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Session 120PD Provider Contracting Issues

Track: Health

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Recorder: BRENT LEE GREENWOOD

Summary: Panelists discuss new developments and strategies related to provider contracting. What changes in the risk-sharing arrangements are occurring? What contracting methodologies have been successful and what ones have not? How has this varied by provider type? What, if any, changes are being made to provider contracts resulting from the "anti-managed care" lawsuits being filed?

Mr. Brent Lee Greenwood: I'm with Reden & Anders in Atlanta and I'll be your moderator. What we have planned for you is to explore two new innovative ways for reimbursing specialist physicians. We have some distinguished speakers for you. I'll lead off by discussing the key drivers that will shape future physician reimbursement strategies. Second will be Geoffrey Baker, president of E-Med Solutions, Inc. He will be discussing contract reimbursement. Recently, his firm implemented a statewide contract reimbursement system at Blue Cross/Blue Shield of Florida.

After Geof will be Michael Kalison. He is the chairman of Applied Medical Software Inc., and he'll be discussing physician diagnostic related groups (DRGs). His firm is currently in discussion with the Health Care Financing Administration (HCFA) to implement a demonstration project using physician DRGs. Finally, Joe Romano, is the vice president/chief actuary of Foundation Health Services, and he's here to discuss the actuarial issues associated with implementing these types of programs and others in a health plan.

If we look at the current environment, there are several emerging dynamics that will impact physician reimbursement. There's movement to open access plans, relaxation of medical management programs, patient protection legislation, the

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Note: The tables and charts referred to in the manuscript can be found at the end of the manuscript.

advancement of medical technology, and increasing access to medical information by consumers. Providers are moving away from capitation and becoming very skeptical of risk-type arrangements. When we look at health plans, everybody is trying to improve their bottom line and access needed capital in order to survive in the marketplace. There are many dynamics going on right now.

Based on these issues and others, I have identified some key drivers that will be shaping future provider reimbursement arrangements. The first is the use of technology, from both a medical and educational standpoint. We're very much in the age of consumerism where the consumer will be actively managing their healthcare. There is also the issue of capital. How are plans and providers going to access capital in order to do the things they need to do to survive in the marketplace? There is everybody's ultimate goal of maximizing market share.

I'd like to set the stage for the presenters and share some of my predictions based on work I have done with a variety of provider clients. First, I see physicians continuing their efforts to organize into groups, networks, or potentially unions. There is a big push by some specialties to unionize. They feel this will give them market power, financial security, and hopefully some operational efficiency.

In the past, most physicians would sign just about any contract that came through their door because managed care made up a small part their practice. But now, physicians are getting much more astute in their negotiations and have a better understanding of what these financial contracts mean to them. Managed care is becoming a much larger part of their practice, so they really need to know how these new types of reimbursement arrangements will impact their revenue and income. In the long run, these reimbursement arrangements might influence a physician's productivity, practice style, and office operations. I definitely think that's the direction we are going.

Physicians will also be held more accountable by the patients they serve. With all the information on the Web, I'm sure you've heard stories of patients challenging a doctor's diagnosis. Patients are actually coming to the doctor with a self-diagnosis and requesting treatment for their illness. Consumers will have a lot more information in their hands and be challenging physicians even more in the future. They're going to be demanding satisfaction.

My view of the future is that fee-for-service contracts will still dominate the landscape, but movement will be towards per-patient or per-episode-of-care reimbursement, such as contact cap and DRGs, both of which will be discussed. One of the main reasons for my prediction is health plans will need a new cost containment strategy as medical management oversight is relaxed.

I also hear in my discussions with physicians that they're tired of their fee schedule reimbursement being dependent on the performance of their peers. Most of the physicians are trying to do the right thing, but the value of their service is worth less and less, due to the excessive utilization of just a few of their peers. The excessive utilization reduces the size of the specialty revenue pool, so all are

penalized. The current reimbursement structure does not hold physicians accountable for their outcomes or resources used.

In the future, we're going to be focusing on resource allocation that might encourage best practices and protocols. I think we will also look at some risk-sharing arrangements that bring more specialists into these programs. Last, consumers will have access to physician profiling and report cards, which will become a part of their decision-making process. Health status adjustments will become important so the information can be comparable. However, better health status models are needed.

My belief is if you look at your own data, you will find a wide variation in the cost and practice pattern by specialist within a specialty. What we're trying to achieve, especially with these new reimbursement arrangements that we'll be talking about, is how do we reduce the practice variability and bring more accountability onto the providers. We're also going to be using technology to help improve the delivery of care by applying disease management programs, telemedicine and teaching tools.

Why would a health plan look to these new arrangements going into the future? You probably recognize some of them. But what health plans are really seeing is a significant increase in their specialty cost trends. Even specialists are approaching the health plan saying, "I'd like a new and innovative way of reimbursement rather than the traditional fee schedule, because it's just not working. I'm tired of my fee schedules being reduced."

Those plans that still have global contracts might be looking for new innovative models they can introduce to the PHO in order to solve the Medicare and Medicaid risk issues and improve the financial solvency of that physician's hospitals organizations (PHO). These new arrangements just might do a better job of aligning the incentives between the primary care physician (PCP) facility and the managed care organization.

As we talk about financial and medical management issues, we must ask the question of how can we transfer control of these issues back into the hands of physicians, but make them more accountable? How can we stress resource allocation over production, since it is obvious fee schedules are production oriented? We will talk about resource-based methods of reimbursement. You will see that the methods will actually encourage best practices going forward. They can also complement new product strategies, such as an open access product, or a limited network product.

Mr. Geoffrey B. Baker: I've been in the managed-care industry for over 16 years. I started at CIGNA Health Plans. Then I operated a couple of large medical groups and was involved with Columbia HCA setting up marketing services organizations (MSO) networks. From there I went on to found E-Med Solutions, which is a company focused on assuring predictable medical expenses for health plans. We provide a Web-based payment solution that allows payers to establish fixed budgets and then use alternative methods for distribution. That being said, what I wanted to do today is touch on some of the challenges Brent elaborated on.

What are the criteria we use in selecting a reimbursement method? There are operational and physician acceptance issues, for example. What are the different reimbursement methods out there and what about the contact payment method? What's attractive about this method? I think one of the big issues out there is clearly how are we going to adjust the physician payment in light of patient severity or acuity issues. There is also the issue of physician acceptance. The issue is not how can we do this, but rather, how can we gain physician acceptance when physicians are running away from managed care and capitation?

There are several questions that must be addressed when evaluating whether or not to implement a new reimbursement strategy. What is the return on investment (ROI) of these new physician reimbursement arrangements? There are so many competing initiatives now underway in health plans. One has to compare the impact of these new arrangements with disease management programs or new e-health strategies to put referrals, claims, and eligibility on-line. What is the implementation process? We'll talk about the process we went through at Blue Cross of Florida and what the required resources were. Finally, what are some of the lessons learned from this experience?

