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Essential Principles in the Care of the Elderly

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The world is aging. Already in 2003, the US Census Bureau reported that 35.9 million persons in the United States were 65 years or older, 12% of the population.[1] The first baby boomers turn 65 years old in 2011, and the next 25 years will witness the most rapid increase in the number of older adults. The oldest of the old, those aged 85 years and older, are the fastest-growing segment of the American population. This, coupled with further advances in chronic disease management, diffusion of "best practices," increased attention to maintaining physical, cognitive, and psychological function, and availability of improved treatments for the most common causes of death and disability, is likely to continue to extend both the average life expectancy and years of active life. Increasing awareness of persistent inequalities in our health care system, a decreasing ratio of working adults to support dependent children and retirees, and an increasing burden on family caregivers are just some of the countervailing forces that continue to limit the promise of healthy, productive aging.

We certainly want good health care waiting for us in our golden years, but what is good care? In the care of the elderly patient, there are 11 essential principles that should be considered: 1) the role of the physician as the integrator of the biopsychosocial–spiritual model; 2) continuity of care; 3) bolstering the family and home; 4) good communication skills; 5) building a sound doctor–patient relationship; 6) the need for appropriate evaluation and assessment; 7) prevention and health maintenance; 8) intelligent treatment with attention to ethical decision making; 9) interprofessional collaboration; 10) respect for the usefulness and value of the aged individual; and 11) compassionate care. These essentials are closely related to the six health system redesign imperatives identified by the Institute of Medicine in its landmark 2001 report, Crossing the Quality Chasm.[2] The embodiment of these eleven principles represents a standard of excellence to which we can all aspire.

THE PHYSICIAN AS INTEGRATOR OF THE BIOPSYCHOSOCIAL-SPIRITUAL MODEL

As medical care becomes more complex and specialized and relies more on technology, good care requires having a physician who provides leadership in the integration and coordination of the health care of the elderly patient. The current generation of older adults has witnessed amazing advances in research and great accomplishments in diagnostic and curative medicine, but, today, we are realizing that scientific reductionism is not enough. The reforms in medical education, care, and research over the past century have too often resulted in fragmentation of medical thought and care. It is imperative that the health care professional responsible for the care of older adults keep the "big picture" firmly in mind – we must never forget that the patient is so much more than the sum of his or her organ systems.[3,4]

Society is calling out for a physician with a commitment to the person and not just to a specific disease state or mechanism. The person is usually part of a family and a larger community, but, sadly, there are some elders who have no family and are isolated from the community. The first essential for the physician who cares for an elder is to act as an integrator of the biopsychosocial and, one can add, spiritual, model. To accomplish this, the physician must know the patient thoroughly. This is not to denigrate the excellence of the specialties and subspecialties that have achieved much over the past few decades. The ideal model of health care, however, will exist when the patient is seen not from a single specialty point of view but with the full appreciation of other organ systems, emotional or psychosocial factors, information based on the continuity of care over time, and knowledge of the patient's family and community.

Recent position statements of the Future of Family Medicine,[5] American Geriatrics Society,[6] and Society of General Internal Medicine[7] have all recognized this increasing

fragmentation, and the resultant public demand for a rational, humanistic approach to care, especially of the older adult. All of these organizations and others have called for a system of primary care that provides a continuous, caring relationship and establishes a "medical home" in which patients can obtain the majority of their health care needs.[8] The primary care provider also must ensure the coordination, supervision, and interpretation that is vital for the older patient to navigate a complex system that often provides conflicting recommendations and in which the vested self-interest of the "system" is not always secondary to the needs of the individual patient. The primary physician, then, acts as advocate to obtain needed services, but also as advisor and confidant. At times, the best advice is to avoid tests or treatments that have little or no potential benefit but significant potential to harm. Perhaps most important, this physician will come to know the patient as an individual, within a family and a community, with particular values, beliefs, and priorities. Thus, the physician comes to serve as interpreter and integrator, helping the patient to obtain health care that is most consistent with his or her own preferences and needs. This role will most often be played by a family physician, general internist, geriatrician, or nurse practitioner. For some patients, it may be a trusted oncologist, cardiologist, or other specialist. The key factors are the interest and ability to see the patient as a whole person, not simply as the sum of his or her organ systems, and the clinician's time and expertise to serve in this critical role.

We can expect more evidence to accumulate in a wide variety of areas that will illustrate the relationship of the biological, psychological, social, and spiritual components in human problems. Clinical distrust, chronic stress, and depression have been linked with increased inflammatory markers that may result in higher rates of cardiovascular disease.[9] There is now overwhelming evidence that depression coexisting with diabetes leads to poor outcomes.[10] One study has demonstrated that social support may have a protective effect with respect to interleukin-6 elevation, and, thus, could potentially result in a survival benefit in patients with ovarian cancer.[11] We have much to learn about the dynamic relationships among wellness and disease, psychosocial factors, and the spiritual state. The practicing clinician is aware of the higher mortality in the first year of widowhood, more pronounced in the surviving widower than in the widow, and the higher morbidity and mortality seen in the elderly after a relocation has occurred.[12]

CONTINUITY OF CARE

The ideal situation may indeed be a warm and supportive relationship with the same personal physician serving as advisor, advocate, and friend as the patient moves through the labyrinth of medical care. The realities of today's complex medical environment, however, with the patient moving between office, home, hospital, specialized care units (coronary care units, intensive care units, stroke units, or oncology centers), nursing home, and hospice care, often make this ideal impossible. In fact, in many instances, patients receive the best care from physicians and other health professionals who focus their practice in these specialized environments. The medical intensivist provides the most up-to-date, skilled care in the intensive care unit; the physician in regular nursing home practice will be more available to patients, staff, and families than the one who has a few nursing home patients scattered among several facilities.

