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Commentaries on "The Future History of Geriatrics: Geriatrics at the Crossroads" and Author Response

Geriatrics at the Crossroads—or Simply Early in the Journey?

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IN his provocative thought-piece, Dr. Kane suggests that geriatrics is at a crossroads (1). He does acknowledge that attempts have been made to "gerontologize" other fields of medicine but suggests that geriatrics has now reached the point where the next stage in its journey requires redirection to a focus on chronic disease as its defining niche.

From my perspective, however, for geriatrics to move forward would not entail redirection but simply reinforcement of our determination to disseminate widely our traditional expertise in chronic disease and related domains—including frailty and other geriatric syndromes. Our geriatric diaspora should spread ever more widely and become integrated as seamlessly as possible into all of internal medicine and family practice, surgery and its subspecialties and allied disciplines, neurology and psychiatry, rehabilitation, and beyond—in short, throughout medicine and the many other health care disciplines engaged in care of the elderly population, all in the interest of improved care of the burgeoning numbers and progressive aging of elderly Americans. The prospect of providing that care in an appropriate and cost-effective manner threatens to overwhelm our health care system unless anticipatory changes in education, training, and research are made now and in the near future. However, effectively meeting this demographic imperative both qualitatively and quantitatively also represents the future of our profession. Thus geriatrics represents an opportunity for all the specialties and subspecialties to flourish in the 21st century.

Thus I would argue that rather than standing at a crossroads, we in geriatrics are simply still rather early in our journey toward our necessary position of leadership in medicine, still in the lag phase of what is certain to become logarithmic growth and development for several decades to come. As pointed out by Dr. Kane, we must overcome the disincentives, disinterest, denial, and many other barriers to our progress that are so widespread both within medicine and also in the "ageist" world at large, challenges that might discourage all but the most dedicated, determined, and optimistic among us.

Yet there are unmistakable signs of progress in our journey toward respect, recognition, and positions of leadership and responsibility. Yes, the number of certified geriatricians continues to decline as many "grandfathers" elect not to be recertified. However, those that do are clearly dedicated and competent, and all those certified since 1994 are not only committed to excellence in care of the elderly population but also have actually been *trained* to practice expert geriatrics. The quality of our national meetings improves year by year. The sophistication and results of our research are receiving recognition, and competition for funds from the National Institute on Aging becomes keener each year. Our leading journals are becoming more selective as the quality of submissions improves (2). Finally, those who choose geriatrics clearly recognize and embrace their role as ambassadors, pioneers, and pacesetters; these are forward-looking physicians whose contributions as academic and community leaders will be leveraged many times over through those whom they teach by precept and personal example throughout long and satisfying careers.

So I would urge us as geriatricians of the present and future to press on with our journey along the path we are already embarked upon—to "gerontologize" medicine and our partner health professions in the interest of excellent care of our older citizens.

Acknowledgment

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Commentary

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Dr. Kane (1) has succinctly described roles for current and future geriatricians. In addition to defining clinical settings,

he defines clinical tasks for which health professionals, including geriatricians, other physician specialists, and nurse clinicians, would benefit from the application of the expanding knowledge base of geriatric medicine to patient care. Dr. Kane labels geriatric medicine's current approach to these multiple roles as "schizophrenic," and he suggests that geriatrics should "declare its intentions" with regard to its future. Although acknowledging that the proposed roles for geriatrics are "not all mutually exclusive," Kane concludes that geriatricians should define themselves more explicitly as experts in the management of chronic disease.

Kane's premises that geriatric medicine is not currently a popular career choice for young physicians and that the principles of geriatric practice incorporate many of the elements of quality chronic care are accurate. His projection on the expected short-term decline in *certified* geriatricians is supported by a recent analysis of American Board of Internal Medicine (ABIM) and American Board of Family Practice certification and recertification data (2).

