

# **RECORD, Volume 22, No. 2\***

---

Colorado Springs Meeting  
June 26–28, 1996

## **Session 70PD**

### **Profiling and Managing Physician Performance**

**Track:** Health

**Key words:** Legislation and Regulation, Pension Plans, and Taxation

**Moderator:** ERICK M. DAVIS†

**Recorder:** ERICK M. DAVIS

*Summary: Physician performance is key to minimizing the cost of health care and providing health care benefits. Measuring and managing physician performance may be the factor that determines who survives in the next century.*

**Mr. Erick M. Davis:** I'm a physician who was in practice for 15 years. I was trained as an internist and then as a psychiatrist with a subspecialty in addiction medicine which I practiced for 15 years. I then was a senior executive at an health maintenance organization (HMO) in Washington state for about five years. The company was acquired, I lost my job, and I became a consultant. Now I'm a consultant with Milliman & Robertson, Inc. where I have worked for about six months.

I do quite a bit of work with an organization called the National Committee on Quality Assurance (NCQA), a company that surveys and credits managed care organizations, much like the Joint Commission does for hospitals. This topic, credentialing and managing of physicians is something that is near and dear to NCQA's heart. I hope that I can sensitize you somewhat to the issues that you'll need to deal with, related to creating profiles and instruments that will be helpful in managing physician behavior.

A recent article in *USA Today* was titled "American Medical Association (AMA) Wants to Take Over Accreditation of Doctors, Are We Surprised?" Why do you

---

\*Copyright © 1997, Society of Actuaries

†Mr. Davis, not a member of the sponsoring organizations, is Senior Consultant for Milliman & Robertson Inc. in Seattle, WA.

think they want to take over accreditation of their own? They've always wanted to do that but let me read a couple of things from the article.

The AMA Trustees have adopted a plan to certify that the doctors meet minimum standards. We'd hope that had done when they went to medical school and residency training. The program is aimed at replacing multiple inspections which doctors currently face from managed care organizations, insurance companies, and hospitals. That's true. The poor doctors are being examined on all sides by many different payers.

The program, which the AMA hopes to have in place by the end of the year, would have AMA physicians evaluating colleagues' credentials, qualifications, ethics, office management, clinical performance, and patient care results. HMOs and other users of the information would pay the AMA for this report. At the very end of the article, there's a comment by Cindy Wolfe, who's the director of Public Citizens Health Research Group, who states "I would trust that about as much as I would trust General Motors regulating auto safety."

The point is that this is a very pertinent topic and one that's of great concern to providers, physicians, and the AMA, because it certainly influences their life on a daily basis.

I'm going to talk about the things that go into numbers. If you want to get into the numbers, you can look at instruments like the *Singer Report*. I'll give you a summary of the 15 physician profiling proprietary instruments that were on the market about a year ago.

This report goes through all of those different instruments and evaluates them in great detail as to many characteristics. I have about eight of these pages that list everything you could want to know about these different systems.

I'm going to talk about the conceptual framework that leads to the creation of these types of profiling systems, but not the detail. I hope that will be helpful in terms of how you approach this subject, if you need to do this for your clients. I asked you earlier, can physicians be managed? We're going to make the assumption that they can. They're not that different than other human beings.

You do have to recognize that physicians, at least physicians my age and older, which is the majority of the physicians in the U.S. that are in practice, went into medicine because they wanted to be entrepreneurs. They wanted to run their own

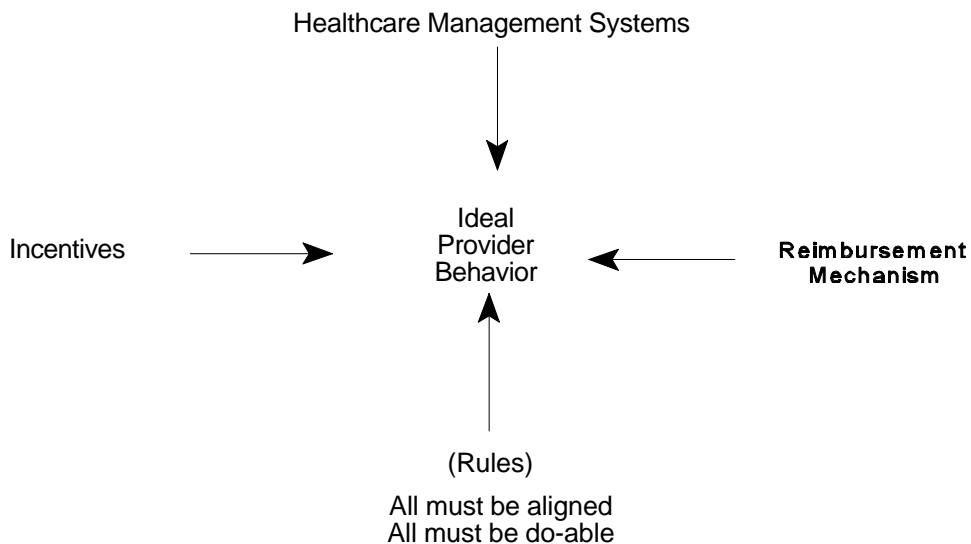
show and shop. They didn't want to have to answer to anyone and they wanted to practice that way.