Clearly, the payers need to control cost. We're seeing a level of inflation like we haven't seen in several years. I come from California and the big employer coalition there is Calpers. In 1998, they had an inflation rate of 5%. In 1999, it was 10%, and this year, we can expect another 10-12% increase in health care costs. This is a tremendous problem in light of the fact that health plans are moving away from capitated arrangements and paying their physicians on a fee-for-service basis, which is starting to accelerate cost trends.

Providers also have considerably more clout in their negotiations with health plans. The product climate has also changed. Patients want more choice and access to specialists, which raises the question of how are we going to control medical costs? If we're paying everybody on a fee-for-service basis and we're in fact removing medical management or the referral process, what are we going to do?

The other challenge executives will face is the extremely hostile legislative and legal attitude toward the different physician compensation arrangements. One has to be very careful of that. Also many health plans have made significant investment in their information and claim systems. These systems typically either do fee-for-service or capitation, but they can't handle these types of alternative reimbursement arrangements. These are just some of the challenges out there, and given these challenges, I think it's very helpful to identify the criteria that we might use in terms of selecting a reimbursement model.

Given those challenges, what are the additional considerations we might think about in terms of moving away from capitation or from fee-for-service reimbursement? Clearly medical cost trends are an issue. As Brent mentioned, specialty cost trends might be on the rise. But given those cost trends, where are they occurring? Is it in the Medicare, Medicaid, or commercial line of business? Is it occurring in specific specialties? Is your overall utilization going up? Is it going up on the hospital or the outpatient service side? Is it part of your pharmacy costs?

We need to isolate where those cost trends are occurring. It might be that you don't have any problems and you can continue with the status quo.

Another consideration is the point-of-service product. Can we implement a capitated gatekeeper model in light of the fact that patients can basically go anywhere they want? How should member co-pay and liability be handled? Also from a health plan prospective, how are we going to bill these employers? If we have a capitated program or a case rate payment method, how is this going to be billed back to the self-insured employer? How are the patients going to pay co-pays or co-insurance given this alternative method? There are a lot of issues to address.

Let's talk about medical management. You can't implement a financial system in the absence of a strong reporting infrastructure. If we go to a case rate payment method, do we have to be concerned about the initial referral from the PCP to the specialist? Given a case rate or contact payment method, do we need to have continuing medical management oversight? Can we, as a health plan, reduce the micromedical management that all of us are getting criticized for?

Other issues revolve around member considerations. We want to make this as transparent as possible to the patient and to the member as we implement this system.

However, I think the biggest challenge clearly is the physician acceptance issue. It's not an issue with the proposed reimbursement model, but rather gaining the physician adoption to the process, and early wins will beget success.

From an operations perspective we have to protect against the situation where the contracting folks or the medical director go out and negotiate the new arrangement, but find out it can't be implemented. Before implementing a new model, you must make sure that claims can be processed correctly and that payments be reconciled to reports presented to physicians. That has been a tremendous challenge because of the systems investments made to date.

An analogy that I've been given by some of these health plan discussions is we have too many cars on the freeway. We had Y2K. We have all these different initiatives like disease management. There is also E-health. The freeway is jammed. How do we put one car in front of the other on the freeway, or clear the lane and what's it going to cost us? Given the cost, how does that compare to other initiatives we have underway? Are we going to focus on improving the way we process claims through on-line claims adjudication or are we going to focus on medical costs that are 85% of the problem as opposed to 15% of the problem? These are the kind of issues plans are weighing as they look at these different reimbursement arrangements.

What I'd like to highlight now are the different types of alternative reimbursement arrangements under a specialty budget. We have two extremes right now. We have fee-for-service that is leading to an inflationary environment. Production-based compensation encourages one to get paid more as they do more. At the

other extreme is capitation and that has all kinds of issues right now in this marketplace.

What we really want to do is find a medium that represents a method of reimbursement without going to either extreme. I think the challenge for most health plans is developing a method that distributes the money equitably to all participating physicians. Establishing a budget or a capitation is easy. Let us just capitate and pass the risk to the provider. But once the provider has that risk, the larger issue is how they will manage the risk and distribute the funds? I think that is a fundamental challenge. It's this interspecialty distribution issue.

We touched upon and talked about direct capitation. That's clearly one of the easiest things to implement, but the challenge is that there has been a secular trend in the market away from capitation. There are issues with access and choice, resulting in the growth of point-of-service and other open access type products being launched.

Another method is the zero-based budget or relative value unit (RVU) point method. Under this method you establish a budget and adjust the fee schedule based on actual utilization. If utilization goes up, the fee schedule is reduced to fit within the budget. Many managed care organizations have that type of program.

The challenge with that type of arrangement is we get into the game of reducing the fee schedule but the physicians make up their revenue loss by doing more. The real danger of reducing the fee schedule is that we will also impact the institutional component. In this situation, we have seen those costs go up as well. It's not fair to the physicians in that type of program either. A physician who is efficient and provides appropriate care might, in fact, be penalized by his or her peers who are generating inappropriate utilization. Those are just some of the pros and cons. The pro of that approach is that it's fee-for-service, it's understandable, and it can be executed fairly easily.

This is the specialty case rate method. This is different from a diagnostic or procedure-based case rate such as a delivery, C-section, or a coronary artery bypass graft (CABG) case rate, for example. Rather, this is a case rate that is defined by the episode of care for a defined period of time where the physician is responsible for the total care of that patient, regardless of the diagnosis or services that are performed. In this example, the case rate is fixed but the budget is variable. If the dollar case rate is \$100 and 10 cases are identified, then the budget will be \$1,000. If 20 cases were identified, then the budget would be funded at \$2,000. That's the distinction.

The next method is the contact payment method, and I'll go into some discussion here. Finally, we have hybrids. Your market might be such that a capitation is completely unacceptable. I might be in Minneapolis, New Orleans, or Charleston, but the consequence might be that physicians don't want to accept capitation. Therefore, I might have to look at a hybrid of fee-for-service and case rates or a gradation or an evolution in this process. It's not a binary result.

Let us discuss the contact payment method. The contact payment method is a method of assigning specialist funds to more than one service provider within a specialty. The real advantage is that I can have a large physician panel, and I don't have to deselect my panel. The physicians who have the lion's share of the patients, in contrast to services, get the lion's share of the payments under this method. The way this method works is, if I'm a patient and I see a cardiologist for the first time, I am effectively assigned to that cardiologist for a defined period of time, for instance, six months. That cardiologist is then responsible for my total cardiology care for that six-month period regardless of the diagnosis or the services performed. That's a contact payment method. At the end of that contact payment period a new contact is issued if care continues.

Let me give you a simple math example to show how this method works. What we do first is establish a fixed budget. That budget can be a percent of premium or a fixed per-member, per-month dollar amount. In this example, we have a total of \$225,000 in the budget for the first month. We had a total of 1,000 unique patient contacts and patients that saw the physician for the first time. Those patients were assigned to that physician for six months. We divide the 1,000 contacts into the \$225,000, and we come up with a case rate or a contact payment of \$225. What we want to be able to do is smooth out the variation and address the lag issues when we first transition from fee-for-service to this method.

