MANAGED CARE: PRACTICE PARAMETERS

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Background

The past several years have provided the medical profession and health policy leaders with much to concern themselves about.

The adoption of RBRVS has and will continue to dramatically alter the way in which physicians are paid. The debate over national health care continues to be a top item on the nation's agenda. Experiments on the predetermined rationing of health care are now being conducted. While these topics have stolen the headlines, another important movement has quietly gained great momentum. Louis Sullivan has called it "the beginning of a peaceful revolution in medical care." The revolution he refers to is the rapid rise in interest in developing and using practice guidelines.

The growing interest in practice guidelines is well documented by an inventory of the organizations that have involved themselves with them. The most publicized attempts at guideline development have been made by the recently formed Agency for Health Care Policy and Research (AHCPR). Congress has subsequently invested hundreds of millions of dollars in this federal agency in an effort to develop national guidelines to impact the care of Medicare recipients.

The AMA has also been active in guideline development and review. Its board of trustees rated practice parameters as a priority as early as 1988. The AMA has helped to facilitate interaction among specialty societies and other organizations to address guideline-related issues. David Eddy's eloquent series of articles in their journal (JAMA) in early 1990 underscored the organization's commitment to this topic. The AMA currently publishes a directory of practice guidelines with regular updates. Other active participants in the guideline movement include specialty societies, universities, managed care organizations, health insurers, and independent organizations (e.g. RAND). Medical management vendors have already begun to incorporate practice guidelines into their products. The number of guidelines developed by these types of entities now numbers well over 1,300. The perceived importance of practice guidelines is again underscored by a recent American Hospital Association poll. In it, hospital quality assurance directors rated information on practice guidelines as their most important educational need, far ahead of even information pertaining to compliance with JCAHO standards!

What, exactly, are practice guidelines, and why have they recently prompted so much attention? Definitions abound, but most are similar to the following, which defines practice guidelines as "systematically developed statements to assist practitioners and patient decisions about appropriate health care for specific clinical circumstances." Some authors, like Eddy, distinguish between practice guidelines, policies, standards, and parameters, but for the purposes of this article, all are synonymous. Given this definition, one...
quickly sees that some practice guidelines have been around a long time. What distinguishes today's guidelines from those we have encountered in the past? There are two important differences. Today's guidelines (at least the good ones) are being developed systematically and scientifically. They represent more than just personal opinion or a restatement of the standard of care. Secondly, today's guidelines are being looked at as tools for the management of health care delivery, rather than just educational/informational material.

Three major forces have been cited as combining to spur the interest in practice guidelines. The first, and most obvious, is the continual escalation of health care costs. As the cost of medical care continues to rise, it is imperative that we use our increasingly limited resources in the most effective manner. When we do spend medical dollars, we must be sure they are both necessary and productive of the highest benefit possible.

The second force is the continued documentation and growing public awareness of the tremendous variation in medical care. It has been nearly a decade since Wennberg used small area analysis to demonstrate large regional differences in the frequency of surgical procedures for the same clinical conditions. More recently, we have seen a twofold difference in the use of PTCA and CABG surgery in different areas of the country. Other similar examples abound. This variation suggests at best disagreement, and at worst ignorance, about the optimal treatment for specific clinical conditions.

A third force, closely linked with the one above, is the growing concern about the quality of medical care in this country. If quality care equates to appropriate care, we may have reason for concern. Numerous studies have documented that a high percentage of specific treatments and diagnostic studies are unnecessary; carotid endarterectomies (32%), coronary angiograms (17%), and upper GI endoscopies (17%).

If quality care is care that produces the best outcomes, we again have reason for pause. Though not mentioned as frequently, guidelines also serve to eliminate the underuse of services which contributes to increased variation in health care and poor outcomes.

We now know that guidelines are becoming an important topic of interest, and we at least have a feel of why this is. This, however, is not enough to know. To gain a greater understanding of practice guidelines, we need to examine how they are developed, how they may be used, and what potential problems their use may entail.

The remainder of this article deals with these topics.

**Development and Dissemination**

Proper development and dissemination are key ingredients to the successful use of guidelines. If not based on scientific evidence, a guideline may not improve quality of care or outcomes at all. If respected practitioners are not involved in the development process, physicians will rightfully question the validity and clinical usefulness of a guideline. If not presented in clear terms and in a forceful yet acceptable manner, a guideline may well be ignored.

