Policy Report

Redesigning Health Care for an Older America

An Interdisciplinary Workshop of the
INTERNATIONAL LONGEVITY CENTER–USA

Sponsored by
Josiah Macy, Jr. Foundation

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The International Longevity Center-USA (ILC-USA) is a not-for-profit, nonpartisan research, education, and policy organization whose mission is to help individuals and societies address longevity and population aging in positive and productive ways, and to highlight older people's productivity and contributions to their families and society as a whole.

The organization is part of a multinational research and education consortium and includes centers in the United States, Japan, Great Britain, France, the Dominican Republic, India, Sub-Saharan Africa, and Argentina. These centers work both autonomously and collaboratively to study how greater life expectancy and increased proportions of older people impact nations around the world.

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Acknowledgments

The International Longevity Center gratefully acknowledges the Josiah Macy, Jr. Foundation for sponsoring the workshop upon which this report is based. A special note of appreciation to June Osborn.

Thanks to the Werner and Elaine Dannheisser Endowment and the Mollye and Bernard Mills Endowment for their ongoing support of ILC-USA programs to advance healthy aging.

Grateful acknowledgment to rapporteur Harrison Bloom.

Finally, the ILC-USA pays tribute to Michael DeBakey, internationally recognized cardiothoracic surgeon, who first brought up the idea of bringing together leaders in the varied fields of health care for a workshop on redesigning health care for an older America, and whose enthusiasm was a significant impetus to making the workshop happen.

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Preface

The national debate on Medicare reform has been directed toward a variety of cost-containment strategies aimed at improving upon the existing health insurance plan. The workshop on Redesigning Health Care for an Older America had a different focus. It did not specifically address the issues of cost, access to care, or quality of care. Vitally important as these issues are, other equally important issues must be brought to the table.

The aim of this workshop was to contribute to the development of a proactive—rather than a reactive—comprehensive health care program for an older America by concentrating on a patient-centered approach that reflects the needs of older persons. We sought to explore the potential for moving Medicare in new directions, including the eradication of the many diseases of old age that have their origins *in utero* and infancy. We concluded that there must be an expansion of public health as well as increased investments by both the government and the private sector in biomedical and sociobehavioral research and technology to improve prevention, diagnosis, and treatment.

Significant increases in the budgets of the National Institutes of Health and, specifically, the National Institute on Aging are essential to a nation growing older. Essential to the care of older persons are the continuum of care and collaboration of physicians, nurses, social workers, and other health care providers. Adaptations of our health care "system" are necessary to meet the needs of an older patient with complex psychosocial and medical, acute and chronic pathologies, as well as to protect the health of higher-functioning older adults.

No serious discourse about health care in America can proceed without acknowledging the enormous contribution Medicare has made as the nation's one egalitarian health insurance program that provides coverage for wealthy and poor alike. Begun in 1965, Medicare established a government commitment to providing access to acute medical care for *all* older Americans, including racial and ethnic minorities. Medicare promoted physician-based ambulatory care, in many cases obviating the need for hospital-based emergency-room care. It contributed to increased life expectancy and lower morbidity rates. Its low administrative costs (2 to 3 percent versus 14 to 16 percent in private medical plans) offered a model of efficiency upon which future health care administrative infrastructure could be based.

However, Medicare's essential structure has not changed for 40 years. It remains a reactive medical insurance system rather than a **proactive health system**, with an emphasis on acute in- and outpatient care. In 1965 the fields of geriatrics and gerontology were not well established in the United States. Consequently, neither experts in the care of older persons nor older persons themselves were included at the Medicare planning table to make a case for the specific needs of older patients, which include the complexity of issues associated with their health and the extra time a physician needs to take care of such complex patients.

What is known about health care for older persons in 2006 must be built into a reformed system that incorporates Medicare's strengths and develops a continuum of services that support the life-course perspective and ensure the healthy aging of the next generation. These services range from health promotion and disease prevention; outpatient diagnosis and treatment of acute, chronic, and emergency illnesses; hospital, community-based, and home care; day-care centers and assisted-living facilities; to long-term, end-of-life, and hospice care. As noted, this system must be proactive rather than reactive, and health-oriented rather than disease-oriented; it should have a public health and environmental perspective; it should recognize the importance of a healthy lifestyle; and it must place a strong focus on geriatric medicine—the bedrock upon which good health for older Americans must rest.

Redesigning our system of health care to meet the needs of people throughout life is a challenge of monumental proportions. It will come to fruition only after politicians, other leaders in the public and private sectors, scholars, health providers, and researchers come to an agreement to build an accessible, affordable health care system of high quality.

The timing of this report is relevant. It is obvious that the baby boomers will need to work beyond the average age of retirement, presently 62. Further, corporate America has already sounded alarms at the prospect of losing critically needed workers with the coming retirement of the boomers. However, for the boomers to continue to be productively engaged, they must remain healthy, an important role for Medicare reform and geriatric medicine.

It is also plain that older workers who continue to work will be concerned about their parents and other family members who require caregiving. Long-term care is a critical economic and social challenge.

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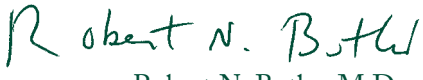
The ILC task force on Redesigning Health Care for an Older America presented a "white paper" to the participants of a consensus workshop that met June 15–16, 2006. The paper represented an elaboration of the seven guiding principles listed in *Redesigning Health Care for an Older America*, published by the ILC-USA in 2004. Its purpose was to stimulate discussion among workshop participants about structural reform of our health care system based upon an intergenerational lifespan perspective of disease prevention and health maintenance.

