

A Statement of Principles: Toward Improved Care of Older Patients in Surgical and Medical Specialties

The Interdisciplinary Leadership Group of the American Geriatrics Society Project to Increase Geriatrics Expertise in Surgical and Medical Specialties

The following statement and recommendations resulted from deliberations between geriatricians and specialists from 10 disciplines (anesthesiology, emergency medicine, general surgery, gynecology, ophthalmology, orthopaedic surgery, otolaryngology, physical medicine and rehabilitation, thoracic surgery, and urology). These discussions took place in May and September 1998 and were revisited in June 1999 at a series of meetings under the auspices of a major project funded by The John A. Hartford Foundation (JAHF) and carried out by the American Geriatrics Society (AGS). The goal of the project is to improve the care of older patients. The organizations represented at these meetings and contributing to this statement are:

- American Society of Anesthesiologists and Foundation for Anesthesia Education and Research
- Society for Academic Emergency Medicine Residency Directors
- Association of Program Directors in Surgery
- American College of Obstetricians & Gynecologists
- American Academy of Ophthalmology
- American Academy of Orthopaedic Surgeons
- American Academy of Otolaryngology
- American Academy of Physical Medicine and Rehabilitation
- Society for Thoracic Surgeons
- American Urological Association

RATIONALE

The increase in the number of older people in the population in the United States has been striking and will become even more explosive after 2011. Conservative estimates are that the US population aged 65 and older will grow from 35 million in 2000 to 78 million in 2050 (from 13 to 20% of the population), and the number of those aged 85 and older will increase from 4 million to 18.2 million.¹ Moreover, if we assume that life expectancy from age 65 will continue to increase at the rate seen in the 1990s, the projected population of people aged 85 and older will then reach an awesome 31.2 million by the year 2050.

Improvements in skill and technology in the various non-primary care specialties, as well as better physiologic status in older adults, has brought about and will continue a disproportionate increase in the proportion of persons aged 65 and older (and 85 and older) who are candidates for

surgery and other non-primary care interventions.² Meanwhile, geriatricians continue to be in short supply. There are about 9000 geriatricians at the present time, whereas the need is estimated to be about 30,000. The shortage of academic geriatricians is particularly pressing.³

See also p 702

In addition to the role they play in primary care, rehabilitation, and long-term care of older people, geriatricians offer expertise in “pulling older patients through” traumatic events and avoiding postoperative and other disasters that often befall older patients during hospitalizations. The frequent, and at least partially preventable, hazards of hospitalization and surgery in the older age group form an impressive list:

- Acute renal failure
- Adverse drug events (incidence 10–15%)^{4,5}
- Inappropriate bladder catheterization
- Deconditioning and immobility^{6,7}
- Dehydration (prevalence 7%)⁸
- Delirium (incidence 20% in medical patients, 10–50% in postoperative patients)⁹
- Depression
- Electrolyte disturbances
- Falls (incidence 4–11 per 1000 patient-days)¹⁰
- Functional decline (incidence 32%)^{6,7}
- Incontinence (prevalence 11% on admission and 23% on discharge)¹¹
- Infection (especially pneumonia and urinary tract infection)
- Malnutrition (prevalence as high as 61%)^{12,13}
- Pressure ulcers (incidence 5%)¹⁴
- Stress-induced gastrointestinal ulceration
- Thromboembolism
- Untreated or undertreated pain

Given the demography, the expansion in eligibility of even very old patients for surgery, the shortage of geriatricians, and the growth of knowledge regarding how best to manage postoperative and other critically ill older adults,^{15,16} we conclude that surgical and medical specialists must carry considerable responsibility for future geriatric care. Therefore, there is now an urgent need to make available to these specialists opportunities to learn the principles, strategies, and tactics of excellent geriatric care and to apply them for the benefit of their patients. Only in this way are outcomes likely to improve.

Supported by a grant from The John A. Hartford Foundation
Address Correspondence to David H. Solomon, MD, Rand Health, 1700 Main Street/ PO Box 2138, Santa Monica, CA 90407.

