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UTILIZATION REVIEW

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- Trends in utilization review (UR)
- Preadmission certification, concurrent review, discharge planning, retrospective review
- Considerations in the design or purchase of UR services
- Normative data and monitoring UR
- Recent experience of UR programs and future expectations

MR. JEFFREY P. PETERTIL: As health care has grown to over 10 percent of gross national product (GNP), at a cost of $1 billion per day, the need for review of health care services to determine if use is appropriate and effective has become very clear. Although the need for it is clear, UR does have controversial aspects. There are questions not only about health care effectiveness, but also about whether cost containment is interfering with the quality of health care.

UR has never before been a separate session topic at a Society meeting, although it has been mentioned under the broader topic of health care cost containment. Today we have three speakers from outside the actuarial profession who will provide historical perspective on UR as well as comments on current and future considerations. Ms. McGhee and Mr. Penn have each participated in the health care field as both a provider and an insurance payor. Mr. Studnicki will speak from an academic perspective.

MS. GLORIA D. MCGHEE: Medical care UR is the orderly examination of the medical inputs into the treatment of illness and promotion of

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health. Any input can be examined; however, this discussion will be limited to those related to reviewing the medical necessity of hospitalization. The process of this review usually begins by screening the appropriateness of admission to the hospital. This screening is most frequently conducted by a registered nurse using preset criteria, and can be completed prior to admission, during hospitalization or after discharge. A variety of steps can occur after screening. These steps and the decisions to be made in determining the suitable utilization will be discussed in detail today.

The concept of UR in the medical field has existed in some form for at least three decades. The current form arose from the U.S. Federal Government mandate in P.L. 92-603 in 1972. The purpose of P.L. 92-603 was to assure that health care services

- be provided only when medically necessary.
- are of a quality that meet professional standards.
- are provided at the most economical level consistent with quality care.

The law called for this review when services were to be paid for by Medicare, Medicaid and/or the Title V Children's Program.

By 1978, there were 193 organizations with review responsibility in 195 designated geographic units of the U.S. These organizations were called Professional Standards Review Organizations (PSROs) and were operated by medical foundations, medical societies, insurance companies and, on occasion, private contractors not previously associated with medical care or reimbursement.

During the early years a great deal of emphasis was placed on determining review procedures, management of accuracy in carrying out defined procedures and methods of collecting data for analysis. During 1975 and 1976 there was intense scrutiny of the ability of PSROs to demonstrate results (produce savings); significant ambiguity existed as to the importance of quality assurance.

The studies conducted during this period attempted to demonstrate the impact of review in terms of the number of days of hospitalization reduced, demonstrated instances of improved quality and measurement of the cost of review. The studies reported that

1. measurement of quality was difficult,
2. days of hospitalization could be reduced by the "best" PSROs, and
3. the cost of review was between $8.00 and $12.00 per admission.

In the late 1970s, a search began to identify the "best" PSROs, and funding for review activities was reduced annually. In the early 1980s criteria for eliminating ineffective PSROs were developed. The stronger PSROs were requalified as Peer Review Organizations (PROs) and

continued to receive funding; also, they now could offer review services to the private sector.

In the 1980s, UR has become an essential service provided by PROs, insurance carriers, private contractors and some employers. The review processes developed during various phases of PSRO growth form the bases of review services available today. The predominant types of review are preadmission, concurrent and retrospective.

PREADMISSION REVIEW is the review of the medical necessity of non-emergency hospitalization and/or surgery prior to hospitalization or surgery. Preadmission review in its evolved form can encompass:

1. assigning a designated length of stay (or period of coverage) for certain diagnoses or surgical procedures without a review of severity of illness or intensity of service.

2. review of reasons for admission to determine the presence of the admitting diagnosis on a "hospital-appropriate" list, and the assignment of a date (usually the average length of stay for that diagnosis or procedure) as the next date for review.

3. obtaining information which would enable a determination of the severity of illness or intensity of service (SI/IS) and measuring this information against criteria categorized by body systems (such as cardiovascular, female reproductive, endocrine, and so on) to determine appropriateness of admission.

CONCURRENT REVIEW is that review which occurs during hospitalization. It usually takes place in one of the following forms:

1. Preadmission review has been conducted and a length of coverage notification has been made to the hospital. If the hospital desires additional coverage then appropriate information is provided and reviewed for extended coverage; otherwise, only the initially assigned coverage is considered.

2. An average length of stay (LOS) assignment has been made (either at time of preadmission or within 24 hours of admission) and the reviewer verifies if the patient has been discharged within that LOS. If not discharged, additional diagnosis information may be obtained and either a new LOS assignment is made, an additional percentile assignment within the same diagnosis is made, or the case is referred to a physician advisor.