Let us continue our example. If we just used a simple average, in the next month, the value would be \$150. We can eliminate the variation in payment values by using a period-to-date rolling average. In the next month example, we add up the total budget on a period-to-date basis and we add up the total points and then divide the total budget by the total points for an average contact payment value of \$150. We would withhold a portion of the first month payment to reflect expected lag factors in this case. This is probably one of the best ways to implement this method and that's the approach we've implemented with our ten clients to date.

One of the issues that will arise involves patient health status. A physician will say, "You paid me \$150, but my patients are sicker." You'll probably observe a wide variation in physician practice patterns. To address these issues, you will want to conduct a historical analysis, even before you start talking to physicians. A historical analysis represents one-year of claim history for a specialty, for instance, orthopedics. The intent of the historical analysis is to see how the individual physicians will fare financially on a fee-for-service equivalency basis under a contact payment. What we're doing is comparing how a physician would have been paid under the existing fee schedule versus the contact payment rate.

In our first run of the historical analysis, we do not use any kind of severity adjustment or acuity adjustment. We just want to see the distribution of payment values amongst the physicians on a fee-for-service equivalency basis. The fee-for-service equivalency is equal to the total value of services provided by the physician, using a contact payment, divided by the value of the same services using a fee schedule. Let's say we had \$150 worth of services performed using a fee schedule and those same services represented \$100 using a case rate. This physician would

effectively be operating at 66% of their fee-for-service equivalency. This is why both Brent and I wear flack vests when we go talk to a room of physicians. In most cases physicians are uniformly hostile to managed care. They say they like fee-for-service, and don't want to change the way they're being paid. I've had discussions with physicians and showed 50% or more of them in the room how they will actually do better under the contact payment method versus the existing fee-for-service method.

Why is that? Some of these physicians might in fact be practicing very efficiently and appropriately. They have large patient panels and do very good work. As a consequence, these physicians are more concerned about their time and the opportunity cost of their time versus the fee schedule value. The argument begins with, what's the value of your time, and would you feel better if you were paid more for the time you spend with your patients? I think that is a more proactive argument. Again, under this method, several of these physicians can do very well.

One of the common observations we have when we first do this analysis is a wide distribution of payment. We have some physicians that are at 175% of their equivalency and others are at 75%. Some of this might be due to the law of large numbers since they might have a very small patient base. Some of this might be due to the physician's subspecialization; that is, the orthopedic surgeons who do only hands and backs. Given these facts, you might want to make some adjustments to the contact point values. The way to do this is through a diagnostic-based adjustment. You can do this through a production or RVU-based adjustment, or you can develop a weight by provider type. A third adjustment method is to use a stop-loss mechanism.

One of the things I want to touch on again is the physician acceptance issue. It's very important that you gain physician acceptance in this process. You share data with the physicians, and you select those specialties or those physicians that are interested in this process. You engage them in the data discussions and get them involved in the design of the program. That is what we call the business rules. This way, the physicians can actually help design the adjustments to the payment values. For example, they can establish the additional weighting factor for a particular head or back procedure. Or we might want to carve out a particular procedure and pay it on a fee-for-service basis because it takes a long time to do. These are just some of the issues to be addressed when developing this model.

Another issue involves the physician's office staff. We have to make sure the office staff gets the needed information in order to write off the account receivables. The education of the office staff is a very critical component to this model. Some of the organizations that have rolled out this payment method to date have gained quite a bit of momentum out in the marketplace. There are a lot of plans currently looking at this method.

The ROI for this model can be rather significant. The ROI really relates to medical cost savings. It's the difference between your historical costs and the budgeted costs. That's where the savings occur. Because this payment method is effectively a case rate and the physician has to manage their utilization appropriately, it

results in some dramatic savings in a relatively short period of time. We've seen anywhere from a 10% to a 30% reduction in overall utilization, particularly for those specialties where there's considerable variation and discretion in the procedures being performed.

This model also has an impact on the institutional costs because the corollary to the physician service is the technical modifier. The outpatient services, treadmills, casts, and so on will go down as the physicians are paid under this method. We can also blend this model with a patient satisfaction component and qualified additional benefit oversight. We would do so to address concerns regarding under utilization that might occur.

There's a process we went through with Blue Cross to address this issue. We worked with Blue Cross to design the initial program, the funding levels, and the business rules. We started with a historical analysis, as we talked about before. We modeled a variety of scenarios, and given the results of those scenarios, we established a baseline scenario to discuss with the physicians. The key strategy of the plan is the physician acceptance needed to employ the rolling out of this model.

Another key strategy is, how are we going to interface this with the existing claims system? How is this going to impact existing workflow process for our claims department, and the way we process eligibility or referrals? Finally, what kind of data can we produce and provide online to physicians, as well as to the medical director in this process?

As a final thought, you might not want to go directly to a full-blown capitation model. You might, in fact, want to think about a hybrid or transitional strategy such as a specialty case rate or a fee-for-service method combined with a case rate. Your decision will depend on how your market is positioned and how receptive the physicians are. You must go out there and gain that acceptance early and gauge those physicians by establishing focus groups. Meet with the top specialist leaders in the community and get their input and buy in. You will gain the likelihood of success by showing physicians how they will do under the new model on a fee-for-service equivalency basis.

Implementing a contact reimbursement model will not be easy and will take significant commitment, but it's also a commitment to attain a core competency. Internalizing this process will help you manage your relationship with physicians. Once you've done this, you can attain a high ROI, just as the health plans we're working with are now achieving.

Mr. Michael J. Kalison: In 1976, I was invited to head up the technical team that developed and implemented the nation's first system of payment by the case. It was the prospective payment system (PPS) for New Jersey Acute Care Hospitals based on DRGs. This project was funded by the Health Care Financing Administration.

I was attracted to this project because it seemed like the obvious thing to do. Payment by the case is simple; it's elegant and what is most important is it has the

natural quality of language. We were talking about physician acceptance, and if there is one thing I'd like you to carry away from this presentation is the importance of the provider interface and acceptance of the natural language of case payment by physicians.

I don't have any problem explaining this concept to a group of doctors. It seems natural to me that health care should be paid by the case, but prior to DRGs, hospitals were reimbursed based on charges or per diems. In 1980, New Jersey Hospitals were the first in the country to be paid using DRGs. In 1983 Medicare adopted the system. HCFA paid for the experiment in New Jersey, and except for some minor start-up glitches, Prospective Payment System (PPS) has run smoothly for the last 20 years. I would have you compare that to managed care.

In 1976 and 1979, when the new payment system was being developed, aligning incentives between doctors and hospitals was a priority issue. In fact, as the faculty for this session discussed beforehand, it was actually one of the tasks requested by HCFA. But, at that time, physician payment was too politically explosive. Just getting the hospitals to accept the idea of payment by the case was dramatic enough.