The specific reasons that geriatricians are not returning for recertification are not known, but they are probably more complex than those Kane proposes. For instance, it is of interest that an ABIM analysis shows recertification rates for fellowship-trained candidates that are below 60%. For geriatricians originally certified by the ABIM in 1998 and 1990, 59% who were fellowship trained returned for recertification versus 43% of those certified through the practice pathway (A. Wiley and L. Gross, unpublished data, 2001).

A pluralistic approach to geriatric medicine's future role in the United States is more likely to attract young physicians and influence the quality of medical care provided to older adults, than, as Kane believes, a premature narrowing of geriatric medicine's objectives. In my community, Cincinnati and southwestern Ohio, dozens of geriatric medicine and geriatric psychiatry fellows have been trained since the early 1980s, and many remain in the area. Among these geriatricians, some teach and lead research activity at the College of Medicine, some are in full-time nursing home and home care practices, some lead hospice programs, some staff the local Program of All-Inclusive Care for the Elderly (PACE) site, some have developed hospital-based consultation or special care programs, some serve as Medical Directors in Medicare managed-care divisions of insurance companies, some support and staff community mental health programs, and some are in primary care practice. Although small in number, these geriatricians provide leadership and education that widely influences the quality of care received by older adults in their communities. As Kane suggests, a common theme among these varied roles may be the application of the principles of chronic disease management, but the approach is pluralistic—not a narrowing of focus.

Geriatric medicine in the United States remains a young discipline. The aging of the U.S. population will have a major impact on both the practice of medicine and the future health care costs of the elderly population. The demand for the clinical, educational, and management skills of geriatricians from patients, their families, and the leaders of delivery systems will continue to grow. Public and private resources will be applied to attract young physicians into geriatric medicine careers and to ensure that every physician develops skills specific to the care of the older adult. The principles of geriatric medicine practice that developed over the past 50 years, if widely applied to the care of older Americans, will provide for the delivery of quality, cost-effective care for well and frail elderly and older adults with chronic illness.

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Commentary

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Clinical geriatrics as described by Dr. Kane (1) is in the throes of another midlife crisis, having gone from a youthful promise to rejuvenate the old at no excess cost to fear of extinction as a profession. Kane proposes a solution that sounds to me like another attempt to repackage our product and sell it as new and improved, as the *new* model for complex chronic disease management. In support of this proposal, he offers the results of outcome studies of geriatric care that demonstrate effectiveness of "geriatric care models." The problem with such a broad generalization is that there are many geriatric care models and it is difficult in any given report to determine what in the black box accounted for the results, or lack of them.

My view of this literature, including the recent excellent Veterans Administration trial of inpatient and outpatient Geriatric Evaluation and Management Units, is that our results are consistent but modest, largely qualitative, and transient (2). However, having said that, I do think our outcomes should be viewed in perspective. Our results are at least as impressive, for example, as influential cardiovascular drug trials and phase II chemotherapy trials in oncology. The way the data are presented can hide this important fact. Statistical significance and relative risk statements obscure small absolute risk improvements in so-called hard end points. Increasingly, disease-model trialists are examining the quality of life achieved by interventions. Expert panels now routinely consider the incremental cost of interventions. Geriatrics should explicitly present our clinical outcomes in the common language of outcomes, for example, number needed to treat, in order to demonstrate our bang for the buck on par with prestigious organ- and disease-based specialties.

One approach is to engage with the other specialties. The Hartford Foundation is sponsoring an exciting experiment to introduce geriatric training into the surgical and medical specialties. Hartford has partnered, for example, with the American Society of Clinical Oncology to support innovative joint training in oncology and geriatrics; this is an experiment, if you will, in hybridization. This has already born fruit in the inclusion of standardized functional measures for elderly subjects recruited to studies conducted by the cooperative trials groups. This trend should be encouraged by requiring all sponsored clinical research to account for age and functional status at recruitment and for outcomes as they are now for race and gender. One might worry that, if every specialty learns a few functional assessment tools, geriatricians may become redundant. I doubt this. Surgeons want to operate; gastroenterologists want to scope. Rather, the Hartford model and the requirement that age and functional status be reported for trials ought to create awareness and a referral base for geriatrics among the specialties.