The failure of physicians to make visits as necessary in the home and in long-term care facilities is related to several factors in the United States, including training, physician attitudes, and reimbursement systems. Our medical schools and residencies for generalist physicians continue to struggle with incorporating excellence in house calls and nursing home care as part of their educational program. Although reimbursements for visits to the home and nursing home have generally improved in recent years, high office overhead and productivity expectations have continued to limit the ability of physicians to practice in these relatively time-inefficient sites. Physician attitudes have also been a problem, in that doctors in the health care system of the past few decades have been more interested in the acute aspects of care than in chronic and long-term care. These attitudes have been reinforced by the educational and reimbursement systems in place. We are just beginning to see research and education initiatives designed to address the gap in chronic care knowledge and attitudes of our students and residents.[13,14]

Nevertheless, continuity of care remains an essential principle in the care of the older patient.[15] Recently, a wealth of literature documenting the critical importance of adequate communication among health professionals around transitions in care[16,17] lends support to the notion that safe, effective, efficient, and patient-centered care can only occur when the in-depth knowledge and understanding of the personal physician is communicated to, and incorporated by, the specialized teams in the intensive care unit, general hospital setting, long-term care setting, and even hospice setting.

We must recognize that optimum health care can only be provided to the older adult by an ever-expanding team of professionals, including primary care and specialty physicians, hospitalists, nurses, therapists, and social workers. This does not mean we can abandon the concept of continuity. Rather, we must pay even more attention. Physicians, nurse practitioners, and others with a long-term relationship with a patient may remain active advocates and sounding boards, even when they are not the "provider of record" at a given time. Equally important, indeed critical, to the safety of patients is increased attention to continuity at transition points in the care of the older patient – from home to hospital, from hospital to rehab unit or nursing home. The physician responsible for the care of patients at each of these junctures must communicate fully and accurately with the patient, family, and receiving health care team to ensure that the patient's treatment plan, values, expectations, and preferences are known and honored at every step.

BOLSTERING FAMILY AND HOME

Every physician should enlist those means that would keep an elderly person either in the individual's own home or in an extended family setting. It should certainly be our goal to keep elderly persons functioning independently, preserving their lifestyles and self-respect as long as possible. The physician should use the prescription for a nursing home as specifically as a prescription for an antibiotic or an antihypertensive medication.

A number of forces have resulted in patients going to institutional settings when other alternatives might have been possible. Between 1960 and 1975, a massive push toward institutionalization took place, creating hundreds of thousands of nursing home beds. What are the forces that contributed to excessive institutional care? Funding mechanisms have been disproportionately directed toward reimbursement for institutional care rather than for other alternatives. With the increase in mobility of families, there simply may not be family members available in the community to participate in the elderly person's care. Homes are architecturally based on a small nuclear family and do not permit housing of an elderly patient. Finally, the movement of women into the work force has meant that fewer family members are available to remain home with the impaired or disabled elderly person. Despite these forces, rates of institutionalization have actually declined slightly in recent years; older adults and their families overcome amazing obstacles to keep loved ones at home whenever possible.

What alternative can the physician recommend to these caregivers? A simple list includes homemakers, home health aides, other types of home care, daycare, aftercare, specialized housing settings, visiting nurses, friendly visitors, foster home care, chore services, home renovation and repair services, congregate and home-delivered meal programs, transportation programs, and shopping services. Personal physicians should also understand and use legal and protective services for the elderly whenever indicated.

Publicly financed programs such as the Program for All Inclusive Care of the Elderly and home-based Medicaid waiver programs that support nursing home–eligible elders to remain in their homes have grown in recent years, as federal and state governments have recognized that supporting seniors' desire to stay in their own homes is not only better, but is actually less-expensive care.[18] States have explored options to provide services in the homes of nursing home–eligible patients through a combination of Medical Assistance waivers and other programs. In addition, a growing body of research demonstrates the benefits of home-based interventions that target patient and caregiver priorities and teach problem-solving skills to maintain physically frail[19] and demented[20] individuals in their homes.

Despite the pressure to contain institutional long-term care costs, funds have not been available for adequate expansion of publicly funded programs to support frail older adults in their own home. Further, many of the evidence-based interventions that might provide cost-effective strategies for supporting older persons in the community are not reimbursed by insurance. Thus, resources remain limited and disjointed. The role of health care providers is to facilitate referrals, coordinate services, and become knowledgeable about general resources available and appropriate referral sources (i.e., care manager, area agency on aging) with expertise to help patients and families navigate the system effectively.

Who are the caregivers in American society? Data from 2005[21] revealed that a majority (57%) of Americans are currently or have been in the past unpaid caregivers for an adult family member or friend. In 2005, 46 million Americans were actively providing care. Caregivers are a diverse group, with up to 44% of men in one recent survey. Nearly half (42%) are between the ages of 45 and 64 years, and 17% are aged 65 years and older. Caregivers provide an average of 21 hours of care per week, with 17% reporting 40 or more hours weekly. Many experience a significantly negative impact on their job performance, with up to $650,000 in wages, Social Security benefits, and pensions lost over a career as a caregiver. Family caregivers also experience negative health impacts, with nearly half of those caring for a person with dementia experiencing depression, 64% rating their emotional stress as 4 to 5 out of 5, and older spouses who are caregivers experiencing a 63% higher mortality risk than control subjects.