3. Under SI/IS review, the patient record is usually screened at 24-72 hours intervals to determine if illness is severe enough to warrant hospitalization and if the treatment is sufficiently intense to be provided only in the hospital. If criteria are not met, the case is referred to physician advisor.

RETROSPECTIVE REVIEW is that review which is performed after hospitalization usually at the time of claims processing. This process is similar to what is described in 1 and 2 under concurrent review.

Each of these types of review evolved during various periods of PSRO development. It is important to understand the background of these reviews in order to understand their criteria bases and potential effectiveness.

1. Preadmission review and concurrent review appears to be the approaches selected initially by many carriers to develop a manageable system.

2. Preadmission and concurrent reviews reflect the first methods used by many PSROs in their first five years of operations. This was because data bases were very limited, CPHA PAS being one of the more reliable ones. This data base records diagnosis categories by age, sex, presence of single or multiple diagnoses and LOS, and gives data for most reasons for hospitalization. It is recorded in percentiles of LOS. The CPHA data base thus served as the only data available to many PSROs.

3. Preadmission and concurrent reviews were methods developed by Intequal to solve the problems identified in early PSRO review. These problems were

    a. numerous steps in diagnosis coding to reach LOS assignment, and

    b. lack of criteria to address the level of appropriate hospital services.

Intequal developed a scheme of review that categorized all reasons for admission into 14 body systems, with a list of measurable criteria to determine if illness was severe enough for hospitalization and if continued stay was justified by the intensity of service. These criteria have been the basis for review criteria over the last five to eight years. Most criteria today evolved from this system.

Data analysis is conducted after gathering information from the review and claims payment processes. Data analysis has several functions in the UR process.

- Data Analysis is a means of determining the type of cases that should be reviewed prior to or during admission, for example, Friday and Saturday admissions; Monday discharges; designated hospitals or physicians whose admissions and LOSs are questionable, designated diagnoses; procedures which appear to be out of line.

- Data Analysis results can be used to determine if a UR contractor is performing services as expected.

- Data Analysis can be constructed to monitor current claims trends on UR problems cited in past, and to identify emerging UR problems.

Business employers have spurred the widespread use of the UR process:

- San Diego Employers Coalition on Health Care had a record of 80 percent of nonemergency surgery admissions occurring at least one day prior to surgery. Today, 80 percent of nonemergency surgery patients are admitted the morning of surgery.

- Blue Cross of Northeast Ohio reports a 13 percent decrease in inpatient days through the use of preadmission certification.

- Blue Cross of Kansas City, Missouri reports a 6.8 percent decline in hospital admission.

- John Deere reports a 33 percent decline in bed days per 1,000 population.

HMOs report utilization statistics of 250 to 500 annual bed days per 1,000 members. Why the difference in commercial UR and HMO statistics? Several variables that might account for this have been reported by Mr. Paul Ellwood of Interstudy and Luft. Some of the differences are accounted for by a younger, healthier HMO population and the presence of increased competition. However, there are other significant variables for the commercial UR industry. These variables are the availability of alternatives to hospitalization, such as home and hospice care, and the ability of the HMO panel physicians to encourage appropriate utilization.

MR. DONALD A. PENN: I'll be talking today from a hospital perspective. In 1965, the Medicare program was enacted and started this whole mess. Hospitals at that point in time were not too concerned with anything other than medical care delivery. Utilization review, in those days, was mandated as something somebody thought should be necessary in the Medicare program. It was left up to providers to do it. However, providers did not know anything about UR, and by 1972, after six years of rising utilization under the Medicare program, a law mandated and established review organizations outside of the hospital entity. Those were not very effective. Providers are not any different than anybody else; they do not like to be told what they should do. So what evolved was a documentation game. Basically for the next ten to twelve years, providers became very good at documenting medical records to justify medical necessity in accordance with the PSRO rules and regulations that were issued. At the same time, the regulations required that one provider review other providers' records; providers were encouraged to review a peer's records and take a firm position that the care was unnecessary. The UR became no more than lip service.

Another factor was at work here. Third-party payors were paying the bills for the most part, and it was first dollar coverage. Providers didn't care about UR. They weren't concerned with cooperating with third-party payors because there was no threat of withdrawal of funds. That added to the continuation of providers paying lip service to UR. Neither hospitals nor payors were concentrating on data structures.

They had not even defined the data elements that might be necessary. What they were doing instead was establishing charge structures. Prior to the Medicare program, providers were billing on per day, per diem or per case bases. However, because Medical reimbursement was based on a ratio of charges to charges, (Medicare patients' charges to total hospital charges) and then applied to cost, hospitals had to develop an individual charge billing basis. This was carried so far that a patient did not get much for the room charge. He was charged for toothbrushes, for tissues, for entering the front door and sometimes for visitors in the room. That went on to such an extreme that payors are getting back to negotiated rates, per diems or per cases.