My second concern is that Dr. Kane raised but did not address the problem of recruitment to the field. In our Darwinian world, the sexy, not the strong, inherit the niche. In the United States, geriatricians are becoming an endangered species; our reproductive rate appears to be falling below population replacement levels (3). The United Kingdom environment offers a comparison case. Recently the National Health Service published a series of hybrid policy and evidence-based National Service Frameworks, including the National Service Framework for Older People. Knowledgeable experts have criticized the document, but two things stand out to a U. S. reader (4). First, the U. K. environment supports population-level policy that trains geriatric consultants in all levels of care, that is, long term, intermediate, acute, and community. It mandates their integration into delivery of care to the elderly population, something unlikely to happen here. Second, the standards adopt explicit "disease" management guidelines for geriatric syndromes for which there are adequate evidence-based data. Unfortunately, only falls met the criteria for inclusion, but the falls standard is adopted on par with stroke-management guidelines. This both rewards past performance and challenges future British geriatricians to establish a research base for clinical practice. In the U. K., geriatricians are not the rare birds we are in the United States. In 1993, geriatricians comprised 17% of the National Health Service medical specialist consultant workforce, the largest single specialty represented. This dropped to 15% by 1999, but the field had increased overall by 22% (5).

Darwinian evolution worked slowly. Our views of evolution have changed as a result of the research of the late Stephen Jay Gould and others who have shown that saltatory evolution works rapidly in response to environmental change. Random chance favors the lucky mutant and the generalist. If we do not wish to trust to luck, I suggest our future favors a generalist strategy, and a wide net for recruiting the next generation.

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The Adolescence of Geriatrics

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The question is not What will geriatrics be when it grows up? but When will geriatrics grow up? As an adolescent specialty, geriatrics has enjoyed "experimenting" in various areas of the health care playground, some a little more risky (e.g., managed care) than others. But, as adolescents who learn from their experience (remember that the most curious adolescents learn the most, although they are usually the biggest risk takers), geriatricians have learned where to be successful, and where not. The step now is to move into adult roles of leadership, innovation, vision, and yes, influence and power.

Based on Kane's (1) declaration of intentions, which I agree are not mutually exclusive, here are some suggestions for the future of geriatrics.

Models of Care

Geriatricians need to persevere in their development of innovative models of care, whether it is for older persons with chronic diseases or for older persons who have not yet developed them. (Geriatric preventive care will continue to struggle for years until it proves itself, but this is no reason to give up!) (2) One of the basic elements leading to success of geriatric care models is "targeting," that is, knowing which patients will benefit most from a specific intervention (3,4). Successful geriatric models also require "control" in decision-making processes, especially when it comes to frail chronically ill older persons (5). The antithesis of this is seen from previous unsuccessful studies involving geriatric consultation (6,7). Good ideas are only good ideas unless they are implemented. Another ingredient for success is leadership, as is the case for other models of care that improve outcomes such as those involving Total Quality Management (8).

So, what innovative model of care would allow targeting of diverse services (from high touch to high "tech"), would benefit from control in medical decision making for frail older persons, and would prosper from geriatric leadership?

What model of care would also grant geriatrics a bit of influence and power? (Please do not let the word *power* frighten people. Whenever there are competing forces, as there are in health care, a *balance* of power is essential to ensure judicious use and delivery of services.) The next model of care that would change the future of geriatrics is The Geriatric Hospital (9). Before the critics claim, "Ridiculous, geriatricians have enough to do in chronic care and our place is in long-term care, not acute care," let me say this. This suggestion in no way puts less importance on areas of long-term care (LTC). Rather, in order for LTC to survive, and thrive, it needs geriatric hospitals. LTC gets a very thin, disproportionate piece of the Medicare pie, compared with the approximately 40% of the Medicare budget that acute care receives. If geriatric principles were to influence acute care more, prehospital and posthospital care could finally be connected, so that a true continuum of care would have a chance.

