

# Quality of ambulatory care for the elderly: Formulating evaluation criteria

by Ann K. Ferris and Leon Wyszewianski

*Efforts to assess the quality of ambulatory care services provided to Medicare beneficiaries cannot meaningfully proceed unless a concerted effort is made to develop criteria and standards for ambulatory care quality assessment that reflect the specific characteristics and needs of the elderly. In this article, we describe some*

*of those characteristics and needs—such as physical and mental impairments and multiple coexisting conditions—and we show how they affect the care provided to the elderly and, therefore, the proper assessment of that care. We also outline an approach for the orderly development of the requisite criteria and standards.*

## Introduction

The concerns that arose in the early 1980s about the quality of care received by Medicare beneficiaries initially focused on inpatient care (Eggers, 1987) but quickly extended to other types of care, including, in particular, care provided in ambulatory settings. In 1987, peer review organizations (PROs) began to assess, on behalf of the Medicare program, the ambulatory care provided to Medicare patients in health maintenance organizations. In 1989, ambulatory surgical centers became subject to PRO scrutiny, and there are plans to move into other ambulatory care settings as well.

Although there is little information about the basis for all these current and future evaluations of ambulatory care, it is reasonable to expect these assessments to be based mostly on criteria and standards of care in use for the general adult population. So far, however, there is no indication that these general criteria have been adjusted to take into account the characteristics of the elderly, who comprise the vast majority of Medicare beneficiaries.

The purpose of this article is to show why and how assessments of ambulatory care services provided to Medicare beneficiaries should be based on criteria and standards of quality that explicitly reflect the specific needs and salient characteristics of the population 65 years of age or over. To make our task manageable, we have restricted our discussion to what is known as the "technical" aspect of care, which involves the application of medical knowledge to diagnosis and treatment (Donabedian, 1980). The evaluation of the interpersonal aspects and the amenities of care—the nontechnical components—is therefore not included in this discussion.

In addition, although we are concerned with criteria and standards of care in an overall sense, we focus primarily on the basic, initial issue of defining what constitutes appropriate care for the elderly and place relatively less emphasis on the subsequent step of developing specific measures and indicators. As we see it, only after it has been specified what is good and appropriate care is there an issue of what measures or indicators should be used to assess care and what data are needed or available for this purpose.

Reprint requests: Ann K. Ferris, M.D., Stanford Midpeninsula Health Center, 704 Webster Street, Palo Alto, California 94301.

## Rationale

The need for evaluating ambulatory care provided to the elderly based on criteria and standards that take into account the special characteristics of this population is best illustrated by studies in which the relation between the age of patients and the quality of the care provided have been examined. The results of these studies are contradictory and ambiguous. An important reason for this is that most of the studies did not use criteria and standards that take into account important age-related differences (Wyszewianski and Donabedian, 1981).

For example, in a study by Lyons and Payne (1974), it was shown that patients 65 years of age or over received care for cerebrovascular accidents that had significantly lower scores on the study's measures of quality, even though the authors suggest that care for these patients may have been appropriate if factors often associated with advanced age had been taken into account. In particular, the authors note that cerebrovascular accidents "... are frequently terminal events in the elderly, and little, if any, manipulation or therapeutic intervention will alter the course of events. Physician effort in this context may be cautious or even withheld, especially in a patient with multiple additional diagnoses or disabilities for whom survival may mean only greater disability and societal disruption."

On the other hand, in the same study, Lyons and Payne suggest that the significantly higher scores for care provided to the elderly with bronchitis—as compared with care given to those under 65 years of age—are less a reflection of better physician performance than evidence of physician's response to the need for "... added attention to detail for assurance of a satisfactory outcome of medical care in restoration to a previous level of health." This is because bronchitis among persons 65 years of age or over is often associated with heart disease, emphysema, and diabetes. In effect, Lyons and Payne suggest that, for cerebrovascular events and for bronchitis, the care provided to the elderly might have been judged to be neither better nor worse than that provided to the nonelderly, had criteria been used that give explicit recognition to the special situations and needs often associated with elderly patients. Conversely, it is reasonable to expect that reliance on these more specific criteria might have helped uncover differences and inadequacies where none were detected.

