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Session 16TS
The Alphabet Soup of Managed Care Organizations

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Summary: Individual Practice Associations (IPAs), Physician Hospital Organizations (PHOs), Managed Care Organizations (MCOs), Integrated Delivery Systems (IDSs), Marketing Services Organizations (MSOs), Point-of-Service (POS)... What do they all mean? The instructors help the managed care neophyte understand the differences between the various provider-centered managed care entities.

Mr. Timothy M. Ross: Grady Catterall will be leading off, discussing the purchasers' side of MCOs, and then I will be following up with a provider perspective on MCOs.

Mr. Grady C. Catterall: How would a plan sponsor, or, in some cases, an individual look at the different MCOs that are available? How would he or she try to decide between them?

First, I'd like to give a definition of managed care. Then I'll be talking about the characteristics of MCOs; I'll be presenting the menu of plans available and then a few concluding observations.

As I said, managed care is a nebulous concept. It means different things to different people. First, we have to define what is being managed. Second, it's helpful to look at what is not managed care. The principle of managed care is to manage the cost of care. You also want to manage the quality, the delivery, and so forth, but

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the overriding impulse that drives plan sponsors to adopt a managed care plan is to rein in their costs. That brings us to the secondary goal, which is to manage the quality of care. In part, that is a reaction to the cost imperative. When you reduce the cost, you're in danger of reducing quality; plan sponsors, and especially plan members, don't want that to happen. Second, plan sponsors have realized that quality care means healthier members, and that means lower costs in the long run. You won't see savings in the first year necessarily, but eventually you should.

Managed care is an attempt to limit or control one or more of the following: price, utilization, or mode of delivery. The price of health care services is simply the fees that doctors and hospitals charge. In some cases, price control means discounts; in other cases, it means repackaging those fees as per diems or capitation payments. The second thing is to control the utilization of health care services. We want to control access to health care so that people use services when appropriate and use the appropriate level of services. We don’t want them to overdo it. Finally, we want to control or manage the delivery of health care—how it is delivered, and how it is received by the patient.

Managed care is not indemnity coverage, under which the plan reimburses the member for the full cost of services, regardless of who provides them. You don't have to worry about in-network versus out-of-network. There aren't any special regulations that you have to follow in order to get the care that you want. The second feature of indemnity coverage is fee-for-service billing, under which providers charge for each service and charges are billed when the service is rendered, not when a member is enrolled. There's no advance prepayment under this arrangement.

Let’s discuss the main characteristics of MCOs. First, there are usually special pricing arrangements with providers. There is also a limit on the choice of providers, meaning there's a set group of providers that plan members can go to. In an MCO, you have a limit on access to specific services. That might mean that in order to see a specialist, or in order to be hospitalized for an elective procedure, you'll have to go through the plan's special procedures. Finally, there's quality control, or at least coordination of the care that patients receive.

The special pricing arrangements come in two principal forms. One is a discount off the standard, fee-for-service rates. In that case, the provider is still charging for each service that he or she performs, but the patient is charged at a lower rate. The second major form of payment is capitation. Per capita flat prepayment is usually per member per month (PMPM). In some cases, it's per case or per episode. For example, sometimes there will be a set rate for a normal delivery, heart bypass surgery, and so forth. There is a limit on the choice of providers; that is, the

provider network that is part of the plan is a subset of the total provider population. It does not include all of the providers in the area, although in some cases, some plans try to achieve something approaching that. Second, services that are received from non-network providers are reimbursed either at a lower level or not at all, except for emergencies. The provider panel may be open or closed. If it's an open panel that means that providers who are not within the provider network can join if they meet the MCO terms. If it's closed that means the MCO is contracting with a specific group of providers. You do not have the situation where any other provider in the community can just join by signing on the dotted line. If you have an open panel MCO, then it is possible for one provider to belong to several plan networks. Many of you who are in an MCO will be familiar with that. Your doctor might be a member of Aetna's, Prudential's, or United HealthCare's network, so it adds to the confusion sometimes.

Chart 1 shows a schematic of the closed panel MCO. One MCO contracts with Group A. The little x's are all the physicians or other providers. Members of this MCO must receive their services from these providers, and the providers who are outside (whether they are independent providers or parts of groups) can't sign up here unless they actually join Group A. It's possible to have a closed panel plan with more than one provider group, but if it's a closed panel situation, then the providers outside would have to join one of these groups in order to serve that plan's members. By contrast, if you have an open panel situation then you can have overlapping provider panels (Chart 2). Here Groups B and C serve both MCOs. The second feature is that these providers outside of Groups B and C, if they meet the conditions of the MCO, can join the organization either as an independent provider, or if the group allows, they can join one of the preexisting groups. The other thing that can happen is that they can always join the second MCO or vice versa.

The second major characteristic is limit on access-specific services. This goes under many names, such as precertification, where you might have to call someone at the plan's office before you have elective hospitalization. Prior authorization particularly applies to managed pharmacy programs. Utilization management (UM) and utilization review (UR) are ways of controlling access to specific services. UM and UR usually involve certain administrative procedures that a member has to go through in order to receive health care services and get reimbursed at the full rate. The second major feature is the use of a primary care physician (PCP) as a gatekeeper. In that situation, either hospitalization or access to specialty physicians requires the authorization of the PCP. There are usually restrictions that the plan places on the PCP (in addition to the restrictions placed on the member) regarding what he or she can authorize, whether he or she can authorize several specialist visits at once, or if he or she can only authorize one at a time.

