appropriate to define two separate geographic markets for the those two levels, and I also think that while as a stylized construct, it is worth looking at, that really here I would agree more with Greg Werden that I think that the appropriate model in which to analyze the factors that drive the pricing decision and the profitability decisions of the hospitals are such that one cannot separate out the two stages.

And as again, a very simple way of saying it, is getting in a network is not making a sale. One can be in a network, as a hospital, and not have a single patient show up on the doorstep to purchase any service whatsoever, and get absolutely any revenue.

Whether or not a hospital gets revenue, covers its costs, makes a profit, has the ability to raise

price above competitive levels, depends completely on whether or not it has the ability to more or less act in a fashion such that it is not significantly constrained or does not risk losing significant patients to other hospitals.

And I think Greg laid it out very, very well, that it is the vulnerabilities of risking loss of other -- to other hospitals of patients. That is the essence of whether or not one is going to be able to earn super competitive returns or not. And I think as well that the nature of negotiation is that it is simultaneous that one is looking at what kind of price one is going to offer for all the services in a contract at the same time that one is negotiating to be in a network, but I think the nature of the dynamics in this marketplace are that we see that threats or actual commitments to give or take volumes is what in essence constrains the price.

So, I think it's artificial to separate the two.

MS. MATHIAS: Jack, did you want to respond?

MR. ZWANZIGER: I guess I actually really enjoyed the discussion that I heard this afternoon. I think the one sort of generic issue, and I think all of you, you know, I would be interested to hear your responses. I mean, I think the thing that wasn't really

addressed very much was the issue of patient heterogeneity. I mean, I think for example when you look at patients for traveling for long distances, you know, for pretty simple procedures. You know, when I was looking at California data, you know, I was telling Greg Werden, I mean, one of the things that was striking is that you would see people getting a cholecystectomy traveling 150 miles, over 100 miles to go to UCLA Medical Center.

You know, I think that, you know, just to see this patient as being very price sensitive, because they're willing to travel so far to get the service, I think, you know, is clearly wrong. I think those patients are probably the least price sensitive of the patients or probably the least price sensitive of the patients in the market. And so I think one of the issues that, you know, and I didn't see much of this really being discussed, is that it may be true that you see zip codes where you have patients dividing and traveling to different areas.

But that doesn't mean, it seems to me that, you know, this is a homogenous market in which the patients are dividing up based on small price differences. I think it's much more likely to hypothesize that there may be reasons of tradition, you know, of maybe the

particular physicians that they're using, and a small price difference is unlikely to divert them from one hospital to the other. They may have religious affiliations which are determining their choice. They may have quality perceptions which are limiting their choice. There may be issues of, you know, they may have moved from one area to the other and they may be very familiar with that hospital, there may be a long family tradition.

I mean, it seems to me to be very simplistic to assume that it's price differentials that are moving these patients around from one hospital -- or may potentially move these patients around from one hospital to the other.

MR. HARRIS: Let me just respond two things. One is just anecdote, and a joke of mine is that now that I am almost 55, I do analysis by anecdote, but this goes back to the Dubuque case. It turns out that one of the two hospitals in Dubuque was a Catholic hospital and a non-Catholic hospital, I don't remember the affiliation. I think it was a Catholic hospital, had decided for economic reasons to lower their price. They were going to really compete and they lowered it substantially, 30, 40 percent, and no one moved. But they kept the price down at the lower level.

Now, I later was told, and I don't know the truth of this, that Dubuque is a city that's very much divided along religious lines, and the people were not going to change their hospitals. But that demonstrates an important point, and that is, what you're suggesting is important, but it applies to all the different hospitals in the market. It also can apply to the two merging hospitals as well.

You can't just assume that small changes in price are going to move people back and forth between the merging hospitals. So, it's a fair point, but it has to be symmetric.

The second one is just an observation. Now, I haven't done any of the large kinds of scale studies that you do, I tend to work in individual markets, because I'm more involved with litigation. What the typical pattern, and again, this proves nothing in any particular case, but the typical pattern is that people are going to similarly -- hospitals that look similar.

