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## Comprehensive Geriatric Assessment: Is It Too Comprehensive For Compliance And Cost-Effectiveness?

Comprehensive geriatric assessment (CGA) has been defined as "... a multidisciplinary diagnostic process intended to determine a frail elderly person's medical, psychosocial, and functional capabilities and limitations in order to develop an overall plan for treatment and long-term follow-up."<sup>1</sup> CGA has steadily grown in importance in the United States since the pioneering work of Dr. T. Franklin Williams in the early 1970s.<sup>2</sup> Dr. Williams found that a comprehensive outpatient screening of patients who had been referred for nursing home placement was effective in determining those patients for whom the placement could be avoided. In 1984 Rubenstein, et al. published a landmark report of a random-

ized clinical trial of an inpatient geriatric evaluation unit.<sup>3</sup> Patients in the acute hospital who were expected to have a delay in a discharge home were randomized to the geriatric evaluation unit or to usual care. Patients in the geriatric evaluation unit group were more likely than controls to experience and retain gains in functional status, to have fewer nursing home days, and to have a dramatic decrease in mortality at 1 year. The authors reported overall costs for the first year that were lower for the intervention group, but this estimate was based on limited cost-finding that did not include the added costs of geriatric evaluation unit treatment above those of intermediate care.

The Department of Veterans Affairs, which had provided extensive support for research, education, and clinical work in geriatrics with the formation of geriatric, research, and education clinical centers in the late 1970s and early 1980s, fostered the development of geriatric evaluation units at VA medical centers in the late 1980s.<sup>4</sup> With increasing recognition of the need to include management along with evaluation, the geriatric evaluation unit was retitled the geriatric evaluation and management (GEM) unit. The GEM approach to care, with its emphasis on caring for the whole patient, addressing all dimensions of health including the psychosocial and functional, specifically seeking the patient's wishes regarding the aggressiveness of treatment, and working with multidisciplinary or interdisciplinary teams, is now a fundamental component of geriatric clinical care. It is an approach compatible with the biopsychosocial model that is fundamental to family practice. Departments of family practice have been closely involved in the development of geriatric programs in many institutions.

While the value of the GEM approach for a select group of frail elderly is not in question, controversy continues about the appropriate selection of elders for GEM care and about the components of GEM care that are most effective. In 1989 the Department of Veterans Affairs, the National Institute on Aging, and the Robert Wood Johnson Foundation sponsored a conference to establish consensus on the research agenda for work related to geriatric assessment.<sup>5</sup> An overview of the evidence for the impact of GEM care on survival, diagnostic accuracy, placement, functional status, use of hospital services, and costs of medical care supported the effective-

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ness of GEM.<sup>1</sup> Participants in that conference reported, however, that trials of GEM to date had been heterogeneous in types of assessment and in subsequent care, making it difficult to determine which aspects of GEM care were effective.<sup>6</sup> Recommendations were made for further research on targeting criteria that would address the need for differing criteria in different settings.<sup>7,8</sup> Recommendations were also made on outcome measures.<sup>9</sup>

Outpatient GEM treatment seems intuitively to be both low-cost and accessible to a large number of frail elders. One study of outpatient GEM for frail elderly patients reported 29 percent reduction in hospital bed days,<sup>10</sup> while another small study found a 25 percent reduction in the health care costs.<sup>11</sup> Confirmation of the efficacy and low cost of outpatient GEM in larger trials, however, is needed, because even outpatient GEM care has many hidden costs. A large trial is currently underway at the Department of Family Practice and Community Health, University of Minnesota.<sup>12</sup> This study, which selected patients at high risk for hospitalization and then randomized them to usual care or to an outpatient GEM intervention, will assess the effect of GEM on number of hospital admissions, costs of health care, quality of life, and survival.