Many families feel the burden of caregiving today, sandwiched between the demands of their parents and their children and grandchildren. It has been said that the empty nest syndrome has been replaced by a crowded nest syndrome. Many caregivers experience extreme burden and stress, and sometimes the question is, who is the real patient – the patient or the caregiver? The physician will often see the caregiver who is in more distress than the patient, and who may, in fact, develop serious physical and emotional problems as a result of the burden and stress encountered.[22,23]

The belief that old people are rejected by their families is a much-exploited social myth. Many families are struggling to cope with the needs of parents who are frail and debilitated. The family member, friend, or neighbor is often the crucial link in guaranteeing that the dependent elder remains in the community. In repeated studies, the characteristics of the caregiver, more than those of the elderly patient, are essential in predicting institutional placement. Even when adult children and elderly parents are separated by distance, the quality of their relationship may be unaffected, maintaining cohesion despite limited face-to-face contact.

COMMUNICATION SKILLS

Specific communication skills are critical in good management of the care of the elderly patient. Most important in good communication is listening and allowing patients to express themselves. The physician should use an open-ended approach, interpreting what the patient is saying and reading between the lines. The physician can use intuition in deciding what the patient means. Why did the patient really come to see the

physician? The elderly patient complaining of headache or backache may be expressing depression or grief. We should not miss important verbal clues when the patient tells us, "Doctor, I really think these headaches started when I lost my husband."

It is helpful to leave the door open for other questions or comments by the patient, both at the conclusion of the visit and in the future. It is always helpful to ask: "Are there other questions or concerns that you have at this time?" A physician anticipating a specific problem can make it easier for the patient to discuss this issue. For example, "You are doing well, but I know that you are concerned about your arthritis and whether you will be able to climb the stairs in your home. At some point, we may want to discuss the various alternatives that are open to you."

One important aspect of the aging of America is the increasing diversity of older adults.[1] In the past, white English-speaking individuals have comprised the majority of our older population. Increasingly, however, health care providers will need to be prepared to care for a racially, ethnically, and linguistically diverse population of elders. Physicians and other professionals caring for older patients will need to provide culturally sensitive care, recognizing the unique and varied cultural contexts of their patients. Further, groups, including the federal government, have recognized the critical role of health translators to provide appropriate care to patients who are not proficient in English. All of these issues may be magnified in the care of older patients.

Just as the physician providing care to pediatric patients must deal with the children's parents, the physician providing care to the elderly patient must be able to deal with their adult children. These children play a vital role in decision making and providing support, and the physician must, therefore, possess skills in communicating with them and in dealing with their emotional reactions, such as guilt or grief. The physician taking care of an elderly patient with cancer must be prepared when the adult daughter tells him: "Whatever you do, please do not tell my father that he has cancer," especially when it is apparent that the parent is totally and fully aware of all aspects of his problem.

The physician should be careful when meeting with an elderly patient who discusses his absent spouse or child, or when dealing with adult children or grandchildren who are discussing the parent or grandparent who is not present. The physician should not necessarily accept the assumptions that are stated about the absent family member. Physicians must be able to listen carefully, ask questions, and collect information; their opinion of the situation might be entirely different if they had an opportunity to hear the view of the absent family member.

Peabody[24] in 1927 said, "The good physician knows his patients through and through, and his knowledge is bought dearly. Time, sympathy and understanding must be lavishly dispensed, but the reward is to be found in that personal bond that forms the greatest satisfaction of the practice of medicine." The physician who enters the patient's universe and understands the patient's perceptions, assumptions, values, and religious beliefs is a tremendous advantage. Frankl,[25] in *Man's Search for Meaning*, demonstrated how physicians can help patients understand the meaning and value of their lives. Of course, how elders find meaning in their lives is related to how they found meaning at other stages in their lives. It is therapeutic for the patient to feel that the physician cares enough about that individual to understand his life, particularly the meaning and purpose of his present existence. Frankl[26] stated in *The Doctor and the Soul* that human life can be fulfilled not only by creating and enjoying, but also by suffering. He provides examples in which suffering becomes an opportunity for growth, an achievement, a means for ennoblement. Frankl's existential psychiatry or logotherapy is a useful psychological method that helps the elderly patient appreciate the positive attributes, meanings, and purposes of his or her life.

Yalom[27] defines existential psychotherapy as "a dynamic approach to therapy which focuses on concerns that are rooted in the individual's existence." Many individuals are tormented by a crisis of meaning.[28] Many suffer an existential vacuum, experiencing a lack of meaning in life.[25–29] The patient experiencing an existential vacuum may demonstrate many symptoms that will rush in to fill it in the form of somatization, depression, alcoholism, and hypochondriasis. The physician recognizing an existential vacuum can help the patient find meaning. Frankl's main theme is that meaning is essential for life. Engagement or involvement in life's activities is a therapeutic answer to a lack of meaning in life. The physician can help guide the patient toward engagement with life, life's activities, other people, and other satisfactions.

Frankl[25,26] provides advice to all physicians in using hope as a therapeutic tool. The physician dealing with the elderly must focus on the significant role of hope in daily practice. As physicians, we must eventually understand the biological basis of hope. We do not understand sufficiently the biochemical, neurophysiological, and immunological concomitants of different attitudes and emotions and how they are affected by what is communicated from the physician. Physicians may worsen panic and fear; however, physicians also have an opportunity to create a state of confidence, calm, relaxation, and hope.