OBJECTIVES

The conclusion from analysis of the early years of the Hartford/AGS project is that many specialties are making progress toward enhanced education and faculty development in geriatric care, but there is an urgent need to overcome some important barriers. Accordingly, specialists and geriatricians should set the following mutual objectives:

- Eliminate historical disinterest in geriatrics and increase awareness among specialists of the progress made in the care of older persons during the Geriatrics Renaissance of the past 25 years
- Demystify prevalent myths derogatory to older people that contribute to continuing relative disinterest in the care of older Americans
- Expand and deepen research on aging and the evidence base for excellent geriatric care for the surgical and medical specialty patient
- Improve dissemination of new clinical research findings in geriatrics into the specialties
- Convince leaders of specialty societies, examining boards, and residency review committees of the importance of applying existing evidence regarding methods for improvement of the health of older persons
- Improve communication and collaboration between geriatrics and the surgical and medical specialties
- Define the place of in-hospital care on specialty services in the overall care of older persons
- Enhance remuneration for the care of older people, recognizing that the complexity of their illnesses necessitates additional physician time
- Overcome widespread deficiencies in knowledge of the principles of good geriatric care among specialists
- Ameliorate the shortage of academic geriatricians and geriatrically oriented specialists who are needed to accomplish many of the above objectives

RECOMMENDATIONS

The following specific recommendations are advanced in order to achieve each objective in the left column. These would be implemented by collaborative efforts on the part of geriatrics and the surgical and medical specialties.

- Summarize in specialty-oriented literature the expanding evidence base for excellent geriatric care
- Correct mythology about aging through courses, symposia, and publications for professionals and the general public.
- Encourage basic biogerontological research, define a multispecialty clinical research agenda, and increase funding from foundations, corporations, government agencies and individual philanthropy for controlled clinical trials of interventions to improve health and function of older people
- Take steps to assure that specialty residency programs adopt specific learning objectives and curricula in geriatric care as part of a targeted effort to enhance residents' knowledge, skills, and attitudes relevant to care of the older patient.
- Increase information dissemination by the major societies, academies, and associations, increase mandated emphasis on eldercare in residency programs (not necessarily a defined time commitment), and increase geriatrics content in in-service and board examinations
- Strive locally to strengthen the geriatrics division or department in the institution so that enough people will be available for on-site, day-to-day collaboration with the surgical and medical specialties and, reciprocally, include specialists as affiliates or members of geriatrics programs and centers/institutes on aging
- Collaborate in developing well organized, continuing, coordinated healthcare systems for vulnerable older people, characterized by integration of care regardless of settings (office, clinic, home, assisted living, hospital, nursing home, and hospice) and by seamless financing mechanisms
- Campaign along with organized medicine and the public for appropriate remuneration for the care of older patients
- Encourage medical schools to enhance their educational emphasis on care of the older patient so that all future specialists will have a foundation of basic principles and knowledge
- Encourage young physicians and surgeons to become interested in the geriatric aspects of their discipline as a career focus, including funding career development awards for junior faculty in surgical and medical specialties