Life's not like that anymore, so you have many doctors who are grumpy and disappointed about what has happened to the way they chose to run their business life. One has to keep that in mind in terms of dealing with physicians out in the real world.

This talk is going to mostly be about physicians, although there are a number of other practitioners out there that it would include, the most common being registered nurse practitioners and physicians assistants, which are two other types of primary care providers in the U.S. There are about 100,000 physician assistants and nurse practitioners in the U.S. and about 600,000 physicians.

I tried in Chart 1 to think about a managing provider behavior, which is the same as practitioner. I'll use those words interchangeably as having four inputs. First is our health care management systems; that is, what types of systems are available to the practitioner to help him or her provide care in an efficient and high-quality manner with optimal customer satisfaction.

**CHART 1  
HEALTHCARE MANAGEMENT TRIAD (QUADRANT)**



On the left-hand side are incentives and we're going to talk some about incentives. On the right is reimbursement. We're going to talk mostly about reimbursement, because physicians, like everybody else, are influenced highly by how and how they're paid and what they're paid. Knowing all the satisfier issues related to one's choice of location, or money, basically comes down to money. When a physician tells you it doesn't, I would not believe him or her. So we're going to spend quite a bit of time talking about reimbursement.

On the bottom of Chart 1 is what I refer to as rules, which are the administrative requirements related to the practice of care. We're going to talk about that briefly.

I'd like to outline what I call the domains of ideal provider behavior. The qualities of that behavior are that, first, it has to be quantifiable. Second, it has to be meaningful. It has to be modifiable. You've got to be able to do something about it and it has to be sustainable. We want to get our money's worth and have this happen over a period of time.

The domains that we'll be talking about later in terms of profiling systems include efficiency, which is essentially how much product can I produce, given a certain amount of energy and certain amount of resources. I want to do that with the least amount of resources and the greatest amount of product. The quality, availability and access, satisfaction/complaints, health status, and administrative domains are all domains which are included.

We'll go into detail about those as we continue. So that we all are using the same language, I'm using the word risk as the chance to lose and return as the chance to gain. What are physicians looking for in terms of reimbursement scheme? If they get their fixed cost and the variable cost of their encounter or their care paid covered in any payment, they're happy. They just don't have their profit at that point. If there's no risk for loss or gain, except through volume, then the only profit uncovered is related to these other issues, which we will talk about later.

There are the different types of risk sharing, risk shifting, and risk-related payments from the providers' standpoint. We're going to go through them in detail and talk about the issues that are pertinent to physicians. We'll also discuss the ideal provider behavior that we want to create and that one must protect against or prepare for in terms of profiling systems. In the old days, when doctors received a fee for service and their fixed and variable cost and usually some profit were included, one had to worry about overutilization to get to that target income that physicians believe they should have.

Now the game has changed a little bit. When you shift risk to physicians and you underpay them, at least from their perspective, there have to be other kinds of protections in place to monitor that.

First, we're going to talk about discounts of fee for service. This is probably the most common type of risk shifting in the U.S. today. How many covered lives the U.S. are under capitation? It's surprisingly small; it's only 6%. Six percent of covered lives are under a capitated agreement.

The vast majority of payment mechanisms are still fee for service, and it's usually discounted fee for service. Some terms that are used for discounted fee for service include: usual, customary and reasonable, allowable, assignable—things that are tiered, and related to volume. Those are all fairly common mechanisms that most physicians are aware of. They have different types of risk associated with them, particularly related to volume. The issue here is that the payment and a discounted fee-for-service system usually does not equal the fixed or variable cost and usually has no profit associated with it at all.