This draft workshop report, composed of eight short essays that expand upon the white paper, represents the views of the majority of workshop participants.



Robert N. Butler, M.D.

Redesigning Health Care for an Older America

EIGHT GUIDING PRINCIPLES

1. The life-course perspective supports the healthy aging of the next generation.

2. The basic principles, core knowledge, and values required to competently care for older individuals must be widely disseminated throughout the health care–provider community. This is best accomplished through the academic disciplines that comprise geriatrics and gerontology.

3. The health care system must, in a culturally sensitive and appropriate way, protect and respect the rights, dignity, and personal needs of older Americans by promoting and supporting a person-centered approach.

4. Comprehensive integrated health care services, providing a continuum of care, are necessary to maximize health and quality of life.

5. Clinical autonomy, guided by the body of evidence-based medicine produced by scientific research and blended with clinician experiential expertise, is essential to optimal quality of care for older Americans.

6. Investments in aging research—basic biology, age-related diseases, clinical and health services delivery—are crucial to improving care for current and future generations of older Americans.

7. Universal health coverage encompassing all age groups provides the best opportunity for assuring access to a continuum of care that can result in a healthier population experiencing a better quality of life.

8. The workforce to provide high-quality health care for the current and future older generations of Americans needs to be culturally and ethnically diverse, professionally trained, horizontally integrated into interdisciplinary teams, and financially well supported.

1. The life-course perspective supports the healthy aging of the next generation.

The life-course perspective is a conceptual framework that incorporates both biological and social experience. It includes the cumulative effects of early life events and conditions, as well as universal patterns. It enhances our understanding of the interaction of biological factors, physical environment, and social context over time, and provides a scientific basis for understanding the emergence of health problems.

The life-course perspective, which counters stereotypic and negative images of older persons, can foster an appreciation of the dynamic processes of aging.

Factors that determine a person's health include genes, social class as mediated through the physical and social environment, and individual behavior. As people live longer, chronic diseases have emerged as major causes of disability and functional dependency, with significant economic and financial consequences. They present an enormous challenge for policymakers, medical and social services, and providers of long-term care, as well as, of course, for patients and their families.

Health in adulthood is affected by early-life exposure to adverse physical, psychological, and social factors, and to inadequate health care. Studies indicate that in utero exposures influence health status and risk for disease later in life, with evidence suggesting that maternal nutrition strongly influences a person's health throughout the life course. Babies with low birth weight are at increased risk of developing type-2 diabetes and coronary heart disease in adulthood (Brunner 2000). *In utero* exposure to lead is associated with lower IQ scores (Erdem et al. 2004). Protracted exposure to tobacco smoke in babyhood is associated with a number of health problems, including diabetes and attention deficit hyperactivity disorder (ADHD).

Singh-Manoux et al. (2004) wrote that "recent research in social epidemiology has established the importance of considering the accumulation of advantage and disadvantage across the life course when examining adult health outcomes." A study by Hillsdon et al. (2005) found that people who are physically fit at younger ages are more likely than their sedentary counterparts to report good health at older ages, and Topp et al. (2004) concluded that musculoskeletal and cardiovascular health among older persons is related to physical functioning, with symptoms of chronic disease in later life strongly related to lifestyle choices involving physical activity and nutritional intake.

Unfortunately, the data that would allow for a more rigorous examination of the connection between early-life exposures and late-life health status are often limited. We need more research and better data to understand the implications for persons 75 years and over (Muller and Gusmano 2005). Nevertheless, growing recognition of the effects of early-life exposures on the health of older persons has encouraged researchers to develop appropriate data sources. For example, the more extensive use of personal histories can yield insights equivalent to findings in longitudinal data collection. Also, reinterpreting historical information on populations can aid in the detection of early-life exposure to infection and environmental toxins (e.g., immunization statistics and sales volume of products known to promote health or be unhealthful).

The potential connection between early-life exposures and late-life health conditions confirms the importance of targeting younger populations with preventive and ameliorative services and education. Although, for various reasons, it is impossible to

entirely eliminate disease in later life, building health care programs that prevent, from earliest life, some of the diseases of old age through comprehensive prenatal, pediatric, and adolescent programs of health promotion and disease prevention should reduce disease in old age.

Medicare's continual efforts to improve the health of its beneficiaries are consistent with the approach we suggest. However, because these efforts are targeted to current beneficiaries only, this approach is insufficient. The Centers for Medicare and Medicaid Services invest considerable resources to provide beneficiaries with health education, but most of the behaviors that have health consequences in old age are established much earlier in life. For example, since "the real leverage in establishing healthier lifestyles comes at a much earlier age," reaching out to working-age Americans would build on Medicare's "growing commitment to the health of American elders" (Gusmano and Schlesinger 2001).

We need to build replicable, integrated care programs that current best evidence and knowledge indicate may help deter the onset, lessen the severity, or possibly prevent, from earliest life, some of the diseases of middle and older age through comprehensive prenatal, pediatric, adolescent, and young adult programs of health promotion and disease prevention.

Such programs should include care delivery, individual and family education, and rational and appropriate behavioral modification methods leading to actual changes in habits that can result in healthier lifestyles and better overall health throughout the lifespan.