Another reason for geriatric hospitals is that currently, hospitals are dangerous places for the elderly population (10), who account for approximately 40% of all U.S. hospital admissions (11). Because this statistic includes patients of all ages, rates are higher than this in adult hospitals, and are likely to be even higher in rural areas if elderly populations are disproportionately high. At our hospital, hospitalization rates are higher for those aged 75 and older (usually more frail) compared with those 65–74 years old. Why does the care of chronically ill older persons spin out of control in the hospital? How often do clinicians struggle with the complex acutely ill frail older person for whom the more they do, the more trouble they cause? How often do our older patients come out of the hospital in worse functional shape than when they went in? It is not because of bad medicine or bad care. It is because the system is not set up for the special needs of these patients. Although Acute Care for the Elderly (ACE) Units have improved the situation dramatically (12), a systemwide change has to occur. Again, I hear the critics say, "I can see it happen. St. Elsewhere will become St. Elsewhere Geriatric Hospital, and all we'll have is a hospital full of frail elderly people, more of whom will suffer at the hand of high technology." But a change of name is not enough. Two other transformations have to occur. First, solid geriatric leaders have to become directors of hospitals. Second, these leaders have to become heads of *true* geriatric departments. By true departments, I mean those that have within them diverse divisions such as cardiology, urology, and orthopedics, to name a few. Now the critics are laughing as I hear them say, "Sure, geriatricians will be telling those specialties what to do?" Of course not. However, geriatricians can change the culture of how things are done, of what is important. It just takes time and perseverance. Geriatricians have done this for nursing home care, for home care, and for subacute or posthospital care. It is time to bring things full circle.

Most of us have resisted utilizing medical technology to the extent that other specialties have, and rightfully so. We realize that overuse of such technology is not the answer to improving functional outcomes among older persons. However, targeting such technology, controlling its utilization, and leading other specialties in directions that make a difference in functional life expectancy, not just mortality figures, will bring us out of the crossroads and into the mainstream of modern medicine. Without this leadership role in hospital care and in technology, geriatricians, as Kane writes, will merely continue to be "cross-subsidized to the extent they are credited with attracting a patient base of high users of medical technology."

Education

All medical school graduates are expected to *master* (not just be *acquainted* with) geriatric principles. Although there is some progress, thanks to the Association of American Medical Colleges/John A. Hartford "Enhancing Gerontology and Geriatrics Medicine Education in Undergraduate Medical Education" grant, the John A. Hartford project "Increasing Geriatrics Expertise in Surgical and Related Medical Specialties," and the Geriatrics Academic Career Award grants from the Bureau of Health Professionals, geriatrics as a specialty area in medical education has a way to go. For example, two commonly used board review books for United States Medical Licensing Examination (USMLE) Step 2 have chapters on multiple subspecialties within Internal Medicine, except Geriatrics (13,14). One of the books has a half of a page on normal aging (13) and the other has a half of a page on delirium, but it is under a chapter at the end of the book called "Symptoms Signs and Ill-Defined Conditions" (14). Should we consider geriatric syndromes ill defined? Two review books for USMLE Step 3 also have chapters on multiple subspecialties within Internal Medicine, but they lack chapters on Geriatrics (15,16). It gets worse! Of three Internal Medicine Board Review books, two have no chapters dedicated to geriatrics and one has only a small section within a chapter called "Multidisciplinary Skills for the Internist."

As reluctant as we are to admit it, testing drives what students learn (17). Geriatrics requires a stronger presence on the boards. Another route to reach all medical students is to require that all medical schools have a formal geriatrics rotation. Although there may be some debate as to what is the best way to teach the principles of geriatrics (e.g., integrative model within other courses vs block rotation), this would be one tangible method to ensure that *all* graduates of medical education receive this minimum geriatric educational opportunity. For those readers who are doubtful that "geriatrics" has enough influence to pull this off, I would offer the example of the Family Practice "movement" that resulted in a mandate a few years ago that *all* medical schools require a rotation in this specialty. Who were the movers and shakers here? Some family medicine academicians would answer "the medical students." As those of you who are on curriculum management committees can attest to, not only do tests drive what students learn, but students are also a driving force or at least a loud voice, in decisions related to curriculum. Could we not "use" our students to help our cause?