The New Jersey all-payer system ended in 1992. I will present a version of the DRG payment system adapted for physician payment and customized for managed care. It is a system designed with a lot of provider input. In fact, it is provider friendly. A slightly different version of this system has been proposed recently by the New Jersey Hospital Association to the federal government as a Medicare demonstration project for New Jersey. Once again, what I'd have you think about and carry away is the importance of communicating economic information to the doctors in a language they can relate to.

Let us discuss aligning the economic objectives of providers in managed care organizations. The first objective in New Jersey was to align the doctors with the hospitals. In this situation, we're going to try to make the payment work for us instead of against us, by aligning three parties: the hospitals, doctors and managed care organization. I had a nice write-up in *Modern HealthCare* and they referred to our system as a second-generation system, so let me contrast it using this paradigm.

First generation payment schemes tend to rely on four things. The first is the professional organizational structure. There are successes, but many disasters as well. It's not a natural fit. Doctors practice in a group and when they're asked to form an IPA with a lot of strangers, all sorts of things can happen. You can re-label it as a MSO or whatever you want, but it's still the same disaster. The second is indirect performance measures. Why don't we look at the case they're treating? We can look at RVUs, bed days, procedures, and tests, but why not go to the case? The third is comprehensive controls over provider behavior. As was said, there's nothing that irritates these guys more than the daily phone call. We have armies of people on the managed care side, and armies of people in the doctor's office making phone calls back and forth. Many times they are being put on hold. The fourth is limits on patient freedom of choice. The consumer must join the network,

and if they want to go out of the network, there are a million phone calls, which turns them into the enemy too.

In second generation payment schemes the payment is designed explicitly to support managed care objectives. Make the payment work for you instead of against you. Incorporate financial incentives and encourage improved provider performance. Align the economic objectives so traditional managed care tools like utilization review and Quality Assurance (QA) promote the common interest of both the providers and the managed care organizations, instead of the perpetual bureaucratic war. This arrangement can be used with or without traditional professional organizations. If there's a functioning one, that's great, but as I just heard, maybe the more important thing is to get at the molecular level and make a decision about individual doctors.

Let's get down to that level. Promote patient freedom of choice, make it portable. Make it something where they don't have to stay in the network. It's done bilaterally by contract.

In order to get to the heart of the matter and use language that the doctors can relate to, we really have to burst the bubble about two issues. What types of patients did the physician treat and how did he treat those patients?

Table 1, Determining Expected Payment, shows the severity-adjusted DRGs. My law firm represents a lot of university hospitals, and there isn't a doctor that isn't going to say they treat the tougher patients. They all do. The challenge has been met. This is the 14th version of the DRGs; it's the all-patient refined DRGs. In the labels down at the left side we see that M stands for medical DRG, and P stands for procedure. The number of cases is given to you so you can see it was credible. Obviously, the ones and twos are the majority, but as you go down, you can see there are a credible number of cases.

TABLE 1
 DETERMINING EXPECTED PAYMENT
 Based on Medicare RBRVS

| | | # cases [1] | (RP) [2] | (CP) [3] | (HB P) [4] | Total (PP)-[5] | HSP [6] | Total Case Rate |
|-----------------|------------------------------------|----------------|-------------|-------------|------------------|-------------------|------------|--------------------|
| DRG 89 M | Simple :Pneum/Pleurisy | | | | | | | |
| | Severity of Illness Level 1 | 1,370 | 287 | 45 | 29 | 362 | 3,432 | 3,794 |
| | Severity of Illness Level 2 | 892 | 334 | 107 | 61 | 503 | 4,921 | 5,424 |
| | Severity of Illness Level 3 | 241 | 344 | 230 | 158 | 733 | 7,583 | 8,316 |
| | Severity of Illness Level 4 | 27 | 437 | 459 | 384 | 1,281 | 17,766 | 19,047 |
| DRG 96 M | Bronchitis/Asthma | | | | | | | |
| | Severity of Illness Level 1 | 1,394 | 246 | 32 | 16 | 295 | 2,783 | 3,078 |
| | Severity of Illness Level 2 | 1,132 | 270 | 62 | 34 | 367 | 3,565 | 3,932 |
| | Severity of Illness Level 3 | 201 | 301 | 129 | 41 | 471 | 4,774 | 5,245 |
| | Severity of Illness Level 4 | 27 | 377 | 290 | 122 | 790 | 8,615 | 9,405 |
| DRG 107 | Coronary Bypass w/o | | | | | | | |
| | Severity of Illness Level 1 | 136 | 5,01 | 1,14 | 2,48 | 8,464 | 23,097 | 31,743 |
| | Severity of Illness Level 2 | 306 | 4,96 | 1,37 | 2,78 | 9,130 | 25,717 | 34,847 |
| | Severity of Illness Level 3 | 114 | 5,06 | 1,73 | 3,63 | 10,432 | 30,474 | 40,906 |
| | Severity of Illness Level 4 | 40 | 5,69 | 1,41 | 3,99 | 11,107 | 45,478 | 56,585 |
| DRG 110 | Maj Cardvas OP X Occlus | | | | | | | |
| | Severity of Illness Level 1 | 56 | 2631 | 857 | 1,56 | 5,050 | 15,273 | 20,323 |
| | Severity of Illness Level 2 | 173 | 3265 | 1,08 | 1,45 | 5,810 | 17,431 | 23,241 |
| | Severity of Illness Level 3 | 84 | 3314 | 1,20 | 2,04 | 6,565 | 22,914 | 29,479 |
| | Severity of Illness Level 4 | 43 | 2588 | 1,45 | 2,25 | 6,307 | 31,760 | 38,067 |
| DRG 121 | Circulatory DX w/AMI | | | | | | | |
| | Severity of Illness Level 1 | 275 | 335 | 118 | 355 | 809 | 7,558 | 8,367 |
| | Severity of Illness Level 2 | 420 | 374 | 167 | 481 | 1,023 | 8,952 | 9,975 |
| | Severity of Illness Level 3 | 71 | 353 | 255 | 712 | 1,320 | 11,952 | 13,272 |
| | Severity of Illness Level 4 | 25 | 420 | 559 | 1,24 | 2,227 | 25,820 | 28,047 |
| DRG 144 | Other Circulatory DX | | | | | | | |
| | Severity of Illness Level 1 | 234 | 212 | 90 | 206 | 509 | 5,342 | 5,851 |
| | Severity of Illness Level 2 | 335 | 332 | 167 | 335 | 836 | 7,096 | 7,932 |
| | Severity of Illness Level 3 | 109 | 367 | 236 | 348 | 951 | 7,721 | 8,672 |
| | Severity of Illness Level 4 | 38 | 477 | 464 | 417 | 1,360 | 16,380 | 17,740 |
| DRG 148 | Major Sm & Lrg Bowel OP | | | | | | | |
| | Severity of Illness Level 1 | 312 | 1,80 | 780 | 732 | 3,315 | 10,536 | 13,851 |
| | Severity of Illness Level 2 | 500 | 1,92 | 761 | 879 | 3,566 | 13,357 | 16,923 |
| | Severity of Illness Level 3 | 171 | 1,95 | 890 | 1,18 | 4,033 | 19,992 | 24,025 |
| | Severity of Illness Level 4 | 53 | 2,14 | 1,04 | 1,70 | 4,896 | 35,034 | 39,930 |

(RP) - [2] - Responsible Physician Payment(CP) - [3] - Consulting Physician Payment

(HBP) - [4] - Hospital Based Physician Payment

(HSP) - [5] - Hospital Component

We had to come up with some way to differentiate the physicians. The responsible physician is actually identified from the UB92, a HCFA/hospital form, lines 82 and 83. A typical argument is that it doesn't account for splitting the specialty, like cardiology. You have noninvasive procedure and this and that. Maybe it represents 3-4% of the cases. That line on the UB92 actually identifies the physician most responsible for resource utilization, over 90% of the time.