CHART 1
CLOSED PANEL MCOs CHART 2
OPEN PANEL MCO WITH OVERLAPPING NETWORKS

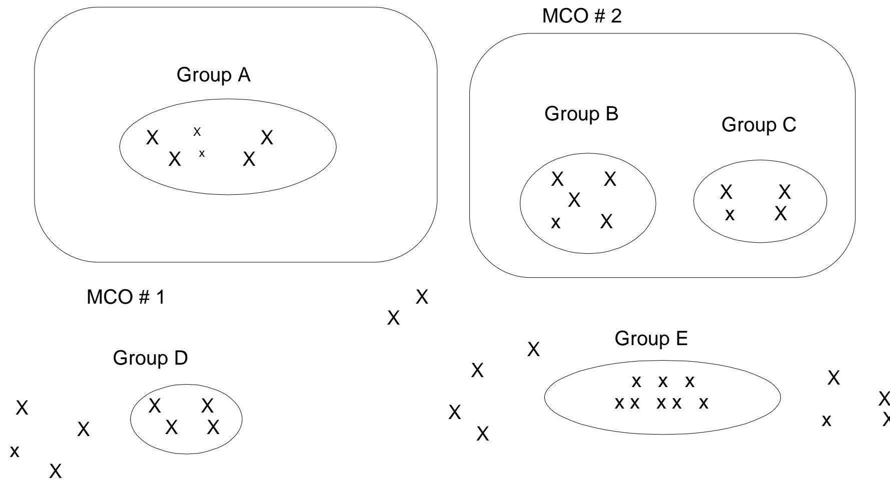
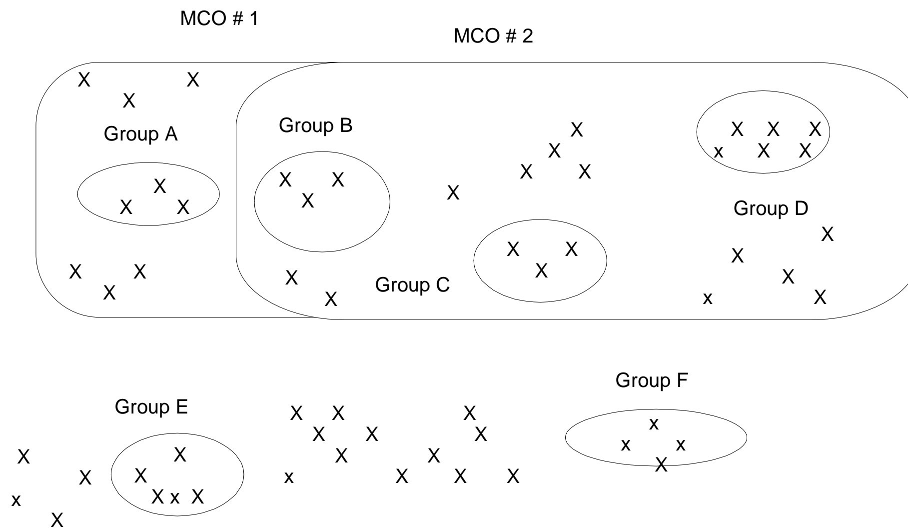


CHART 2
OPEN PANEL MCO WITH OVERLAPPING NETWORKS



The last major characteristic is quality control, or at least coordination of care. Here is where the PCP or gatekeeper can have a very beneficial effect on plan members—one that plan members can appreciate. If you have been treated by more than one provider for different conditions, sometimes each provider doesn't know what the other providers are doing. You can have medications that conflict with each other, and it can be difficult to find the best course of treatment. One of the jobs of the PCP is to coordinate all the services received by specialists or other providers. For large or catastrophic cases, you have case management, in which the plan will take an active role in managing the care that a patient receives. This

happens with cases that involve extensive hospitalization—cases such as open heart surgery and high-risk pregnancies. One level down from that is disease management, which is for people who are not yet receiving acute care but have some condition for which they probably will need care more than the average person. Examples are people with diabetes and high blood pressure. That can be extended to preventative care in general. It is still the case that some indemnity plans do not cover checkups and other preventative services. That's more likely to be covered by an HMOs or other managed care plans.

Finally, offering practice guidelines creates the potential to affect the way that the doctors practice medicine. In some cases, enforcing protocols of practice means saying to a doctor that instead of trying a very expensive treatment, he or she should try the less expensive one first to see if it works. Plans can participate in the development of these practice guidelines through outcomes measurement. By actually seeing what works, they can apply that to the development or revision of clinical guidelines in the future.

There are some secondary features that most people would associate with MCOs, especially HMOs. First, there are usually no paper claims to be filed. However, you do have to go back and get a referral from every time you want to see a specialist. So, there's still paper involved. Second, rather than being faced with deductibles and coinsurance, you have a flat co-payment, which is usually a fairly small amount, such as $5 or $10 for a physician visit. It might be $25 or $50 for an emergency room visit. In some cases, there are per hospital admission deductibles, but usually there are none.

Now we come to the types of plans available. I will start out with managed indemnity, which is not quite a managed care plan, but has features of a managed care plan. There's the PPO, the POS plan, and the HMO. HMOs come in two major varieties. The individual practice association (IPA) or network model plans are open panel plans. Then there's the group or staff model plans, which have closed panels.

The managed indemnity plan has traditional billing and reimbursement features. What makes it managed indemnity is that there are some precertification requirements or utilization management, especially for hospital coverage. Often a plan will impose a penalty or will reimburse at lower rates if a person does not receive authorization before an elective hospitalization. As I said, it's not really a managed care plan, but it has some managed care features.

A PPO is a plan that contracts with independent providers or with one or more provider groups to get the trade-off of reduced fees in return for preferential access

to patients. Oftentimes when you hear the word access mentioned in the context of MCOs, it is referring to patient access to services or providers. From the providers' perspective, however, it's important to have access to a large population of patients, and by having elements in the plan (or steerage as it's called) that gives incentives to members to seek in-network providers, that will increase the patient volume for providers that are in the network.

Providers generally are paid discounted fees rather than capitations. There are some exceptions. Members may receive services from nonnetwork providers, but they are usually reimbursed at a lower rate. There is usually some type of utilization management.

One variant of the PPO that you'll come across sometimes is the exclusive provider organization (EPO). You don't see that very often. An exclusive provider organization, as the name suggests, does not cover non-network services. You get your services exclusively through the network. It might also have a gatekeeper and the providers might be capitated, especially the PCP. It really looks a lot like an HMO, but one of the main differences is that it's regulated under insurance laws or ERISA rather than under HMO laws. Some states do not allow EPOs because they say it's just another kind of HMO, so if you have one, they want to regulate it as an HMO.

A POS plan is, I believe, midway between an HMO and PPO. It can be viewed either as a PPO that has a gatekeeper or an HMO that covers nonemergency out-of-network services. There's lower reimbursement to the parties not only for services that are rendered out of network by out-of-network providers, but also for specialist services (whether in network or out of network) that are not authorized by the PCP. So if you are a member of an MCO or a POS plan, and you see an in-network specialist on your own but you haven't gotten prior authorization, it's treated as if you've seen an out-of-network provider. The name comes from the fact that a decision by a member to go in-network or out-of-network for care is made at the point of service; however, that's also true of PPOs. Thus “point-of service” does not uniquely describe POS plans; it just happens to be the way the nomenclature has developed.