Most guidelines are developed with some type of consensus-building process, using specialists or experts as a consensus panel. Whether these experts sit around a table and hammer out an agreeable guideline or participate in a Delphi-type process, their consensus opinion is seen as something which is highly informed, reputable, valid, and useful. The worth of the guideline often seemingly ends up resting on the credibility and recognition of the experts on the consensus panel.

While this type of process certainly results in the incorporation of accepted standards of care and fosters a sense of legitimacy, it is by no means perfect. Eddy points out two crucial problems with this approach. First is the fallacy that people should do (as suggested by a guideline) what most people are doing (as defined by accepted practice). There simply is no guarantee that accepted or "average" practice is based on scientific evidence. A repeating circle of accepted practice leading to guidelines leading to accepted practice, etc., can thus lead to a high degree of conformity to an unproven practice. A second problem is the assumption that experts can accurately assess probabilities of outcomes linked to certain types of treatment based on their subjective experience without thoroughly examining scientific evidence and methodically estimating costs and benefits.
Another problem with expert-produced panels is the fact that they may not be useful. A guideline developed by neurosurgeons at an academic medical center may not be useful to target physicians if they are community based internists. Their patient populations and experiences are likely to be quite different, as are their examination skills and the availability of resources.

These problems are not cited as a call to stop all guideline development until a better process is found, but as an indication that we need to continue to work to improve the process. Ideally, the process should begin with clear identification of: 1) the problem being addressed, 2) different types of treatment available for the condition in question, 3) an exhaustive compilation of scientific evidence demonstrating the efficacy or lack of efficacy of these treatments, 4) the economic and social costs and benefits associated with each treatment option. This research might be better done by a non-physician/expert to insure objectivity and completeness. The process would then continue with development of a guideline shaped around this research, rather than merely looking at just the accepted standard of care. Experts, as well as non-experts, should be involved in this part of the process. Community physicians, nurses, and administrators who will be using the guidelines must be represented.

It seems to be axiomatic that the better the development process, the better the resultant guideline. Unfortunately, it is probably also true that the better the development process (more background research, diversified representation, use of individuals with different skills and backgrounds), the more expensive it will be. This is one of the bases for the argument for producing relatively fewer national guidelines rather than multiple local ones. A centralized, experienced group (i.e. a federal agency or national medical society) may be able to produce better guidelines while reducing the total overhead costs involved in doing so.

After guidelines are developed, how should they be disseminated? Do we simply mail them to providers and ask them to use them? Do we send a messenger to each office to introduce a guideline and its merits in face to face meetings? Do we write guidelines into physician contracts? No matter what the exact mechanism, basic elements in the dissemination process must be present to gain provider acceptance and adherence.

The guideline itself must be clear, concise, and specific. Some type of incentive (whether economic or quality-based) must exist and be made salient to the provider. A respected local provider should help represent the guideline and encourage its use. This last element serves two purposes; it helps other providers buy in to the quality and validity of the guideline, and it eases the perception that an outsider (outside of medicine or outside of a particular locale) is dictating how medicine should be practiced in a community.

Potential Uses

After discussing the development and dissemination of guidelines, the next logical question arises: What do we do with them? It is the answer to this question that provides the most excitement, confusion, and consternation related to the topic of practice guidelines. In a global sense, we have already indicated the use of guidelines as a definition of appropriate, high quality care, they are given to physicians to help them practice in such a way as to decrease unwanted variation, to do only what is necessary, and to produce the best possible outcomes at the lowest cost. A partial list of more specific uses includes applications to physician profiling/selection/education, network management, utilization review, technology diffusion, risk management, and patient/consumer advocacy.

Physician profiling/selection/education. The growth of standardized billing, electronic data interchange, and claims generated databases allows payors to reconstruct patterns of practice for individual physicians. First attempts at judging these practice patterns involved the identification of outliers. The underlying assumption here, again, is that anyone doing something at a frequency within two standard deviations of the average of his/her peers passes muster. As we have seen, this may be a dangerous assumption. This also allows for a wide variation in what is termed acceptable care. A better way to analyze practice patterns might involve defining quality care based on accepted practice guidelines and then matching individual treatment patterns to this expected level of care.