Other issues are those things that a profiling system needs to be sensitive to, in terms of the monitoring that's related to this type of system. First, of course, is what we call a visit mill or churning. Since the provider can make his profit and can get a contribution margin that will allow him to pay his variable cost, the only way he or she can do that is to push volume. In these situations, just like in usual fee for service, one has to look at frequency of visits. Second is cost shifting. When providers' practices have a mix of payer mechanisms, they, believe it or not, are sophisticated enough that they know who has what payment mechanism and they know which patients are full fee for service, and which are capitated. They behave differently within a practice based upon that. Having had this experience myself, as a patient, being asked about my insurance coverage, I know that it happens. What can tend to happen is that the provider group will begin to pay less attention to the discounted fee-for-service patients and not do tests that he or she can't bill for in their office. For a variety of other services he or she may provide in their office, they'll shift attention more to those patients for whom they're going to get full reimbursement and for whom they can add more services. There's the issue of balance billing. Some states require that there be hold-harmless clauses and contracts, so that the physician, at least in the managed care situation, may not be able to balance-bill the patient except for the copayment, which would be in the contract. But sometimes because of a misunderstanding, or fraud, and sometimes for a whole variety of reasons, patients are incorrectly billed. One must look at that

issue and make sure that's not happening if it's stated in the contract that it's not supposed to happen.

The next item is adding ancillary services and I'm going over this in detail now because you're going to see these things later. If I'm not going to get paid very much for my visit, ancillary service is the cognitive service that I provide to the patient. The way that I could really make money is to have a whole bunch of diagnostic and treatment modalities in my office and prescribe those. I can do an electrocardiogram (EKG). I can draw bloods. I can do a pulmonary function test. I can do a little heat treatment if I have some physical therapy (PT) services, a little massage therapy. There are all kinds of things that I can add onto to the menu and can start billing for those items. Sometimes I'll get paid for them.

Then last but not least is the use of nonphysician providers. Do you folks have any idea about what percentage of primary care services can be provided effectively and in a decent quality manner by nonphysicians? Seventy percent is about right. The professional organizations that represent nurses and physicians' assistants say 80%; that's what you'd expect them to say. If you look at most of the general literature, somewhere between 50% and 70% is what it looks like, especially if you do retrospective studies. This is a big issue. We're working with a client right now, a major managed care company that has asked us to do a feasibility study on replacing the vast majority of their primary care physicians with nonphysicians. This is an organization that is the major provider of health care services in its state. If it goes through with this, the repercussions are going to be absolutely phenomenal.

There are, of course, cost differences between a physician and a nonphysician, although they've narrowed over the last decade because physician assistants and associates in research and planning (AR&Ps) have been very successful in getting their salary ranges up. In some markets it's not worthwhile replacing physicians with those nonphysician providers because of cost structure and the excess capacity of physicians. In some other markets, it's not that way. The cost can in general be reduced between 30% and 50%. Here's an eye opener for you. Bringing in nonphysician providers, issues of supervision, issues of scope of practice, and all those types of things have to be looked at.

**From the Floor:** In a physician setting where would a physician's salary fit in? Is that cost or is that profit?

**Mr. Davis:** Well the question is, where does the physician's income play? It's part of the formula. It's basically a fixed expense of the practice. That also depends on

how the physician pays himself or herself, but, in general, they like to look at their income as being fixed. They have a certain desirable income and they try to work to that point. Everything else above that is profit or put back into the practice as earnings to build up the practice.

The question was, if we're going to replace all these physicians with nonphysicians, what are doctors going to do? Here I am. Do you know what you call an anesthesiologist in LA? A waiter. This was going to come up later, but I'll go ahead and tell you a few anecdotes right now.

In Seattle, where I live, in January, Group Health Cooperative of Puget Sound, which is the largest HMO in Washington state, laid off eight board-certified, early mid-career family practice doctors. That particular environment was not a very efficient environment. The panel size was about 1,600 patients per doctor. You know what the panel size for family practice doctor is in general in the U.S.? From pediatric to geriatric, it is between 2,000 and 2,500. What is the required ratio of nonphysician providers to physician providers in terms of the supervisory relationship? That may be different in every state. It's simply a licensing and regulatory issue.

I can tell you that in Washington state where I live, which is fairly typical, you don't have to get a special dispensation from the state regulatory agency to have up to two nonphysicians per physician. There are some practices that have up to four per physician.

There are also two levels of supervision. One is what's called direct, which means the physician is physically available, typically in the same building on the same site. The other is indirect which means, by cellular phone. If it's indirect, there's usually some kind of regular reporting or supervision that's required once a month. This stuff is a bit different by state, but that's a general relationship.

This is the per-visit relationship. That is, each visit has a start time and an end time. The doctor gets a fixed fee. Again, this may not meet his or her costs. Some of the issues here relate to shifting risk or relate to the case mix.