In this age of increasing technology and subspecialization, the patient's recovery may still depend on the physician's ability to reduce panic and fear and to raise the prospect of hope. Cousins[30] describes the "quality beyond pure medical competence that patients need and look for in their physicians. They want reassurance. They want to be looked after and not just over. They want to be listened to. They want to feel that it makes a difference to the physician, a very big difference, whether they live or die. They want to feel that they are in the physician's thoughts." For example, in building the doctor–elderly patient relationship, nothing is more effective than the physician picking up the phone and calling the patient and saying: "I was thinking about your problem. How are you doing?" This expression of interest by telephone represents a potent

method for cementing the relationship between doctor and patient.

Jules Pfeiffer's cartoon character, the "modern Diogenes," carries on the following discourse upon meeting an inquisitive fellow traveler through the sands of time.

> "What are you doing with the lantern?" asks the traveler.
> "I'm searching," replies Diogenes.
> "For an honest man?" he asks.
> "I gave that up long ago!" exclaims Diogenes.
> "For hope?"
> "Lots of luck."
> "For love?"
> "Forget it!"
> "For tranquility?"
> "No way."
> "For happiness?"
> "Fat chance."
> "For justice?"
> "Are you kidding?"
> "Then what are you looking for?" he implores of Diogenes.
> "Someone to talk to."

Help comes from feeling that one has been heard and understood.[31]

DOCTOR–PATIENT RELATIONSHIP

What the Doctor and Patient Bring to Each Encounter

The physician must understand what both he or she and the patient bring to each interaction, including both positive and negative feelings. The patient's views of old age may be negative and fearful, believing illness signifies misery, approaching death, loss of self-esteem, loneliness, and dependency. The physician's own fears about aging and death may color the interview as well. The doctor may simply not view helping the older, impaired patient as worthwhile. The physician may have low expectations for success of treatment, writing off the elderly patient as "senile," "mentally ill," or "a hypochondriac." The doctor may have significant conflicts in his or her own relationship with parent figures or may feel threatened that the patient will die.

KNOWING THE PATIENT

Several steps are recommended in building a sound doctor–patient relationship, particularly applicable to the elderly patient.[24] The first rule is that the physician should know the patient thoroughly; the second rule is that the physician should know the patient thoroughly; and the third rule is that the physician should know the patient thoroughly. The interested physician performs the first step in building a sound doctor–patient relationship by gathering a complete history, including the personal and social history, and doing a complete physical. Ideally, the physician should be a good listener, warm and sensitive, providing the patient ample opportunity to express multiple problems and reflect on his or her life history and current life situation. Thus, the physician will be able to understand the meanings and purposes of the patient's present existence. Forces in the health care industry oftentimes prevent the physician from being a good listener, warm, and sensitive. The physician may not be listening as he or she is inputting information into an electronic health record system. The physician sadly may not be present for his or her patient.[32]

As stated previously, family and friends represent the principal support system for the elderly and usually call for nursing home placement only as a last resort, after all alternatives have failed; however, the physician must be able to recognize the dysfunctional family. There are elderly who have been rejected by children. There are elderly who have rejected a child for a variety of reasons, such as the adult child's same-sex relationship. There are families with members estranged from each other for many years. The patient may have had a stable and supportive marriage, but increasingly the rate of divorce has risen. Older adults may have relationships outside of marriage, including same-sex relationships. It is critical for the practitioner to have an accurate understanding of family dynamics and history to appropriately rally family support, and also to recognize when family dysfunction is harming their patient.

CREATING A PARTNERSHIP WITH THE PATIENT

In all dealings with the patient, the physician should be frank and honest and share information truthfully. The patient should feel a sense of partnership with the physician. In this partnership, the doctor first reviews his perception of the patient's problems. Then, for each problem, alternative choices are considered, and decision making is shared with the patient. Although there are situations in which frankness is counterproductive, with most patients, frankness is helpful. There are also situations in which the elderly patient does not want to share in decision making, but simply wants to surrender his or her autonomy to a relative such as a spouse or adult child, or to the physician. Again, in most cases, the physician should attempt to enter a partnership with the patient and share as much decision making as possible.

Discussions with the patient or family members should be presented in a hopeful manner. As discussed previously, it is important to offer a positive approach whenever possible. The physician's infusion of optimism and cheerfulness is therapeutic. The physician should help patients appreciate such positive attributes or purposes in their lives as religious beliefs, relationships with children and grandchildren, the enjoyment of friends, or the enjoyment of the relationship with doctors, nurses, and other health professionals in the immediate therapeutic environment.

The physician should be cautious that discussions with family members be held with the patient's consent. If the patient is sufficiently mentally impaired, then it might be appropriate to deal with the closest relative. Complex ethical and legal questions arise in the matter of confidentiality and decision making in regard to the elderly patient with partial mental impairment.

NEED FOR THOROUGH EVALUATION AND ASSESSMENT

The physician must avoid prejudging the patient. We must not allow preconceived notions of common patterns of illness to preclude the most careful individualized assessment of each patient. Conscientious history-taking and physical examination are essential. Treatment choices should be considered only following a thorough evaluation. Judicious consideration of all factors may result in a decision to treat or not to treat certain problems in certain patients. Attention to lesser problems may be postponed according to the priorities of the moment, rather than complicate an already complex therapeutic program.

Physicians must avoid wastebasket diagnoses. The past concept of "chronic brain syndrome" or "arteriosclerotic brain disease" is one such example. Not all mental disturbance in the elderly represents dementia; not all dementias in the elderly are arteriosclerotic. Neuropsychiatric disturbance in the elderly might be placed into a wastebasket and casually accepted as both expectable and untreatable when, in reality, a very treatable cause may be present. The physician must consider and seek out treatable disease.

