



Paul Gauguin. *Two Tahitian Women on the Beach*, 1891. Oil on canvas.

A comprehensive geriatric assessment is key in evaluating frail elderly patients and in developing appropriate management approaches for these individuals.

Comprehensive Geriatric Assessment

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Background: *As an adjunct to the general and cancer-specific clinical and diagnostic examinations, comprehensive geriatric assessment (CGA) is an integral tool that examines factors affecting the course of disease and the outcome of treatment. The principal areas of focus of the CGA include the patient's functional, physical, mental, emotional, pharmacotherapeutic, and socioeconomic status.*

Methods: *We describe the role of CGA in the identification and management of frail elderly patients. The literature is reviewed to outline the components, programmatic configurations, and process of CGA. Information from systematic reviews of clinical trials of different CGA program models is summarized, and observations relating to the research agenda concerning the applicability of CGA and CGA principles to management of older cancer patients are discussed.*

Results: *Since age itself is not predictive of outcome in an elderly cancer patient, the CGA helps to distinguish between elderly patients who should be treated with intent to cure and those who will benefit from clinical oncologic and geriatric co-management.*

Conclusions: *A more accurate evaluation of prognostic indicators that includes CGA parameters could lead to a higher number of older patients being included in clinical cancer trials and being treated effectively in practice. It would also identify those who would benefit from gero-oncologic CGA and ongoing management aimed at maintaining function and community living.*

Definition and Role of Comprehensive Geriatric Assessment

Comprehensive geriatric assessment (CGA) is a multidimensional, interdisciplinary diagnostic process to determine the medical, psychological, and functional capabilities of a frail elderly person in order to develop a coordinated and integrated plan for treatment and long-term follow-up.^{1,3} While integrating standard medical diagnostic evaluation, CGA emphasizes quality of

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life and functional status, prognosis, and outcome that entails a workup of more depth and breadth. Thus, the hallmarks of CGA are the employment of interdisciplinary teams⁴ and the use of any number of standardized instruments to evaluate aspects of patient functioning, impairments, and social supports.^{5,6}

A CGA in some configuration has been performed in many different institutional and community settings. In its most extensive forms, it underpins care in hospital geriatric units and can play a key role in community-based services such as the Chronic Care Model for ill and impaired adults⁷ and the Program of All-Inclusive Care for the Elderly for the frail and disabled.⁸ It can also be performed as an adjunct to standard medical evaluations in primary care settings. A multidimensional geriatric assessment — an abbreviated form of CGA but one that also covers medical, functional, psychological, and social domains — is performed in screening by community health professionals and primary care providers who can use the results to refer patients to geriatric specialty programs for more comprehensive evaluation and management. In the clinical context, CGA is used to identify the functional problems and disabilities of older patients with the aim of providing care and arranging longer-term follow-up.

The focus of the more extensive forms of CGA is the elderly who are frail (ie, at risk of loss of homeostasis and incident disability) or disabled or both. Frailty is a clinically recognized syndrome that is common in older adults.⁹ Using recently developed criteria, the prevalence of marked frailty is less than 10% in community-dwelling adults 65 years and older,¹⁰ with high risk of mortality over 3 and 7 years. While the prevalence of disability appears to be declining somewhat,¹¹ approximately 1 in 5 older Americans lives with some established disability.^{12,13} Given increases in the older population, particularly in the oldest old, the number of frail and disabled Americans has likely increased in the past decade and will continue to grow.^{11,14}

From the inception of geriatric medicine, it was recognized that frail and disabled older adults were those at highest risk for adverse outcomes and were also most likely to benefit from geriatric care. Much subsequent health services and clinical research has sought to define the healthcare delivery modalities as well as specific interventions that would mitigate or even prevent frailty and its outcomes. The CGA has been central to the approach and has the objectives of improving diagnostic accuracy, optimizing medical treatment and health outcomes, improving function and quality of life, extending community tenure, reducing use of unnecessary formal services, and instituting or improving long-term care management.¹