From a clinical perspective, there is a growing awareness among health care providers that different age groups require different care, as reflected in recommendations such as those of the Canadian Task Force on the Periodic Health Examination (1979). As more studies are conducted to determine what represents optimal care for elderly patients, it becomes more feasible to develop age-specific criteria and standards based on sound scientific information.

Although the case for evaluating the care provided to the elderly based on criteria that take their characteristics into account is relatively clear, the nature and extent of the requisite adjustments is less obvious. This is the question we explore in the remainder of this article. We begin by describing some of the prevalent characteristics of the elderly that differentiate them from a younger adult population. We then describe how these traits should affect the care they receive and how, therefore, these characteristics need to be reflected in assessing quality of care. We conclude with some thoughts on the development of new criteria and standards of care for this group.

## **Distinctive characteristics and needs**

Although the majority of noninstitutionalized people 65 years of age or over report their health to be good, very good, or excellent (Kovar, 1986), there is a segment of this population that has different and greater health needs because of limitations in cognitive or physical function or because of the presence of multiple chronic medical problems. In addition, the elderly population, as a whole, is more likely to have certain impairments such as arthritis and hearing loss and is more at risk for certain infections and cancers. Therefore, there are differences in the entire elderly population that affect that population's health care needs, and there exists a subset of this group whose characteristics require additional special attention.

One of the most significant impairments leading to a decrease in function is dementia. Severe dementia affects 4 to 5 percent of those 65 years of age or over, with another 10 percent having mild to moderate impairment (Terry and Katzman, 1983). This compares with an overall prevalence of dementia of 1.3 percent in the general population (Talbot, Hales, and Yudofski, 1988). Although many cognitively impaired elderly people remain in the community with assistance from family and home care services, the progressive nature of most dementias leads to increasing health needs. The end result may be institutionalization or extensive home care. Often confused with dementia is depression, which is as common as in a younger adult population, affecting 2 to 10 percent of the elderly (Blazer, 1980; Gurland, 1976) and, at its worst, may cause the same degree of functional impairment.

Decreased mobility also affects the independence of older individuals. This may be the result of longstanding rheumatologic disease, cerebrovascular accidents, peripheral vascular disease and its sequelae, or weakness from other diseases. An estimated 3.9 percent of those aged 65 to 74 years and 25 percent of those 85 years of age or over have trouble walking, compared with only

1.4 percent of younger adults. Overall, almost 44 percent of the oldest old need assistance with some daily activity (Office of Technology Assessment, 1985). As this age group grows larger, the number of dependent individuals can be expected to increase as well.

Sensory impairments are not uncommon in the older population. Visual impairment affects 9 percent of those 65 years of age or over and 12.8 percent of those 75 years of age or over, in contrast to 2.1 percent of those 18-45 years of age. Hearing loss affects 31.5 percent of people 65 years of age or over, 38 percent of those 75 years of age or over, but only 3.7 percent of those 18-45 years of age (Adams and Hardy, 1988). The severity of these impairments ranges from mere inconvenience to total dependence on others for assistance.

Another condition that takes its toll on the elderly population is incontinence. It is estimated that 10 to 20 percent of women and 5 to 15 percent of men are affected (Kane, Ouslander, and Abrass, 1984). Not only does this condition negatively affect their quality of life but it can lead to greater strain on caregivers and is often the precipitating cause for institutionalization.

Other characteristics of the elderly affect their functional status, albeit less directly. The end-stage complications of generalized atherosclerosis, cardiovascular disease, and diabetes mellitus lead to greater debilitation. In addition, the presence of multiple coexisting chronic diseases or acute illnesses complicating chronic disease leads to a greater reduction in functional status or to a decrease in compensatory ability.

Certain diseases and cancers are associated with aging. For example, cancers of the breast, colon, prostate, and female genital tract have an increased incidence with increasing age, and more than one-half of the elderly suffer from cardiovascular disease (Kennedy, Andrews, and Caird, 1977). These diseases are leading causes of morbidity and mortality in this age group. Influenza and pneumonia, which are quite common in the elderly, are the fourth leading cause of mortality in those 65 years of age or over.

In summary, certain diseases and impairments are more common in the elderly population, resulting in different and greater health care needs. In addition, the complexity and chronicity of disease in this population can result in a person's inability to compensate and function at the level that would be otherwise expected.