After reviewing Kane's article, I conducted an informal survey of third-year students during an ambulatory care class (response rate of 24/30). The students were at the end of their third year. They were asked to "pretend that 10 years from now, you are taking care of a 75-year-old patient with one of the following disorders/diseases/issues. Rank in order the type of physician you think you would have learned the most pertinent and useful information from about this disorder/disease/issue" (Table 1). Students were given three

choices: geriatricians, general internists, or other specialty. The disorders, diseases, and issues were taken directly from the table of contents of the *Geriatrics at Your Fingertips* handbook (18). Although two were ranked first choice by 100% of students (falls and end-of-life care), a less than desirable percentage of students ranked geriatricians as first choice for such disorder, disease, or issue as hearing impairment, musculoskeletal disorders, pressure ulcers, and urinary incontinence. Although this was a small survey, it begs the question, How can we expect mastery of geriatric principles by students if they do not see geriatricians as the masters in these areas? The problem (as most other geriatric problems are) is multifactorial: there are changes in health care economics, increases in clinical loads, and competition for research funding. These have all pushed medical education onto the back burner for academic faculty (19).

At least one solution is to form an "Academies Collaborative." One model of an Academies Collaborative (20) has defined four major goals for its work, some of which, we should be proud to say, have been done to some extent among geriatric academic centers but could be solidified through a more formal academic collaborative. These goals are as follows: first, information sharing and infrastructure development; second, educational scholarship and research; third, national resource function, that is, develop and share nationally a strategic approach to medical education; and fourth, advocacy for the educational mission of medical schools (20).

Table 1. Informal Survey of Third-Year Medical Students

Disorder/Disease/Issue	Percent
Normal age-related changes	63
Initial visit (general assess.)	25
Pharmacotherapy/polypharmacy	88
Alcohol/tobacco abuse	13
Anticoagulation	17
Anxiety	29
Cardiovascular disease	8
Delirium	75
Dementia	79
Depression	42
Dermatologic conditions	4
Endocrine disorders	4
Falls	100
Gastrointestinal diseases	4
Hearing impairment	63
Hematology/oncology	4
Infectious diseases	4
Malnutrition	79
Musculoskeletal disorders	25
Neurological disorders	4
Osteoporosis	92
Pain	54
End-of-life care	100
Preoperative/perioperative care	8
Pressure ulcers	63
Prevention	46
Psychotic disorders	4
Renal/prostate disorders	21
Sexual dysfunction	46
Sleep disorders	33
Urinary incontinence	38
Visual impairment	38
Women's health	13

Note: This survey gives the percent of students who ranked geriatricians as their first choice for type of physician from whom they think they would have learned the most pertinent and useful information about the listed disorders, diseases, or issues.

These are only two suggestions to enhance our future as geriatricians based on Kane's declaration of intentions. Whether or not one agrees with his declarations, I would hope that all those in the field of geriatrics realize that the most important statement he makes in his paper is that "geriatrics can control its destiny." Geriatrics is at a crossroads, and it may not matter if some geriatricians go this way, and some go that way. Two things are certain: geriatrics has come a long way, and it must keep going.

Acknowledgment

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Commentary

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Managing a multiplicity of illnesses, medications, and well-meaning family members is where geriatricians do their best work. This is where the burden of illness can overwhelm primary care providers who are not comfortable balancing the functional, physical, psychological, social, economic, and spiritual needs of the patient. This is where experience and judgment help in setting priorities and in making fundamental decisions on a plan of care.