If the outmigration pattern was that instead of flip-flop to Poplar Bluff, instead of going to Poplar Bluff, they were all going to St. Louis, or they were all going to New York, well, that fits your model better. But if these are people who live, I think it was 70 miles between Poplar Bluff and Cape Girardeau, if

it's people who live, let's say, 30 miles away from Poplar Bluff and it's 40 miles to Cape Girardeau and the hospitals at Cape Girardeau look a lot like the hospitals in Poplar Bluff, and you can see that in those zip codes, that lots of people are splitting back and forth. Well, it's true you can't say exactly what people are going to do, but it's not a huge leap to say that you're going to get some movement out of those zip codes.

So, again, it doesn't quite answer the question how specific you can be with the elasticity, because you're not being specific, but I think when you actually look at individual markets and look at it closely, that is an issue, and it should be dealt with the best you can, but as a general matter, I don't really think it amounts to big numbers.

MS. MATHIAS: Jack, did you have a response?

MR. ZWANZIGER: Well, the other one, and I think unfortunately from my point of view, most of the cases have really been the kind of examples you've talked about, which are sort of small towns, isolated, you know, a few hospitals. You know, it seems to me from a policy point of view that the kind of cases that I think would be of most interest to me are the ones that weren't litigated, which are ones in urban areas where I

would argue that, you know, that there is localized market power, even though these kind of analyses may find it hard to identify that. And I was just wondering, you know, what the thoughts again were of the people on the panel.

MR. HARRIS: I don't want to be a monopolist, but again, I will be. I think, again, this gets to some of the things Greg was saying, what's the price increases, is it just a price increase across the board or is it a price increase for different products, or maybe just at different facilities. And while I don't doubt that what you're saying is true, you have to ask what you mean by kind of local market power.

Does it mean that after the merger we can raise the price at both of these hospitals? Well, then you have a two to one and that's well defined. Or does it mean maybe that you have -- one hospital has a large service area and the other area has a small service area, so that in effect you can price discriminate in that local area by just raising the price at the hospital with the small service area?

It ultimately in my mind comes back to the question, you must have a mechanism and the analysis has to focus on whatever that mechanism is. So, to say that a hospital, an individual hospital, has local market

power, is just saying that there's differentiated products. But the interesting question in the merger context is, are these the most similar hospitals, and after they merge, is there a mechanism by which I can exercise market power? Possibly by raising the price at one. Or whatever.

MR. ZWANZIGER: Or both.

MR. HARRIS: Whatever, it depends on the circumstances, but again, I think ultimately you must have a mechanism.

MS. GUERIN-CALVERT: And I think urban markets, Barry and I have an informal allocation, he does the rural markets, I do the urban markets, and --

MR. HARRIS: I'll write that down.

MS. GUERIN-CALVERT: And we dropped it when I changed. But I think you raise an interesting point, because one of the things that I have been struck by, doing a lot of work in urban markets, and looking at a lot of the hospital documents and information, is that it gets back to Barry's point in terms of what are the services that are arguably the subject of the market power, because oftentimes what happens is that while there may be a city or an area in which the particular hospital or hospitals are located, every few miles are a number of other hospitals, and they go out for quite

some distance, and it's very typically the case, as in the Washington, DC area, and it was the case in the East Bay in California, where a very substantial amount of the population growth is coming from the suburbs. And these are people who work in, say, the East Bay, or travel every day over to San Francisco proper for work.

And it turns out that if you look down at the individual service level, it's hard to identify some real sense of local market power, even if you measure it even based on shares, that if you look at OB/GYN services, you would find that there were actually a surprising number of people from Oakland, from down to the south, from out in Contra Costa County, who routinely were going to San Francisco in very large numbers, to have normal deliveries. And so I think I would agree with Barry that you really have to look at and identify what is it that might constitute the ability of an individual hospital or the merging parties.

The other thing I think we haven't talked about much today, and it's particularly prevalent in the kinds of markets you've described, is what's the mechanism by which price would go up post merger? In urban markets, in the Sutter case, even in the plaintiff's market, there were 13 hospitals of considerable size. In the

market as the court found it, it was not dissimilar to the Rockford case. It was basically a couple of counties, with the prospect that it might also include San Francisco, but it had in it about 20 hospitals, all of which were relatively close to each other and to the patients.