Hospitals began to see third-party payors measure utilization in terms of days per 1,000, number of admissions per 1,000, cost per day and so on. They also began to see annual actuarial assessments of employer benefit plans to determine rate increases. That brings us up to where we are currently.

I am going to explore several phases of UR, from its beginnings to its future. The earliest motivation for UR programs had nothing to do with cost considerations. It came out of tremendous interest in the late 1950s and early 1960s to identify factors accounting for variation in the quality of care. From 1985, and onward, we can expect that cost containment concerns will be an important motivating factor although, as I will mention a little bit later, quality is reemerging as an important issue.

UR as a cost-containment mechanism was introduced by public purchasers of care, the federal government, via Medicare and Medicaid, anxious to see that dollars were being well spent. Today and beyond, we see the very strong influence of private purchasers of care (corporations, multiemployer trust funds, and so on) on UR development. In the early days, the focus of federal UR was on the duration of care. In 1985 and beyond, UR is much more complex and is concerned with other factors such as the appropriateness of admission, the care given each day of confinement, comparative charges or pricing and the ratio of ancillary charges to total charges.

Prior to 1980, UR was conducted only by PSROs. In 1985 and beyond, UR is a new industry with private review organizations, insurance companies, third-party administrators and computer software companies getting into the act.

What about data? Prior to 1980 there was very little sharing of information. The PSROs resisted sharing information with each other and hospitals never shared information. That's changing dramatically. There's a revolution in the development of data networks. Now we are seeing the development of state-wise data networks like those in California, Iowa and Maryland. Such data networks come about as a result of cost review commissions that approve hospital rates for all the hospitals in a state. We also are seeing regional data networks develop. The PROs, the new versions of the PSROs, are now following much the same review protocol on a national basis. Commercial data networks are developing. Insurance companies and large private review

companies are developing their own data networks and are attempting to sell access to it to whole new client networks. National data bases are also under development. UR is moving from a regulatory review system to becoming a permanent part of management information systems for benefit administrators.

In the early days of UR, changes were aimed almost exclusively at the provider of care, the physician or the hospital. Most of those activities were transparent to the patient. That is still largely true today, but more and more review activities are targeting the recipients of care as well as the providers. A good example is the second-surgical-opinion program which attempts to sensitize the user of care to cost considerations.

What is the future direction of UR? I think quality of care will re-emerge as an important issue. Largely as a result of per case and capitation payment systems, new concerns are being raised about the interface between utilization and quality. The federal DRG system essentially mandates proprietary behavior on the part of hospitals. What a per-case reimbursement system does is provide financial incentives for a hospital to reduce the amount of resources expended on any case. And then, in turn, concerns arise like those we are hearing on Capital Hill from groups like the American Association for Retired People. They are seeing Medicare recipients being discharged from hospitals "quicker and sicker" because the hospitals are under tremendous pressure now to get that patient out of the hospital. The payment for any given case is now fixed; whether the hospital spends $2,000 to care for that patient or $25,000, it gets the same $3,000 or whatever the payment is for the DRG. Another area where quality is emerging as an issue is the level of admissions of patients who have received ambulatory treatment. The payment system encourages ambulatory surgery that perhaps ought to be handled on an inpatient basis. We'll start to see some modifying effects to the fixed payment system as quality issues being to emerge once again.

In the future denominator data is going to become essential. This is a pet concern of mine in working with insurance companies. I can get all kinds of information from the claims payment files on users of care, but very little information on spouses and dependents. Typically, very little demographic information is available. Many insurance companies use a fudge factor to determine the total number of enrollees or insureds, and with just a little bit of tampering with this fudge factor, insurance companies have recognized that they can obtain some rather dramatic improvements in their utilization profiles. This has got to stop! We have got to get good denominator data to put together with the claims payment information. So we have to eliminate those fudge factors, and we are moving in that direction.

Utilization review will definitely expand to cover ambulatory services, because the hospitals are losing their inpatient franchises. Much of what used to be done on an inpatient basis is now moving outside the hospital. Purchasers of care will see to it that UR programs follow the services, and so UR will move on to ambulatory care in a big way. That means there is going to be a need for new data generation

instruments. We'll need new and valid measures of ambulatory use. We haven't done a very good job of defining those, and we are going to need to spend a lot of time and effort defining the unit of care for evaluation. How do we describe outpatient use? Do we look at an episode of illness from the first visit to the visit when the patient's health status has returned to some preexisting level, or do we look at a single encounter? Or, do we look at some specified time period, perhaps a month or a year? All of these technical issues need to be solved before we can move utilization review into the outpatient setting.