How hard can 80-year-old kidneys be pushed to treat heart failure? How much is the heart failure contributing to the shortness of breath in the face of pulmonary fibrosis or 100 pack-years of smoking? Is the patient's poor sleep a result of heart disease, a bladder outlet obstruction, depression, boredom, or sore joints? Would any sleeping remedy help or just make matters worse, especially with regard to cognition? Most often, a combination of many of the above define the problem and perplex organ-specific physicians who like to place the patient either in or out of their acute model of care.

Although geriatrics might have a hard time deciding what it wants to be when it grows up, I am beyond midcareer and comfortable with life's decisions. The specialty of geriatrics is what I do and I mark every day in its company. The routine defines the practice and is not dissimilar to what many geriatricians do in an academic environment with more than modest clinical responsibilities. If we are to write the future history of geriatrics, perhaps we should be reminded that "history, although sometimes made up of the few acts of the great, is more often shaped by the many acts of the small" (1).

The practice is somewhat different from what many of my fellow internists are doing right down the corridor. Although we may see the same number of patients in a half-day, they know when I'm in town. The wheelchair traffic around my office space is the first hallmark. Next, we can do a head count of all the people moving in and out of each of my three exam rooms. I do not find burdensome the additional history provided by family, volunteers, home health aids, and the occasional case manager that shows up. Nurses also tell me my patients are the slowest when it comes to getting undressed. The dress–undress rate is rather fixed and can eat up much of our allocated time (either 20 or 40 minutes).

My patients are, on average, 7 years older than the rest of our internal medicine practice. We calculate panel size to determine patient volumes, and age does make some difference using ambulatory care group adjustment for case mix (2). Unfortunately, I have not been able to convince any of my colleagues that we should be counting all heads and not just patient heads when determining panel size.

Cognitive impairment in the outpatient setting is one of the great frailties of aging. In the nursing home, fully two thirds of my patients have dementia (3). Given the decade-long march of most dementias, particularly Alzheimer's disease, this is chronic disease care at its fullest. Another useful measure of disease burden and a reflection of chronic illness is the Charlson index (4). This too plays to Kane's definition of geriatrics and chronic disease care (5).

When life's journey nears its end, I am usually reminded not to stand in the way. Keeping someone pain free is often my last contact with patient and family. This practice is now central to clinical care for the aged, in harmony with Kane's concept of chronic disease care, and not just an end-of-life exercise. The stories I have heard these past 25 years are more a celebration of life than a surrender to our mortality.

Caught up in the day-to-day routine of seeing patients, "who can control his fate" (6)? We are defined by what we do, and at the same time we define the field. Chronic disease care with a premium on care is a juggling act for both the patient and the practitioner. It can be quite a performance. It includes a display of compassion, an understanding of the science of the day, and an honest recognition of the uncertainties about us. To care for the frail, we must understand the balance between autonomy and risk and appreciate the transitions from wellness to infirmity.

Acknowledgment

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Commentary

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I liked Kane's article (1), despite disagreeing with its primary theme and conclusions. Professor Kane should be ac-

knowledged for his views, which have been shaped by his wide clinical and academic experience, but I feel that he has produced a rather narrow, if not slightly depressing, perspective and vision of future geriatrics.

This article is intended for a U.S.-based readership because its focus is the development and future of American-style geriatric medical practice. From an overseas perspective, I have never quite understood why the lack of emphasis in the United States on *acute* geriatric care has gone relatively unchallenged by geriatricians. This area has been virtually ignored by Professor Kane and yet, in my view, may be the salvation of geriatrics in his country. The resurrection of the discipline of geriatric medicine in the United Kingdom in the 1970s was largely the result of a greater emphasis on acute hospital-based care of elderly frail people, allowing them access to investigations and procedures common and routine in younger people, and providing the opportunity to begin the process of rehabilitation. Geriatric medicine is now the largest medical subspecialty in the UK, and this power and influence now ensures that all other areas of older people's care is open to geriatric specialist involvement. This includes acute and rehabilitative care, primary and community care (intermediate care model), stroke medicine, various aspects of palliative and dementia care, and long-term care where it exists. General practitioners (GPs) are now being encouraged if not financially rewarded for taking specific professional interests in subspecialty areas such as care of the elderly.