REFERENCES

1. Statistical Abstract of the United States 1998. The National Data Book. Washington, DC: US Census Bureau, Sept. 16, 1998.
2. Francis J. Perioperative management of the older patient. In: Hazzard WR et al., eds. Principles of Geriatric Medicine and Gerontology, 4th Ed. New York: McGraw-Hill, 1999, p 365.
3. Reuben DB, Bradley TB, Zwanziger J et al. The critical shortage of geriatrics faculty. *J Am Geriatr Soc* 1993;41:560–569.
4. Gray SL, Sanger M, Lestic MR, Jalauddin M. Adverse drug events in hospitalized elderly. *J Gerontol: Med Sci* 1998;53A:M59–63.
5. Leape LL, Brennan TA, Laird N et al. The nature of adverse events in hospitalized patients: Results of the Harvard Medical Practice Study II. *N Engl J Med* 1991;324:377–384.
6. Hansen K, Mahoney J, Palta M. Risk factors for lack of recovery of ADL independence after hospital discharge. *J Am Geriatr Soc* 1999;47:360–365.
7. Sager MA, Franke T, Inouye SK et al. Functional outcomes of acute medical illness and hospitalization in older persons. *Arch Intern Med* 1996;156:645–652.
8. Warren JL, Bacon E, Harris T et al. The burden and outcomes associated with dehydration among US elderly, 1991. *Am J Public Health* 1994;84:1265–1269.
9. Inouye SK. Delirium in hospitalized elderly patients: Recognition, evaluation, and management. *Conn Med* 1993;57:309–315.
10. Mahoney JE. Immobility and falls. *Clin Geriatr Med* 1998;14:699–726.
11. Palmer MH, McCormick KA, Langford A et al. Continence outcomes: Documentation on medical records in the nursing home environment. *J Nurs Care Qual* 1992;6:36–43.
12. Covinsky KE, Martin GE, Beyth RJ et al. The relationship between clinical assessment of nutritional status and adverse outcomes in older hospitalized medical patients. *J Am Geriatr Soc* 1999;47:532–538.
13. Reuben DB, Greendale GA, Harrison GG. Nutrition screening in older persons. *J Am Geriatr Soc* 1995;43:415–425.
14. Allman RM. Pressure ulcer prevalence, incidence, risk factors, and impact. *Clin Geriatr Med* 1997;13:421–436.
15. Inouye SK, Bogardus ST, Charpentier PA et al. A multicomponent intervention to prevent delirium in hospitalized older patients. *N Engl J Med* 1999; 340:669–676.
16. Landefeld CS, Palmer RM, Kersevic DM et al. A randomized trial of care in a hospital medical unit especially designed to improve the functional outcomes of acutely ill older patients. *N Engl J Med* 1995;332:1338–1344.

The statement and recommendations resulted from deliberations among the following geriatricians and specialists:

Anesthesiology

Alan D. Sessler, MD

Representing: Foundation for Anesthesia Education and Research, American Society of Anesthesiologists

Emergency Medicine

Gary Strange, MD

Representing: Society for Academic Emergency Medicine

General Surgery

Walter J. Pories, MD, FACS

Representing: Association of Program Directors in Surgery

Obstetrics & Gynecology

Gerald Holzman, MD

Representing: American College of Obstetricians & Gynecologists

Ophthalmology

Thomas J. Liesegang, MD

Representing: American Academy of Ophthalmology

Orthopaedic Surgery

Kenneth J. Koval, MD

Representing: American Academy of Orthopaedic Surgeons

Otolaryngology

Steven M. Parnes, MD

Representing: American Academy of Otolaryngology

Physical Medicine and Rehabilitation

Dale C. Strasser, MD

Representing: American Academy of Physical Medicine and Rehabilitation

Thoracic Surgery

Reneé S. Hartz, MD

Joseph LoCicero III, MD

Representing: Society for Thoracic Surgeons

Urology

George W. Drach, MD

Representing: American Urological Association

American Geriatrics Society

David H. Solomon, MD

Co-Director, AGS/Hartford Project: Increasing Geriatrics Expertise in Surgical and Medical Specialties

John R. Burton, MD

Co-Director, AGS/Hartford Project: Increasing Geriatrics Expertise in Surgical and Medical Specialties

Joseph G. Ouslander, MD

President, AGS

Paul R. Katz, MD

Editor-in-Chief, Geriatrics Syllabus for Specialists

Myron Miller, MD

Project Advisor to Orthopaedic Surgery, PM&R;

Representative to AAOS Task Force; Outreach Program

Peter Pompei, MD

Liaison, AGS Education Committee; Project Advisor to

Anesthesiology, Orthopaedic Surgery, Thoracic Surgery; Outreach Program

Meghan B. Gerety, MD

Treasurer, AGS

William B. Applegate, MD

Member, AGS Board of Directors