And what was missing in that story and what the judge found was that there was no coordinated effects story. There was no ability of the two firms on their own to raise price, and there were a number of players in the market, even with the plaintiff's market, that you would have to coordinate.

And so I think that would be something that I would raise back to the panel, is in urban markets, what would be the nature of the competitive effects story that one would have to tell to have a concern about coordination among hospitals.

MR. ZWANZIGER: Well, I mean, let me try, and then you can shoot me down. I mean, for example, let's say you had -- let's take one stylized story, of a suburb which has two hospitals, okay? And say, I don't know, 50 percent of the patients in that suburb use those two hospitals, and the other 50 percent go to the downtown hospitals, which I think is not unreasonable.

Now, I guess sort of the casual story when you

talk to managed care plans is that they would look at that suburb and they would say, you know, our network would be incomplete and we would be really disadvantaged if we had no hospital at all in our network from that suburb, because people would really regard it as being limited and a limited access network.

And so therefore, if you have two hospitals, then you have the alternative of one or the other being in the network. If both of them merge, even though it would not pass any of these market tests because such a large proportion of patients go elsewhere, there would be a lot of pressure on the plan to sign that entity into the network, and they would be able to extract the price increase as a result.

Okay, what's wrong with that story?

MS. GUERIN-CALVERT: I guess what I would say is looking at it right now, how is it that in that marketplace right now the managed care plans do get good prices from those two hospitals that are in the suburb?

MR. ZWANZIGER: Competition. Because the two beat each other's brains out. It used to be, for instance Santa Monica, which is an example of a market that I knew pretty well. You would have Santa Monica General right next to St. John's, two pretty similar hospitals that were, you know, a mile and a half apart,

they would beat each other's brains out when they were negotiating contracts.

MS. GUERIN-CALVERT: And I think in a world where there was inclusion and exclusion from networks, that was oftentimes the primary mechanism, I think as Greg has laid out, by which volume discounts were accomplished, because the beating each other's brains out to be the only one in the network, the survivor of that competition gets much greater certainty as to the volume of business that they're going to get, and as a result, more often than not, is willing to give a discount.

What's going on in the marketplace right now, though, is that those two suburban hospitals look out there, and every single hospital in the entire suburban/urban area is in the network, they have no commitments from the managed care plans as to what kinds of patient volumes they're going to be getting. And that's, I think, what sets up the competition is the efforts on the part of the managed care plan to try to, to the extent people are willing to commit to lower prices, to move more volumes.

MR. WERDEN: But they can still get the same sort of effect in that world, and it can work out to be the simple differentiated product model. The hospitals

raised the prices to managed care plans, the managed care plans are going to be able to steer some patients away from them to avoid paying that price as often, and so you're going to get a localized competitive effect, based on how much the managed care plans are able to do in order to steer patients away, and if there are a lot of patients that really want to go to these hospitals, then it's going to be hard to steer patients away and you're going to get a bigger unilateral price increase.

I completely agree with what both Meg and Barry have been saying about the importance of figuring out what they were calling the mechanism of a price increase, I would describe it slightly differently, I would say your competitive effects theory. Every merger case should have one, and the market delineation exercise tends to be fairly pointless in some cases, because it doesn't match up with the competitive effects theory, or because the competitive effects theory is done well and it subsumes the market delineation exercise.

But certainly you have to think carefully, what are these hospitals going to do to exercise market power, and then everything else you do has to be consistent with what that thought is.

MR. HEYER: Greg, I just wanted to ask, maybe

you were about to comment, I know you've done a lot of thinking and writing about networks, and maybe Greg to some extent answered it already, but it's been mentioned several times now that because all of the hospitals tend to be in the networks, it seemed as though the implication of that was, well, then, this competition in the first stage isn't an issue anymore, and I was wondering if you agreed with that or how you would characterize it.