## **Implications for medical care**

The specific needs and limitations of the elderly have broad implications for defining what constitutes high-quality medical care for this population. Standard assumptions about access to care and about diagnosis and treatment for certain diseases may not be appropriate for important segments of this population.

### **Care-seeking**

The elderly often assume that health problems associated with aging are an inevitable and irremediable consequence of growing old, and for that reason, they frequently do not seek medical care when they should

(Brody and Kleban, 1981). For example, Branch and Nemeth (1985) found that 12 percent of people 70 years of age or over did not see a doctor when they thought they should because they considered the problem they were having to be a result of their age. Health problems also go completely unrecognized because of impairments associated with aging. People with dementia can be unaware of changes in their health and those changes may or may not be apparent to the family or caretaker responsible for deciding when care should be sought. But even those who recognize the need for medical care may not obtain it because of impairments that make it difficult to arrange transportation, to tolerate long visits, or to navigate offices not designed to accommodate walkers, wheelchairs, and stretchers.

## Diagnosis

Within the physician's office, a new set of problems arises for many elderly patients. The cognitively impaired or the aphasic patient can find communication difficult, and the principal caretaker may not be accompanying the patient or may be aware only of nonspecific changes. In such cases, a complete and lengthy examination is required to ascertain the nature of the problem, yet the patient may be uncooperative or unable to tolerate it. More extensive testing than usual may be required to compensate for the communication difficulties. Communicating with the hearing impaired is less of a problem, but more time and access to writing material is necessary. Many people with mobility impairments have difficulty moving to the examination table and tolerating the various positions necessary for an adequate examination.

Specific diagnoses may be difficult to establish even in patients who can communicate and who are able to tolerate the examination. The expected signs of infection may be absent in an older person (Gleckman and Hilbert, 1982), and other diseases can present themselves in an atypical manner. Hyperthyroidism can be present without tachycardia or tremulousness (Davis, 1974), and myocardial infarction can manifest itself predominantly as dyspnea (Noble and Rotham, 1981; Bayers et al. 1987; Pathy, 1987). Consequently, a directed physical examination is often replaced by a more comprehensive evaluation and more diagnostic testing.

Other problems arise within the diagnostic process. Diagnostic procedures generally considered appropriate are not always possible in elderly patients who cannot tolerate the discomfort or cooperate with the testing procedure. Exercise testing is usually impossible in a weak, debilitated person; a pelvic examination may be infeasible under routine office conditions in a patient with dementia and apprehension; and complete neuropsychometric testing would not be possible in a person with severely diminished eyesight. Colonoscopy, which is usually an outpatient procedure, may require special consideration in an elderly person who cannot perform an adequate preparation as an outpatient. Where possible, in such instances, alternative nonstandard methods have to be employed. For example, in a debilitated or demented patient who could not easily tolerate exercise testing or even a nuclear imaging

procedure, the diagnosis of coronary artery disease may need to be based on electrocardiographic findings and symptoms. In such a situation, it may be more reasonable to prescribe medication and closely monitor its effects rather than attempt an invasive or uncomfortable procedure. Likewise, a diagnosis of chronic obstructive pulmonary disease might have to be based on physical examination alone in a patient who cannot give symptoms or cooperate for pulmonary function testing.

Overall, an adequate evaluation of an elderly patient can be more comprehensive, take more time, result in greater discomfort for the individual, and yet not yield all the information normally obtained from this process.

## Treatment

Treatment also may be more complicated. In the presence of multiple coexisting diseases, medical choices are more limited. Therapeutic limitations may affect everything from the choice of a pain reliever to the choice of cancer therapy. Patients already on many medications are at increased risk for adverse drug interactions, and choices for treatment of new problems may be limited by safety considerations.

Moreover, compliance becomes more difficult with complicated drug regimens, especially in persons with cognitive impairments. Monitoring efficacy and side effects often requires more frequent visits or home care evaluations and also becomes much more difficult in those with cognitive impairments or multiple medical problems.

Preventive medicine has a somewhat different focus in the elderly. In addition to the usual health maintenance practices, it is necessary to screen for vision and hearing impairments, dementia, and certain kinds of cancer. Immunization recommendations are different for those 65 years of age or over, and functional issues such as driving safety need to be addressed.