In summary, the following key points deserve emphasis:

- The life-course perspective is useful in promoting the economic and social conditions necessary to develop lifelong good health.
- Tailoring interventions to address economic and social disadvantage include efforts to improve access to healthy foods, adequate housing, and comprehensive health coverage.
- Methods to positively change detrimental health behaviors must complement educationally focused efforts. Some examples include eliminating sugar-laden soft drinks from school cafeterias, having fresh fruits and vegetables available for meals and snacks, lighted walkways and trails for walking, jogging, and biking.
- Health promotion and disease prevention programs targeted by age, gender, social-economic status, and risk, which include recommendations based upon best current evidence and practices, should be implemented.
- Programs should be targeted to individuals, families, and communities.

2. The basic principles, core knowledge, and values required to competently care for older individuals must be widely disseminated throughout the health care–provider community. This is best accomplished through the academic disciplines that comprise geriatrics and gerontology.

Clinicians who are trained in geriatrics make unique contributions to health care and preservation of function by understanding the processes of normal aging, the changes in the ways diseases are manifested with age, and the variation in individual response to therapeutic modalities. Also significant is the geriatrician's sensitivity to the way a patient

interacts with the physical and social environment, which includes housing and neighborhoods. These functions need to be taught and broadly disseminated to all involved in caring for older persons.

The American Geriatrics Society Core Writing Group of the Task Force on the Future of Geriatric Medicine published an article entitled "Caring for Older Americans: The Future of Geriatric Medicine" (2005). The article clearly, articulately, and concisely presents five goals to optimize the health of older individuals. The goals are:

1) To ensure that every older person receives high-quality, patient-centered health care

2) To expand the geriatrics knowledge base

3) To increase the number of health care professionals who employ the principles of geriatric medicine in caring for older persons

4) To recruit physicians and other health care professionals into careers in geriatric medicine

5) To unite professional and lay groups in the effort to influence public policy to continually improve the health and health care of older persons.

Each goal is discussed in terms of the requisites to be obtained, the obstacles that impede goal attainment, and strategies for overcoming the obstacles. Additionally, geriatrics' core values, attributes, and competencies is outlined, and specific recommendations to reach each goal are summarized. There is little to dispute in this excellent paper, and it is, on the whole, optimistic. But its warnings and cautions require serious attention, not simply from geriatricians but from all physicians and other health care personnel, government, and politicians at all levels, nongovernmental organizations, foundations, corporations, and the public at large. In fact, with the defunding of Title 7 of the Public Service Act in 2006, the status of geriatrics training for clinicians and nurses has become even more precarious. Of the many important issues that must be addressed, the following deserve immediate attention and remediation if geriatric medicine is to survive and play the important role it should in leading the way in caring for the older population.

Geriatric medicine must begin to attract sufficient numbers of medical students and physicians-in-training of high quality who possess excellent clinical skills and are humanistic, enthusiastic, and committed. Presently there are far too few of these individuals, either in geriatric fellowship training (of the 300 available fellowship positions only about 45 percent are filled) or in junior faculty academic positions, to carry out the most important goal of all: educating and training physicians and other clinicians, at all levels, in the essentials and principles of caring for older individuals.

Teaching the principles of geriatric medicine in all of its various forms (didactic, interactive, bedside) needs to be fully integrated into medical school curricula, resident training, fellowship training in all adult medical and surgical subspecialties, and continuing medical education for practicing physicians. Such teaching must be required, not simply provided as elective offerings. To ensure that geriatric fellows and faculty are perceived as excellent teachers and positive role models within their institutions, instruction in effective teaching needs to be incorporated and emphasized in geriatric fellowship training.

Equally important, geriatric fellowships must attract and train many more clinical researchers. Rigorous research training should entail at least

one, and probably two or three, additional years beyond the current one-year (predominant type) programs. Upon becoming faculty, clinical researchers must have protected time and qualified senior faculty mentorship to succeed. There must also be plentiful opportunities that include government programs to fund research, as well as encouraging partnerships with private resources.

In order to attract high-quality fellowship trainees who will become clinician educators and clinical researchers, it is absolutely mandatory that strong incentives be provided for medical and family medicine residents considering these careers. Examples of incentives include loan repayment forgiveness, support for training beyond the current one year required for certification, and opportunities for career development awards. Medicare, for one, needs to raise its voice and use its influence to offer incentives. Also, medical students and residents must have exposure to well-functioning and healthy older individuals, not exclusively to frail, significantly impaired, hospitalized or nursing-home patients. The overt and covert pervasive influence of ageism needs to be acknowledged and directly confronted, given that students and trainees are young themselves and live and practice in a youth-obsessed culture.

Without a steady increase in the number of fellowship-trained geriatricians, all other reforms to support the formal discipline of geriatric medicine become irrelevant. Of course there will be, and should be, faculty interested in and experienced in the care of older people in general internal medicine, family medicine, and subspecialties who will fill important roles in teaching, but the ultimate direction and leadership should emanate from divisions or departments of geriatric medicine.

A third significant role for fellowship-trained geriatricians entails assuming leadership positions in a variety of areas, including long-term care, health policy, health plans, medical schools, foundations, medical groups, media, and industry, among others. Leadership will help pave the way for viewing later life as part of a continuum, part of a life course that begins in infancy. For example, advocating for disease prevention and health promotion beginning in childhood as the first step toward a healthy and active life as an older adult places geriatric medicine in its proper role as complementing, not competing with, other medical specialties.