Don't fall for the argument. Obviously in the case of the P, which is a surgical case, reflects the surgeon. In a medical case, it might even represent the primary care

physician. The surgeon might call in a consultant, which is shown in column three. Column four is the hospital-based physician, which can be broken down into anesthesia, radiology, and pathology. This was done by taking the cases, grouping them by the severity-adjusted DRGs, and applying Medicare RBRVS at 100%. It was all repriced to make it an apples-to-apples comparison to represent total physician payment.

The hospital component represents the facility component. Adding the combined physician component with the hospital component represents the total case rate. This is the underlying matrix to the system. If you have this dynamic, you can do a lot of things. For example, I will give you two models to show you the breadth of this concept. Table 2 (at the end of the manuscript) first is the prospective payment model. We determine the prospective combined physician hospital rate per case adjusted for severity of illness. Under this concept, we can apply a discount up front, we can transfer the risk to providers downstream via a case rate, or develop an incentive arrangement where the providers can allocate surplus among themselves. The problem here is you might be relying on institutional or structural organizations to distribute the money among providers, which is a big deal. Downstreaming it bilaterally to the individual physician doesn't work in this case because there are too many exceptions.

In contrast to that approach, the partnership model seems to be gaining momentum. I call this the partnership model. Under this model a severity of illness adjusted case payment is made only to the responsible physician or the surgeon. Payment to hospitals and all other providers is based on a fee schedule, discounted charges, per diems or whatever else you negotiate. The whole structure of payment is not tampered with. Finally, the managed care organization, hospital and all other providers share in the actual savings through a surplus allocation methodology.

Let's review the key concepts. They include the responsible physician, the unit of payments, the incentive structure, and the surplus allocation methodology.

If actual cost comes in below the expected computation, then the surplus is shared between the responsible physician, the other providers and the managed care organization. How would this be applied? The responsible physician is the surgeon, and the payment is adjusted for severity of illness. The responsible physician would be paid using that case rate. The consultant would be paid on a fee-for-service basis. Let's say it is at 100% of Medicare so it's consistent. Hospital-based physicians would be paid on a fee-for-service basis. Those are just budget numbers. That's what is expected over a large population for that DRG at that level of severity for the combined physician component, hospital component, and length of stay.

We might ask what if we achieved a 10% reduction in resource utilization? A 10% reduction in the use of consultants hospital-based physicians and hospitals would result in savings. At that point, you could apply any incentives you want, 25% of the surplus goes to the surgeon, 25% goes to the rest, and 50% goes to the payer or whatever's negotiated. It's a negotiated number. I know there's some question

about gain sharing and incentives, and I'd be delighted to discuss my recent conversations with HCFA.

This is the advantage of running every DRG that is representative of medical cases. One thing that we observed in putting this together is that the whole scale of numbers is much smaller. Let me compare the two for you. The component split between physician and hospital expenses is somewhere between 30/70 to 40/60 on a surgical case. Those values have been picked over and raked over several times.

But if you look at a medical case, you'll see the physician/hospital component split is more like 10/90. Physicians get nothing. They get \$50 a day or they get \$85 to do a consult. Of course, Princeton Medical Center charges \$1,200 a day. If you can take one day off the medical case, you will see a savings. The medical case has a lot of leverage. By increasing the medical admission payment a little bit more, you can cut off a pretty big per diem.

How would it be implemented? This is really a reconciliation process. Using DRG 148 for colon cancer, physician A under this model would be paid a severity adjusted case rate. That's the return premium payment. As a courtesy, we've given him his own charges and we compare it to a resource-based relative value schedule at 100%. As a courtesy, we show the physicians what they're making off the fruits of their own labor. Every column to the right is reversed. Remember, under this model, we are paying everybody else based on fees in order to achieve savings.

For the career profile system (LIMRA) consultant, the actual payment is what it is. There might be charges or they might not even be used in a given case. We then show their contribution to the expected payment that was in the budget. Adding the value for consultants, hospital-based physicians, and the hospital, we show the total all the way to the right.

For physician A the total contribution is \$25,000. I'm trying to show that this physician used a lot of consulting services, resulting in a negative number under the consulting column. He also used a lot of hospital-based physicians which could be radiology. However, this might have enabled this physician to use less hospital services. The kind of information that comes off this language is incredible. You can really see how everybody is utilizing the hospital. Is this just another example of a high utilizer or is the physician doing the right thing.

Then we have the overuser, physician B. We're using the same case, case mix, and severity adjustment so it is an apples-to-apples comparison. What you will notice here is a negative value of \$16,243. We must remember that the individual physician numbers are fictitious, but the cases are real, and when we share this information with the physicians, it's like truth serum. It's very interesting. Physicians use different amounts of radiology, the lengths of stay vary.

I will tell you that I've never had a problem with a severity adjustment. The doctors understand. They ask for the branching diagrams, and we offer them the

phone number of 3M, if they really want to find out. To date, no one has ever made the call.

Once you have a service matrix set up and it uses actual numbers, you can find out whether the problem is the consultant or not. This information allows you to drill down that way. We have our expected values, and we have our actual payment. This one appears to be a good guy (physician C). Here's the opposite. After making an adjustment to reflect case mix and severity for an apples-to-apples comparison, their experience is high.

The one final thing I have to say is, as far as providers go there was a lot of shock when we first introduced the system in 1976, 1977, 1978, and 1979. There was a lot of reaction to changing from charges to a case rate. But 20 years later, this program is still around. It usually takes me eight minutes to explain, and there's not a lot of back and forth. The thing I would leave with you is the importance of communicating economic information to doctors in a language they can understand.

Mr. Joseph N. Romano: I want to cover four broad areas. One area is environment, which will include a recap of some of the things people have said but from the sense of where we are in managed care. I'll also include the insurance point of view. Second, we'll discuss some comments on change and transition. We'll discuss timing and links to products and pricing, as well as how changing your provider network or provider contracting is an issue for pricing. Finally, I'll have a few different thoughts about implementation. These are a little bit different topics from the ones discussed thus far and are more aimed at some of the things you might come in contact with day to day.