For example, neuropsychiatric disturbance, including a dementia syndrome, may be caused by severe depression, which is a very treatable disorder. The most common types of dementia include Alzheimer's disease and vascular dementia. Other forms of dementia, potentially reversible, include myxedema, chronic drug intoxication, pernicious anemia, and chronic subdural hematoma. Neuropsychiatric disturbance may also include delirium secondary to many types of medical illness or drug toxicity. Such delirious states can be helped if the primary disorder is recognized and treated; failure to do so may in fact lead to hastened death of the patient.

It is often difficult to disentangle the physical from the emotional. Emotional disorder may present in the elderly as a physical problem, such as musculoskeletal tension being the principal manifestation of depression. Conversely, physical disease in the elderly might present as a mental disorder with confusion, disorientation, or delirium often being the first sign of many common medical ailments including myocardial infarction, pulmonary embolism, occult cancer, pneumonia, urinary tract infection, or dehydration (Table 1.1). For this reason, it cannot be emphasized too many times that proper diagnosis is essential to make specific treatment plans, such as the treatment of urinary tract infection in the case of an acute delirious state, or the treatment of thyroid deficiency in the case of a specific dementia or in the treatment of depression. Each of these is very specific. Treatment in each case would be irrational if a specific diagnosis were not known.

Table 1.1. Characteristics of Elderly Patients

1. Physical disease might present as a mental disorder with confusion, disorientation, or delirium often being the first sign of many common medical ailments.
2. Functional or physiological capacities are diminished, for example, creatinine clearance declines with age; however, the rate of physiological decline varies between individuals.
3. Adverse effects of drugs are more pronounced and more likely.
4. Typical signs and symptoms of disease may be hidden or slight, for example, pain may be absent in myocardial infarction, fever may be minimal in pneumonia.
5. Multiple organic, psychological, and social problems are present.

It is often not sufficient to know the organic or anatomical or psychiatric diagnosis; rather, we should seek a more complete understanding of the elderly patient. At times, it is more important to assess the elderly patient's functional status, which might have greater significance than the diagnostic or anatomical label. For example, in the case of a cerebrovascular accident, knowledge of the precise anatomical lesion via magnetic resonance imaging angiography may not help the patient as much as understanding the patient's functional state. It may be more important to know whether the patient can walk or climb stairs, can handle his or her own bathing, eating, and dressing, whether he or she can get out of bed and sit in a chair, handle a wheelchair, or whether he or she requires a cane or walker. All these functional concerns must be considered in evaluating an elderly patient.

Affecting our diagnostic thinking in evaluating an elderly patient would be the consideration of what is physiological versus what is pathological. Aging itself can be defined as the progressive deterioration or loss of functional capacity that takes place in an organism after a period of reproductive maturity (Table 1.1). The Baltimore Longitudinal Study of Aging, since 1958, has studied this decline in each of several specific functional capacities, such as glucose tolerance and creatinine clearance. There is a progressive deterioration of glucose tolerance with each decade of life. Indeed, hyperglycemia is so common in the elderly that to avoid labeling a disquietly high proportion of people as diabetics, Elahi et al.[33] formulated a percentile system that ranks a subject with age-matched cohorts. (Some individuals, however, show no evidence of deterioration of glucose tolerance or insulin sensitivity with aging.) Although currently the accepted definitions allow the same diagnostic criteria to be applied at any age, it is recognized that treatment decisions must be individualized, especially for the frail or very old.[34] The rate of decline in creatinine clearance also accelerates with advancing age.[35] This phenomenon appears to represent true renal aging because it was seen in several hundred normal individuals who were free of specific diseases and not taking medications that might alter glomerular filtration rate.

In fact, two major conclusions from the Baltimore Longitudinal Study of Aging emerge. Even when specific functional capacities change with age, health problems need not be a consequence of aging. Many of the most common disorders of old age result from pathological processes and not from normal aging. The second important finding is that no single chronological timetable of normal aging exists. Even within one individual, the physiological capacities of organs show aging at different rates. Between individuals, more difference is noted in older people than in younger people.

Increased adverse effects of drugs are present in the elderly who often tolerate medications poorly (Table 1.1). Polypharmacy is a major problem in the care of the elderly patient. Not only do psychotropic medications cause an altered response of the central nervous system resulting in confusion and delirium, but also antibiotics or digitalis may cause these problems. Altered renal and hepatic functions may affect drug elimination. In general, the elderly demonstrate greater variability and idiosyncrasy in drug response in comparison to younger individuals.

Prudence is, therefore, extremely important in prescribing drugs for the elderly individual. The physician must determine if the patient's complaint is justification for treatment. Is this medication absolutely necessary? The skill of the physician is required in weighing benefit versus risk. The benefit–risk balance is more crucial in the elderly patient than in younger individuals. The physician must attempt to keep the total number of medications down to as small a number as possible. Tools such as the Beers Criteria for Potentially Inappropriate Medications in the Elderly[36] are available to assist the clinician.

Also affecting our diagnostic ability in the elderly is that signs and symptoms of disease in the aged may be slight or hidden. Pain, white blood cell response, and fever and chills are examples of defense mechanisms that may be diminished in older persons (Table 1.1). The aged person may have pneumonia or renal infection without chills or a rise in temperature. Myocardial infarction, ruptured abdominal aorta, perforated appendix, or mesenteric infarction may be present without pain in the elderly.[37]

Multiple clinical, psychological, and social problems (Table 1.1) are characteristic of the elderly.[37] Clinically and pathologically, an elderly patient may have 10 or 15 problems. Geriatric patients should benefit from the use of a problem-oriented approach to medical records. Medical records should include not only the medical problem, but should demonstrate an understanding of functional, psychological, social, and family problems as well. The key feature of the problem-oriented record is the problem list, which serves as a table of contents of the patient's total medical history. It behooves us to use a problem list as a minimal or core component of a problem-oriented system in caring for the elderly patient. Without a problem list, we can easily lose track over time of the elderly patient's multiple problems; for example, that the patient in 1975 was hospitalized for a psychiatric problem or that, in 1995, the patient suffered a compression fracture of the T-10 vertebra secondary to slipping on ice. These problems may be lost to memory without some form or problem-oriented system. In addition, care is enhanced by maintaining a medication list that is kept current at each patient visit.