Guidelines in this case become a tool for analyzing individual physician practice patterns. Information gained from this process can be used by employers, insurers, and other consumers to select and maintain preferred physicians, groups, or even hospitals. Sharing this information with providers would allow for education, self-inspection, and response. Provider response could mean an alteration of practice to conform to guidelines or justification and clarification of why it is necessary to continue to practice outside the bounds of a guideline.

Network management. Practice guidelines can be used to manage the collective practice of a network or group of physicians. Through the institution of guidelines,
appropriate referral patterns can be encouraged. Unnecessary referrals to specialists can be avoided, necessary referrals can be rapidly identified, and return of patient management to the primary care physician can be facilitated. Adherence to guidelines can allow for better prediction of service utilization by managers. Guidelines can be used as a marketing tool, demonstrating a commitment to and maintenance of quality of care by a group of physicians. Guidelines can also be used as a basis for economic incentives. Rather than attempt to reward low utilization (a justifiably unpopular notion fraught with ethical and legal concerns), a plan might reward appropriate utilization as defined by practice guidelines. In other words, the economic incentives would be linked to quality rather than utilization.

Utilization review. Guidelines may streamline the U.R. process. The concept of "administrative bypass" is already growing in popularity. A physician who demonstrates conformity to accepted practice guidelines may be allowed to bypass the U.R. process (pre-certification, referral for required second opinion) and thus avoid what is often viewed as the most menacing aspect of managed care. Practice guidelines are, of course, already widely used in utilization review. The problem is that guidelines used by U.R. companies and insurers are often proprietary and not available for inspection - the dreaded "black box." Each entity may have slightly different guidelines. Physicians are thus subjected to decisions that seem to have no apparent rationale and are often inconsistent between payors. By using appropriately developed and published guidelines, the U.R. process can be made more justifiable and less acrimonious, with fewer "surprises" for physicians.

Technology diffusion. The use of new technology is now almost totally at the discretion of individual practitioners. These practitioners are often not able or in the position to consider cost/benefit analysis in a social context or to determine the relative likelihood of patient outcomes when compared to alternative treatment methods. Payors attempt to slow the diffusion of unproven technology by denying reimbursement based on experimental/investigational contract clauses, but as soon as a certain technology is used enough to be considered an accepted practice (though still unproven), this doesn't work.

If those who are capable of properly evaluating the costs and benefits of a new technology are involved in the guideline development process, guidelines can be used as a tool to ensure the proper use of new technology. New technology that is clearly efficacious in certain situations will be incorporated into physician practices sooner than they might otherwise have been. Technology that is clearly not efficacious can be identified as such and better alternatives can be prompted by guidelines. The use of promising yet equivocal technology can be limited to situations that will allow for the best information to be obtained for further study.

Risk management. Though not as much of a headline issue as in the past, malpractice still has a significant effect on health care costs. High malpractice premiums are passed on to consumers, and physicians still feel compelled to practice defensive medicine to avoid potential liability. Theoretically, guidelines can help reduce the need for defensive overuse of services while serving as a shield against liability for a poor outcome. Following an accepted guideline may serve as incontrovertible evidence that acceptable care was provided. Lay jurors would not have to depend on confusing and conflicting testimony of "hired guns" for interpretation of what is and isn't appropriate care.

Maine is already experimenting with this concept. Twenty-four guidelines in anesthesiology, radiology, emergency medicine, and obstetrics are linked by law to malpractice liability. Physicians who can prove compliance with the guidelines may be able to obtain early dismissal of a lawsuit. There is a fear that guidelines may be used against physicians to prove liability. In Maine, however, guidelines can not be introduced by plaintiffs. It is probably too soon to tell if this application of guidelines will actually decrease malpractice costs. Of note is the fact that anesthesiologists following ASA guidelines for intraoperative patient monitoring have seen marked decreases in malpractice losses and premiums.