Leadership will help pave the way for viewing later life as part of a continuum, part of a life course that begins in infancy.

Although geriatric medicine is used as the example, the above three roles—teaching, research and leadership, as well as clinical services, apply to recruitment and training in all disciplines dealing with the delivery of health care to the older population. Thus the same methodology and goals apply to schools of nursing, social work, rehabilitation, nutrition, pharmacy, and health care administration.

What is needed in geriatric medicine, for example, is a coordinated effort via a public-private partnership initiative to rejuvenate and grow the specialty of geriatric medicine. Currently, the federal government has ended training funds for teachers in geriatrics. A modest but incremental investment,

averaging less than $22 million per year, would establish at least 1,400 academic geriatricians, and private support could contribute the remainder toward the total goal of 2,400 academic geriatricians. The funds generated by this public-private partnership would ensure the establishment of a foundation of knowledge and leadership sufficient to improve our health care system's capacity to care for an aging population (Muller and Nyberg 2002).

3. The health care system must, in a culturally sensitive and appropriate way, protect and respect the rights, dignity, and personal needs of older Americans by promoting and supporting a person-centered approach.

Ageism can be an unacknowledged factor in determining the course of medical treatment given to older people. They are often excluded from the decision-making process and dismissed as already having "lived their lives." Ageism can engender prejudice on the part of medical personnel who assume that an older man or woman is incapable of understanding medical terms. It may lead to neglect, because older patients cannot always speak up for themselves, and to rationing of medical services.

Equal access: Older persons, as well as all Americans who interact with health care services and reimbursement agencies, should have equal access to the existing menu of useful services. They should be entitled to patient-friendly processing, maintenance of quality of care, and protection against discrimination based on gender, cultural affiliation, or disability status. The obligations of service providers and insurers must be defined, with a structure in place to monitor for compliance and to allow for grievances to be brought to the attention of responsible officials. To keep up with changes in medicine, health care financing, and social practices and preferences, these rights should be reviewed periodically, and on occasions of major changes in regulations or benefits. Sufficient personnel and facilities must be available to assure an adequate supply and the prompt delivery of services and culturally competent staff.

Older persons are subject to misinformation when they receive medical documents that are not in easily understandable format, such as small-print instructions or product warnings. All written material older patients receive—including consent forms, follow-up instructions, and explanations regarding coverage, claims, and payment obligations—must be written in language that can be easily understood by a layperson and translated into the appropriate languages of the recipients. Type fonts should accommodate persons with visual limitations, and attention should be given to improved technology for expanding use of the Internet as an information source by older persons. Equal access also includes information regarding treatment options, second opinions, and preventive services.

Older clients should be represented in decision processes, at all levels and in all domains of the health care system, relating to their health and their financial solvency. The income distribution of older households and typical cost of care and substantial financial coverage must be taken into account so that out-of-pocket costs are affordable. Important steps on behalf of older clients include drafting legislation and regulations, molding professional attitudes and behavior, and designing physical facilities and program operations, including handling of complaints about timing or quality of service. The development of an American Patient Association, with consumer representation to ensure that patients receive appropriate care without prejudice

and to provide a voice for persons with disabilities, could strengthen this process.

Privacy: Older persons faced with major problems and decisions while dealing with impairment of personal networks and sensory and motor disabilities are particularly vulnerable to loss of privacy. Within the context of health care delivery, a person's decision making, personal information, and physical space must be guarded. All persons must have assurance that their records are effectively protected against disclosures to unauthorized parties—commercial and others.

In the drive toward increased efficiency through the intensive use of physical space in health care facilities, a person's privacy may be compromised. It must be noted that persons over 80 often require more time for dressing, processing, and explanations, increasing the need for privacy in facility design. And for older persons in temporary or long-term residential settings, the availability of spatial privacy is necessary to achieve balance between social opportunities and control of one's use of time.

4. Comprehensive integrated health care services, providing a continuum of care, are necessary to maximize health and quality of life.

Throughout the life course people experience many levels of health and disease. In order to avoid the risks of errors, delays, duplication, and omissions, it is essential that a comprehensive integration of health services be in place (Docteur et al. 2003; Kohn et al. 2000).

An integrated system is inclusive of all types of services that clients may need and is designed and equipped with resources and standards that support and effectively maximize population health across the life course. While this is applicable to all age groups, additional elements must be addressed in order to achieve integrated care for older persons. Comprehensive integration involves many components in addition to medical care, including the coordination of social care services, management of transitions, health care financing, and the recognition of the productive activities of older people.

Indeed, a continuum of care within a comprehensive integrated system includes a life course commitment to health promotion and disease prevention, continuity of primary health care for acute and chronic diseases, attention to mental health, dental care, care of hearing and vision, proper nutrition, and long-term as well as end-of-life care.

Social care services: Social care services (i.e., information, personal care, social service referrals, family supports, discharge planning, and advocacy in dealing with institutions) are generally part of discussions about the health-related needs of older persons. Less attention is given to peripheral but important environmental services, such as socialization and networking, housing, and transportation. Effectively coordinating social care services with acute care, postacute care, ambulatory maintenance protocols for chronic disease, and care of dependent frail elders is a challenge for record systems, financing systems, deployment of agency personnel, and professional training. For example, inadequate recognition of the cost of social service personnel in provider budgets submitted for reimbursement is a shortcoming often mentioned by physicians caring for older patients. Continuity of care depends on maintenance of eligibility, financial coverage, quality standards, and treatment goals appropriate to the needs arising from the combination of sickness and normal aging, with social services serving as a platform for patients to benefit from clinical services (Naylor et al. 1994).