History of Comprehensive Geriatric Assessment

The roots of modern CGA practice go back approximately 70 years and are conventionally traced to the work of Marjory Warren in the United Kingdom.^{15,16} Warren created a specialized geriatric assessment unit in a large chronic disease hospital (a “workhouse infirmary”). The hospital had been filled with elderly patients who were neglected and bedridden. By systematically evaluating these patients, Warren was able to determine who might benefit by medical and rehabilitation efforts. She remobilized a majority of these patients and in many cases discharged them to their homes. These experiences led her to become a leading proponent of comprehensive assessment of elderly prior to their placement in chronic hospital or nursing-home facilities. Since then, the concepts and practice of CGA have evolved to amalgamate the traditional medical history and physical with functional evaluation and treatment derived from the rehabilitation disciplines, social work assessment, and other aspects of psychometric measurement from the behavioral and social sciences (Table 1).

CGA is now applied internationally and has a central position in systems of geriatric care rather than only at the point of entry into institutional long-term care. In the United States, CGA was a defining feature of programs begun in the 1970s in some Veterans Administration hospitals (now Department of Veterans Affairs [VA] medical centers). Geriatric evaluation units (now called geriatric evaluation and management [GEM] units) were established, first in inpatient bed sections and later in ambulatory care, to identify, assess, and treat frail and disabled older

Table 1. — Diverse Goals and Objectives of “Assessment” in Geriatrics

<p>Clinical Goals:</p> <ul style="list-style-type: none"> • Multidimensional geriatric screening of relatively unselected older populations <ul style="list-style-type: none"> To refer those at risk for CGA or other more thorough workup • Comprehensive geriatric assessment <ul style="list-style-type: none"> To improve process of care: <ul style="list-style-type: none"> - Improve diagnostic accuracy - Improve medical treatment - Arrange for long-term case management To improve outcomes of care: <ul style="list-style-type: none"> - Improve functional status - Better quality of life To contain costs of care: <ul style="list-style-type: none"> - Reduce use of unnecessary formal services - Prolong tenure in the home/community <p>Nonclinical Goals:</p> <ul style="list-style-type: none"> • Determine eligibility/payment for services • Conduct research to determine patient baseline characteristics, natural history, or outcomes of treatment

veterans in the system who were at risk for institutionalization and failing to benefit from usual care.¹⁷ An influential early controlled trial suggested the GEM approach was highly cost effective, leading the VA to adopt it system-wide.¹⁸ By the mid 1990s, over three quarters of the 172 VA medical centers reported having a GEM program.¹⁹

Outside of the VA medical centers, hospital GEM units have floundered due to funding issues, difficulty in maintaining interdisciplinary teams, and lack of sufficiently trained physicians to run these units.²⁰ Nonetheless, CGA has become part of geriatric primary care and inpatient consultation services. Standardized packages such as the Minimum Data Set (MDS) embody the first stages of CGA and are at least intended to facilitate the CGA process (eg, RAI-Home Care Assessment Manual²¹). Presently, however, the US healthcare system is not focused on detecting and referring frail elderly patients for further evaluation, and many experience the deficiencies of usual care, most notably but not solely at point of transition between different parts of the system. Even where adopted in the United States (eg, the MDS resident assessment system for nursing homes), standardized clinical assessment systems are not widely used to plan and manage care.

Components of Comprehensive Geriatric Assessment

Table 2 provides a list of basic components usually included in a CGA. While the detailed elements vary, virtually all CGAs — whether relatively simple multidimensional assessments for screening purposes or fully elaborated team assessments — include medical, psychological, social, and environmental components, as well as functional components (at the level of activities of daily living [ADLs] and instrumental activities of daily living [IADLs]). Table 2 also provides examples of elements that may be contained in more or less extensive assessments. These are discussed in more depth after first reviewing the various ways in which a CGA is initiated in the system of care.