There is going to be a tremendous increase in data needs and a tremendous growth in the development of data networks. Tomorrow's health care utilization and cost management information system will include multiple indicators of use and cost, and uniform reporting. Right now we have what I refer to as a data mosaic, because different corporations and groups use different insurers and third-party administrators to process claims. We are going to have to move to a more uniform reporting system if we are ever to develop valid and useful evaluation. We are going to have networks with national and geographic coverage. Some of the Blue Cross plans now, those that have the largest number of national accounts, are actively engaged in putting together a national data base for that purpose. Our management information system of tomorrow will include employee and enrollee demographic information as well as information on variables which are powerful explainers of utilization. For example, we know from research in this country and in other countries, that an individual's living arrangement is a powerful determinant of utilization. People who live alone experience, on average, five times the amount of hospitalization of those who live a family structure. We'll need to include extensive market service area data, because utilization and cost experiences are also determined in part by the nature and structure of the medical market service area--how many hospitals, the existence of alternative delivery systems, the HMO penetration, the physician to population ratio, the surgical specialty to medical specialty ratio. So far, the best predicator of surgical use is the number of surgeons.

UR information must be available on a continuous and routine basis to determine case mix and severity adjustments. We also are going to have to be able to compare UR results with various criteria, including regional and industry norms.

In the future, UR will be increasingly integrated with medical practice issues. In the early days when we dealt only with length of stay we would say: "Well, the hospital's average length of stay seems to be too long or too short, but we're not sure why that is. Let's go back and take a look to see if we can understand what it is that accounts for the length of stay." In tomorrow's more sophisticated UR systems, there will be extensive criteria to determine the appropriateness of care.

Finally, UR programs will become increasingly difficult to conduct, but more essential than ever before. The review will become more difficult because of multiple cost containment interventions. It will be very difficult to isolate the effect of any single cost containment activity in a multifaceted medical service facility. It will be difficult to do reviews

because of continued market segmentation by providers, increasing problems of favorable and adverse selection in describing and predicting the utilization for different groups. I understand, for example, that in any given calendar year, only 50 percent of Medical enrollees will utilize Part A benefits. That opens up all kinds of interesting possibilities for identifying those segments of the Medicare market where utilization levels are very low. And then also, this review is made difficult by the pricing mechanisms of alternative delivery systems. How is a capitation rate developed for a HMO in a highly segmented market? UR will be a very difficult process, from the point of view of understanding the various factors influencing use as well as difficult from a pricing point of view.

MR. MCGHEE: I want to pick up again by briefly describing the health care market the insurance industry is facing. HMOs have their 250-450 bed days per 1,000 enrollees. Employers want utilization review and cost control, but they don't necessarily want to change from the indemnity plan, the minimum premium. They prefer not to once again hand over the control of health care to the HMOs, because they want to control their medical care costs.

Some cost-containment measures are in place. There is a process for reviewing hospitalization at 24 to 72 hours intervals to determine if each individual day of hospitalization is appropriate. There are more ambulatory surgeries and more outpatient services. Many of the tools used by HMOs are available to insurance carriers. There are flexible ways of covering patient needs including hospice and home care so the physician can provide high quality, low cost care. And something else is going on. Hospitals and doctors are more willing to cooperate. Now hospitals are accustomed to providing data. They are accustomed to having review processes conducted. They are accustomed to having audits, having people in and out of their medical records and accounting departments.

Given this market environment, how does an insurance carrier proceed? I think a carrier had to start by asking itself some questions. One is, what is the bed day per 1,000 insureds it would like to achieve? Most companies can achieve an 800 bed day per 1,000, or greater, with current plans. If a carrier establishes a UR process that reduces only gross abuse, it can obtain a 500 to an 800 bed day per 1,000. Or it can adopt a stricter UR plan, one used by competitors with prepaid or capitated plans and get the same results. A carrier will have to do more communicating, and will have to be more careful about selecting preferred providers. It will have to let its insureds know what it is they have purchased and how to use the system. It has to let them know that their doctors approve of the plan. One advantage HMOs have over insurance carriers in indemnity plans is that the process is transparent. It's transparent in that HMO doctors tell patients: "I'll meet you in the morning to repair your hernia in the outpatient setting. You'll be fine by 3:00 in the afternoon and you'll be able to go home. I'll send a nurse to check on you tomorrow and the next day." That's the level of care necessary to produce the number of bed days HMOs do. Insurance carriers are going to work harder because they have an

external system. But by working with providers and with employers they can achieve results similar to HMOs.

Next, a carrier must review its benefit plan structure to make sure it has adequate support for alternative delivery systems such as home care used in lieu of hospitalization. The carrier must let the home care agencies it selects know that it is wide open to any thoughts they might have about managing care without hospitalization. Also, adequate hospice coverage is necessary. A carrier can provide a $5,000 hospice benefit, but when that's expired the patient will go back into the hospital. A carrier will have to provide substantial benefits in the hospice area.

Carriers should increase coverage for ambulatory surgical procedures. A company might want to consider the ambulatory alternative procedures that normally require up to three days of care. No one saves any money on tonsillectomies and appendectomies and other procedures involving one or two days of hospitalization. Money is saved by reducing the rate of hospitalization.