The range of services needed by the elderly is also greater than that for a healthier adult group. Nutritional counseling becomes increasingly important in a population with a high prevalence of diabetes and heart disease. Foot care is an issue for those with diabetes and for those with vascular disease. Physical and occupational therapy services are utilized to a greater extent because of the prevalence of arthritis, osteoporosis, strokes, and debilitation. All of these needs result in more office visits to a broader variety of health professionals.

The existence of the aforementioned impairments and the limitations they define can change the goals of medical care altogether, thus changing the focus of both diagnosis and treatment. The value of establishing a diagnosis may depend on active life expectancy and the discomfort the diagnostic or therapeutic procedure entails. Ethical decisions regarding extent of diagnosis and treatment often direct medical goals, as do the wishes of the individual patient. In some instances, treatments may be chosen that are more tolerable but less efficacious; in others, treatment may be withheld. Care in such cases may depart radically from normative care where such issues are not involved. For example, a decision may be made not to place a pacemaker in a terminal cancer

patient or a person with advanced Alzheimer's disease.

We re-emphasize that there are many healthy elderly individuals whose health care needs vary little, if at all, from the general adult population. Nevertheless, an important and growing segment of the elderly population, particularly those 75 years of age or over, has different and greater health care needs because of the increased presence of impairments, the ravages of longstanding chronic disease, and the coexistence of multiple diseases. For these persons, different health care strategies are often necessary. This includes the consideration of different diagnostic processes, therapeutic options, and overall treatment goals. Meaningful evaluation of the care provided to such individuals must take these different requirements into account.

## Effect on assessment of care

Given the unique characteristics of large segments of the elderly population, general standards of quality are not likely to be adequate for assessing quality of care for this population. Evaluations of the care provided to the elderly must take into account the variations in care necessary to deal with the presence of impairments, the existence of comorbid diseases, and the prevalence of certain diseases in this population. Using the three approaches to the assessment of quality originally defined by Donabedian (1966)—structure, process, and outcome—as an organizing framework, the basic elements that need to be specified so as to properly assess the care provided to the elderly are discussed in this section.

## Structure

Structural characteristics reflect the capacity to provide good care. Structure refers to the physical attributes of a facility, the adequacy of personnel in terms of both numbers and qualifications, and other organizational features. Good structure is a necessary though not sufficient condition for the provision of good care.

In the assessment of structure, many characteristics are not uniquely desirable for the elderly but, nevertheless, take on more importance in this population. Facilities serving the elderly should be evaluated for accessibility via public transportation—especially in areas where the elderly rely heavily on such transportation—adequacy of handicapped and regular parking, and ease of access for persons using walkers, canes, and wheelchairs. For a population more likely to have difficulty in ambulating and to suffer from visual and other impairments, evaluation of the facility itself must focus on such features as adequate lighting, absence of loose rugs and clutter, handrails on walls and in the bathrooms, and safeguards to prevent falling or wandering.

In assessing adequacy of staffing, it must be taken into account that more personnel is likely to be required to assist the elderly with dressing and undressing and with mobility problems. The clinician's level of training in the diagnosis and treatment of geriatric problems is similarly important, as is the presence of mechanisms for the expedient referral to social services, dietary counseling,

and physical and occupational therapy. The exact mechanism of referral is likely to vary from setting to setting, but it should be present and be effective. Because, as noted earlier, many elderly have multiple and complicated medical conditions and often require more extensive evaluation as a result of the atypical presence of disease, the adequacy of the time allotted for a visit is also a concern.

## Process

Process refers to the steps taken to diagnose and treat a problem. Therefore, the evaluation of process is a determination of whether the correct steps were taken and whether each was carried out appropriately. There is an area of overlap between structure and process that involves certain routine activities that apply to all patients or to broad categories of patients, such as measuring blood pressure and weight. In an elderly population, such routine activities ought to include basic assessments of cognitive and physical function. They should similarly encompass screening and prevention activities, including, in particular, the administration of influenza and pneumonia vaccines to those among the elderly who should receive them and routine screening for hearing and vision loss, osteoporosis, atherosclerosis, and cancers common in the elderly.

As we indicated at the outset, when process is evaluated based on general standards, care provided to the elderly may appear to be inadequate when it is, in fact, good care; and what appears to be good care is not. These discrepancies are traceable to using standards that do not take into account the unique characteristics of this population and the sometimes different goals of treatment.