MR. VISTNES: I don't think that's really right. The fact that all the hospitals are in the network, it still comes back to the issue, what is the threat that the managed care plan has, if one of these hospitals gets out of line? And if you have, in Jack's example, two hospitals across the street from each other, comparable reputation, comparable services, and shared physician staff, then the fact that you have all the hospitals today doesn't mean you couldn't drop one tomorrow, which still means that what may be the principal threat is still, you drop the guy from the network, and enrollees don't care that much anymore, because they keep their doc, they keep the same basic good access to services, but there's always still, even if you do want to keep all the hospitals in the network, even if the world has shifted to a point where real

inclusion is necessary, you still have more abilities to engage in these diversionary patient tactics when hospitals are similar to each other.

That is, if they have similar physician staff, then it's still easier, especially in California, if you can engage them in the risk-sharing contracts, say, hey, docs, you can admit to either hospital, but it's coming out of your pocket if you admit to the one that's 10 percent more expensive, since you're already practicing at the hospital across the street, since you're already sending 30 percent of your patients, why don't you send 50 percent of your patients.

That can be a very effective strategy, even while retaining hospitals in the network, trying to get the doctors to instead switch their patients not across the street, but across town, or across county or 50 miles away, in a lot of cases, maybe a whole heck of a lot more difficult. Not always, if they're part of a huge physician clinic, and I can tell you, well, gee, Mr. Jones, I'm going to admit you to the hospital 50 miles away and I'm happy to do that, because my colleague 50 miles away is the one who will visit you in the hospital, so I don't have to go across every day traveling 50 miles a day to see you. That may work, but the health plan still wants to think, and even the

doctor wants to think, what's Mr. Smith going to say when he's been coming to me for all these years for care he trusts to me, and then when he's lying in the hospital, he sees Mrs. Jones come up to treat her.

Maybe that will work, maybe it won't, it's a hospital-specific case, but you still have that threat value. And that's I think the relevant determinant of the competition that's going on.

MR. HEYER: Does anyone else have any other questions or reactions to the various other panelists who were implicitly or explicitly saying anything critical of them?

MR. HARRIS: I just have one which is a definitional point, and it's something that Ted Frech said when he gave his Los Angeles example and said that markets were implausibly large because hospitals at the opposite ends of the market probably didn't compete with each other, and I guess I think that's an irrelevancy. I mean, that's too strong. I think it may be an irrelevancy. And the question is, can you find a group of hospitals that can exercise market power.

And it may very well be the case that hospitals at the opposite ends of some market don't compete with each other, but they compete with hospitals inside, and you can never define a group of hospitals that

collectively could raise price.

Now, if you could price discriminate locally, then I would say it was different, but if you can't price discriminate, all that's saying is you can't find a bunch of hospitals. So, I don't --

MR. WERDEN: It's not even necessary that the firms at the edge of the market compete with the firms in the middle.

MR. HARRIS: I agree, I'm just taking up what Ted said. I think that's an observation that has some value in other contexts, but not in this context.

MS. MATHIAS: Ted, why don't you respond?

MR. FRECH: Well, I think my point is that there are lots of groups that you could find in that -- say in Los Angeles, lots of groups of sellers that could exercise market power jointly, but there's nothing, nothing is going to leap out at you from patient flow data about it. So, you could think of it in sort of differentiated type competition in general, you know, if you had -- if you're thinking of all the people that make different kinds of cars, maybe a Daewoo you can say is not constraining the price of a Mercedes a lot, but they all kind of compete with their neighbors.

But there are lots of groups that you could cordon off, you know, say the smallest companies made

the smallest cars, a third of the world, and they could get -- they could raise prices probably 15 percent for five years or something like that until the other guys moved in. But lots of possible groups. It's just really hard with the tools that I think unfortunately become traditional, these patient flow tools, to draw the lines. That's what I think the world is like.

MR. HARRIS: Well, I agree that it's difficult to draw lines, but again, you have to go back to first principles and the first principle is the hypothetical monopolist paradigm.

MR. FRECH: Yeah.

MR. HARRIS: And any variation from that, you better have a reason, and there usually isn't a variation, but just the way the facts fit here, it looks like there's something different.