A CGA can be effective only if there is a process for identifying elderly patients who may benefit from it. In most cases, they are elderly individuals who are frail and disabled or have multiple interacting comorbid conditions, as opposed to relatively healthy older people (including those whose health conditions are addressable by usual medical approaches) and those with serious focal chronic conditions for whom disease management by primary care with input by other subspecialists is appropriate. Examples include an

older patient who appears to be on a rapid downward trajectory toward nursing home placement and a previously functional senior who is requiring increasing assistance to accomplish daily tasks.

Although no “gold standard” has been developed that accurately and reliably identifies frail or pre-frail seniors, a number of clinical screening tests applicable to frail patients are now available. The timed “up and go,”²² a test of one-leg standing balance,²³ and brief screening questionnaires,²⁴ among others, are useful. Due to the lack of a validated test battery for the frailty syndrome, geriatricians have often been left with forming a “gestalt” of which patients are frail or pre-frail. Community screening and casefinding have been implemented in some Medicare managed care organizations via enrollment and periodic questionnaire (eg, the Probability of Repeated Admission [PRAPlus²⁵], in care management demonstrations in the VA system,²⁶ and in the senior “health check” program required of general practitioners in the United Kingdom in their elderly practice panels in the National Health Service,²⁷ to name a few. Multidimensional screening in hospitals and other settings has also been used in targeting at-risk patients for CGA.²⁸ Generally, screening is performed to identify patients with new or troublesome functional deficits or with challenging geriatric problems (falls, cognitive status changes, incontinence) and to refer them for CGA in the most appropriate setting.

The scope of the CGA per se is dependent on the care setting and resources available. In institution-based programs or intensive community-based models like the Program of All-Inclusive Care for the Elderly (PACE),⁸ an interdisciplinary team divides the responsibilities for assessment components. Results are report-

Table 2. — Components of Comprehensive Geriatric Assessment

Component	Elements
Medical assessment	Problem list Comorbid conditions and disease severity Medication review Nutritional status
Assessment of functioning	Basic activities of daily living Instrumental activities of daily living Activity/exercise status Gait and balance
Psychological assessment	Mental status (cognitive) testing Mood/depression testing
Social assessment	Informal support needs and assets Care resource eligibility/financial assessment
Environmental assessment	Home safety Transportation and telehealth

ed at the team meeting, during which an interdisciplinary problem list and care plan are developed.¹⁴ Hospital GEM units or PACE sites may involve many different disciplines, given the complexity of care plans and the high prevalence of incipient disability and geriatric syndromes in the overall caseload. Smaller teams, usually composed of a geriatrician, social worker, and nurse, can perform CGA in clinic or practice settings when the problem mix and caseload allow. Such smaller teams form the core of geriatric primary care practices in the United States²⁹ and a variety of prevention-oriented programs of in-home geriatric assessment.³⁰ Physicians alone can perform many aspects of a CGA,³¹ although this is often not practical given the limited time available and the workload issues of instituting a complex care plan. Still, if appropriately focused on a defined set of geriatric problems and linked to the necessary care management resources, a small team or physician CGA can also be beneficial.

As stated above, the medical aspect of CGA, like the other components, varies with the setting of the encounter (Table 2). In the acute hospital, day hospital, or nursing home, the geriatrician either alone or with other physicians may be involved with evaluation and management of acute or subacute problems or surgical procedures. Otherwise, in the CGA process, the geriatrician will focus on developing a list of complex clinical problems with a prioritization so that the most serious are dealt with first.³² Thus, there is no routine format for the medical history or physical examination: the focus will be driven with the input of patients, families, and caregivers on the major complaints as well as the findings of other members of the team concerning the health and functioning of the patient. Development of the prioritized problem list, as important as it is, is not the only goal of the medical encounter in the CGA process. Other objectives are counseling for disease prevention and health promotion, determining immunizations, screening for asymptomatic conditions that are prevalent in elderly patients, assessing medication burden, screening for other substance abuse, and ascertaining social and psychological problems. A general review of the geriatrician's approach has been provided by Applegate.³²