For example, I'm a general pediatrician, but I have a special interest in the management of asthma. I did a one-year fellowship in Denver at Children's Jewish, and that really excites me.

Now I'm in an environment where I'm going to get paid per visit. For some strange reason, I'm getting all these kids who have asthma. I'm known in the community as liking those kids and doing well with them. I've got a caseload that's sicker. I'm going to spend more time with these kids because I know that education is really important to how their disease is managed. I'm going to spend more on resources which I may not get compensated for on a per-visit basis.

That also relates to the severity issue if I have a particular skill or specialty. Let's relate this to geriatrics. I'm going to get more older people. If I'm an obstetrician/gynecologist and I have some perinatology training. I'm going to see high-risk women which takes more time, and it's more resource intense. I'm going to have to do more ultrasounds in my office. All those kinds of things can affect my profit or my earnings.

The issues again are the same ones that we've seen. The visit mill-churning is a time related issue. In this situation, we have to worry about denial of medically necessary care. I may just say to myself, I really can't afford to spend this time to do these things to offer these services, so I may cheat a little bit. I just may not have that available in my office, so I refer the patient. One has to protect against denial of care in this situation.

Then, of course, there's the issue of excess referral. If I can't cover the cost myself, and I'm a primary care physician, I'm going to refer more patients. There needs to be some protection in place to make sure that I'm just not a referral mill. I can't just answer the phone and say, "Mrs. Jones you can go to this doctor and that doctor because cost will go up dramatically."

The point of this and the issues are that when you are looking at these types of reimbursement mechanisms, they affect behavior. You have to create monitoring systems to give you information about that kind of behavior that you may inadvertently be supporting.

Prepaid goes by two terms. One is capitation. Actuaries love capitation. It's just a great mathematical challenge. The other is sometimes known as a percentage of premium. Actuaries hate percentage of premium. Eighty-five percent, you don't need an actuary to do that. I can even do that. Sometimes what's known as a management fee, or as the profit.

Management fees are most common in Medicaid managed care organizations. It's an attempt to give the doctor a little bit of extra money, and hopefully, they will



assume some responsibility in actually case managing these more difficult patients. Oftentimes it doesn't work out that way. Doctors just look at it as profit upfront.

The shifting mechanisms make sense. First of all, the frequency of services may be needed by the population at risk. The population that's capitated may be much greater. In a percentage of premium situation, that's a particular worry. There have been no studies of utilization in the other types of variables that can affect this. In a capitation situation, hopefully, it has been protected against by an accurate actuarial and mathematical analysis of the population for which the care is being shifted.

Again the case mix issues may come up and there may be some adverse selection. That may play into this, which hopefully has been protected against by creating a capitation amount. There's another condition called moral hazard.

In a situation where I'm insured, if I have a benefit, I'm more likely to use it or misuse it. In the military situation, and in some HMOs, this can be a real problem. Managing what we now call demand management in these situations. There's a whole industry out there now that has come up in terms of demand management to keep people out of the office.

Finally, there's the issue of the type and the intensity of the service, which may be more complex when you put those two items together. Again, if capitation has been properly derived, this should be somewhat selected against. The percentage of premium and the management fee situation may be a bit different.

Availability means that the service is there. Does the doctor have an opening on his or her panel so that a patient can actually be assigned to that panel? Access comes in once the patient is assigned. Is the doctor within a reasonable geographic distance and travel time? How easy is it for the patient to get in to see the doctor? What is the wait time to get an appointment? Once the patient is there, how long does he or she have to wait to get service or a referral? That's access.

If I'm being paid a certain amount of money, it doesn't matter whether my office is open 40 hours a week or 30 hours a week. How many hours do you think my office is going to be open? Thirty, if I'm going to make the same amount of money. You want to protect against those things.

There's the issue of preventive services. Oftentimes preventive services are not included in capitations, but sometimes they are. One has to look at whether those services are being properly given in either situation. Since preventive services can

be quite costly, especially immunizations, one has to make sure that the kids are getting in there and getting their immunizations that have been paid for.

Again, there's the issue of referral mills. It's amazing when you look at some studies we've done especially at cardiology studies on cardiology carveouts and capitations. If you remove that from a primary care cap and give it to cardiologists, it's amazing how there are a few things that primary care physicians can do that are cardiologic. Suddenly only the cardiologist can take care of that problem. So referral mills can occur.