The United States has made significant progress and gained remarkable achievements in geriatrics, including probably the best model of academic geriatric practice (compared with the slower development of academic geriatrics in Europe) (3), comprehensive geriatric assessment (4,5), and having the substantial influence of the American Geriatrics Society both professionally and politically. Professor Kane's views on the future options available may compromise these achievements. More optimism is needed. For example, I believe that geriatrics is an excellent model for guidelines if they are age sensitive, focused on the practical needs of older people, interdisciplinary, and evidence based. The recently published Falls Guidelines of the American Geriatrics Society are an excellent example of this and have been well received in Europe: They have prompted several unique European initiatives in this area (6).

Whilst I agree that practicing a Chronic Disease Model for older people should be professionally rewarding for geriatricians, this should not exclude their involvement in other important dimensions of the discipline discussed in the article and my commentary. It is true that geriatrics has been at the crossroads for many years in several countries, but this need not be seen as a major concern—this allows the discipline and its disciples to continue to be innovative and creative. There will always be a political agenda for the health care of older citizens, and this must be used to advantage in identifying need, emphasizing quality of life issues, and promoting good health in retirement, which is a perspective not discussed by Professor Kane.

If geriatricians go down a path of least resistance (Chronic Disease Model) and make no other detours, they will be depriving the U.S. population of the type of specialization that is paramount to achieving a healthier old age.

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Commentary

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Geriatrics is the youngest of the big clinical disciplines. Less than one century after the creation of the word "geriatrics" by the American-Austrian born Ignatus Nascher (1) and around 50 years after the British nomination as a distinct clinical discipline (2), "geriatrics thus faces a crossroads" (3). Nothing seems more natural and challenging.

The world was never as old as today, and it seems only one intermediate step of an incredible victory of hygiene, mother-and-child health, and adult medicine. Care to older persons does and will continue to contribute to this increase in life expectancy. At present, it is important to highlight similarities but also differences between the developed and developing world, as well as the United States of America and other developed countries, mainly within Europe with their individual health systems. In this respect, the somewhat pessimistic view of Professor Kane is not entirely shared on the other side of the Atlantic ocean. Nevertheless, difficulties also exist in Europe to position geriatrics positively amongst established medical disciplines and, in particular, internal medicine (4).

Geriatrics not only deals with well-defined diseases, but even more often with complex syndromes such as falls. Therefore, a broader knowledge of different medical specialties is needed, in which a holistic approach to geriatric patients is essential. However, geriatrics should not be lim-

ited to chronic care, even if geriatrics is "the epitome of good chronic care" (3).

In order to become the merited central part within the armamentarium of the different medical specialties, geriatrics has to become even more attractive and recognized in the following sectors: First, health promotion, disease, and disability prevention in aging persons must be initiated by geriatricians with the goal of not only extending healthy life expectancy, but maintaining functional independence, thus enhancing quality of life. This also includes community care for aging people (5,6). Second, antiaging medicine should be supported by a high-quality level of both biological research and well-planned randomized control trials. The demand of the population at stake for this rapidly involving field should foster geriatricians' involvement in this field. Third, to date, each medical discipline has to cope with compromised older patients and therefore geriatric know-how is asked for in nearly every health care setting. For these reasons, geriatricians need to actively contribute to the development of psychogeriatrics, gerontopharmacology, gerodontology, oncogeriatrics, and the like. The best way to cope with the requests of specialists is to develop with all clinical partners specific and adapted care programs, as pediatricians did decades ago. Fourth, rehabilitation, especially for elderly people, should be performed by a multidisciplinary team, headed by a geriatrician. Using comprehensive geriatric assessment, leading problems can be identified and individual "treatment/intervention/evaluation cocktails" can be mixed. Finally, end-of-life care is a centerstone of geriatrics as more than 80% of all deaths occur beyond the age of 65 in developed countries. Geriatricians must also enhance their ethical concerns in a way that promotes "dignity-conserving" care (7).