For example, what is considered the standard diagnostic process may not be appropriate for patients suffering from dementia. For such patients, exercise testing, pulmonary function tests, and similar tests often cannot be performed because the patient is unable to cooperate. For other procedures, such as lumbar puncture, computerized tomography scans, and pelvic examination, it might be impossible to perform them on a patient with severe dementia without using sedation. This might explain why indicated procedures are not performed or, if they are, why the additional risks that sedation entails were incurred. Thus, it must be recognized that a different set of tradeoffs is involved in assessing whether it was appropriate to perform a given procedure.

Likewise, in treating a dysphoric patient with no appetite, it may be appropriate in general to take a wait-and-see attitude to avoid incurring unnecessary expense or subjecting the patient to potentially dangerous medications. However, if the person has a significant weight loss from another disease process and cannot tolerate any more weight loss safely, it may be wiser to treat early and prevent greater debilitation. A more aggressive approach than usual may well be the best choice in such a situation.

Medication regimens may similarly have to depart from accepted norms to take proper account of the kinds of impairments that are more prevalent among the elderly.

Thus, regularly scheduled analgesics may be prescribed for a patient who cannot tell anyone when pain is present. Although by general standards it might appear that too much medication is being administered, the amount may in fact be optimal given the characteristics of the patient and the goal of assuring consistent relief from pain. Other examples of proper care that may appear, by usual standards, as overmedication or polypharmacy include constipation and agitation that would be treated in a nonpharmacologic manner in a cognitively intact person, but would require medication in a person unable to follow a more complicated but drug-free regimen. Similarly, a safer but less efficacious medication might be prescribed for a person unable to report side effects. But, again, without knowing that the patient exhibits certain characteristics—ones that are especially common among the elderly—it might appear that the patient is receiving suboptimal treatment.

The process of care is relevant only to the extent that it assures a desired outcome, and, for this to occur, the goals of treatment must be known. Treatment goals can often vary from the norm in older persons, and this will be reflected in the process of care. Both ethical and medical issues are involved in goal setting for some elderly people. For example, if the overriding treatment goal for a malnourished cancer or dementia patient is to remain at home, inadequate nutrition may be accepted to avert institutionalization if home enteral therapy is not acceptable or requires restraint or sedation. If this decision is reached in agreement with the patient and family, inadequate body weight should not be seen as evidence of improper care.

Just as the complexity of medical issues affects the goal-setting process, so does it affect the frequency of visits required to assure good care. A younger adult with stable arthritis and hypertension may be seen infrequently in the office, but an older person at greater risk of serious side effects from antihypertensives and nonsteroidal anti-inflammatory medications may need to be seen more frequently.

In summary, the appropriate process of care in the elderly population is often different from that in a younger population. Therefore, standards used in the evaluation of the care provided to the elderly must allow for the presence of other conditions and diseases, functional goals, and the wishes of the patient, which all take on special significance in caring for the elderly.

## Outcomes

Outcome assessments focus on the net results of care. This can range from examining the extent to which care eventuated in regained function and relief of pain to the evaluation of mortality data. In the older population, important considerations in outcome assessment relate to the special characteristics of the population and the difference in treatment goals.

In a younger adult population, with mainly acute episodic illnesses, the goals of treatment and therefore the outcomes that are measured are usually cure of the patient and absence of mortality. In an older population, with one or more chronic diseases often present, cure may not be a realistic outcome. Instead, the outcomes sought include control of disease, maintenance of function, and

prevention of adverse drug reactions. In very complicated cases, the actual goals of medical treatment may be difficult to ascertain, as improving one condition may actually result in the worsening of another. In these types of patients, assessing quality through outcomes may be quite challenging unless the specific treatment goals are known.

For patients with terminal conditions such as cancer and end-stage congestive heart failure, both cure and lack of mortality are not reasonable outcomes. Although prolongation of life is generally considered a desirable if not paramount goal of treatment, it is especially true among the elderly that, to the individual patient, prolongation of life at the expense of comfort or function may be devastating. The ethical issues involved in this type of decision are beyond the scope of this article, but because such decisions about outcomes are frequently made when caring for the elderly, assessments of that care must take this element into account.

Likewise, if complete relief of pain results in a groggy state that, in the elderly, increases the risk of falling and sustaining serious injuries such as hip fractures, then partial relief of pain is the more appropriate goal, and outcome evaluation of pain relief must take this into account. Similarly, the goal of maintaining independent living may weigh more heavily than adequate dietary control of diabetes or hypercholesterolemia in a person who cannot follow a diet without supervision.