We've expanded the episode of care from a visit to hospitalization, which is similar to a case. Many of the issues are the same here. Some of the ways that you may know that this is done are global/surgical case rates, from the time of the presurgical visit to the patient's sutures being taken out and having their postsurgical visit. Usually within 90 days of the surgery. Everything related to that surgery is covered. Doctors have to provide all of the services to that.

Obstetric care is a very common global case rate. From the time the woman gets pregnant to the time she comes back for her first postpartum visit, professional services are included in that. Diagnostic related groups (DRGs) are another one. The popular disease management carveouts are an actuary's heaven for figuring out how to fund those types of instruments and what should be included in them.

The mechanisms "in the middle" are fairly straightforward. They're usually based upon uncomplicated cases or ideal cases. The payment rate may not correctly adjust for the intensity of services that are necessary or their complexity (the frequency of those services). For example, if I'm an obstetrician and I'm seeing sicker women, I'm going to have to see them more frequently. I'm going to have to provide more services in my office, whether it's more urinalysis to monitor for proteinuria or ultrasounds.

The issues on an in-patient basis can be premature discharge, which will typically result in readmission or some undesired complication. The issue of denial of services is also a death and ethics issue. It's the issue of the quality of care in this situation and transfer. If I've admitted the patient and stabilized them, I may want to transfer them prematurely to some other level or place of care, and have the home health care agency or the skilled nursing facility (SNF) people take over the cost as soon as possible.

On an out-patient basis there are the issues of availability and access. We've already talked about those under utilization and the issue of patient or provider satisfaction.

Per diem is fairly straightforward. There are the same payment issues. We have severity adjustment, case adjustment, and case mix changes.

One has to protect against prolonging the stay. The most intense and costly services are in the first day or two of admission and after that, the hospital will make money because the intensity and cost of services are much less after the first few days. They want to keep the patient longer. That's where they're going to make their margins and get their money back.

In an intensive visit, someone takes care of the most severely ill patients on an in-patient basis at a unit critical care (UCC) level. There may be a tendency to reduce the availability of these services because they're expensive to provide. This can result in, of course, quality issues. In those types of situations, the hospitals may limit the types of services or the scope of services they provide.

For example, we all know that trauma centers are not a money-maker. You lose money on a trauma center. Most hospitals, unless they are supported some way by governmental subsidies or academic situations, don't have trauma centers anymore.

Doctors don't like risk pools and they don't like withholds. The issue is whether they're funded by a budget. If they're funded by a budget, there's essentially no risk and the doctors look at them as being bonus or reward pools. My opinion is that's the best way these things should be presented. Then they can be funded by a withhold, which is a risk where the doctor is not getting full payment for his or her services on whatever their profit is that they think they should be.

The mechanisms are fairly straightforward. The issues are denial of care and underutilization. Typically these pools are paid out on the basis of utilization. Costs are covered, and utilization is low. Doctors get to share in that. There's little individual control here on a one-to-one basis between a doctor and a patient. This is an aggregate issue. The metrics have to be done on an aggregate basis.

These types of systems need very intense and successful health care management systems to make them work if the doctor has any chance at all of participating or gain sharing in these risk pools. You must have profiling in these systems to be able to pay out and make them work.

Multiple-year contracts are somewhat straightforward. The issues are not knowing what the medical price inflation index is, whether the appropriate escalator was built into the contract, and whether the original base rate was a reasonable one. In terms of monitoring, is this organization spending capital on improving itself, infrastructure, and physical plant? There's a tendency not to do that.

We're going to change our focus a little bit and look at this from the provider standpoint. I will hopefully sensitize you a little bit to some of the issues that you're going to have to deal with if you work with the provider community and create these kinds of profiling methods.

Let's discuss some of the issues that one needs to be aware of. In terms of discounted fees, one needs to look at an equivalency calculation in the community. There are several different averages that one can use. One has to look at that compared to the undiscounted charges, which is typically what the cost basis of the doctor's practice is usually figured on. There are a variety of other types of comparative basis and calculations that need to be done to help the doctor look at what he or she is really getting. How they are going to manage their practice is based upon this.

This gets into some issues of practice management and cost management. If you're going to be involved in these things with goods and providers, they're going to want to ask you questions and you're going to have to be able to provide them with some answers or someone who can.

These are the kinds of things you'll have to go through with these groups to help them to understand. The degree of health care management relates to how efficient or how well this group is practicing medicine. In the marketplace how are the fees discounted?

These kinds of things doctors oftentimes don't understand and you have to help explain them. So that they understand what they're getting into, in terms of their risk.

The greater the withhold, the greater the risk being shifted to the doctor. That's something the doctors need to realize, especially if a good amount of their practice has withhold associated with it.