I would say the previous speakers have certainly given us a lot of food for thought. I think the key message is that there are a lot of opportunities for change and for looking at areas that need to be looked at continually.

From a recap point of view I certainly would say that managed care is facing a lot of challenges and these challenges exist whether we're dealing in a fee-for-service or capitated environment. Whether you're dealing in fee for service with pre-authorization concerns in the public sector, concerns about gatekeepers and directing care, or whether you're dealing with capitation, which is even worse in terms of public image, we all have challenges. A couple of challenges raised by the previous speakers deal with, as Brent indicated, increasing specialty costs and the reduction in medical management oversight. Other issues address Geof's points in terms of the decreasing physician acceptance of capitation. There are challenges that we're all facing on the insurer side of the equation.

The point I would make about the environment is that we need an evolution, but not an evolution in the geologic sense. We need something moving a little bit quicker. I don't know if that means five or ten years, but it certainly does not mean 20 or 30 years. I think the challenge is to move from where we are now in your organization's managed care lifecycle to some second stage or third stage and have a plan on how to get there.

The other challenge is the environment you're working in, which is real time. With few exceptions, you don't have the advantage of being able to say, "I'm going to start up this HMO or managed care entity using a second-, third-, or fourth-generation medical management process. You already have something in place. Your challenge is, how do you move from where you're at now to where you want to be?"

Finally, I'd argue that part of this challenge is the actuary's challenge in keeping the pieces together. There are a lot of operational activities that need to go on, but there's a lot of interaction that the actuary needs to be involved in. That's where you come into play.

The change we've talked about is certainly a change that has to happen over time, and it varies by plan and by location. One of the things I'm going to do is give you a few ideas on what challenges we face in our particular company. Our company has about 5.5 million members covered throughout the U.S. in HMO, PPO, and Champus programs. Our medical models vary from one extreme to the other, as Geof mentioned.

In Chart 1, Simple Case Example—FHS Transition, the bottom axis is labeled with ES1, ES2, or WS1, WS2 and so on. This is our eastern states versus western states. We were trying to keep some sense of confidentiality, but if you know anything about western states you'll be able to pick out California in terms of its full-risk cap and shared-risk cap deals. The eastern states are predominately fee-for-service with either a gatekeeper type model or PCP cap. The 5.5 million are in this HMO managed care environment. We have the challenge of many different models. We do not have a lot of PCP models, as you can see from the right-most column, but we do have a lot of different models in different stages of evolution.

Chart 2, Simple Case Example-FHS Transition summarizes how we classify our company into eastern and western divisions. In the eastern division, we have a preponderance of fee-for-service, whereas the western division is more capitated. Our challenge is, how do we move not just from one system, but from multiple systems over time? Some of the other transition issues you'll face will certainly be IS issues. I'll get into that in just a minute.

The fact is, from an actuarial point of view, it is multidisciplinary. We really need to have the actuary involved in the medical management contracting aspects. This is not just from a technical point of view. This changes our dealings with underwriting and provider contracting. Finally, a transition concern is about setting priorities. There certainly are a lot of priorities, and I think Geof mentioned the fact that it's a major project to change your medical models. It takes time. If this project does not have the ultimate company priority through all aspects of the operation, failure is fairly likely.

Some of the issues on information services (IS) and data relate to items discussed by the two previous speakers. Geof talked about doing a historical review of the new system. I absolutely support that, but it implies that you have all the data in your system to model the new arrangement. To the degree you don't, you have to

figure how to move there tomorrow, but realize you're not going to get there today. If you're in an environment where you really don't have that ability to do that modeling, you're going to have to use some external information to try to get a feel and flavor.

One of the challenges I see for an actuary, in his or her data management, data ownership, and data integrity role, is to just make sure he or she has examined the data needs. Not only must you examine the degree to which you have the data, but you must have good data. One of the challenges that I've faced is not whether we had data, but whether it was the right data. If the information was not needed to pay the claim, it was often not picked up from the bill. When data are not picked up for purposes of paying a claim, it's usually not very good or it's not complete. Don't get misled or challenged on the fact that the information exists. Make sure you challenge the testing of how good the information is, because that's going to be the key to implementing different models.

Finally, the change in medical models is probably going to be out of sync with what you do in rating. From our company's viewpoint, with its large employers in California, we are developing rates right now for 2001 and in a few months we will be completely done with our 2001 rating. Considering a medical model change can take six months to two years to implement, so we must estimate what the impact of the new model might be right now. You really need to make sure that you're in sync. Certainly the longer lead time you have from model to implementation, the better you will be able to measure the impact of that model when you have to produce rates or produce estimates for underwriting use.

To quickly summarize, I'd say communicate. Make sure your piece of this project is an interdisciplinary piece, and not just an actuary working with medical management or doing some financial analysis of a model. It's your responsibility on behalf of the team to know how the change will impact your operations. You must understand the timing of that change and have the ability to model its sensitivities. I would certainly not underestimate your responsibility in terms of importance as well as the difficulty of that particular piece.

The challenge will be whether you have the information to do the modeling. If you don't, how long will it take to get it, and what kind of challenges will you face? The particular challenge I had in the past was that some of the information we wanted to use was on the electronic UB92 form, but because we didn't use it to pay claims, we didn't save it. We had the information in our system electronically, but we stripped off the five or six fields we needed and placed it on a tape somewhere. I emphasize that you model the sensitivity of the new model and understand what kind of information you need because it might take you some time to get it.

Finally, you should expect some problems. If you don't expect problems, if you don't plan for glitches, if you don't plan for tweaks in the way you're going to implement this, I think you're really going to have some concerns about the results once things are ultimately installed.

Mr. Geoffrey C. Sandler: This question is for Mike Kalison. I was interested in the exhibits you put up, not so much from a contracting point of view but from a provider-profiling point of view. It seems like there's a lot of data there. I don't know how useful it would really be, but it seems there's a lot of potential to use that tool for provider profiling. Could you comment on that?

Mr. Kalison: I had a wonderful experience. Oxford Health Plan, when it was active in New Jersey, was proposing a set of case rates for various diseases. One of them had to do with some pretty painful stuff. In response to this initiative, the providers at one of the hospitals I represented asked me to employ this system to profile the doctors internally. This was a value to them, because it wasn't being measured by Oxford. However, it was stuff they had bought into.

The methodology you saw was exactly the one that was employed. What we had to do was link each UB92 to every HCFA 1500 associated with a given admission having a common patient identifier. That's how that chart/table was developed. We stripped away the hospital component in the UB92, and then normalized all the physician fees so they represented the same schedule. I had that advantage, but I presented it to the doctors involved, and it was exactly as you said.