PREVENTION AND HEALTH MAINTENANCE

A tremendous revolution is taking place in the United States with emphasis on prevention, health maintenance, and wellness. Unfortunately, the data for what constitutes the best care for the frail or extremely old is sparse, and clinicians must often make their best judgment, taking into consideration the wishes of the patient and family and extrapolating from evidence developed for younger patients. For example, less is known about primary and secondary prevention of heart disease and stroke for the elderly patient than for younger adults. Clinicians caring for these patients need to be prepared to discuss the relative risks and benefits of screening tests and preventive medicine in the context of the patient's overall health status and preferences.

More and more physicians and nurses are emphasizing health maintenance and wellness in their practice and in their community educational programs. The drive for wellness is coming not only from health professionals but also from the public itself. The personal physician has an opportunity in his practice to encourage preventive medicine and health maintenance at every age level and at each level of functional ability or disability.

A remarkable amount of new information is being discovered about the role of exercise and strength training in the prevention or reversibility of frailty and physiological decline.[38] It is expected that more will be learned and that the health of many elderly might be improved by exercise and physical activity. The next decade will see more advances in nutrition, exercise, and therapeutic measures to retard the aging process.

How do physicians and health professionals determine the standard for health screening and health promotion? The Guide to Clinical Preventive Services[39] represents one standard for health screening guidelines. Evidence for screening and prevention in older adults is still often lacking, or controversial. For instance, the Guide continues to conclude that there is insufficient evidence to recommend for or against screening for prostate cancer, in spite of clear recommendations to screen from the American Cancer Society and others. It is clear that each practicing physician will have to follow the medical literature and evaluate the algorithms and guidelines that unfold in the decade ahead. For each question, the evidence is being examined and reexamined.

We can expect that in each area of health screening and health promotion, guidelines will not be written in stone, but will be reconsidered and reevaluated in the years ahead, based on the evidence that is examined. Physicians and health professionals caring for the elderly will witness tension and debate as new guidelines are written. At any time, with the state of evidence-based knowledge that we do have in preventive medicine and health screening, there remains the differential

between the physician's intellectual acceptance and awareness of these guidelines and the actual use of these guidelines on a regular, consistent basis. Increasingly, geriatric practice will rely on technology, such as electronic health records to ensure consistent application of prevention and wellness guidelines. Adoption of quality improvement strategies to provide consistent practice will continue to be driven both by the demands of our patients and, increasingly, the use of pay for performance strategies by insurers including Medicare.

INTELLIGENT TREATMENT WITH ATTENTION TO ETHICAL DECISION MAKING

The doctor should resist the temptation to treat a new problem that is poorly understood with still more medications. The question should be raised whether the present symptoms, such as confusion or depression, might be related to current drug use.

Therefore, the aphorism, "First, do no harm." A similar concept was stated by Seegal[40] as the "principle of minimal interference" in the management of the elderly patient. "First, do no harm" and the "principle of minimal interference" should be remembered when one reviews the abundant examples of iatrogenic problems that the elderly experience.[41,42]

The principle of minimal interference can be applied not only to drug therapy but also to other decisions, including the use of diagnostic tests (the principle of diagnostic parsimony), surgical intervention, and decision making in regard to hospitalization or placement in a long-term care facility. The principle of minimal interference may result in decisions that are both humanistic and cost-effective; for example, a decision that the patient should remain in his or her own home, despite limited access to medical therapy, rather than reside in a long-term care facility; or the decision not to do a gastrointestinal workup in the evaluation of anemia when the patient is terminal as a result of malignant brain tumor.

In the care of the elderly, there are times for minimal interference and there are times for maximal intervention. Again, certainly the patient with dementia caused by myxedema deserves every effort to replace the thyroid hormone carefully. The elderly patient with severe congestive heart failure secondary to rheumatic or congenital heart disease deserves full consideration for definitive treatment, including surgery, for his cardiac problems. The elderly patient with depression deserves specific treatment for this very treatable disorder.

In the future, we will be faced with more and more difficult decisions of an ethical nature. For example, an 80-year-old gentleman may present with a history of resection of an abdominal aneurysm 15 years ago, multiple myocardial infarctions, and multiple strokes causing severe dementia. His main problem on the current hospitalization is pneumonia causing a worsening of his confused state. Because of periods of sinus arrest, a pacemaker is considered. Should a pacemaker be placed in patients with significant dementia? Should pneumonia be treated in patients with severe dementia or terminal carcinoma? Difficult and ambiguous clinical problems such as these will face the personal physician with increasing frequency. The physician in the future will be called on to make complex decisions according to the accepted traditions and values of the specific religion, nation, and society or culture, with major guidance from the patient's stated wishes that were affirmed at a time when the patient was fully competent.

In regard to all therapeutic decisions, a personal physician is at an advantage if his or her understanding of the patient is based on continuity of care. The physician then can consider the patient in totality including psychological, spiritual, social, family, and environmental factors. To recommend intelligently any treatment plan, it is beneficial to have the knowledge of home or institutional environment, the family constellation, the availability of friends, access to transportation, and the economic situation of the patient. Also, as the physician grapples with complex decisions of an ethical nature, specific knowledge of the patient's value systems and beliefs is critically important.