Oftentimes doctors don't understand. They see themselves getting more. I have one practice group who has signed up with several preferred provider organizations

(PPOs). They were just getting a huge volume of patients. Their discounts were about 40% from their UCR. They were reasonable guys and they weren't charging high fees. They were charging what was the local UCR. Their practice income was decreasing. Their patient volume was increasing, and they were busy. They didn't understand what was going on. It's a simple matter of shifting risk, and we showed it to them on paper. They did understand that they need to look at their reimbursement mix and manage that better. This is the excess capacity issue. There are certainly some marketplaces where there is excess capacity of physicians. They're seeing their incomes decreasing. They need to understand this as a risk of the environments that they work in.

There's one environment in the U.S. where there are not enough hospital beds, and there are not enough doctors. You don't want to have a heart attack there because you may not be able to get in the CCU. That is Las Vegas. Don't get seriously sick when you go to Las Vegas.

There are some places where this is true, but there are many more marketplaces now where excess capacity is occurring and physicians need to understand how that community risk, if you will, affects their practice and their income.

We're going to shift gears a little bit and talk about incentives. I use the word incentives to mean motivate or incite to action. The effect we want here is, of course, creating ideal provider behavior. Positive incentives are usually conceptualized as desirable or rewards. Reinforcers are referred to as carrots. Negative incentives are usually undesirable penalties or are sometimes referred to as sticks.

There's a common use of this word incentives out there in the community. It's not a word. It's not in any dictionary that I looked at. It's what we call neologism. It's a new word. It's actually in the literature if you read it. The word incent is actually not a word.

Everybody is watching the doctors all the time and they didn't really bargain for this when they got into this business. Now they have to deal with it from the provider's perspective. What do they want? These are some of the issues you need to be sensitive to in dealing with them.

They want their expenses covered and they want a profit. No big deal, you probably want that too when you go to work every day. They want those expenses to be market sensitive. They work in certain markets and they want to be able to pay their expenses and make a profit that's reasonable, given their market.

They don't want to take risk, except for two reasons. They want to take risk if they have to take risk in order to play or if they can gain share and they can make some money.

They want the risky payment, of course, to be fat; that is, there's an opportunity to gain-share some of it. Of course, they also want a return. Now the kind of incentives that are most commonly used are money. Recognition only goes so far. Special status also only goes so far. Other kinds of rewards include education and other sorts of things that organizations can use.

In order to make these kinds of incentive systems work well, they have to have certain characteristics. First of all, if you try to develop these kinds of profiling systems in a vacuum without the input of providers, they will not typically endorse them and the systems will not be credible. They typically will not cooperate. I strongly encourage you, if you're going to a managed care organization, or some type of provider organization, or some kind of peer organization, to attempt to involve providers at some level in developing these systems.

The types of incentive systems that are used should be peer related. They should be locally related. The providers should feel that they're being compared to their equals. They have to be culturally sensitive. The culture in Kaiser is very different than the culture in PacifiCare. It is also very different than the culture of Harvard Community Health Plan or Intermediate Health Care. All of those organizations have very different cultures, and the types of incentive systems that are developed have to be sensitive to that. Know that culture and know how to influence behavior.

There's usually someone in that organization who can be the spokesperson and who can articulate what that culture is. These kinds of systems have to be easy to understand and comprehensible. Doctors are intelligent, but at the same time, they need to have things simply presented to them in terms of numbers and how they can earn this. They have to be balanced when being a patient advocate or the physician taking care of the patient. My relationship or my responsibilities are to the managed care organization or the pair that is called an agency role. I'm an agent of that organization to some degree or another because I have a contract with them. That contract requires me to behave in a certain way. In some way I'm their agent when there's a balances issue.

These kinds of systems have to be aggregate based, not individually based. There are some legal reasons for that which we'll talk about.

I strongly suggest that incentive systems be framed in terms of rewards or bonuses, not penalties. My experience is that tends to influence behavior better. You do have to remove the unadjusted for high-risk population unless you're doing a carve-out high risk, such as, patients with cancer or patients with human immunodeficiency virus (HIV) disease in late stages.

One of the old ways of dealing with doctors was simply to dump them. This is the old bad apple way of approaching physician management. There are many more attorneys than there are doctors these days, and occasionally, they do speak to each other and collaborate. Its hard to do this anymore. There's usually due process language and many kinds of contracts so that physicians have an opportunity to question those decisions.