Now, the one interesting thing is I never quite understood how to deal with this, is that example that I gave about Dubuque, that it was absolutely clear at the time of the merger one of the hospitals was not behaving in a profit maximizing way, because if it could lower price 40 percent and nothing happened, presumably it could raise it back and nothing would happen, but they didn't. And I don't know why they didn't behave that way, I don't even have a good hypothesis, but the

question is when you -- a broader question is when you observe non-profit-maximizing behavior, sort of where does the hypothetical monopolist paradigm fit into that? I have some thoughts, but they're not well developed and they're probably wrong. So, I'm not going to say it. But it comes up --

MR. HEYER: It could be a consulting opportunity.

MR. HARRIS: But it shows up, and my guess is it's not quite as trivial as just one story in one place. There's -- it's often something that you should be looking at and looking at the behavior of the market -- of the players in the market, again, I'm repeating myself, but including the merging parties.

MS. MATHIAS: I have a quick kind of general question for the panel. We've heard about the problems of using Elzinga-Hogarty, is it something that we should continue employing? Is anyone willing to defend it, or --

MR. WERDEN: We can't continue to employ it, because we ceased employing it many, many years ago. We, at the Department of Justice, I think they at the Federal Trade Commission. The private bar still uses it, I think, because it's there. They can get the data, they can do it, hey, why not? And I think probably in

some cases it persuades judges. But I think what we all can agree on is all these data can be interesting. No reason not to look at these data. But you can't draw any strong conclusions from it.

MR. HEYER: Anyone disagree with that?

MS. GUERIN-CALVERT: I basically agree, but differ in one respect, in the sense that I think Elzinga-Hogarty is used, unfortunately, quite frequently. It was used by the FTC in the Tenet case, and it was used by the state in the Sutter/Summit case. And were it used, as Greg said, as an organizational tool, and not as the definitive word on the geographic market stops here, I don't think we would have quite the discussion that we've been having. But I think it is used particularly in the private bar by plaintiffs to draw very narrow markets, and oftentimes using 75 or 85 percent as the threshold.

Where I would differ a little bit with Greg, but probably also agree with him, is that while we may want to discontinue and the Department has probably been way out ahead of stopping using Elzinga-Hogarty, that doesn't mean that we should throw the patient origin data out with that particular bath water. I think as everyone here has said, it's got some value, it needs to be used carefully, but I can't think of any other

industry where we would throw out robust huge numbers of data as economists that show actual usage patterns on a service-by-service basis, over in many cases decades worth of time.

So, you know, I think -- I don't think I hear anybody saying that we should ignore patient origin data, but if I did, you know, that's where I think we should all be cautious about that conclusion.

MR. WERDEN: My position always is that the descriptive information about the industry is likely to have some uses, and you never know which ones. So, collect it, and look at it, and find out what it's useful for. Patient origin data is descriptive data, you know, description can turn out to be very valuable. Somewhere along the line, it may answer an important question.

MS. MATHIAS: Jack, did you have a comment?

MR. ZWANZIGER: Just one of the comments or questions actually really for Meg is one of the impressions I have, and haven't had to look at it systematically, is that, in fact, if you look at patient origin data over extended periods of time, they're remarkably stable. I mean, if you look at market shares in hospitals, you know, they're remarkably stable, unless a hospital closed, or I guess less frequently,

opened in the area.

I mean, what implications would people draw from that? Does that mean that relative prices have been so stable over such long periods of time? I mean, you know there is some information that could be derived from that stability in terms of trying to come up with sort of limits on price elasticities, at least short-term price elasticities.

MR. VISTNES: I think if the data allowed, and generally the state collected data doesn't allow, if you knew when there were price changes affecting specific plans, then you could do an explicit test to see do these price changes cause that plan's patients to switch between hospitals. The problem with most of the patient discharge data is it doesn't accurately identify much less which health plan individually patients are, it does a pretty poor job of identifying which are in HMO versus some form of PPO or indemnity. And trying to -- you don't even know which hospital's HMO and patients have available for choice.

So, unless you have much more specific data than generally available, I guess I'm falling pretty squarely in the camp where the other Greg is, yeah, this stuff can be useful and nice, descriptive overview, but you need to be pretty darn cautious in how you use it for

the analytical purposes. Maybe there are some good uses, but be careful where you go.