Managing transitions: A critical function in health care is managing patient transitions to different settings (e.g., rehabilitation, long-term care) and treatment modalities while protecting gains from prior treatment. This is especially significant for older people, whose illnesses may be manifest in a variety of ways over time and under changing personal circumstances. Transfers may occur within a single facility when different areas are certified for different levels of care, or from an acute-care facility to an assisted-living residence or to home care. Individual cases vary in the combination of features offered, making it difficult to ascertain the features most helpful to patients. Specially trained nursing personnel and customized task definitions offer promise (Naylor et al. 1994).

Where does Medicare, the primary payer for non–long-term care health services, fit with the varied and often complex needs of today's growing older population?

In 1966, one in 11 individuals was 65 or older. In 2006, that number has increased to almost one in eight, and as the first of the baby boomers reaches 65 in 2011, that ratio will continue to increase. Visits to doctors by older persons in 1966 were largely for acute diseases, whereas today visits are largely for chronic illnesses that include hypertension, diabetes, heart disease, pulmonary disease, arthritis, dementia, and depression. It was uncommon in the past for an older individual to be taking more than two or three medications. Today, older people regularly take eight, nine, or ten prescription drugs (plus any number of over-the-counter and/or nontraditional/alternative remedies).

Four decades ago payment for health care was cost based. Today, most payment is prospective, with far more and often expensive medical and surgical procedures available and utilized than in the past.

Where does Medicare, the primary payer for non–long-term care health services, fit with the varied and often complex needs of today's growing older population?

Yet, while much has changed in 40 years, many things have not. For example, in any given community the hospital and its emergency room usually remains the dominant care provider. Today, older persons account for about 50 percent of all hospital discharges, in contrast to 1967, when it was one in four. Length of stay in acute care hospitals has decreased from 14 to six days. Chronic problems are often ignored, and functional status often deteriorates among hospitalized older patients. Hospital discharges often do not include well-formulated follow-up care plans.

Provider Medicare fee schedules are unduly influenced by subspecialists, usually to the detriment of internists, family physicians, and geriatricians, who provide much of the actual care, spend time with families, etc.

Many innovative and useful additions to acute and chronic care for older persons have occurred over the last 50 years. Some examples include the following:

- Acute Care for Geriatrics (ACE) units in hospitals have been instituted, whereby trained staff work together to minimize the many hazards older people face while hospitalized, to maximize physical and cognitive function, and to optimize transitions to postacute care (home, rehabilitation, long-term care).

- Special programs to prevent delirium, a major contributor to morbidity and even mortality in older hospitalized individuals, have been successfully implemented.

- Focused programs on transitioning from hospital to home have significantly reduced hospital readmissions.

- Specially designed personal health records have been successfully used to guide and coach patients and families through the postacute care period.

- An interdisciplinary team approach in the ambulatory setting has helped coordinate and streamline necessary and appropriate care not routinely available in most outpatient settings.

- Chronic disease models, including self-management support, educating patients and families, group visits, case management, modern information system support, have been devised, modified, and successfully implemented.

Yet, none of these programs or models have been widely disseminated. Why is this so? Factors that determine the rate of adoption of innovations depend upon at least three broad and complex factors: the innovation itself, the external environment, and the adopting organization. Included under the innovation are degree of culture change required, degree of coordination across departments required, and the importance of perceived net benefits. The external environment comprises market pressures, regulatory compliance, and reimbursement incentives. The adopting organization requires senior management support, presence of champions and data that persuades the organization to direct adequate resources. Until, and including the present, the above have functioned as significant barriers to diffusion.

The health care delivery system for older persons basically has not changed—in spite of a very different older population today—from 40 years ago.

Additionally, there is no political advocacy for essential changes, and virtually no money for even ongoing support of important efforts, let alone innovative or expanded programs.

Thus, the health care delivery system for older persons basically has not changed—in spite of a very different older population today—from 40 years ago. Nor can it be changed unless the reimbursement system supporting it changes as well. The fragmentation of health care itself and reimbursement system (or lack thereof, e.g., long-term care) and misaligned incentives are major ongoing problems. Hence, in spite of the many medical and technicologic advances and the many positive contributions brought about by Medicare, health care for older persons is fragmented and suboptimally financed.

Unified financing: Our system of multiple payers, with different financial sources for different components of care, complicates the adoption, guarantee of, and access to standards of care throughout the spectrum. Standards of care are composed of the number of services that are included and the quality of these services. Standards of access depend on the resources of the provider and the financial means of the patient. Notwithstanding the nation's remarkable assets in scientific medicine and in the diversity of health care services, social, economic, racial, and ethnic disparities all contribute to an unimpressive showing on several indicators of population health. The United States is the only major developed nation that lacks an overall financial system of universal coverage (Docteur et al. 2003).

Employers at all levels have an interest in protecting the health and productive capacity of the labor supply.