These are several of the complements that should be considered in terms of developing incentive systems:

- MCO sensitive recruitment
- MCO training/education
- Socialization, culture
- Provider feedback, education and alternatives
- Management; medical collaboration

These kinds of complements can help these incentive systems work better. If the managed care organization recruits physicians who are sensitive to managed care issues, that helps a little bit. You don't have to bang your head against the wall trying to change some doctor's view of the world. This is easier to do these days.

The new physicians who are coming out of training are a little more sensitive to these issues and are more realistic. The average debt of a medical student graduating in 1995 was approximately \$80,000. You're 28 years old; you just finished your residency. You have an \$80,000 debt. You go to the bank and say, I need a quarter of a million dollars to set up my practice. You think you're going to get it? Not anymore. Twenty years ago you might have because you were a good bet but you're not anymore.

So these doctors are going to group practices and other kinds of organizations where they're going to get a salary. They can pay back their debt. Therefore, they are much more amenable to working in these kinds of environments.

Many of the older managed care organizations, which have been around for many years and are fairly mature, have orientation and training programs for new

providers to educate them about what managed care is all about and how incentive systems work. Geisinger has had one in place for many years. M&L Health Care also has one. Group Health and Harvard Community Health Plan have one. You'll see this at all of the well-known older companies that have been in this business a long time.

There are some issues of socialization and culture. As I said, they need to support these kinds of incentive systems. There has to be a good system of giving feedback to providers, which is timely, meaningful, and is peer based. It can be helpful to them in terms of making decisions. If you're asking them to change, you have to provide them with some alternatives or some options to be able to do that.

Finally, there needs to be cooperation between the management or the agency issues and the actual medical management of patients, as I previously mentioned.

You should expect high-quality care within the scope of their practice. They should deliver efficient care to an assigned patient base, panel size, or population, if you will. They're expected to refer the appropriate time and most managed care organizations have directions about when is it appropriate to refer. They also put obstacles in the way related to preauthorization. Patients should be referred to the appropriate specialist.

The question here is, when one capitates for primary care, what should be the scope of that capitation to prevent underutilization? Most capitation contracts are very clear in terms of what's included in the capitation payment listed by the current procedural terminology (CPT) code. The level of what laboratory tests you know that the doctor can provide in his or her office should be included in that.

Any well-designed capitation agreement will be very specific about what's included. Now, of course, you have to sit down with the doctors and talk about that. If you're in rural Utah, primary care physicians, believe it or not, are going to do C-sections. They're going to do appendectomies. They're going to have something within the scope of their practice that, the 28-year-old, board-certified family practice doctor in Salt Lake City was never trained to do. So there are some specific issues like that.

I try to make the capitation agreement as broad as possible, given the scope of practice of a board-certified family practice doctor, and that's easy to do. You just look at their licensing agreement and how they were trained. You sit a bunch of doctors down and believe me they're going to be able to come up with what is within their scope of practice and what is not, given the community standard.



So I think the best in terms of management and cost is to make that as inclusive and comprehensive as possible.

There is a newer iteration, at least in the U.S., of removing preventive services from the capitation agreement, because of paying fee for service for that and then helping the provider to get those people in his or her office at the appropriate time to give those services.

The reimbursement mechanism has been used by the National Health Service in Britain for 20 years. It's very effective in terms of getting high levels of preventive services. In British Columbia, Canada, the National Health Service includes a capitation payment in all preventive services. They have a very low rate of preventive services.

To give you a comparison, the rate of screening mammography in women over age 50 in British Columbia is 50%, while in Washington state, where it's a fee-for-service system, it's 72%. It makes a difference.

The domains have to all be metric based in terms of primary care physician efficiency for the amount of cost of visits, referral rates, emergency room visits, hospital admissions per thousand, laboratory costs, imaging costs, and drug cost. Sophisticated management systems have all of this in them, in terms of getting this information and drilling it down to even the provider level.

In terms of specialty care and provider efficiency, one of the metrics is the primary care physician referring the patient to the doctor. How many times did that doctor see the patient? We know that the average excluding mental health and chemical dependency is about 2.5 visits per referral. We have all of those kinds of parameters already. For managed mental health care, it's about six visits that one would expect. Actually it's bimodal; it's either six or about fifteen.

How many procedures and diagnostics is the doctor doing once he gets that patient in his office? These kinds of things can be measured and can be used in terms of profiling and then getting feedback information and managing doctors behavior.

Hospital average lengths of stay are determined by these diagnosis; days per thousand, cost per admission, and readmissions. Although some people would consider that a quality issue, it can become a cost issue if it's not included in the original admit reimbursement.