These developments must be paralleled by high-end biological research performed by young and promising faculty members. These developments are crucial to allow new drug developments both in antiaging and geriatric medicine (angiogenic factors, Alzheimer's disease vaccine, embryonic stem cells for the treatment of Parkinson's disease, heart failure, and sarcopenia). Moreover, high-level "pre-, post-, and post-post graduate courses" in geriatrics to "train the future teachers in geriatrics" (such as the European Academy for Medicine of Ageing) should be mandatory (8,9).

It was not the aim of this commentary to encompass all the field of geriatrics, but rather to add some "European thoughts" when we are choosing the appropriate way at the crossroads. Recent advances in both clinical and scientific knowledge in geriatrics and gerontology will certainly lead to a better recognition of the newest and probably most important "supraspecialty" of the 21st century—let us just put on the green lights!

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Author's Response to Commentaries

Robert L. Kane

The quality and imagination of the responses to my thought-piece more than justify the original effort (1). It is hardly surprising that a group of geriatricians should rise to the challenge of explicating why there is a future for geriatrics. The issue is not how we see ourselves but how others see us. If medical students don't see the need, what can we expect from society as a whole? Patients and families love the time and attention they get from an interdisciplinary assessment, but no one seems ready to foot the bill for it. The United Kingdom has opted to try to introduce some basic principles of geriatric care into general practice, but it has not tackled head-on the issues of providing real geriatric care. Geriatricians there do not serve the truly frail in institutions. They remain hospital based, where their skills in acute medicine may be plied, and commingled with those of internists; but the name of the game is chronic care.

It does seem a shame to declare defeat just when the population is about to age in record numbers. The question has never been whether the world needs geriatrics, but rather how can we get the world to embrace it, and, perhaps even more, to pay for it. Indeed, my eulogy was a bit tongue in cheek, as befits an assignment to write future history. Perhaps we can rephrase Santayana to claim that they who explore the future now may inherit one more to their liking.

Nonetheless, a few troublesome facts have to be grappled with. First, despite the zeal of adherents, the cult of geriatrics is still small and its influence is not growing. Geriatrics is hard to sell to physicians and to the general public. It is even harder to support. Second, ageism is still rampant, despite medicine's efforts to deliver every conceivable Medicare reimbursable service. Third, chronic care is the current hot button, which seems to have a greater potential to attract adherents. Even the World Health Organization is getting behind it (2). It is also easier to market. People can accept having a chronic condition much easier than being geriatric. Just think of how hard it is to get adolescents to see a pediatrician. Fourth, despite the enthusiasm for tracing all even-

tual changes back to improved medical education, medical educators are even more conservative than their colleagues in practice; moreover, waiting for changes based on new cohorts of better-educated medical students would delay a meaningful effect until well into the baby boom crisis. What we need now is a major infra-re-structure. The present health care delivery system is inappropriate to manage the growing burden of chronic disease.

No one seems to challenge the basic premise that geriatrics overlaps heavily with chronic disease care. The issue is whether geriatricians should give up their hard-fought toehold in the hope of getting a better purchase on a larger ledge. Perhaps they need not abandon geriatrics to embrace chronic disease care, but rather engage in broader dialogues that are compatible with the former. A small cadre of geriatricians will undoubtedly find gainful work exclusively serving the needs of frail older persons. Some may be able to design or operate more efficient means to provide acute care to older persons. Still others can make a good income peddling various nostrums and social devices designed to ward off the undesirable aspects of aging. However, the major opportunities to move medical practice seem to lie elsewhere, in the realm of chronic disease care.

I must plead guilty to an accusation of inconsistency. Having criticized geriatrics for its repeated reposturing, it hardly seems consistent to suggest a new opportunistic change in course. Nonetheless, the future beckons. It would be foolhardy to ignore it.

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