Carriers must establish incentives for physicians and insureds to notify them about pending hospitalizations early enough that the review process can be used to select alternatives. Carriers don't want calls thirty minutes before the patients are going into the hospital, because the insureds have their bags packed and they are on their way. Carriers want a process for examining the alternatives at an early stage, they want flexible approval of noncovered benefits that are high quality and cost conscious.

The next thing a carrier must do is define the target population for the UR program. Information for this comes from the claims administration division. Then the review elements can be determined. Are there Monday discharges that are a problem? Are there nonemergency Friday and Saturday admissions? Are there surgical procedures that can be performed safely in a one-day facility? What is the noncomplicated newborn delivery length of stay? Is there a way to reduce that length of stay, a way to get people out one or two days after delivery instead of three days?

Other facets of the UR must be decided in advance. What are expenses for mental and nervous conditions and are those to be reviewed? What are the expenses for substance abuse? Is there to be a more intense review of specific hospitals and physicians? These latter questions are important because a lot of UR contractors do not do physician specific review. They prefer to stay away from that. Also, many UR contractors are not able to review mental/nervous rehabilitation and substance abuse programs. The next thing to decide is if the review process should validate diagnosis. Admitting diagnosis often causes problems in UR. Only 40 percent of the time does the admitting diagnosis correlate with the discharge diagnosis. So if the review system does not contain a method of validating diagnosis, the review results may not be useful. Then is there to be an active discharge planning process in the system? A carrier should not rely on the discharge planner in the hospital. It should ask about what the process is, find out how discharge is

connected to home care and hospice follow up alternatives and what kind of arrangements are made to send cases home early. A carrier might want to have its own discharge planner and not rely on the hospital system or it may want to supplement the hospital's system and monitor it. Is there to be a retrospective review of any admissions that are not reviewed concurrently? That is not something a UR contractor would do automatically. Will the review be conducted by phone or on site? Many contractors perform reviews by telephone. There is an effective way to do reviews by telephone, but on-site visits are necessary when there is a difficult review.

After determining the UR content, the carrier must decide how it wants information transmitted to the hospital and to the insureds. Does the contractor indicate certification or denial on the plan prepared by the hospital? Is the provider or the insured to be notified about certification and denial, and when is that notification made? What review information is released to the employer and/or the employees, and by whom? One has to be very careful. A lot of UR contractors will automatically send out information to employers. That may not be in line with the plan design or the intent of the review.

Finally, a carrier must decide how to measure impact. It must make sure it gets that information onto forms and loaded into the computer. The decisions about results of the review also have to be made in advance.

MR. PENN: Competition obviously demands performance and the hospital industry has been performing. In fact, in the last eighteen months, hospitals have become more profitable than anyone ever thought possible. That gives employers a good opportunity to talk to hospitals on a business level. Hospitals are beginning to act like businesses. Prospective pricing has put financial incentive in front of them, making them more business-oriented in their attitudes. One hospital in California has 45 different PPO contracts. It is not unusual for physicians there to have as many as 50 different agreements with alternate delivery systems. Hospitals have always been opposed to HMOs' admission avoidance strategies and policies of very tightly controlled utilization, thus the new item on the hospitals' horizon is the negotiated employer purchaser arrangements. These new arrangements are far more attractive than Blue Cross discounts ever were.

So, on to the subject of utilization measures. Earlier I mentioned some very gross ones. However, now data on case mix by disease, gender and age adjusted, is becoming available. Hospitals are gathering this information, having data on severity of illness and patient mix is very important to them now. They used to think about the numbers of beds filled. Now they are thinking about having the right kinds of patients, particularly the more profitable ones, in those beds and fewer numbers of them.

Hospitals are being compared against each other and those professing to be preferred are being tested. Insurance companies need to start capturing data to measure preferred arrangement savings. This is a new element actuaries are going to have to incorporate into future

rates. Another critical new data item is insured usage of the different preferred and nonpreferred providers. A recent report states that only 19 percent of employees in a company plan utilized the preferred provider network. Incentive plans were not very effective. Also, the carrier did not modify its benefit structure so that the alternative delivery programs would be cost effective. But, each carrier needs to measure its insureds migration into those programs in wide-option employer plans. Uncompensated care and patient mix by employer group are two other very critical items of data. Hospitals had transferred the burden of uncompensated care to the shoulders of private payors. However, what is happening now is that the private payor base is shrinking, and the burden of those patients is being moved again. The remaining payors, HMOs, PPOs and so on, are going to have a heavier burden of medical care costs to pick up unless they develop programs to control that. Also, the utilization statistics must be monitored for biases in the underlying data. For example, while it is perceived that a short length of stay is a good thing, a long length of stay could be recommended as a result of a UR process. This means information about diagnostic admissions channeled to alternate delivery systems is taken out of the data and leaving information only on patients who really should be treated in the inpatient setting, potentially skewing the statistics.