Finally, there's the HMO. Members receive medical services from a panel of providers who are either employed by the plan or affiliated with an entity or a provider group that's under contract with the HMO. The provider entity is capitated for all services. That usually covers both primary and specialty physician services and hospitalization. The individual doctors may be capitated or they may be salaried. They might be employees of the plan, or they might be paid on a modified fee-for-service basis. The HMO will provide the full range of medical services, and

out-of-network coverage is usually limited to emergency services. Again, if the plan has an out-of-network benefits rider, then basically you have a POS plan.

As we mentioned earlier, members generally pay flat co-payments rather than deductibles and coinsurance. The important effect of that, from the member's perspective, is that the member is financially responsible for only the co-payment amounts (and the premiums that are paid individually or by the member's employer). The provider compensation is strictly between the HMO and the provider. If there's a dispute about provider compensation, the provider is not going to come after the patient. In an indemnity plan, before you see a provider you must sign a form that says if your plan doesn't pay the benefits, you're responsible for all charges. Under an HMO, you generally don't have to worry about that.

Let's talk about the different kinds of HMOs. In the IPA model, doctors practice independently in their own offices. Physically, it looks like an indemnity plan, a non-MCO. If the HMO contracts with the IPA, the compensation between the IPA and the doctors is likely to be on a fee-for-service basis, but it can be on a capitated basis, especially for PCPs.

In the network model, HMOs contract with several large physician groups. You don't have individual physicians who are in the provider panel. You have more than one provider group who is on the panel, and it is the organizations open to groups who want to join as long as they meet the HMO's conditions. In general, a network model is an open-panel plan.

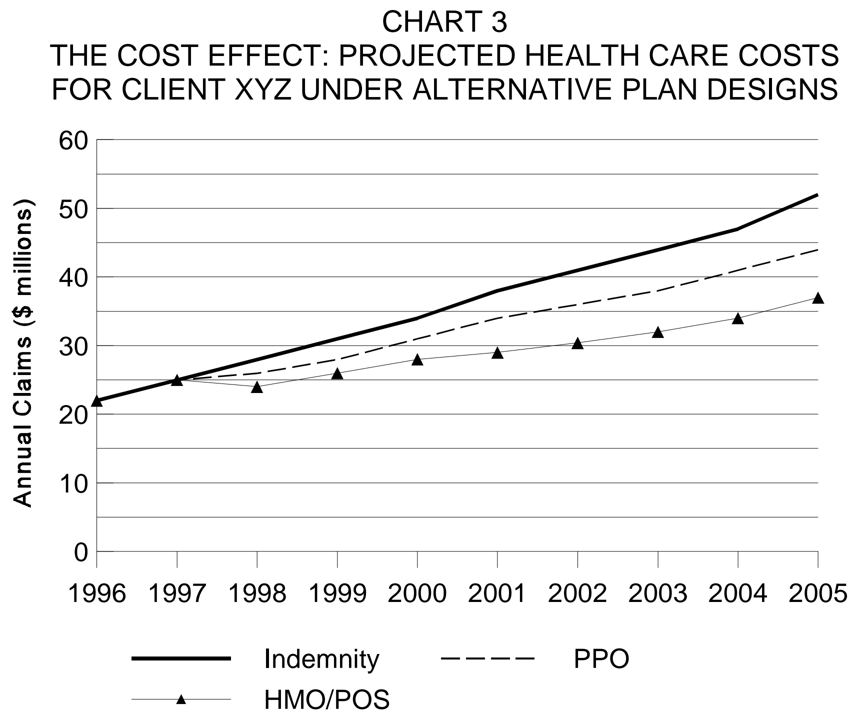
One important feature of the IPA and network model HMOs is that the physicians can see non-HMO patients as well. They can also see patients from several different HMOs. That decreases the control that one HMO has over how the providers practice. By contrast, you have a different situation with a group or staff model HMO. In the group model HMO, the HMO contracts with one large multispecialty medical group who is capitated and financially responsible for all medical services. Generally that medical group will be responsible for any referrals it has to make outside that group. If a patient happens to need a specialty that is not provided by that group, then the group is responsible for paying for that. Sometimes the medical group also will be responsible for hospital charges. That may depend on whether there is a hospital that's part of the provider group that is under contract with the HMO. The medical group may be captive or independent. If it's a captive medical group, that means that it only sees patients that are HMO members. If it's an independent group then it is possible for it to see patients that are not part of the HMO. An independent medical group that's part of a group plan will not belong to

several different plans, but it may have independent fee-for-service patients on the side.

In the staff model, the HMO has the most control over providers. The doctors are actually salaried employees of the HMO. It owns the clinics and may own the hospitals and other facilities that are used. Thus, the doctors are on the payroll of the HMO and they are practicing in HMO facilities. These are generally closed panel plans, and the doctors share facilities, equipment, administrative services, and records. This assists greatly in the coordination of care. For this and other reasons, there is an opportunity for a high degree of control over physician practice patterns. You're more likely to see specific protocols, even if they are just informal protocols for physicians to follow. The fact that they are practicing in one place means that there tends to be an informal atmosphere of cooperation. They tend to consult each other more freely about how cases should be managed.

I just wanted to present one graph from a case study (Chart 3). This is for a client that I was working with earlier this year. The medical costs under this client's indemnity plan were increasing rapidly and were projected to increase over the next several years if no changes were made to the plan. Under a PPO arrangement projected costs were lower. You can generally reduce the projected costs still further under an HMO or POS arrangement.