There was no disagreement about the way the severity was computed. That was the example I was mentioning. 3M made the branching diagram available so they could see who was slotted into what category. Unfortunately, they never called 3M after that. We showed them the stuff and I guess the only issue that came up was about how we didn't use an outlier methodology so some cases stood out. That was kind of remarkable because it was like holding up the mirror because the doctors picked those out.

I remember one guy saying one fellow weighed 350 pounds. It was a 12-day length of stay. I pointed out that he was in the right severity level, but as you do for Medicare, you would eliminate such a case. They would be outliers because not everybody walks in weighing 350. I had the benefit of seeing the physician reaction without the stigma of it coming from Oxford or from Blue Cross.

I guess you could say that it was profiling at its best. They had actually scheduled two meetings, one for the presentation and a second one to have me come back with questions. I'm not making the statement that there won't be specialties where this concept might not fit, but if you create it in real time for a physician, that's the essential atom. That's what you're going to build your system off of. I think it was noticeable.

This initial project was inpatient only, and the next question was what about the outpatient end of it? I showed you the inpatient piece. My colleagues are putting up the outpatient piece as we speak; it goes into effect in July. It might not be quite as simple and elegant, but I think this is the strongest physician-profiling tool that I've seen. There might be some that are close, but this has the benefit of having all the data come off of commonly collected claim forms.

I agree. If you suggest it for profiling and not for payment, you don't get the full benefit. In order to make people change behavior, you must assign a monetary value. Profiling is okay, but I would urge you to come up with your own variation on the incentive payment scheme because that's what's going to change behavior and that's what you want.

Mr. Greenwood: One observation is that these concepts are so new that people are still trying to grasp them. The other thing to point out is that these programs have actually been implemented. However, one should not expect that these programs are the answer to everything or the perfect method of reimbursement.

The message delivered across many of the projects we've worked on is that this is going to evolve. However, what we hear from physicians in the marketplace is that they're tired of their fees going down, and tired of their ultimate income being dependent upon their peers. As they try to do the best they can, the value of their services for something like a cataract is worth less and less. This is because their colleague will perform a cataract operation as soon as someone comes in the office with blurred vision.

What we've learned from these assignments is that physicians are quite acceptable to these types of arrangements. Through the historical analysis we begin to find out which physicians will likely be on the health plan's side when it is introduced. Many realize they can do better under these programs than under a straight fee-for-service type environment.

I think the big point is that it's not going to be perfect. Many times the program is melded specifically for a geographic area, and it will evolve, but the whole concept is building momentum. We estimate that about 7% of the managed care population is under some sort of resource method of reimbursement, like contact or case rate. It is definitely gaining momentum.

Mr. Kalison: I want to make a comment about profit sharing because it's a word that has gotten a lot of attention lately. I also want to give you Medicare's reaction to it. I was knee-deep in all that stuff, and I bet you half the audience here was too. This is the idea of enabling a hospital to take a portion of the DRG and pay it to a physician who is efficient.

The model we showed you incorporated this concept. That is the version the New Jersey Hospitals has submitted for approval to HCFA. There were about a dozen sites around the country that proposed that. You might also be familiar with the negative opinion issued by the office of the Inspector General regarding profit sharing. The office said that this might be a good idea, but it certainly has lethal components to it. The public is not comfortable with paying physicians to do less, which, by the way, is managed care's problem too.

They suggested that in order for profit sharing to be implemented (and I guess this would apply to commercial business not governed by Medicare law), they would be looking for uniformity, auditability, and protection of the patient. That's the

proposal we put before HCFA. I don't want to suggest they have accepted this because it's going to be a long arduous process.

The answer might turn out to be no, but as you're planning for the commercial business, you can put in these types of protections. I think the things they suggested are actually pretty valid. If the models are too individualized or micro, then if you've seen one system, you've seen one system. It has no validity. You can't get these comparisons across a big database. It has to be simple and understandable. The severity-of-illness adjustment is critical because it is one of the things that protect against patient dumping. The signal sent to the doctor is that he doesn't have to get rid of the tough case because it's going to be too resource intensive, and he's going to lose money.

Only 10% or 5% of the cases would be affected by severity adjustment, but if it isn't there, it'll kill the whole system. It's a small number with a big impact, but it has to be there. HCFA reacted to that and said it's very important because then a doctor won't have an incentive not to treat. The idea of defining the incentive is important so that it doesn't become too big and so that somebody isn't influenced by money. At the end of the day, the argument is that 3% of the doctors in the program will be bad guys and react to money incentives.

Whether it's under managed care or any other system you concoct, those are people you just have to deal with. But you shouldn't, as my colleagues in New Haven said, "Let the perfect be the enemy of the good." Incentives are important. They have had a rocky ride with both managed care and fee for service. But I wouldn't suggest for a minute that you throw out the carrot and only hit them with the stick. I hope you take some of these ideas and work with them.

Mr. Christian A. Ulmer: I'm just curious about co-insurance programs where the patient is asked to pay a percentage of the claim. What are you basing the patient's co-insurance value on in these new arrangements? Is it a portion of the exact payment? Do you set up an idealized system, or do you do base it off a fee schedule?

Mr. Baker: If we are using a case rate in our system that's being charged back to the employer, the patient pays the co-insurance value based on that case rate. It can be done a couple of ways. A second way is where the co-insurance is based on a percentage of the total cost based upon the allowable amount in fee-for-service. This is typically how it's done and is representative of the services actually incurred.

The problem with taking a percentage of the case rate is that you might significantly overcharge a patient for the services rendered. For example, if you went in for an office visit, and if it was valued at a \$500 case rate, and the co-insurance benefit was 80%, the patient would actually pay \$100 or the 20% co-insurance. That might not be viewed as being fair to the patient, even though the opposite would be true as well.

Mr. Greenwood: What I'd like to do is give the panel one last opportunity to make any last comments before we leave. Anyone want to start?

Mr. Romano: The only comment I have is to express a concern from someone who has been involved in both fee for service and capitated environments. You must make sure that the model and payment methodology are clearly identified and do not lose sight of the fact that, in some particular situations, they just won't work initially. If you need to change, then the plan must be in a stage of evolution.

Mr. Baker: I just want to concur with my colleagues here that blending the data with the incentive component is a very powerful way to change physician behavior. Second, no financial system should be implemented without looking at the underlying clinical process. I think those two things have to go hand in hand. Profiling unto itself is much more effective when it's married to the financial component.

Finally I would agree with Joe that this is an evolutionary process.

Mr. Greenwood: I bet Mike Kalison a dinner that HCFA would institute some form of physician DRG in seven years. We will see which one of us will be paying for dinner seven years from now.