Employer purchaser controls also require changes. Over the last five to ten years, many large employers have become self-insured to eliminate the insurance carrier administrative fee as part of their cost containment programs. Those employers have also increased patient cost sharing with increased deductibles and lower coinsurance. When an employer becomes self-insured, control is a must. Therefore, these employers have undertaken preadmission certification programs whether the admissions are voluntary or mandatory. There are now 45 different UR programs professing to help an employer control his utilization. Providers are responding to this new environment by maintaining detailed plan information on patients. Some providers are coding payor identification in patient records. They used to identify this only by Blue Cross, Medicare, Medicaid, other insurance and other categories. Now they are recording by employer, or by purchaser. They are also beginning to develop (and many of them have) sophisticated benefit-plan files by employer so they know exactly what a patient's benefit plan offers and can maximize the benefits of it.

Providers have very detailed utilization data and are now beginning to share it with those who can help them gain a competitive edge. PSROs and PRO utilization data is now available (since April 1985) under the Freedom of Information Act.

Hospitals are developing local standards of performance. Ideally, with large purchasers they agree on performance measures. Most providers have already adopted uniform coding systems. ICD9CM and CPT4 procedure codes at the moment are the standard, so systems can interface with each other.

Providers have altered their whole operating structure. They will no longer be adding new hospital beds for the sake of keeping up with what's going on down the street, but rather to meet program designs. If a hospital is pushing outpatient care, that's what the construction will be. Hospitals are also monitoring the utilization of ongoing programs and services in order to get out of unprofitable ones. They are using detailed data and utilization review to select and recruit physicians who are profitable now. They are diversifying. Hospitals are multi-corporations. One has thirteen corporations under a parent including a Wendy's hamburger stand and a Texaco station in addition to a lot of other things.

Malpractice insurance carriers are raising premiums significantly for those hospitals and physicians who are in HMO or preferred provider networks. It was thought that because these arrangements were preferred, the carriers would lower premiums. The opposite has occurred because of carriers' concerns about the economic incentives in those contracts, the risk of malpractice from poor quality. I don't know what the resolution of that is eventually going to be.

Employers are also gathering utilization data now to measure providers, carriers and third-party administrators. They are beginning to study processing time and performance, primarily that of third-party administrators processing insurance carriers' business. They are also beginning to look at subscriber type.

The last point I want to raise is about the "Actuaries Full Employment Act." Hospitals didn't think they needed actuaries, but that may be the key to their success. Hospitals are beginning to realize they need actuaries if they are going to compete on pricing their services to employers, particularly those hospitals entering into risk arrangements with employers.

MR. PETERTIL: I am going to ask the first question, and am going to ask it of the audience. How many of you are employed by insurance companies? A great majority with insurance companies. Of those with the insurance companies, how many companies have a UR program today? It looks like two-thirds. And of those, how many of you feel satisfied with the UR program at your company? One!

I have another question. What are the necessary qualifications for a person doing UR work?

MS. MCGHEE: Most review coordinators with UR contractors are RNs. That is because the PSROs primarily used RNs to conduct the review process, or medical records people. I have been able to use well-trained technicians, people familiar with medical terminology, people who will meticulously ask the questions, obtain the answers and compare them with criteria they understand. I do believe a registered nurse is required when the routine process does not work in deciding whether or not an admission needs to occur or whether a continued hospital stay is necessary. A registered nurse can prepare a very good report for the physician to review without that taking up very much of his time.

MR. PENN: I contend that the best place for utilization review is at the provider level, and that if the preferred providers are in fact preferred, one of the things they do well is utilization review. A level of trust must be developed between the purchaser and the providers. Most third-party UR can be performed by people Ms. McGhee identified. The UR retrospective study can be performed by actuaries or epidemiologists, preferably actuaries. The interpretation of that phase is probably the most difficult part of the UR process.

MR. STUDNICKI: I'll go a step further and say that the development of some UR programs is reaching the point where some aspects of the review can be done without human intervention. The basic review can be mechanized to the point where, if the criteria are valid and well established and the nature of the interaction of the provider with the system is well organized, it often times can be conducted without human involvement. Johns Hopkins University is experimenting with a personless preadmission certification program. It is anticipated that there will be some physician resistance to dealing directly with a computer. Those people will have an option to talk to a person.

Unanswered UR questions are about who determines the criteria and who evaluates the information. Those definitions require complex decisions that need to involve a whole range of specialists, including statisticians, physicians, actuaries and various health professionals. Anyone who has anything to offer will be welcomed into the fray.

MR. JOHN FRITZ: I'm with Tillinghast, Nelson and Warren. I think it was Mr. Penn who advised us to be very specific about the data one asks for in a review. I wonder if he could expand a little on that. Who does one contact to get the information, how specific is very specific, and what type of information is available to guide the forming of specific requests?