CHART 3
THE COST EFFECT: PROJECTED HEALTH CARE COSTS
FOR CLIENT XYZ UNDER ALTERNATIVE PLAN DESIGNS



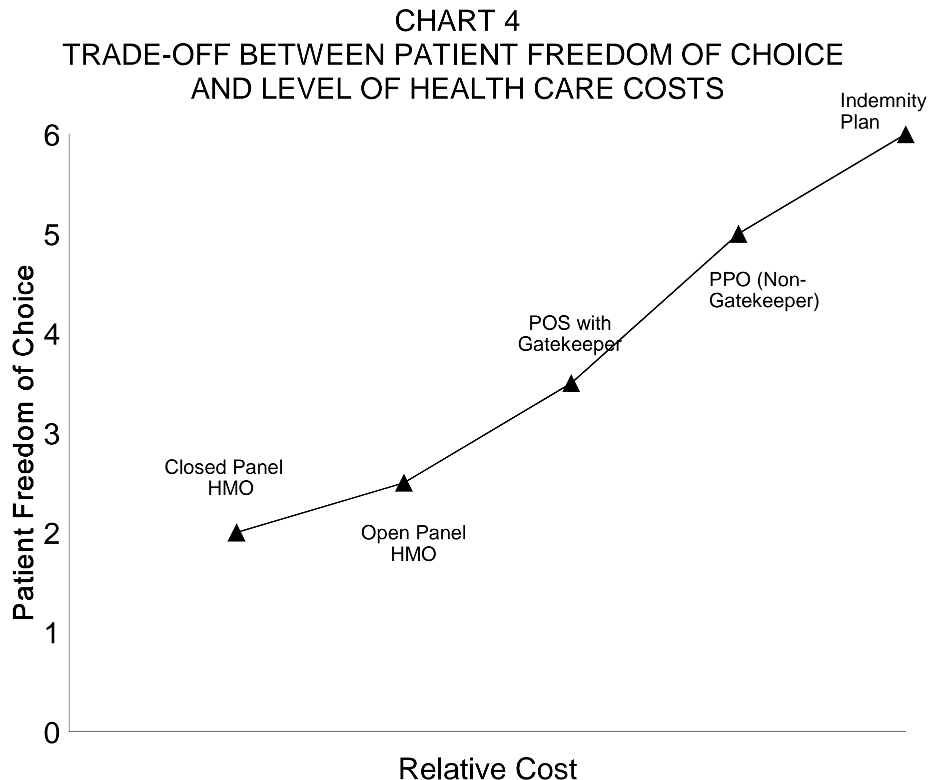
Two things are important. First, the PPO line and the HMO line are lower than the indemnity line. Second, they are a little bit flatter. You can't see this too clearly on this chart, but there is a less steep slope to the HMO and PPO lines. Thus, you can not only get immediate savings (in many cases) by switching to a PPO or HMO, but you also get a lower increase in the cost as time goes on. One caveat is that if you switched your managed care plan, but then you offer richer benefits within that plan, that PPO line might actually jump above the indemnity line for a little while. In fact, the average PPO premium is higher than the average indemnity premium just because the benefits are richer.

Chart 4 illustrates the general trade-off between the relative costs and the patient's freedom of choice. There are no units on the horizontal axis, so don't make any assumptions about one plan type being five times as costly as the other one or anything like that. The point is that at this end, with a closed panel HMO, you'll generally have the lowest cost for a given set of benefits, but also the least freedom of choice. Patients have to see the HMO providers within that panel. If their provider is outside that panel, then they're out of luck. With an open panel HMO, if a patient is seeing a provider who is outside the panel, then the provider might be able to join the group. In a POS plan with a gatekeeper, the gatekeeper provides some control over utilization, but you can go out of network if you want. With a non-gatekeeper PPO plan, there's no restriction on access to specialists who are in the network. Again, you can go out of network if you want. With the indemnity plan, which is the highest cost plan, you can see any provider and the benefits don't vary according to whom you see.

One example of an MCO is pharmacy benefit managers (PBMs) who will provide prescription drug coverage and manage that coverage. There are instances where this is being done on a capitated basis where prescription coverage is provided for capitation. This is an example of what is called a carve-out—a specialized subset of the total health benefit array of services. Another example might be a behavioral health organization (BHO). You will hear about this in one or more perspectives. Mental health has certainly been a cost issue over the years for employer plans, and these BHOs have been providing capitated mental health and substance abuse benefits for employer plans.

In addition, because of some of the issues with fragmentation of care in the Medicaid market between the acute care HMO providers and the community mental health providers, certain states, such as Tennessee, have gone to a statewide BHO approach. This state is seeing some fairly dramatic results by implementing it 100% in a fairly short time frame. Other states are dealing with this approach through a greater or lesser degree. There are laboratory providers who will provide laboratory services either on a capitated basis or with some very attractive fee

schedules. We're seeing some radiology services provided as a specialty MCO, and this is actually distinct from a capitation of a radiology group in a town. There's one or two national entities that are essentially stand-alone corporations. Their business is essentially to get in between the HMO and the radiology providers and to provide some value added services by organizing the radiology providers and finding some efficient protocols for managing radiology. And then, of course, there's any number of capitated specialties such as cardiology.



Finally, we're seeing examples of case management and disease management. One example is that there are some HIV/AIDS specialty providers in the Medicaid market. These providers have contracted directly with the state. They basically said, "We're AIDS providers, so we know how to take care of this population. We think we can do a better job and we'll negotiate a capitation that's appropriate for the AIDS population. We'll carve that out, and we'll take the risk for that population."

An example of one of the more general providers is a PCP. A PCP, because of the risk characteristics of those services, can actually take capitations on relatively small numbers of lives because the nature of primary care tends to be a high frequency, low cost for a service kind of risk. They can actually get some reasonable risk characteristics with only a few hundred lives. What's probably foreign to us as actuaries is that primary care is not where most of the risk is. Multispecialty group

practices are existing in large clinics of multispecialty groups. Many of these are capitating. I think Grady mentioned that. A third example of general providers is hospitals and health systems. They are getting involved in accepting capitation and other forms are participating in the managed care.

These examples are not so much MCOs; they are just provider groups who are finding themselves taking capitation because the HMOs are coming to them and saying they want to shift risk to the provider. There are some examples, though, where these provider groups become somewhat more integrated. You'll hear the acronym MSO. I tend to think of it as an organization that provides managed care contracting in the administrative services to physician groups. PHOs tend to be organized around a hospital. The physicians who are the primary admitting physicians and part of the referral pattern of that hospital organize jointly into a PHO. Another example would be an IDS. This is an example of some large hospital chains that adopt a strategy—a vertical integration where they will not just have to have strategic alliances with physician providers, but they will buy physician practices. In this regard, the IDSs own the hospital and buy the physician. They own many of the ancillary services associated with hospital systems. These systems start to look a lot like the staff model, brick-and-mortar type of HMO that Grady mentioned.