MS. GUERIN-CALVERT: And I think what I've seen is that oftentimes the numbers are so huge, and I agree completely with Greg, the way the data are aggregated, you really cannot distinguish by individual plan, nor by discrete periods of time.

What I've seen, though, for example, in the LIJ/North Shore case, as well as in the Sutter/Summit case, what was turned over in discovery from third parties was the actual hospital usage data at the individual plan level for very discrete periods of time. And there you could actually track down the diversion mechanisms, the letters that went out to the physicians, please use this hospital more so than that hospital, and you could see the shifts in enrollees that had occurred in the follow-on period of time.

And again, there's all sorts of noise in those data, but it let you look at a definable mechanism and see what the result was.

I think the thing that gets difficult, though, as Greg mentioned, is looking post merger. It's unclear whether you would expect there to actually be any diversion. If it was that the threat to divert was sufficient to discipline pricing, then you might not see

any diversion whatsoever, and it may not show up at the aggregated data level, and then I think we also need to define what do we mean by price increase? The world that we've been talking about is one in which everybody is in the network, the ability to get huge volume discounts is gone.

So, that change occurred simultaneously with some of these recent mergers. We would expect in general the product that's being delivered, more choice, less management, is going to be a more expensive product. Each hospital's price probably has gone up by some, having nothing to do with mergers. And costs have gone up enormously in this industry, so you have to track that, too.

But I think you raise an excellent point, it's very hard to estimate.

MR. VISTNES: One other sort of follow-up on that, and in that regard, and I think Meg had mentioned earlier, patient origin data can be very useful in the context particularly of natural experiments. If you see a change, then use the patient origin data to see, how did that affect patient flows?

So, for example, if one hospital changed its price dramatically or relative to the other hospitals, find out what sort of flow took place. If a health

plan, for example, puts its physicians under capitation or some other form of risk-sharing contract, which arguably gives incentives to divert patients to the cheaper hospital, then you can do a time series, find out did that switch, in fact, occur over time? If a big marketing approach took place by a hospital that's alleged to say, ah-hah, here's the implication of competition between hospital A and B. Look to see, did it, in fact, result in 50 patients a month being switched over, or five patients per year?

So, in that context, it can be awfully useful, and it goes directly to the heart of the issue of let's let the facts speak for themselves. I think we're in pretty decent agreement, as much as you would ever get five or six economists in agreement on anything, as to some of the theoretical possibilities and the conceptual, this is how the strategies would work. It's more a factual question of to what extent are they implemented, especially on a market-by-market. There's no question that California is going to have more effective, sophisticated, and accepted diversion tactics than a -- well, I won't mention other places, but other places.

MS. MATHIAS: Well, I think that we're going to actually end this a little early. I think probably

everybody is a little relieved about that. I wanted to particularly thank all of the panelists for coming and participating, giving us so much of your time, not just here, but also thinking about this before you even got here, and it was clear that everybody spent a lot of time and effort, and we really appreciate that. So, I wanted to give a quick round of applause.

(Applause.)

MS. MATHIAS: And then also wanted to mention that tomorrow morning we will start at 9:15. We will be looking at single specialty hospitals in the morning and contracting practices in the afternoon. And also, just one little bit --

MR. HEYER: And we will be taking attendance.

MS. MATHIAS: One little bit of consideration, it's kind of like a camp site in here, if you brought something in, we would really appreciate it if you would take it out with you. Thank you.

(Whereupon, at 4:48 p.m., the conference was adjourned.)

- - - - -

C E R T I F I C A T E O F R E P O R T E R

DOCKET/FILE NUMBER: P022106

CASE TITLE: HEALTH CARE AND COMPETITION LAW

CONFERENCE DATE: MARCH 26, 2003

I HEREBY CERTIFY that the transcript contained herein is a full and accurate transcript of the notes taken by me at the hearing on the above cause before the FEDERAL TRADE COMMISSION to the best of my knowledge and belief.

DATED: APRIL 10, 2003

Rita M. Hemphill

C E R T I F I C A T E O F P R O O F R E A D E R

I HEREBY CERTIFY that I proofread the transcript for accuracy in spelling, hyphenation, punctuation and format.

Sara J. Vance