MR. PENN: As of April 1, 1985, the U.S. Department of Health has made available, under the Freedom of Information Act, the data collected by PSROs and PROs over the past several years. You need to contact the regional Health Care Financing Administration office in your area and designate the PSRO from which you want to receive the data. Usually there is one PSRO in each state, depending on the size of the area. PSRO data include admission-discharge rates and charges by diagnosis (DRG). Those data are also provider specific. The same is true of the available Medicare cost reports. The agency will not honor any requests such as: "Just give me your data." But, if you ask for information on a particular provider in an area, you will receive it.

MR. MCGHEE: When you are looking at provider profiles, be certain you know what an "outlier" is: how it's figured, whether it's good or bad to have it, what the particular problems are in certain DRGs, and so on. There is a lot of information in the literature about outliers, and you might want to review it before you begin to look at them.

MR. PENN: Yes, anytime you get data of that nature, also request definitions of the elements so you won't make too many wrong assumptions.

MR. GEROLD FREY: The ultimate measure of the effectiveness of the practice of medicine would seem to be life expectancy and the vitality of life. What international comparisons have been made of these criteria?

MR. STUDNICKI: The literature is rich in international comparisons of health care system utilization and its relationship to life span. The other concept, vitality, is perhaps more interesting. We do know that in the U.S. a very high proportion (12 percent) of GNP is channeled into the health care industry. I think the comparable figure for Britain is approximately 6 percent. U.S. longevity is clearly not better, and in some cases, is worse than that of many other nations. So there does not seem to be a strong correlation between utilization and favorable changes in morbidity or mortality.

It is also quite clear that, because of an infusion of dollars, the U.S. has developed a tremendous acute tertiary care medical system that has driven the development of new health care techniques, methods and treatments. It's probably fair to say that without those substantial funds such developments would not have taken place, at least not at a rapid rate. So judging medical care effectiveness is not just a simple matter of looking at morbidity and mortality statistics and comparing those to amounts of dollars expended. Quite clearly, the U.S. system of acute medical care is without peer anywhere in the world. The public policy question is, of course, about how much we are willing to pay to retain that capacity. At the level of the individual purchaser of service, everyone wants to pay only for what he is getting. This is a very tough public policy issue that needs to be addressed as we continue to develop UR and utilization control. Like it or not, we do have a very complex and sophisticated medical care system with financial underpinnings. Once we shift to a system where every purchaser tries to cut the best possible deal he can in the name of cost containment, then some of the social good represented by that tremendous capacity is threatened. It is a very important public policy issue.

MR. CHRISTOPHER WAIN: How does one provide a meaningful benefit for hospice care without unintentionally drifting into custodial care? Also, how does one run a UR program with the objective of minimizing malpractice claims?

MS. MCGHEE: First of all, I didn't recommend a dollar limitation on hospice care. What I did was recommend a clause stating that prefiled, preapproved hospice programs used in a high quality, cost conscious manner, in lieu of hospitalization or other eligible services would be covered. Accompanying that is an alternate treatment clause stating that a program for noncovered care that is high quality, cost conscious medicine, will be considered for coverage. In order to comply with ERISA, one must be very careful about how those requests are made. They must be made in writing, be well-defined and be measured by the same set of criteria each time. My company also developed an individual early warning system called ROSE, Rehabilitation Outreach Service for Employees. In one case, ROSE brochures were given to all employees of a company and were also posted all over the worksite. The employees were told that when they had a catastrophic or terminal

illness, an individual benefits management plan would be developed for them.

MR. PETERTIL: How do you keep malpractice out of UR?

MR. PENN: UR ought to be conducted by people who are normally covered by malpractice; that is, by medical providers rather than by third-party payors, employers or consultants who can hire outside doctors or nurses. This should be since self-insured employers who handle their own claims administrations now are also being named in malpractice liability suits. Obviously, when anybody files a suit he names the deepest pockets involved. I think the use of preferred providers will ultimately result in lower insurance risks, just like nonsmoking and safe driving personal habits have. But it's going to take awhile to prove that point, particularly to the reinsurers and the malpractice carriers who are getting to be fewer and fewer in number everyday.

MS. MCGHEE: What brings lawsuits is misunderstanding and unrealistic expectations. Communication, to the provider and to the patient, at the outset of covered treatment is essential.

MR. PENN: When I was a hospital administrator, a new fetal monitoring device arrived one morning and was left sitting on the back dock. That same day there was a delivery of a distressed baby who later became disfigured and developed other problems as well. The hospital suffered a $5 million lawsuit simply because the new equipment was not hooked up right away. I don't know that we can get out of some of these malpractice cases.

MR. FREY: How should insurers address the conflicting goals of limiting medical claims while not denying treatment that is medically necessary?