And finally, like I said, there is an alphabet soup of names and acronyms out there: the integrated service delivery networks, community integrated service networks in Minnesota, and PSNs. The statutes may provide some enabling legislation for some of these organizations. What is distinctive about these organizations is that they have been organized with the objective of taking risk and managing that risk either from an HMO or preparing to contract directly with various purchasers such as employers, Medicaid agencies, or the Health Care Financing Administration (HCFA). Some of them will go on to become HMOs.

I'll briefly touch on some of the actuarial roles that you might encounter in working with a provider MCO. In each of these situations, you could certainly find yourself either working with a provider MCO or one of the entities. For example, you might be involved with an HMO in capitation negotiations or an MCO or with employers in direct contract purchasing. I think Grady mentioned the EPO, and certainly if you had an IDS or a PHO that would be direct contracting with an employer. These will often be organized as an EPO. They're not insured and the point of them being noninsured is that they become subject to ERISA, which provides a certain amount of a shield, if you will, from state regulation of insurance risks. HCFA has established a specific program for provider-sponsored organizations (PSOs) and for the Medicare Plus Choice program in the recently passed Balanced Budget Act (BBA) of 1997. You might play a role in the State Department of Human Services,

Medicaid Program. You might be involved with the insurance department in the regulatory issues of forming a PSO, or you might be involved with the reinsurer in establishing reinsurance negotiations for PSOs or MCOs that are taking risks but are concerned about the high claim risk. If you're familiar with health insurance, you're aware of some severe central high claim risks that are out there.

One of the basics that you get involved with is what's referred to as actuarial pricing models for health care. A capitation rate will be calculated using the things that affect managed care utilization and negotiated reimbursement. The capitation rate is calculated as the utilization rate times cost per service, which gives you a PMPM cost. The utilizations are expressed as per thousand per year, so when you take that nominal per thousand per year rate, you usually end up dividing by 12,000. Utilization rate assumptions in this are taken either from historical results, as a starting point, and then potential projected managed care improvements are taken into account. Grady mentioned that if you start with an indemnity plan, and you modulate it through a managed care audit, you can certainly see some tremendous improvements in things like in-patient utilization. If you've been watching the markets you know that indemnity and weakly managed PPO-type programs will be running at 400 hospital days per 1,000 or so for the commercial population. However, a well-run HMO can have 200 days per 1,000 or lower, which will reflect provider costs and discounts negotiated at reimbursement. Of course as you calculate that, you take into account the effect of co-payments. These pricing models tend to dissect the cost structure into a lot of detail; in-patient service for example is broken down into medical, surgical, and so on, and physician services are broken down into office visits, surgery, and so on.

One of the basic issues that you run into in looking at pricing is it's very typical to find shifting of sites of care, for example, from inpatient to outpatient or from inpatient to a home health setting. As a result, utilization will decrease at one site and increase at another. Another issue to keep in mind is that when you do that, very often, the in-patient days that are being reduced are the ones that have relatively lower severity than the average, and the net effect, very often, is that the service intensity—for example, the relative output per day for in-patient care—after the reduction in utilization, tends to go up to the higher level of severity. The hospital industry has certainly seen severity levels increasing. Similarly, intensity will increase on the outpatient side, as well. Ideally you're trying to shift care to the most appropriate and efficient location.

I'd like to touch on an issue for PHO formation pertaining to the issues of taking risk, dividing risk, and aligning incentives to manage that risk across a group of providers. If you have the hospitals and physicians coming together to form a PHO, very often there are two phases to contract with an HMO or employers to accept the

risk on a capitated basis. Ideally, the PHO will get the best deal possible; they will get the highest capitation rate that the market will allow them to get from that HMO or from that employer. The second thing is, once the PHO gets this money and the capitation, how does it divide that money among the physicians and hospitals? This is often not an integrated delivery system; these physicians are not salaried or owned, and they are still financially independent from the hospital. As a result, and perhaps it is not surprising, the physician and hospital entities don't always trust one another. And there can be uncertainties in how you go about dividing the capitation dollar among the players. Finally, there's the potential that players will not make the best efforts to manage care or the players will shift risk from one party to another, essentially so one member of this partnership will profit at the expense of another.

Regarding the capitation split, how do you split the premium dollar? This, of course, tends to be a negotiated process, and you'll develop an actuarial pricing model for the different pools, set about defining the different pools, the in-patient hospital pool, the primary care pool, and the specialty care pool. You'll define those services included in those pools (the parties who are responsible for that). Then you set about developing assumptions as to the amount of utilization that's likely in those various pools, in following historical patterns, probable improvements in utilization and shifting of sites and care, as well as obviously the difficult issue of what is an appropriate level of reimbursement. How do you relate a hospital cost per day or per discharge to so many office visits or so many surgical procedures? What is an appropriate care level playing field of reimbursement between those two types of providers? The selection of those assumptions is certainly part of the negotiation in addition to reviewing historical costs and potential improvements. Many times you're making comparisons to market benchmarks either in terms of the types of utilization improvements that may occur, or where there are other examples of capitation dollars being split.

There's a need in this system to align incentives in such a way that the providers will tend to be most at risk for the services that they provide directly. The providers are essentially capitated for their own services; therefore, they have the most incentive to manage their services efficiently. At the same time, if you think of physicians and their ability to manage in-patient care, patients in a patient setting, you want to provide an incentive to those physicians to utilize those hospital services as efficiently as possible. For example, very often there's a split between a primary care and specialty service definition. There's kind of a gray area, if you will, whether a patient needs to be seen by a primary doctor or by a specialty care doctor. You don't want to have a situation where you capitate your PCPs but not your specialists because they're not the same sort of coherent group of assigning members to specialists in advance. They may be on a fee for service approach. If

I'm a capitated primary care doctor, I could rationalize to myself that a lot of these patients really need to be referred to specialists. Doing that takes less effort on my part. Unfortunately, it ends up running up a deficit in the specialty care pool, which is bad for the program overall. You want to provide an incentive for them to do what they ought to do, but also for them to refer out the care that they ought to refer out. And, finally, you may want to provide some reward for providers who have overall favorable financial results.