TABLE 2
AMS 12.0 APR-DRG EXAMPLE

| Number of Cases | Physician Component | | | Combined Physician Component | Hospital (HSP) Component | Length of Stay | Physician Incentive Distribution | | | | |
|--|---------------------|---------|---------|------------------------------------|-----------------------------|-------------------|----------------------------------|-----------------------------|-----------------------------|-----------------------------|---------|
| | RP | CP | HBP | | | | Surplus w/10% | RP | Group | Payor | |
| | | | | | | | HSP + HBP + CP Improvement | Payment w/ 25% Incentive | Payment w/ 25% Incentive | Payment w/ 50% Incentive | |
| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | |
| DRG 148 P Major Sm & Lrg Bowel OP | | | | | | | | | | | |
| Severity of Illness Level 1 | 312 | \$1,802 | \$780 | \$732 | \$3,314 | \$10,536 | 7 | \$1,205 | \$301 | \$301 | \$602 |
| Severity of Illness Level 2 | 500 | \$1,926 | \$761 | \$879 | \$3,566 | \$13,357 | 9 | \$1,500 | \$375 | \$375 | \$750 |
| Severity of Illness Level 3 | 171 | \$1,957 | \$890 | \$1,186 | \$4,033 | \$19,992 | 13 | \$2,207 | \$552 | \$552 | \$1,103 |
| Severity of Illness Level 4 | 53 | \$2,149 | \$1,045 | \$1,701 | \$4,895 | \$35,034 | 20 | \$3,778 | \$945 | \$945 | \$1,889 |
| DRG 107 P Coronary Bypass w/o Cath | | | | | | | | | | | |
| Severity of Illness Level 1 | 136 | \$5,019 | \$1,143 | \$2,482 | \$8,644 | \$23,097 | 7 | \$2,672 | \$668 | \$668 | \$1,336 |
| Severity of Illness Level 2 | 306 | \$4,968 | \$1,375 | \$2,786 | \$9,129 | \$25,717 | 8 | \$2,988 | \$747 | \$747 | \$1,494 |
| Severity of Illness Level 3 | 114 | \$5,063 | \$1,737 | \$3,631 | \$10,431 | \$30,474 | 10 | \$3,584 | \$896 | \$896 | \$1,792 |
| Severity of Illness Level 4 | 40 | \$5,696 | \$1,412 | \$3,998 | \$11,106 | \$45,478 | 13 | \$5,089 | \$1,272 | \$1,272 | \$2,544 |
| DRG 110 P Maj Cardvas OP X Occlus | | | | | | | | | | | |
| Severity of Illness Level 1 | 56 | \$2,631 | \$857 | \$1,562 | \$5,050 | \$15,273 | 7 | \$1,769 | \$442 | \$442 | \$885 |
| Severity of Illness Level 2 | 173 | \$3,265 | \$1,086 | \$1,459 | \$5,810 | \$17,431 | 8 | \$1,998 | \$499 | \$499 | \$999 |
| Severity of Illness Level 3 | 84 | \$3,314 | \$1,203 | \$2,048 | \$6,565 | \$22,914 | 10 | \$2,617 | \$654 | \$654 | \$1,308 |
| Severity of Illness Level 4 | 43 | \$2,588 | \$1,459 | \$2,259 | \$6,306 | \$31,760 | 15 | \$3,548 | \$887 | \$887 | \$1,774 |

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‡Mr. Kalison, not a member of the sponsoring organizations, is a Partner at Kalison, McBride & Jackson, P.A. in LibertyCorner, N.J.

Note: The tables and charts referred to in the manuscript can be found at the end of the manuscript.

CHART 1
SIMPLE CASE EXAMPLE
FHS TRANSITION BY STATE

Medical Reimbursement Models

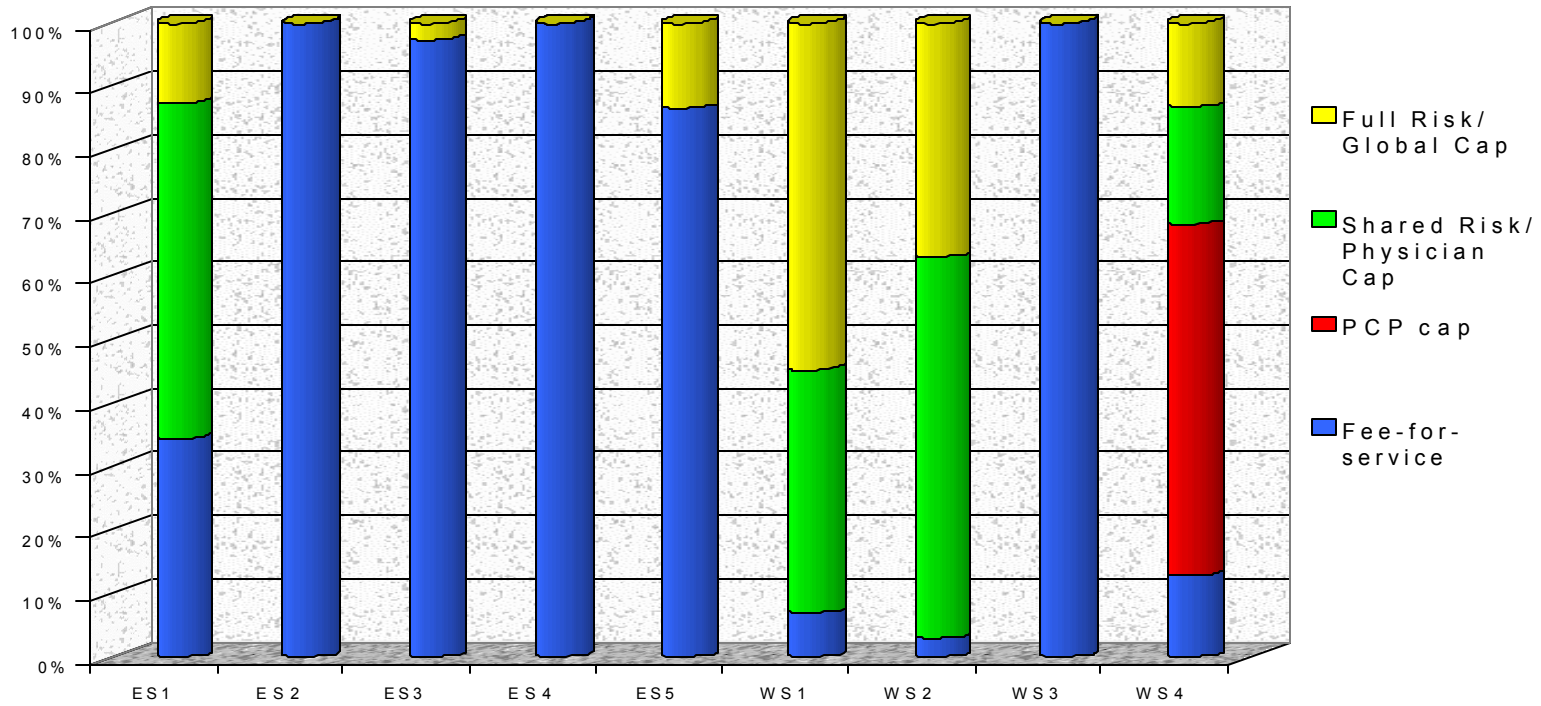


CHART 2
FHS TRANSITION BY REGION

Medical Reimbursement Models