This is certainly an issue for the care of older persons since they are more likely to require a diversity of care components in different stages of chronic conditions and functional deficits. As a result of fragmentation of the health sector, some of the cost-control methods used by financial organizations in health care result in barriers to needed services or in restrictions of eligibility to those most likely to need care. Thus, in addition to wasting the opportunity to maintain health, such practices may shift responsibility to public agencies and eventually to taxpayers.

Promoting a common goal: Medicare was enacted, in part, because diverse groups (e.g., local governments, employers, and adult children of older people) perceived that they shared a problem to which the legislation offered an appropriate and feasible solution. Similarly, the possible stakeholders in the redesign of health care financing today are many and should be encouraged to unite behind a common objective. Health care professionals would prefer to use their skills maximally, to receive a fair return on their personal investment, and to have team support for accomplishing their treatment goals.

Employers at all levels have an interest in protecting the health and productive capacity of the labor supply, and in controlling costs by applying economies of scale to underwriting and administration of health care financing. Small employers and their workers would enjoy the protection of a larger risk pool. Large corporations, such as General Motors, would be more competitive in the global market were the United States to have universal national health insurance. People would not need to defer major medical treatment until age 65, and those with chronic diseases and survivors of cancer would have more consistent eligibility. They would also be protected against employer bankruptcy or layoffs. State and local governments would benefit by having national uniform benefits and quality standards supported by national financing.

Older persons in the workplace: Health care for older working people will become increasingly important as more men and women age 65 and older continue to perform both paid and voluntary work. A shortage of younger workers, as well as a desire to work and a necessity to earn an income, are the major factors contributing to this phenomenon. There are 3 million men and 2.3 million women 65 and over in the U.S. labor force today (ILC-ESOP Database 2006). Yet health statistics

tend to refer to persons aged 55 and over as "older workers" (the Department of Labor still defines older workers as 40 and over), and there is little information on workers past 65.

A recent poll conducted by Rutgers University found that nearly seven in ten workers surveyed plan to keep working after age 65, many because of financial need (Reynolds et al. 2005). A number of business firms faced with the impending retirement of experienced baby boomers have expressed concerns about a shortage of skilled labor. While only a limited number of employers are reaching out to older workers to meet their personnel needs, that number may increase, creating job opportunities (*Wall Street Journal* 2004).

The relationship between work and health at older ages is varied. Involuntary job loss may have adverse effects on the physical and mental health of older workers, according to a study by a team at Yale University (Gallo et al. 2000), while reemployment was associated with better physical functioning and mental health. Job loss at ages approaching usual retirement age is particularly troubling because workers may be counting on savings in that period to help finance retirement. Thus, labor market conditions should be considered among the environmental threats to the physical and mental health of older persons with which geriatrics is concerned.

For older clients who remain gainfully employed, the preservation of health involves initiatives both on and off the worksite. This is especially worth remembering because people who need to work, as opposed to those who like to work, may not be in the best bargaining position with regard to conditions of employment, which encompasses not only physical surroundings but also irregularity and tempo of work and autonomy.

An integrated care system requires that occupational health and safety as applied to older workers be conceptualized and operationalized. A major step in that direction is the discussion and recommendations in a report issued by the National Research Council and the Institute of Medicine (2004).

In addition to health protection at the worksite, the maintenance of physical, cognitive, and social fitness for work should be part of the general health program for older persons so that those who wish to work are able to do so.

Practical questions arise because of these changes in potential and actual activity levels (American Geriatrics Society 2000). Are clinics that focus on older persons capable of assuring a continuum of care? Do physicians and allied health professionals assume that older patients are retired, and are they oblivious to job requirements when prescribing particular regimens and when visit schedules are made? Are health professionals alert to stress on the job for older patients? Are they alert to the possibility of job loss?

5. Clinical autonomy, guided by the body of evidence-based medicine produced by scientific research and blended with clinician experiential expertise, is essential to optimal quality of care for older Americans.

Evidence-based medicine may be defined as a serious effort to provide standards of care in accord with the best scientific medical knowledge and to assure the quality of clinical decisions. It has gained much acceptance in geriatric care.

A report by the Institute of Medicine (2001) recommended development and adoption of

guidelines for 15 or more major conditions. The 15 conditions, identified by the Medical Expenditure Panel Survey of 2000, include diseases responsible for most mortality and morbidity.

Notwithstanding an increasing reliance upon sophisticated new drugs and treatments, older persons are underrepresented or even excluded from clinical trials.

Assembling evidence that is well supported by scientific studies is challenging, as it depends upon several criteria, including the comparison of a new procedure with established procedures and replication of results. Large studies likely to support reliable evaluations are very expensive and often encounter resistance from professional or commercial parties that may have a stake in existing patterns of care. Creating a body of evidence-based medicine requires attentive monitoring and guidance of research methodology, as well as the commitment by various sectors to the importance of rational practices in medicine and health care (Bours et al. 1998; Leipzig 2005).

The care of older people may be affected by problems that exist both in the research and the application of this process. With regard to research, since so many older persons have more than one significant health condition, the scientific assessment of efficacy of specific treatment modalities in the patient with comorbidities should be included in trials. Yet evidence-based medicine is being developed on a condition-by-condition basis.