Because of the foregoing, the specification of outcome standards for assessing quality of care requires that the special characteristics of the elderly be recognized. Because of the presence of greater severity of illness and more comorbidity in some elderly, any criteria involving morbidity and mortality must take into account both comorbidities and functional reserve. In addition, mortality and morbidity alone may not reflect other important outcomes, such as maximizing physical and cognitive function, minimizing pain, and maintaining independence and autonomy.

## Developing new standards

So far we have argued that, if the Medicare program's plan to evaluate the technical quality of ambulatory care services provided to its beneficiaries is to be meaningful and effective, assessment standards need to be developed that take into account the special characteristics and problems of the elderly. In the absence of such standards, reliance on more general criteria and standards will result in some care provided to the elderly being identified as poor care when it is in fact appropriate and, conversely, in accepting care as being good when it actually is not. It also needs to be recognized that, as the oldest old continue to grow as a proportion of the elderly, the likelihood of these false negatives and false positives in evaluating ambulatory care for the elderly can be expected to increase in coming years. The oldest old are the group most likely to be frail and to have the kinds of impairments and problems that we identified as warranting the development of special quality assessment standards.

In the end, however, agreement about the need for special standards may prove much easier to achieve than the actual specification of the standards. The development

of clinical standards for quality assessment has begun to receive systematic attention only relatively recently, and it is broadly acknowledged that much remains to be done in this area (Chassin, 1988; O'Leary, 1988). Also as is now widely recognized, gaps in our clinical and scientific knowledge as to which interventions are efficacious and which are not impede the formulation of standards in all areas of practice (Bunker, 1988; Wyszewianski, 1988). Moreover, traditionally, ambulatory care has lagged farther behind in quality assessment than inpatient care (Palmer, 1988), and so has the care provided to the elderly.

On the positive side, our understanding of the approaches to the formulation of criteria and standards of quality has been greatly enhanced by the systematic and exhaustive analysis by Donabedian (1982). The need for more attention to efficacy determinations has been acknowledged, and a major effort to address this need is already being undertaken under theegis of the Federal Government. The quality of the care provided to the elderly is similarly receiving unprecedented attention (Health Care Financing Administration, 1987; Fink et. al., 1987), and the quality of ambulatory care is also coming into its own (Palmer, 1988).

All of these developments provide a positive environment for undertaking the task of systematically formulating meaningful standards for assessing the quality of ambulatory care provided to the elderly. We believe it is most likely to succeed if it proceeds in steps, building on what is already known and well established and giving priority to areas and aspects where the ultimate effects are apt to be the greatest. As we see it, two fundamental steps need to be taken: first, to identify the characteristics of the elderly that create the need for special criteria and, second, in light of those characteristics of the elderly, to formulate the criteria and standards.

### **Identification of pertinent characteristics**

As a first step, characteristics of the elderly most likely to affect their ambulatory care needs ought to be identified. We suggested earlier that such characteristics include dementia, sensory impairments, and decreased mobility, as well as multiple coexisting conditions and specific diseases known to be more prevalent in the elderly. Our list is only a beginning. It needs to be examined in light of the relevant literature and the experiences of clinicians who provide care to the elderly and modified accordingly. The goal should not be to make it an exhaustive list but to select the characteristics and needs that are most important because they pertain to a large proportion of the elderly and because they create clinical needs for the elderly that most strikingly set the elderly apart from younger adults. In other words, at least initially, the focus should be on the characteristics and needs that most clearly require different assessment standards for the greatest proportion of the elderly.