INTERPROFESSIONAL COLLABORATION

The physician must understand when to call on other health professionals, such as nutrition education, visiting home nurses, social workers, psychologists, or representatives of community agencies. One must know when to call for legal or financial counseling. All physicians would do well to work in closer harmony with the patient's or family's clergy or pastor.

The physician should know when to recommend specific rehabilitative therapies. Specific use of physical, occupational, recreational, and speech therapies are vital for the proper care of certain problems. For example, the elderly patient with diabetic neuropathy and flapping gait might benefit from bilateral leg braces. Another patient recovering from stroke might benefit from occupational therapy that should be used as a reintroduction of the patient to the activities of normal daily living, and not simply as a recreational or diversionary therapy.

The improvement in health care of the chronically ill elderly requires that health professionals work together for the best interest of the patient. What is required is a genuine collaborative effort to act in a unified fashion to bring about a system that will best meet the needs of the frail elderly. This collaboration will be even more important as more community-based, long-term care options involving home care, home hospice care, and other services, and as care of patients with multiple, complex comorbidities becomes the norm.

RESPECT FOR THE USEFULNESS AND VALUE OF THE AGED INDIVIDUAL

Much in our society works to reject or devalue the aged. We are certainly living in a youth-oriented era and a physician must guard against viewing the elderly as useless, insignificant, or worthless. This lack of respect and devaluation occurs in society at large, in the workplace, in the family, in the entertainment

media, but it should not occur in the doctor's office or other clinical settings. The anthropologist knows other cultures and societies in which the elders of the community are most valued. An hour of watching American television is instructive to witness the youth orientation of our society. It is unfortunate that many elderly patients report that previous physicians treated them poorly because the patient was old.

An exceptional book, although not actively directed to the elderly, is *Respectful Treatment: A Practical Handbook of Patient Care*.[43] The author, Martin Lipp, describes the therapeutic benefit of respect in the doctor–patient relationship, especially in dealing with those we consider problem patients: In the angry patient; the dependent, passive patient; the complaining, demanding patient; the denying patient; the overly affectionate patient; the mentally ill patient; and so on, respect is therapeutic. Many patients feel weak, vulnerable, and demonstrate low self-esteem by virtue of age, illness, and various psychological and personality factors. Respect is a message to the patient that quickly brings about a sounder doctor–patient relationship.

Discussions are held on the subject of calling patients, and elderly patients in particular, by their first name or by their last name proceeded by Mr., Mrs., or Ms. An immediate demonstration of respect is to call the elderly patient by their family name with Mr., Mrs., or Ms. used appropriately.

The next 20 years will see considerable social change with redefinition of the age for retirement and other entitlement plans. We hope that social and economic changes will allow the elderly to function as a continuing resource in our society. We can expect to see reduced restrictions on older workers with particular reference to mandatory retirement. We can also expect to see more educational programs that will provide skilled training, job counseling, and placement for older men and women to initiate, enhance, and continue their voluntary participation in the workforce. We should anticipate the breakdown of stereotypes and greater recognition of the value of the elderly as a human resource.

There are many social forces at play. In 1930, 54% of men aged 65 years and older were in the work force. Then in 1960, 31% were working. Compare this to 2003 when 18.6% of men and 10.6% of women were working. Interestingly, participation in the workforce by men aged 65 years and older had declined steadily from the 1950s through the 1980s, because of improved pension and Social Security benefits. Participation leveled off in the 1990s, and has actually increased slightly since 1993. Meanwhile, women aged 65 years and older have had a steady 10% employment rate since 1950. As the Baby Boomers begin to reach 65 years in 2011, it remains to be seen what decisions they will make about employment beyond the age of 65 years.[1]

Evaluation of workers aged 51–56 years in 1992 and 2004 as part of the Health and Retirement Study suggests that lower rates of retiree health insurance from employers, higher levels of educational attainment, and lower rates of defined benefit pension coverage have led significantly more workers from the 2004 cohort to expect to work past the age of 65 years, compared to the 1992 cohort.[44] Many older workers indicate that they would prefer phasing down and continuing to do some paid work when they retire. Others approaching retirement or in retirement opt for a retirement career. There are many in good health, who have financial stability or a satisfactory pension, who would prefer to pursue a retirement career with passion. This may be part-time or full-time. The person retiring today at age 65 years or younger may enjoy a retirement career that might span 10–20 years. Society must allow elders to fulfill such roles and to retain the wisdom that has accumulated with time. At the same time, there are those approaching retirement who would not want or be able to continue employment, whether in their former role or in new roles that could be created. All of these variations need to be considered in counseling our patients.

COMPASSIONATE CARE

In an increasingly technological society, caring and compassion must be foremost in the practice of medicine. We must avoid the possible dehumanization that takes place when patients simply become subjects for study and treatment. Every year in the United States, we are seeing new accomplishments in medical technology and specialization. Computed tomography, computerized nuclear medicine, magnetic resonance imaging, positron emission tomography, organ transplants, achievements in cardiovascular surgery, achievements in hemodialysis, and achievement in intensive and critical care all have become part of our routine medical environment. In such a medical world, it is imperative that compassionate care not be lost in daily encounters between health professionals and elderly patients.

In all the great religions, various forms of a Golden Rule are stated. Many religions teach "You must love your neighbor as you do yourself," and, "What you do not want done to yourself, do not do to others." Surpassing new technical achievements and new specialized knowledge is the need to express compassion.[45] The physician's duty is "to cure sometimes, to comfort always."