MR. PENN: I just edited some contract material that would have given the employer the ultimate decision to approve or deny coverage. That was revised so the employer can determine the benefit package and the dollar limitations, but the ultimate decision about appropriate treatment had to remain with medical personnel. The employer was very upset about that revision until his lawyer agreed that he should not undertake that liability. So the insurance carrier can determine benefit design, but medical decisions must be made by medical personnel.

MR. JOSHUA JACOBS: Ms. McGhee mentioned that there was a lot of work to be done in this area by insurance carriers, as contrasted to HMOs which decide on both the quality and the economics of care. In addition, they have built-in incentive to give both quality care and cost containment. So do you think that, in the long run, HMOs will have a competitive advantage over those who must rely on collecting and interpreting external data? Or, now that the hospital chains are integrating services including HMOs and ambulatory care centers, won't they also have an edge?

MS. MCGHEE: If you situate yourself so you're isolated from providers and from employers, then yes, they'll have an edge. But, if you situate yourself so you are working in a cooperative environment with providers in a network or a joint venture or a preferred provider relationship and you do the communications, you will have the same opportunities for favorable utilization that the HMOs have.

MR. STUDNICKI: I'd like to echo those comments. There is evidence in group plans, both for HMOs and for more traditional insurance coverages, that it is quite possible to have the traditionally insured groups reach the same low levels of hospital utilization as is typical of the HMO. There are good examples of that, all over the United States, so the issue is more than HMO versus traditional insurance. There is a disturbing part to the HMO picture, from a research point of view, and that is that it has been extremely difficult to gain access to information on the nature of HMO enrollees. That data is very closely held. In reading the advertising literature produced by HMOs around the country, it would be nice to know a little more about the composition of enrolled individuals. The HMOs appear to be more efficient because good HMO enrollment data isn't available as it is for more traditionally insured populations. That is a very difficult issue that the HMO people don't like to talk about.

MR. PENN: HMOs, remember, are just insurance companies. They do not want to release their information any more than you carriers want to release your information to each other. That's part of your competitive advantage. What's going to occur, in my opinion, is that those federally qualified HMOs, as part of their federal qualification designation by the government, will be required to release their information to the general public. There is legislation pending, and a lot of discussion regarding it for the data to be made available. In the interim, the HMOs that initially charged low premiums, and did not have actuaries, are now going through the same pricing maturation process that insurance companies went through. They are finding that their risks are too high. Their premiums are being increased the second and third years. In some cases, their rates are higher than those of insurance companies. So, I think the HMO, while they have a proven mechanism to contain health care costs, will not have a competitive advantage in the future.

MR. STUDNICKI: I have one other comment about HMOs. Disenrollment continues to be a problem nationwide, whether the HMO enrolled population is a middle-class population or a poverty population or an elderly population. The principle reason for disenrollment has been the same for more than a decade now. After some time in an HMO, people want to have freedom of choice. They want to be able to choose more broadly among providers than what is often available to them via the HMO device. That's a problem that continues.

MS. JOAN OGDEN WILCOX: Will someone discuss the various advantages and limitations of the particular UR device known as the appropriateness evaluation protocol (AEP)?

MR. STUDNICKI: AEP is a device that uses a series of criteria. In the original AEP, some 27 individual items were arranged in three categories. Those were nursing services, patient sickness characteristics and physician characteristics. The AEP is performed using the medical record. The reviewer goes through the list for each day of stay, and if any of those 27 criteria are met, then the day of stay is considered appropriate. For example, one of the criteria might be whether or not the patient still has a fever. With that methodology, each day of stay is reviewed, and the total hospital admission is reviewed. In order for an admission to be judged to be appropriate under AEP, the reviewer has got to test those 27 criteria on each day of the stay. Let's assume it's a seven-day hospital stay, and none of the criteria are met for the first day. This means day one is inappropriate. The same result occurs for day two. In order for the admission to be considered inappropriate, each day of stay would have to be considered inappropriate.

What's interesting about the AEP is that it's been applied in eighteen or twenty different states. The overall average level of inappropriate days of stay is between 20 and 30 percent. The level of inappropriate admissions is hovering right around 10 percent. This lends a lot of credence to the charge that there is still a tremendous amount of inappropriate hospital utilization. At Johns Hopkins we have taken the AEP criteria and put them into a cybernetic system from which we feed data back to physicians every two weeks. We did that in western Maryland for six hospitals and saw very dramatic reductions in the percentages of inappropriate admissions and inappropriate days of stay.

MR. PENN: Physicians have had information about their practices withheld from them. That does not seem reasonable, but that's what has happened. Hospitals have kept it from them on purpose, because once physicians do have information, they will correct a lot of the utilization problems themselves. If you, as a carrier, do nothing else, work out some system whereby you keep physicians informed about their patients who you insure, and you'll reap some advantages without doing much more.