Patient/Consumer advocacy. Health economists have long argued that health care can't be left to a free market/competition based approach because of its failure to meet conditions of a "perfect market." One of the primary reasons for this failure is the lack of consumers' ability to gain access to and interpret information. A layperson can be fairly sure about the need for, cost of, and potential drawbacks to buying a household appliance. The clarity of this type of information quickly turns murky if it is an elective cholecystectomy or hysterectomy that is being "bought." Publicly available practice guidelines represent one step towards the education of patients and consumers. Conformity to a practice guideline may lessen the need for a patient to seek a duplicative second opinion regarding their physician's recommendation. Straying from a practice guideline might at least give a patient pause and provide a basis for questioning the physician about his/her opinion.
Potential Problems

Despite such interesting and exciting possibilities for the use of guidelines, it is naive to think of them as a panacea or to believe that they are free from controversy. Many in the medical community have definite and often legitimate concerns about the use of guidelines. Some of the most often cited are listed and discussed below:

Practice guidelines will foster the practice of "cookbook medicine" and reduce physicians' autonomy. Physicians train long and hard to develop the skills and knowledge to collect and interpret clinically relevant information and make independent decisions based on their findings. A physician's own experience is his or her greatest resource. Will practice guidelines change all of this? If used properly, they should not. Guidelines should assist in the decision-making process, but not mandate decisions. They should serve as a readily available synthesis of expert knowledge and scientific analysis which can be applied to a specific situation. Guidelines may actually demand more of a physician; he or she must be sure that his/her diagnostic skills have placed the patient in a category to which a guideline applies. He or she must also be sure additional information or complexities that argue for not following a guideline have not been overlooked.

In turn, those responsible for making administrative decisions must not blindly apply guidelines to every situation. An "administrative culture" must exist which fosters recognition of and allowance for those instances where the provider has necessarily and appropriately stepped out of the bounds of a guideline.

Guidelines are often too general or vague, and often can't be used because the patient has multiple problems not fully considered by a single guideline. No argument here. This is one of the biggest obstacles that guideline developers must overcome. To be usable, guidelines must be specific and relevant, yet flexible. They must also include responses to confounding problems which may be associated with particular clinical conditions. Many current guidelines fail in this regard. This is yet another reason that the guideline development process should include a range of specialties and ultimate users.

Guidelines can be developed to serve any purpose, and may be used for punitive purposes. The potential for abuse of the use of guidelines is clearly present. Guidelines can conceivably be constructed to guarantee low utilization or to reward or punish a select group of providers. However, the potential for abuse with practice guidelines is no greater than with current practices inherent in utilization review and credentialing. One of the important aspects of properly developed practice guidelines is that they are constructed with broad representation of physicians. There is no doubt that physicians will continue to be evaluated, rated, and credentialed by numerous entities. Basing these functions on accepted practice guidelines allows physicians to at least have a say in how they are being evaluated, and, ideally, allows for fair and consistent evaluation.

Many other legitimate concerns have been voiced regarding the use of practice guidelines, but discussion of each is beyond the scope and purpose of this article. Many of these concerns have more to do with the potential problems created by poorly developed, maintained or implemented guidelines than with the overall concept of practice guidelines. As many in the medical community are still uncertain about this unfamiliar intrusion into the clinical decision making process, it is important that guidelines be developed openly and scientifically and that they be implemented with the assistance and input of those who will be using them for the first time.

Conclusion

To summarize, practice guidelines are fast becoming a hot topic in health care circles. We have much to learn about how best to develop and use them, but they are already seen as important tools for enhancing the quality of medical care and prompting efficient use of resources, and they are already being used. In fact, interest in their use is growing so rapidly that those of us who are not at least considering how they might be used in our own organizations may already be far behind the pack.

References

1. The Resource Based Relative Value Scale, developed by researchers at Harvard University under guidance by the PPRC, assigns relative values to every procedure described by a CPT code. A conversion factor (updated yearly) is applied to determine the payment for a specific code. HCFA started phase—in of this system on Jan. 1, 1992.
2. The most famous being a part of the Oregon Basic Health Services Act (Senate Bill 27), 1989.
3. AHCPR was created by an amendment to the Public Health Services Act (PL 101-239), Nov. 1989. Under OBRA 1989, Congress created within AHCPR the office of the Forum for Quality and Effectiveness in Health Care. The Forum holds the ultimate responsibility for development of guidelines.