In this issue of the *JABFP*, Cefalu, et al.<sup>13</sup> have reported the results of a retrospective chart review of patients in a university- and community-hospital-affiliated family practice residency clinic referred for geriatric consultation. The geriatric assessments followed the standard comprehensive geriatric assessment, which takes into account the patient's medical, functional, affective, cognitive, nutritional, and psychosocial status. Formal recommendations were sent in writing to the referring physicians, who then implemented the recommendations at their discretion. The average total percentage of recommendations acted upon ranged from a high of 64 percent for rehabilitation to a low of 14.6 for nutrition. There is no reference standard for the acceptable number of recommendations made by a consulting service with which the referring physician complies. Given the large number of recommendations made by the research group (mean 18.1 per patient), the percentage acted upon could represent a reasonable choice of the physician based on the balance of health needs and available resources for the indi-

vidual patient. Perhaps the recommendations of the comprehensive geriatric assessment were too comprehensive for complete compliance.

As the authors pointed out, practicing physicians are more likely to implement recommendations that are practical and easy to perform. A recommendation that can be carried out by a simple referral to an existing resource (e.g., referral for physical therapy) is more likely to be accepted than is one that will require extensive use of the physician's personal time (e.g., a recommendation for a family meeting). Local factors, such as the receptivity of a particular ancillary service to referrals, can affect the percentage of recommendations accepted. Cultural factors can also affect compliance with some recommendations: for example, in a largely Medicaid population, patients who believe that they have had difficulty gaining access to health care services might be less than eager to discuss limitations of treatment in code status discussions.<sup>14</sup>

This study suggests the need for further research regarding recommendations made by a consultation team within a residency program at a family practice center. To what extent does the number of recommendations made affect the percentage that are carried out? Are recommendations that are easy to implement acted upon more often than those that are difficult? How do the number and percentage of recommendations acted upon differ, if at all, between geriatric and other consultations? Would physicians prefer that some of the recommendations (e.g., the evaluation of urinary incontinence) be carried out by the consultation team directly? What is the role of patient preference in the choice of recommendations acted upon?

The study also suggests the need for research on the use of a comprehensive geriatric assessment outside a residency-based family practice center. While the study was not designed to address cost issues, the authors mentioned the difficulty of developing a geriatric assessment team in a private practice because of the time and costs involved. If convinced of the value of GEM care, large practices might find it worthwhile to designate a geriatric evaluation team; smaller practices could arrange for a team meeting about outpatients once a month, perhaps in conjunction with nursing home rounds, hospital discharge planning rounds, or another regularly scheduled

meeting that assembles the requisite team members from social work, nursing, pharmacy, and psychology.

Cefalu, et al., in discussing the costs of implementing CGA in private practice, offered some hope of streamlining the intake process through the use of computer software programs. Older adults who are computer naive are able to learn to use simple software quickly when the program is designed for use by elders.<sup>15,16</sup> Computer programs might allow for routine gathering of functional status and other data for older patients, but they will not substitute for the give-and-take of round table discussions that are the hallmark of interdisciplinary teamwork.<sup>17</sup> What will be needed are truly interactive networks that link social services, home care nurses, mental health services, and hospital services through the physician's office.<sup>18</sup>

The authors have recommended public policy efforts to change reimbursement for geriatric outpatient visits. Practicing physicians are well aware of the extra time that it takes to provide adequate care for frail elderly patients — time is needed for longer histories, discussion with family and with other caregivers, and assessment of functional, cognitive, and affective status. At a time of cost-containment in health care, any request for increased reimbursement must be accompanied by evidence of a sufficient increase in efficacy of the intervention to offset the increased cost. Further research is needed on both the costs and the cost-effectiveness of GEM care.

It is often said that medical care for the elderly in Great Britain, in comparison with care in the United States, is characterized, to the benefit of patients, by less use of high-technology services and greater availability of social support services. Many elders in this country, too, would willingly trade expensive, high-technology treatment for inexpensive social services — if they had a mechanism by which to do so. Under current schemes for health care reimbursement (with the exception of special demonstration projects), there is no way to move funds from a high-technology pool, such as acute and intensive hospital care, to a low-technology pool, such as in-home support services. Comprehensive geriatric assessment, by taking all the patient's needs into consideration simultaneously and by incorporating the patient's

wishes for level of aggressiveness of treatment, offers a model of integrating medical care with social support. It holds the promise of showing how to reduce health care costs while improving patient satisfaction by providing a better match of services to patient needs. At the same time, it holds the risk of increasing costs if care is not taken to target the intervention to those most likely to benefit and to tailor the evaluation and the recommendations to avoid unnecessary or duplicative services.

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