Critically important is the attitude of the doctor toward the elderly patient. Is the physician willing to spend time with the patient? Is the physician willing to be involved in the chronic and long-term aspects of the patient as well as in the acute illness? Is the physician concerned with the social, psychological, and family aspects of the patient, in addition to clinical and organic aspects?

Care and compassion mean that the physician must dispense sufficient time in her encounters with elderly patients. There is evidence in one study[46] that physicians spend less time with elderly patients than with younger ones. Fifteen to 20 minutes may be minimal time to conduct a visit in the office, home, hospital or long-term care facility. A total of 1.5 hours, not necessarily in one sitting, may be required to complete an examination of a new patient, particularly in the presence of multiple complex problems. More time will be required in each encounter if the various functions of counseling, psychological support, health maintenance, and prevention are to be

accomplished, in addition to making decisions about treatment and possible rehabilitation.

Examples of failure in caring and compassion include the physician who waves at the door of the patient's room; the physician who quickly resorts to psychotropic drugs in the office, rather than taking the time to listen; and the physician on teaching rounds who never sees the patient and who limits her discussion to laboratory studies or some specific, interesting aspect of the case in a nearby conference room.

The physician should be a good listener and read between the lines what the patient is saying. Often, by nonverbal means, the physician can express warmth, understanding, or sympathy. Staying close to the patient and maintaining eye contact is helpful. Sitting adjacent to the patient's bed or sitting on the edge of the bed in the hospital or long-term care facility brings the doctor right into the patient's small universe. The physician might put a hand on the patient's shoulder and pat or touch the patient or hold hands at appropriate points during the visit. As previously stated, however, the physician faced with increasing pressures, may not be present for the patient.[32]

As the revered physician, Eugene Stead, Jr., would say: "What this patient needs is a doctor."[47] Our elderly patients, and in fact, all of our patients are yearning for a physician who will listen and understand. Again, we remember Peabody's words,[24] "The good physician knows his patients through and through, and his knowledge is bought dearly. Time, sympathy, and understanding must be lavishly dispensed, but the reward is to be found in that personal bond that forms the greatest satisfaction of the practice of medicine. One of the essential qualities of the clinician is interest in humanity, where the secret of the care of the patient is in caring for the patient."

CHANGING TIMES IN HEALTH CARE

In the performance of these essential aspects of care of the elderly patient, the physician may be distraught that these are difficult times and a revolution in health care is looming. Physicians and other health professionals may feel discouraged during this period of cost-containment, evolving pay for performance rules, increased competition, the malpractice threat, and other forces in health care reform taking place today. The physician may be disheartened by a system that frequently rewards performing a procedure over talking to the patient; that excessively scrutinizes and profiles the physician in the hospital; and that may often seem to emphasize the financial bottom line rather than excellence of patient care. Despite this tug of war, the physician must simply have faith that patient care that is compassionate and humane, care that is characterized by continuity, care that is sensitive to psychosocial and family issues, and care that is characterized by all the other essential principles will endure. Although the organization of health care delivery will undoubtedly change, we can expect that society will ultimately demand a quality of care that we would each want for ourselves. The authors can visualize that social pressure will enforce the maintenance of quality of care, patient satisfaction, and the fulfillment of the professional ethic of medicine and the other health care professions. The example of the Federal Aviation Agency to the aviation industry (that is characterized in this country by high standards of safety and quality) has been cited as one model that the current changing health care system might follow.

We have discussed previously the work of Frankl[25,26] and Yalom,[27] and the presence of an existential vacuum. The physician caring for 80- and 90-year-old patients must be prepared to hear the patient utter, "I do not know why I'm still here" or, "I do not know why God does not take me away. I have lived long enough." The physician must be alert to the presence of depression and suicidal ideation. If the physician's assessment is that these statements do not represent suicidal thoughts, then the physician must be prepared to respond to ruminations about death that are heard commonly in the very elderly. Without entering too much into the world of theology, it might be appropriate for the physician to say such things as, "That is not for you to decide or ponder. There must be a reason you are still here. Apparently, God must want you here for some reason. There is the friendship that you and I still enjoy, and the friendship that you enjoy with the visiting nurse (or home health aide). You have your nephew in New Hampshire and his family. You may see him only three or four times per year, but I know that you both care about each other. Again, your being here is not really for you or me to decide. All of us must make the best of each day while we are still here."

What about the extraordinarily independent patient who is feisty and maybe a bit eccentric? The patient will not accept what seems to be needed treatment or will refuse home health aides or daycare. Others have divorced themselves from the medical system, at least for the present time, because of past experience that was burdensome, expensive, and seemingly unnecessary. Some will refuse supports such as having health aides because they do not want the burden of strangers in the home or the expense of this assistance (even though they can afford it). They do not want to divert their savings in case they need it in the future, or not to reduce an inheritance to a loved one. They may recall bad experiences with a series of dentists whose bills ran into thousands of dollars. The patient may be wary of the medical system that, each time she suffered a fractured vertebra related to her osteoporosis, kept her in the hospital emergency room for 12–36 hours where she underwent repeated bone scans and other seemingly needless tests. It would seem prudent to state the case for what is reasonable, but to allow as much self-determination and autonomous action as possible. This respect for the patient's autonomy may help cement or enhance the doctor–patient relationship. Many elderly who exhibit extraordinary independence appear to do well despite their selective lack of participation in medical care or other support systems. Segerberg in *Living To Be 100* describes anecdotally manifestations of exceptional independence in 1,200 centenarians.[48] Extraordinary independence needs to be studied more as a positive factor in successful aging, at least in some individuals.