Chart 5 is an illustrative example of how the premium funds might flow where there's a percentage of the premium split between a primary care and a specialty care pool. The specific numbers aren't material but the pools are defined according to the types of services. The primary care pool might include family practice, internal medicine, and pediatric providers. The specialty care pool would tend to include essentially all of the other physicians. There's always a question of where to put the obstetrical care. The hospital pool would include in-patient, out-patient, and hospital expenses. Then there might be an ancillary pool where we include prescription drugs and things like that. In this case, there is an allowance for administrative expenses.

CHART 5
PREMIUM FUNDS FLOW

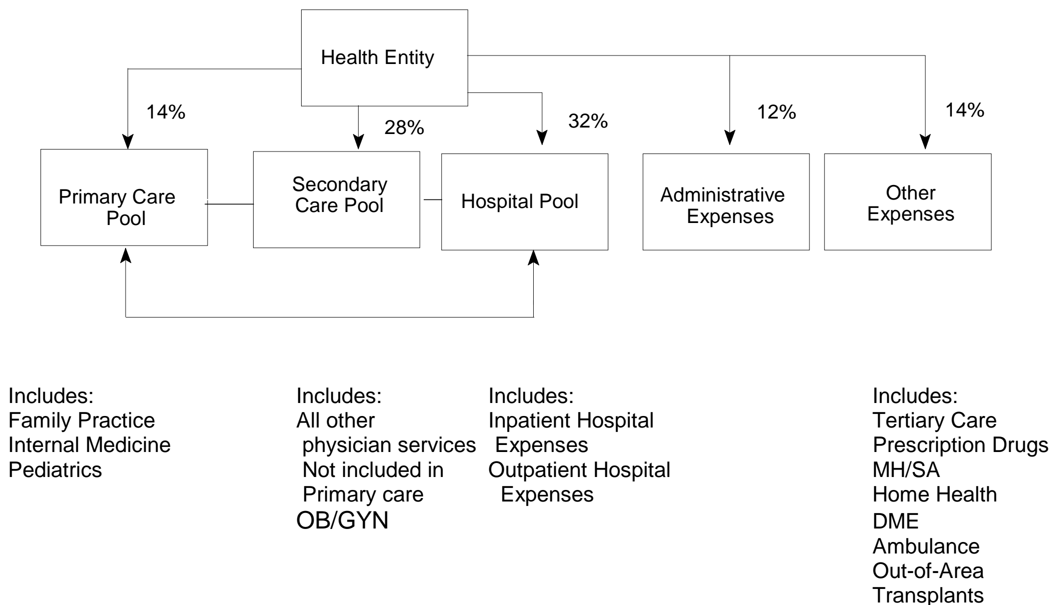
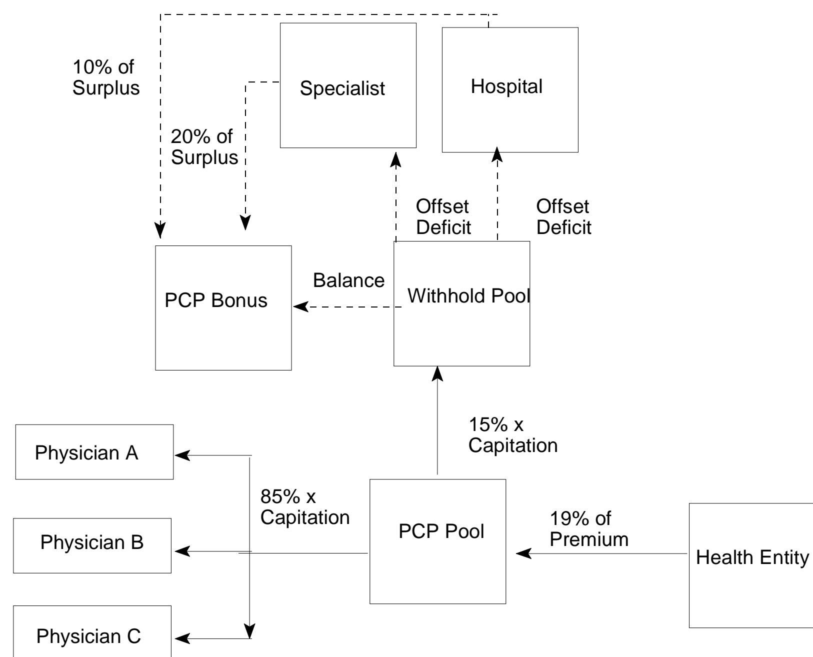


Chart 6 is an example of how you can build financial mechanisms that will help to align incentives. We have a capitation amount going into a primary care pool, which is shown in the lower right as health entity. A percentage of premium is going to the primary care pool. At that point, the PCP will get a significant proportion of that, 85%, while a portion of it, 15%, will be withheld. A portion of

the capitation will be withheld pending the financial results of the plan. To the extent that there might be deficits in the specialist pool or the hospital pool, that withheld pool will go to offset deficits in those pools. If you think about it, you may not be entirely convinced that primary care doctors are going to have that much impact on either the specialty care pool or the hospital pool. There are a couple of issues here; when you're establishing these, not only will the primary doctors have at least some influence, but at the time that you're contracting, there also might be some uncertainty as to exactly what percentage of the funds should be allocated to each of these pools. Providing this sort of mechanism allows each of the parties to negotiate some comfort levels if the pricing assumptions don't work out for some reason. There's a certain amount of buffering.

CHART 6
PCP POOL FUND DISTRIBUTION



On the other hand, if there are surpluses in those pools, then a fraction of that surplus, as well as the amount withheld, will go into a primary care bonus pool. That will end up being distributed to the primary care doctors. Finally, depending upon the history and the objectives of the program, how that primary care bonus gets distributed to the PCP may or may not be directly proportional to the amount of capitation. Rather, it might reflect issues of quality and care, access and care, and things like that. Similarly, in a specialist pool, the specialists are not capitated; their pool is not capitated but the specialists themselves are not capitated, they will be paid out of the pool according to a fee schedule with a percentage withheld.

Where there are deficits in other pools, such as the hospital pool, the withhold pool will help to offset that deficit. If there is a surplus in that pool, that will go into a bonus pool for the specialists. Again, how that bonus is distributed to the specialists is a matter of policy.