### **Development of standards**

Once the most salient characteristics and needs of the elderly have been identified, the stage is set for the actual specification of criteria and standards for assessing the

quality of ambulatory care provided to the elderly. In our view, this task can be made more manageable and productive by giving priority to certain kinds of standards. We suggest the following three bases for setting priorities:

- Consistent with the approach suggested for identifying pertinent characteristics of the elderly, it would similarly make sense at the standard-setting stage itself to give priority to those clinical situations that affect the greatest number of the elderly, such as the presence of sensory and functional impairments, or that affect individuals most drastically, such as cancers.
- The standard-setting process should give priority to situations for which there is reasonable consensus on what ought to be done. It is nearly impossible to specify truly useful criteria and standards if there is strong disagreement as to what is the appropriate course of action for a given class of patients. In addition, standards rooted in controversy actually distract attention and resources from the quality concerns that should be the overall focus of this kind of undertaking. Much more can be accomplished when the standards are generally accepted as meaningful or are not subject to serious challenge because they are based on solid scientific evidence.
- Priority ought to be given, at least initially, to standards that apply to the structural elements of care. For all the recurrent disdain for structure—and the corresponding promotion of the primacy of outcomes—structural aspects remain the bedrock on which quality of care stands. Structure in this specific instance is especially important given that there is reason to doubt that all or even most ambulatory care settings that serve the elderly are fully capable of doing so. An emphasis on structure, including routine preventive and screening activities, can help build that capacity. But just as it is logical to emphasize structural aspects initially, it is equally important not to stop there. As we noted earlier, although necessary, structural features are not sufficient to assure quality. Standards dealing with process and outcome must be developed as well once structure has been attended to.

The just-mentioned steps for developing the new criterion standards are probably best accomplished at the national level under auspices that will maximize their integrity and credibility and, therefore, their usefulness to the Medicare program and others. On this point, we are in general agreement with Chassin (1988), who has enumerated explicitly the characteristics a sponsoring organization ought to have if it is to serve as the site for the development of standards of care. Given the desired characteristics, one specific possibility he mentions is turning to a quasi-public body like the Institute of Medicine; another is to rely on a consortium of universities. The auspices under which this effort takes place would likely become especially important when addressing the difficult as well as ethical issues inherent in this undertaking.

It may indeed be technically difficult to develop process- and outcome-oriented standards that cover all or even most of the possible combinations and permutations of coexisting diseases that may be found in the elderly. Yet the simultaneous presence of multiple conditions and

diseases is an important reason for assessing differently the care provided to the elderly. It is therefore worthwhile to develop the substantial analytic capabilities likely to be needed to resolve this problem effectively.

The ethical issues associated with formulating these standards of care may be no less difficult to address. As we noted, in many instances, the goals of treatment are likely to differ for the elderly. Yet standards that specify implicitly or explicitly what those goals ought to be may be difficult to formulate, particularly when tradeoffs between the quality and quantity of life are involved. At the same time, however, these are issues that many believe our society needs to confront explicitly, particularly given the growing perception that resources for care are finite. The more thoughtful and broadly based the debate of these issues is, the more meaningful the resulting assessment standards will be.

Additional problems are likely to be encountered at the crucial step of proceeding from basic definitions of what represents good and appropriate care for the elderly to translating these into specific measures and indicators. Among the technical problems that need to be faced at this stage, generating or obtaining the requisite data is likely to loom disproportionately large.

For all the difficulties involved, it is important that this effort in standard-setting be undertaken, and soon. The alternative is for the Medicare program and others not to have a meaningful basis for evaluating the care received by a growing proportion of the elderly in ambulatory settings that provide an even greater share of all the care received by the elderly population.