The application phase has other difficulties, one of which concerns use of recommended treatment protocols in widely diffused fee-for-service practice situations, where there may be too few patients with a given condition to predict the likelihood of benefit to a particular patient. Boyd et al. (2005) explored the potentially ruinous effects of such piecemeal standard-setting by professional groups and government review agencies. The daily application of the protocol for each of several conditions would not only be so burdensome for the patient as to jeopardize compliance but also would invite various adverse interactions. A holistic approach is required so that reasonable protocols for frequently found combinations of conditions may be developed.

Notwithstanding an increasing reliance upon sophisticated new drugs and treatments, older persons are underrepresented or even excluded from clinical trials, limiting the available knowledge of the effect of these treatments. In fact, the FDA does not require inclusion of older persons in clinical trials. Ensuring the safety and efficacy of interventions requires greater representation of older persons (Butler and Nyberg 2002).

Medicare: Part D: Insurance company practices that affect utilization may undermine the protection that clinical autonomy affords patients. These practices may serve short-run cost goals but can result in negative long-term health and economic consequences. Utilization management controls, firmly in place with regard to surgery, mental health visits, and rehabilitation services, are attracting attention in relation to Part D of

Medicare, where hundreds of drug plans may affect selection of therapies. The tools include quantity limits, prior authorization, and step therapy (e.g., covering a specific drug only if certain other drugs are tried first).

Furthermore, each plan uses placement of medications in different cost-sharing categories as a means of influencing which drugs will be prescribed. Many exceptions that are built into Part D undermine the regulations that were intended to ensure access to needed drugs. Benefit information that the plans provide also is far from adequate. Because of these and other program characteristics, patients are poorly equipped to make coverage choices that can meet their present and future needs.

This current problem heightens the importance of clinical autonomy exercised by practitioners on behalf of Medicare enrollees whom they serve. Sackett et al. note that "good doctors use both individual clinical expertise and the best available external evidence, and neither alone is enough" (Sackett et al. 1996).

The concept of provider autonomy requires that they keep abreast of new and changing developments within their disciplines. It also implies endorsement of an integrated, interdisciplinary approach to clinical care. Additionally, provider autonomy must include an emphasis on the key role of communication with and education of patients, thereby maximizing patients' rights to incorporate their preferences and choices into the decision-making process.

Decision making should be within the domain of an open, comprehensible, and transparent relationship between providers and patients, not within the purview of insurance policy staff.

6. Investments in aging research—basic biology, age-related diseases, clinical and health services delivery—are crucial to improving care for current and future generations of older Americans.

There are compelling economic as well as health-related reasons to strongly support an increasing investment in biomedical research. According to the Task Force on Aging Research Funding (2004), in 25 years the number of Americans age 65 and older will double to more than 70 million. Currently, health care spending increases by almost 10 percent a year. If by that time research has not reduced further the incidence of age-related diseases, the cost will be devastating. For example, the cost of Alzheimer's disease, the major cause of dementia in the United States, is in the range of $100 billion annually. Concerted research efforts in the clinical and basic neurosciences in the last 30 years have resulted in marked advances in our understanding of its clinical course and mechanisms, as well as new therapeutic directions. Without a cure, it is estimated that by 2040, 14 million people will have Alzheimer's disease. This will result in a national financial crisis with devastating consequences for both family life and national productivity (Rapoport and Wright 2006).

Basic biology of aging: Research that focuses on the basic biological changes that occur with aging, and the diseases associated with aging, will contribute to the development of more effective and affordable care. These include molecular and cellular factors most responsible for aging in humans; the role of the environment and diet in how people age; the role of genetics in aging; hormonal, metabolic, and immune factors in aging; why diseases such as diabetes and Alzheimer's occur with greater frequency in the older population; and how to moderate the impact of nonfatal diseases of old age, such as arthritis, and auditory and visual impairment.

Age-related diseases: Continuing and expanding research efforts concentrated on prevalent conditions such as stroke, Parkinson's disease, diabetes, delirium, dementias, arthritides, heart disease, and many others are necessary.

Clinical: Clinical research covering both broad and narrowly focused areas is mandatory for care to improve. Medication use and misuse is but one example of a broad area necessitating more study. Health promotion and disease prevention require ongoing studies to better define what measures are efficacious for the older population.

Health services delivery: Research examining better and more efficient ways and systems for getting care to older persons is increasingly important as this population grows.

We recommend that 1 percent of Medicare expenditures be invested in aging research ($3 billion in 2006) conducted by the National Institute on Aging (NIA). Phased in over a five-year period, these amounts would be used for:

1) $1 billion for basic biology (year 1, $200 to $400 million; year 2, to $500 million; year 3, to $650 million; year 4, to $800 million; year 5, to $1 billion) including genomics and regenerative medicine *relevant to longevity science*.

2) $1 billion to the NIA for age-related diseases, in collaboration with disease-specific institutes, coordinated through a trans-NIH decision-making committee and guided by the NIA.

3) $500 million for clinical trials and translational research, with proportionate representation of older persons (65 and over) including head-to-head studies of drugs, lifestyle comparisons, cost-effective studies, and a national system for postmarketing drug surveillance (phase-in funding).

4) $500 million for a national preventive medicine research initiative *through the lifespan* including studies of safety and health in the home and workplace, of physical inactivity and obesity, and genetic and other early-life pathological influences; studies of social-behavioral and economic means to effect positive changes in health behavior, since the nation is confronting a health crisis in obesity and its associated medical conditions that could lower life expectancy (Olshansky 2005); studies to evaluate and improve health services delivery (via the U.S. Health and Human Services Agency for Healthcare Research and Quality).