Finally, with hospital pools, there's capitation going in, and there's a fee schedule arrangement to pay to the participating hospitals. In this case, what is suggested is a diagnostic related group (DRG) schedule and a large percentage of that schedule is paid out for each claim as it goes along; at the same time, there's a portion withheld, which again, can be used to offset deficits to the specialists. Then there can be a bonus. Finally, in managed care, the hospital pool tends to be the first place where people go to find utilization savings. You will also find that that's where you're going to be sharing more of your risk. This is not a set formula by any means, and these things can be structured in countless ways. The idea is pretty simple—you must provide some incentives to align the incentives to provide care in the most efficient and most appropriate setting.

Finally, I want to talk a little bit about another issue that Grady touched on, which is the issue of steerage. This takes in the idea of competitive capitation prices and some of the challenges that this can provide or present to the actuary. One of the driving economic forces in today’s provider market is an excess supply of providers and specialists and an excess supply of hospital beds. Depending upon how the specialists are used in some markets, there can certainly be an oversupply. As a result, some HMOs are using a competitive bidding process to contract with certain specialties. We've seen cases where 300,000–500,000 lives are moving on a single bid to a single vendor. In any market that represents a significant chunk of the market share of commercial and/or Medicare lives in a market. As a result, the providers in those markets who are presented with those situations face the situation where they're either going to gain market share or they're going to lose market share. As a result, the economics of that model become a little bit interesting.

Assisting those providers presents some challenges to the actuary, and I'd like to go over some of those now. One of the first challenges it presents can be an issue of data quality. We've seen the situation where the HMO may provide only demographic data and may provide only this rough indication of what the historical costs have been, rather than any particular amount of detailed history of utilization. One of the reasons they're doing this is because they don't want the bids to be based upon historical costs and utilization; rather they want to identify the best they can to deliver this package of services for their population in that market. There's a challenge there to identify what kind of normative utilization there would be for a similar population in general. What's the typical HMO doing out there in this market nationally or regionally? Furthermore, because of the competitive nature of

the situation, the bid prices are likely to be low. To achieve reasonable results at those bid rates, you're not going to have to do normative levels of improvement utilization; in fact, the providers are likely to need to identify something approaching a best practice level of utilization. Of course, there's a significant issue there as to whether the provider will be able to achieve those assumed utilization levels. In any event, data quality is an issue. There's nothing like looking out the back window when you're driving forward. This is a situation where you must look out somebody else's back window to drive forward in this market to have any sort of a data-based approach.

The second issue is the question of unit cost. The providers are likely to have the opportunity to get an incremental volume of business. To the extent that they have capacity, marginal pricing may be appropriate for that incremental volume. To the extent that they don't have capacity, then they will either have to create additional overhead and price it in some way other than marginally, or they will have to go outside. In some cases, if there are facilities, it may be necessary to structure the process or the operation to reduce unit cost below the current historical levels for that provider. You're certainly going to start by looking at the unit cost for the provider you may be working with, but it's possible or probable that those unit costs are going to be difficult. Unless your provider is at the top of their class in that market, it will be difficult for them to go forward with those unit costs in the bid.

Finally, there's the issue, from the unit-cost-for-service perspective, whether or not the provider can actually serve all the members directly. If the provider can serve all the members directly, then it's a question of estimating or guesstimating the cost. If the provider can't serve all the members directly, then the provider is going to have to go outside, subcontract, and buy excess provider capacity in the market. Whether they can subcontract at the same unit cost that they have assumed in their bid is an open issue.

A third challenge, and probably a critical question here, is the optimal price. When you're done, you're going to be presenting a PMPM capitation bid; for the HMO, a higher capitation bid is not good. Increasing that capitation will decrease the likelihood of winning the bid, so you're less likely to win with a higher cost. If you do win, of course, your profit will be higher, but a higher bid also increases the likelihood that you lose your existing market share. So increasing the risk of losing your current market share is something that gets a lot of providers scared. On the other hand, if you decrease your capitation price bid, it increases your likelihood of winning the bid, but it decreases the profitability of the contract in the event that you win. The optimal bid price can be very hard to determine in a market where the HMOs are able to drive a lot of market share in this way.

I think the fourth challenge goes along with that same issue of being difficult to determine the bid price. It is a question of documentation. There's a new standard of practice, which either has been approved or will be approved shortly, on documentation and health plan rate making. It's not clear how you go about documenting all of this. It's not as simple as just putting together a pricing model. When you're done, you end up with a PMPM rate. Your unit cost reimbursement ends up as a fraction. You essentially end up dividing your PMPM by your utilization. That, in effect, is what your cost per service is after the fact. So there are a lot of judgmental issues in putting together a proposal like that.

This kind of leads into the next point, which is a matter of professional risk. I don't know how many of you are consultants or deal with this from that perspective. It can certainly be a difficult position because if you're working for a provider in this situation, the provider runs the risk of losing market share that they previously had. It is as good as lost. Unfortunately, the provider is most likely to win the bid if a mistake has been made, or if they've underestimated the cost. I was reading an article on competitive bidding and it said that this happens often in these types of bidding situations. You ask yourself what the optimal bid price is, and at the time you make your optimal bid price, it's a balance between the increasing and decreasing probability of winning. What if you then find out that you've won? The conditional probability of that actually changes. If you win, it's more likely that you won because you made a mistake. One reason that this happens is because there are numerous uncertainties in estimating those costs. How many people are out there bidding? How crazy are these other providers? Are they as scared as I am? What are their unit costs? How aggressive are they going to be? How badly do I want this? All these factors go into this. Therefore, in terms of managing professional risk, whether you're a consultant or whether you work for an insurer or HMO client, you must distinguish your role as an actuary, per se, from the role of the individual who says, at some point, you have to make a decision to do one thing or another. It's very important to be clear on those roles. Certainly, this is not restricted to things like specialty capitations. We've seen situations where a provider-owned HMO, with a high Medicaid content facing the same competitive bid in the Medicaid market, might ask the financial guy at the HMO and they ask for the consulting actuary's opinion. You come up with a few things and the decision maker takes their bid right to the bottom and that provides a lot of risk to the organization. At times like that, you need to be careful to point out the risks that you may need to take to get the bid. If you get the bid, you may be in trouble either way if that's what it takes to get the bid.