## References

- Adams, P.F., and Hardy, A.M.: Current Estimates of the National Health Interview Survey: United States, 1988. *Vital and Health Statistics*. Series 10, No. 173. DHHS Pub. No. 89-1501. National Center for Health Statistics, Public Health Service. Washington. U.S. Government Printing Office, 1989.
- Bayer, A.J., Chadha, J.S., Farag, R.R., and Pathy, M.S.: Changing presentation of myocardial infarction with increasing old age. *Journal of the American Geriatrics Society* 34(4):263-266, Apr. 1986.
- Blazer, D., and Williams, C.D.: Epidemiology of dysphoria and depression in an elderly population. *American Journal of Psychiatry* 137(4):439-443, Apr. 1980.
- Branch, L.G., and Nemeth, K.T.: When elders fail to visit physicians. *Medical Care* 23(11):1265-1274, Nov. 1985.
- Brody, E.M., and Kleban, M.H.: Physical and mental health symptoms of older people: Who do they tell? *Journal of the American Geriatrics Society* 29(10):442-449, Oct. 1981.
- Bunker, J.P.: Is efficacy the gold standard for quality assessment? *Inquiry* 25(1):51-58, Spring 1988.
- Canadian Task Force on the Periodic Health Examination: The periodic health examination. *Canadian Medical Association Journal* 121(9):1193-1254, Nov. 1979.
- Chassin, M.R.: Standards of care in medicine. *Inquiry* 25(4):437-453, Winter 1988.
- Davis, P.J., and Davis, F.B.: Hyperthyroidism in patients over the age of 60 years. *Medicine* 53(3):161-179, May 1974.
- Donabedian, A.: Evaluating the quality of medical care. *Milbank Memorial Quarterly* 44(3):166-203, July 1966.
- Donabedian, A.: *The Definition of Quality and Approaches to Its Assessment*. Ann Arbor, Mich. Health Administration Press, 1980.
- Donabedian, A.: *The Criteria and Standards of Quality*. Ann Arbor, Mich. Health Administration Press, 1982.
- Eggers, P.W.: Prospective payment system and quality: Early results and research strategy. *Health Care Financing Review*. 1987 Annual Supplement. HCFA Pub. No. 03258. Office of Research and Demonstrations, Health Care Financing Administration. Washington. U.S. Government Printing Office, Dec. 1987.
- Fink, A., Siu, A.L., Brook, R.H., et. al.: Assuring the quality of health care for older persons: An expert panel's priorities. *Journal of the American Medical Association* 258(14):1905-1908, Oct. 1987.
- Gleckman, R., and Hilbert, D.: Afebrile bacteremia: A phenomenon in geriatric patients. *Journal of the American Medical Association* 248(12):1478-1481, Sept. 1982.
- Gurland, B.J.: The comparative frequency of depression in various adult age groups. *Journal of Gerontology* 31(3):283-292, May 1976.
- Health Care Financing Administration: Quality of Care. *Health Care Financing Review*. 1987 Annual Supplement. HCFA Pub. No. 03258. Office of Research and Demonstrations, Health Care Financing Administration. Washington. U.S. Government Printing Office, Dec. 1987.
- Kane, R.L., Ouslander, J.G., and Abrass, I.B.: *Essentials of Clinical Geriatrics*. New York. McGraw-Hill Book Co., 1984.
- Kennedy, R.D., Andrews, G.R., and Caird, F.I.: Ischaemic heart disease in the elderly. *British Heart Journal* 39(10):1121-1127, Oct. 1977.
- Kovar, M.G.: Aging in the eighties: Preliminary data from the Supplement on Aging to the National Health Interview Survey, United States, January-June 1984. *Advanced Data from Vital and Health Statistics*, No. 115. DHHS Pub. No. (PHS)86-1250. National Center for Health Statistics, Public Health Service. Hyattsville, Md., May 1, 1986.
- Lyons, T.F., and Payne, B.C.: The quality of physicians' health care performance—a comparison against optimal criteria for treatment of the elderly and younger adults in community hospitals. *Journal of the American Medical Association* 227(8):925-928, Feb. 1974.
- Noble, R.J., and Rothbaum, D.A.: History and physical exam in geriatric cardiology. In Brest, A.N., ed. *Geriatric Cardiology*. Philadelphia. F.A. Davis, Co., 1981.
- Office of Technology Assessment: *Technology and Aging in America*. Report No. BA-264. U.S. Congress. Washington. U.S. Government Printing Office, June 1985.
- O'Leary, D.S.: The need for clinical standards of care. *Quality Review Bulletin* 14(2):31-32, Feb. 1988.
- Palmer, R.H.: The challenges and prospects for quality assessment and assurance in ambulatory care. *Inquiry* 25(1):119-131, Spring 1988.
- Pathy, M.S.: Clinical presentation of myocardial infarction in the elderly. *British Heart Journal* 29(2):190-199, Mar. 1987.
- Talbott, J.A., Hale, R.E., and Yudofsky, S.C., eds.: *The American Psychiatric Press Textbook of Psychiatry*. Washington, D.C. American Psychiatric Press, 1988.

Terry, R.D., and Katzman, R.: Senile dementia of the Alzheimer type. *Annals of Neurology* 14(5):497-506, Nov. 1983.

Wyszewianski, L.: Quality of care: Past achievements and future challenges. *Inquiry* 25(1):13-22, Spring 1988.

Wyszewianski, L., and Donabedian A.: Equity in the distribution of quality care. *Medical Care* 19(12-Suppl.):28-56, Dec. 1981.