In addition, funds would be used to support research training and necessary infrastructure development, including human longitudinal study programs, laboratories and equipment, bioinformatics, and animal resources.

7. Universal health coverage encompassing all age groups provides the best opportunity for assuring access to a continuum of care that can result in a healthier population experiencing a better quality of life.

Failing to provide universal access to health insurance represents, among many things, a missed opportunity to establish better health behaviors and provide the primary and preventive services that will improve health in older age. Individuals who receive appropriate primary and preventive health services and develop better health habits in earlier years will likely survive longer, and have a better chance to postpone disability to the very end of life.

The development of a universal system of national health coverage would address the needs of all Americans.

Presently, for most people in the United States, health insurance coverage is a necessary, if not sufficient, means of obtaining health care. Despite the persistent myth that individuals without health insurance obtain the care they need at safety-net hospitals, emergency rooms and clinics, and through private charity care, the uninsured face significant barriers to care. The Institute of Medicine reports that more than 18,000 deaths in the United States each year are caused by lack of health insurance. Adults without health insurance are much less likely than adults with public or private insurance to have a regular source of care and, as a result, are less likely to receive preventive services, disease screening, early detection and routine care for chronic conditions, or undergo elective tests and procedures (Berk et al. 1995; Weissman and Epstein 1994). Therefore, the uninsured have disproportionately high hospital discharge rates for "avoidable hospitalizations," which are associated with deficient access to primary care, including disease prevention (Billings et al. 1996; Gusmano et al. 2006; Weissman et al. 1992).

The failure to receive timely medical treatment often leads to significant health problems. Although Medicare helps to reduce the financial barriers to care, for many beneficiaries, it may be too late to overcome a lifetime of delayed treatment. The consequences of being uninsured, moreover, are not limited to the inadequate use of routine and preventive health services. Uninsured adults are also more likely to go without care for serious health conditions (Weisz et al. 2004).

Despite concerns that health insurance leads people to "overconsume" medical care services (the so-called moral hazard problem) (Nyman 2004), evidence suggests that health insurance encourages the appropriate use of health care services. In contrast, a lack of health insurance deters individuals from receiving appropriate care, leading to unnecessary and costly hospitalizations. For example, studies often find that uninsured adults are more likely to be hospitalized for ambulatory care–sensitive conditions (e.g., hospitalizations for congestive heart failure, asthma, and other chronic conditions). These hospitalizations could have been prevented with timely, appropriate primary care.

Thus, we support the development of a universal system of national health coverage that addresses the needs of all Americans.

In providing universal coverage for all age groups in the United States, policymakers have much to learn from the Medicare program, which is presently limited to older persons, the permanently disabled, those with amyotrophic lateral sclerosis, and endstage renal disease. With the exception of the recently passed prescription drug benefit, Medicare is simple to understand. Eligibility occurs once in a lifetime. The program has no means testing—it covers both rich and poor. Medicare, rather than private managed-care plans, affords the greatest choice of physician and hospital. Medicare has the lowest administrative costs of any health insurance plan in the United States, which means that almost all of the money

collected to pay for the program goes to providing care for the beneficiary. Although Medicare needs improvements, there is much to learn from Medicare in shaping a universal health insurance program for the United States.

8. The workforce to provide high-quality health-care for the current and future older generations of Americans needs to be culturally and ethnically diverse, professionally trained, horizontally integrated into interdisciplinary teams, and financially well supported.

While an interdisciplinary team approach to health care is helpful for subgroups of all age groups, it is especially important in the case of a significant portion of older persons. The expertise and experience of many disciplines can greatly contribute to the care of older individuals and families. Often, one clinician, a physician or a nurse practitioner for example, cannot possibly provide the knowledge, skills, or time necessary to deliver optimum care.

Such professions include nurses, social workers, pharmacists, physicians, nutritionists, nurse practitioners, physician assistants, physical therapists, occupational therapists, speech therapists, and care managers. Both paid and unpaid caregivers should also be part of the team. All disciplines need to be readily accessible, although, depending on the clinical setting, only a few may be available at any given time. Some older persons require only one or two disciplines in acute or chronic care; others may need assistance from most. Accessibility and flexibility are key ingredients.

Funding for team care development and training has become almost nonexistent. This must change. Governmental and nongovernmental organizations should invest in interdisciplinary team care training. Team care can be the most effective, efficient, and coordinated way of health care delivery to appropriate older people.

As the older population grows, minority groups will occupy increasingly significant percentages of older persons. Also, older minority individuals have a disproportionately large share of chronic diseases, leading to increased morbidity and mortality. For these and other reasons, the health care delivery system needs far more minority clinicians and providers. Meaningful incentives to attract and retain these individuals are crucial.

It is essential that the education and training received in each professional discipline be focused upon the unique principles of care for older persons. For example, there is a difference between the knowledge, skills, and attitudes required of a physical therapist primarily dealing with young spinal cord injury patients and one caring primarily for older, cognitively impaired individuals after a stroke or with Parkinson's disease.

Other disciplines such as nurse's aides in long-term care, hospital and clinic administrators, home care nurses and aides, and others also require specialized instruction in caring for older adults.

Without a workforce as outlined above, the United States will be ill prepared to meet the very real challenges presented in caring for the rapidly expanding older population.

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PR08–2006–2K–JSP