Finally, there are a couple of resources. There are *Actuarial Standards of Practice 5, Nos. 8, 16, 23, and 25*. There is also the BBA of 1997, the Medicare Provider-at-Risk Rules, and the NAIC Risk-Based Capital for MCOs.

The BBA establishes a definition of a provider service organization. HCFA put one of these definitions into law and one of the points of this is that a provider service organization, which is an MCO that's established and run by providers, will be able to contract directly with HCFA to provide the new Medicare Plus Choice HMO type program. This was actually a key issue for the providers in the BBA. The single most important issue is that, in general, HCFA wants to contract with statewide agencies. There's a provision that says that if the state provides more restrictive licensing requirements or capital requirements than what the secretary of HCFA would require, then HCFA can grant a waiver to the PSO to contract. The relevance of this is very direct to this whole issue that I've been talking about. Many provider-oriented MCOs are rising because HMOs have started off by negotiating reimbursement and controlling utilization and steering. As the HMOs have gathered more market share, they've had greater ability to influence the members who come to the HMOs. Second, they've turned around and shifted, in many cases, virtually all the risk onto the providers, so the providers are in a situation where they're essentially acting as the insurance company, (they're the risk takers), but they don't have the ability to market directly to the purchaser. The providers' ability to go out and take the risk directly to market is a very big issue. In the case of Medicare, that's a very important issue. If you look at California, the percentage of premium that is retained by the HMOs can be fairly large, either in percentage terms or in absolute dollars. This was a big item for them.

From the Floor: Grady, you said that HMO members are only responsible for co-payments and the like. In most states, are HMO members held harmless if the HMO should become insolvent?

Mr. Catterall: I don't know what the state laws say. That really is more of an issue for the providers themselves. I think what tends to happen if the HMO becomes insolvent is that the provider is on the hook and is generally out of luck as far as receiving reimbursement from the member. It just stands as a creditor to the HMO. I think that's how it works, but I'm not very familiar with how the bankruptcy laws work in that case.

From the Floor: What about for hospital stays?

Mr. Catterall: In that case, I think that the hospital would be on the hook. I have not heard of cases where hospitals go after the members to get reimbursement after the members' HMO has gone under; however, it's possible that it has happened. I don't know.

Mr. Ross: I think most HMO provider contracts state that the providers will not pursue the member in the event of insolvency.

From the Floor: I have a question about the group model, where there are captives or the staff model. Do you have any correlation with competency for doctors who would sign up in those things? I know that's not something that you talked about, but I'm just really curious if there's any correlation there.

Mr. Catterall: Some captive group model HMOs are set up by academic hospitals or academic medical centers, so they actually have a certain amount of prestige that will offset the negative marketing effect of having a closed panel. In my conversations with physicians, I know that the most ambitious want to be independent and in a position where they can maximize their income rather than be on a salary. However, there are countervailing forces that I think cancel that out. I wouldn't say that there's any correlation between physician competence or physician prestige and how tightly the HMO controls them.

Mr. Ross: There are a couple of issues with having salaried physicians. In terms of managing your unit cost, you have to keep your member panel size up to an appropriate volume so you have enough volume to distribute those costs. Conversely, for a given panel size, you need to use the fewest number of physicians as possible. If you're going to do that and maintain quality, the physicians need to work hard. One of the issues that might be hitting some of the staff model salaried physician-type provider organizations, some of the IDSs (where hospitals are buying physician practices), is how to maintain incentives for the physicians to work as hard once they're salaried as they were working when they were in private practice. Of course, that's an even bigger issue for those hospitals where they're making good will payments on physician practices in the six-figure range. They continue to pay a hefty salary to buy the physician and have him or her come on board. All of a sudden that physician's incentive to work hard may have gone down and less appropriate incentives are put in.

From the Floor: I have two questions. The first deals with the form of the subcapitation for special services. If, for example, you want to subcapitate home health care services, is that done on a PMPM, or a per-client per-month, or a per-claimant per-month basis? What's the basis for some of these subcapitations? Is it always per enrolled member per month? Second, I'd be interested in your comments on what kind of a modeling horizon is typically used in these analyses. If the capitation rate is set, say for the next year, does that mean that you're doing projections for the next year or do you go out three, four, or five years in the future and try to estimate utilization and unit cost?

Mr. Ross: Home health is an interesting question. There is a spectrum of reimbursement approaches in any service. You can go fee-for-service with some sort of discount or fee schedule. Essentially, the more services that are provided,

the more you pay. Then, through some sort of authorization process or utilization review process, it is up to somebody to limit that. Then there are other reimbursement methodologies that range from that at one extreme. At the other extreme is capitation, where all of that utilization risk gets shifted over to the provider. In home health, you can have per day visits and a variety of things. There have been suggestions of so-called active capitation, where you pay essentially a case rate per month as opposed to a case rate regardless of duration.

One of the issues of home health capitation is that in some markets home health care historically may not be used very aggressively by the HMO. Then, as a home health provider, if you buy into that home health capitation based upon the historical utilization results, you have a tremendous amount of risk because now the HMO has capitated you. They say that they are going to very aggressively manage as many people as possible in the home health field. They've fixed their costs to the home health provider via the capitation. This is an example where I think it's important to have aligned incentives between providers because you don't want that home health care provider taking a beating or a financial loss when what that provider is doing is very good for the HMO and the system overall. There are HMOs out there that play hardball, so don't kid yourself on that. If you're on the home health side, I think you need to be careful about that.

In terms of the modeling horizon, a lot of capitation situations are fairly bread-and-butter arrangements. Your modeling horizon can easily be one year because the rates of renewal are on an annual basis. You want to be careful if there are any particular renewal clauses that say that it's actually a multiyear contract with either a flat rate for multiple years or some sort of fixed inflator over that time. You have to be careful that that's going to make sense. With start-up organizations, you want to deal with an appropriate horizon when considering achieving critical mass and recovering start-up costs. Another example where the modeling horizon might be different is in the case of a large capitation contract. One of the modeling scenarios is a case in which an HMO loses a lot of money, and then gives the business to somebody else the next year. That has happened in cases where HMOs have dumped a lot of members into one provider. There are a variety of modeling horizons.