The quality of clinical care looks at things like disease management outcomes, use of clinical practice guidelines, and medical record documentation. It includes everything from, can you read it, to does it have the right date on it or is there an appropriate assessment?

There is burgeoning development of clinical practice guidelines out there in disease management companies that have all kinds of metrics associated with them in terms of how well a physician follows a pathway of managing patients most efficiently and in the highest quality.

These tools are very sophisticated and very powerful in terms of measuring behavior, not only on an individual but also on an aggregate basis.

In terms of availability, how many panel openings are there? How many appointments are available and what are the open hours? You can create incentives for having extra hours open such as, Saturdays, urgent care times, and things of that nature. Believe it or not, doctors will keep their practices open if you pay them for it.

In terms of access, how long does it take to get an appointment? What is the average waiting time? How far do I have to travel to get to this doctor's office? How long does his nurse or his office staff take to answer the phone when I call to ask a question? How long does it take to get back to me to give me information and answers to my questions? All those things can be measured.

Satisfaction surveys and looking at other kinds of metrics that can be helpful. These are all straightforward things. You can create profiles using all these things. The HEDIS 3.0 is coming out in July 1996 for industry comment and it will probably be the major instrument used over the next few years, starting in January 1997. There's a Medicaid issue and a general private commercial issue.

Those types of measurements can be used. They significantly influence the providers' behavior when you give them information about how well they're doing. Then if you pay them to do well, they do well.

SF36 is a instrument that's used to measure level of functioning of patients. It's one of many different kinds of instruments that can be used to measure patient level of functioning.

Doctors don't like rules. But to work within systems, they need to follow them. They need to submit their encounters, even if they're capitated. Someone has to get that information to be able to do something with it. They have certain obligations in terms of medical record documentation—things like using the appropriate contract and vendor, whether its hospital or laboratory.

Just a comment about the law. There's an amendment to the 1991 Medicare law that says that physicians cannot be incented to deny care on an individual basis. If managed care organizations are going to shift risk to physicians, they have to provide stop/loss insurance for the doctors. They must survey members to make sure members are happy with this situation. They must be able to comply with HCFA regulations regarding reporting of these systems.

There has been some further determination of the actual percentages related to how much risk can be shifted and its wise to know that when one is designing these systems.

Sophisticated markets are places like Sacramento (Calif.), Rochester (New York), and the Twin Cities where we have penetration of about 65–70% of the entire market. We list the different types of reimbursement methods that will work in those different communities.

Well there are a lot of data out there about various demands of management interventions. The most common one is having a combination of a call-in system before ending up in the doctor's office, and having a self-help manual along with that. That's the most common way. There are data out there that are very effective.

**From the Floor:** You were fairly conservative in terms of what you call unnecessary visits. If you look at everybody who walks into a primary care physician's office, about 70% don't need to be there. If you just smiled at them and said go back to your day, they'd be perfectly fine.

**Mr. Davis:** So there's a great deal of opportunity to reduce unnecessary care. We find that when we do ambulatory chart review, the higher the degree of health care management, the lower the use of unnecessary services. The best managed systems are now running about 15–20% of unnecessary visits in terms of the work that we've done. It seems to be about the best you can get.

The patients will return, ask for more, demand a referral, or want to know why the doctor isn't doing this for them? The most common being, "Doctor my knee hurts,

let's have an magnetic resonance imaging (MRI)." The patients out there are fairly sophisticated these days. They may not know what they're asking for, but they know the terminology. As a matter of fact, from a physician's standpoint, you know, it's not the old days where you went to the doctor and whatever the doctor said was gospel. Patients are much more active partners in decision-making these days. Indeed they have very high expectations of the kind of care that can be provided to them, and some of those expectations are probably unreasonable. I think you know that the patients themselves are very strong self advocates and that's one of the ways that's protected against these days.

Older generation folks who are in their 70s are a little bit different. Their attitude about physicians is a little bit different than younger folks. So they may need more protections in place.

You know those CPT codes are very descriptive about the scope of the services that are provided and the time. In general, doctors are not dishonest people. They play around the margin and they try to maximize income. Very few are criminals and are practicing fraudulently. It does happen, but there's a variety of proprietary software out there that will, in the aggregate, look at practice and analyze these kinds of issues and give you an answer about whether this is reasonable or not. You can also do it manually if you want.

Usually there are some, at least in managed care organizations, restrictions about the number of appointments that can be given in a day. The length of appointments is also regulated and managed care organizations will go in and audit according to those criteria. They actually give a report back to the doctor on how he or she performed. That's very time-consuming but there's a good amount of that being done out there.