At the heart of the CGA is a review of patient functioning, as reflected most commonly in terms of measures of ADLs and IADLs. The basic ADLs are composed of self-care activities of dressing, bathing, transferring to and from chair, bed, and standing position, going to the toilet, and eating. In addition to the required daily activities, IADLs include activities that one may do for oneself or may customarily be done other members of the household (eg, housework or other domestic chores, managing money, using the telephone, shopping). In

many cases, particularly in ambulatory clinical settings, patients and/or family caregivers are asked to report on these items by filling out questionnaires. Elsewhere, functioning may receive more extensive clinical evaluation by nurses or occupational therapists. Many potentially useful approaches to functional assessment are available, but selection of a single or set of approaches must be made with care.¹⁶ Given the central importance of mobility to executing most functional activities and the high incidence and often harmful consequences of falls in older patients, assessment of exercise practice and activity status, as well as gait and balance, has become an important aspect of functional assessment in most settings.³³

Two chief streams of useful information flow from the functional assessment component in the CGA. One involves the capacity or incapacity of the patient to perform the specific tasks, wherein incapacity may suggest underlying impairments in organ systems or specific disease processes. In this regard, the nearly ubiquitous screens for cognitive impairment and depression that form the core of the psychological assessment component are helpful (Table 2). The second stream of information involves the nature and degree of help needed for specific tasks to be accomplished. This aspect of the functional assessment draws in additional information from the social and environmental components. The strength of the patient's social support network, the kind and amount of familial help available, aspects of the home environment, and financial ability to secure paid personal care assistance — to name but a few considerations — all inform the functional prognosis and influence the choice of clinical goals and management approaches.

The care plan is formulated only after the data (ie, information from the standardized clinical measures, laboratory tests results, as well as focused clinical impressions) are gathered from all components of the CGA. An often-underappreciated trait of CGA is that the process is not a three-step sequential procedure of completing the comprehensive assessment, reading the "results," and applying sets of protocols to produce a relatively fixed plan of care. Over the long-term, given the age, health, and functional status of these patients, there is rarely a plan of geriatric care composed entirely of final therapeutic formulations. The assessment has no value it does not yield a care plan, and the care plan has no value if not implemented. The literature on CGA effectiveness suggests that greater benefits tend to be seen where the team/providers performing the assessment are also delivering and managing the care. Individual assessments, care plans, and interventions themselves are best seen as works in progress, feeding back on one another.

Programmatic formats and settings in which CGA is performed follow a continuum from community locations (including homes and physician practices), through specialized clinics and hospital services of various kinds, to long-term institutional and community-based rehabilitation and care venues. The resources for CGA and intervention tend to increase along this program continuum, following the increasing burdens of clinical complexity, illness acuity, psychosocial problems, and disability in the patients who tend to enter them through their usual screening or targeting procedures. For example, the hospital is the point of encounter for frail elders who are at particular risk from both their acute illness and the usual hospital procedures. Early identification of these frail, disabled, and clinically complex patients — either in the emergency department³⁴ or soon post-admission — can lead to a more extensive CGA, more effective rehabilitative team intervention, and better post-discharge management.³⁵ Further, it can be a routine feature of step-down GEM units or of specialized hospital units combining geriatric assessment and management with other subspecialty care (eg, geriatric cardiology, geropsychiatry, stroke units, gero-orthopedic units,³⁸ and, more recently, geriatric oncology services).^{3,39} In contrast, most CGAs in outpatient settings — given patients' generally moderate illness acuity and clinical complexity — do not require intensive physician and nurse monitoring of inpatient settings or the range of technological resources. Specialized programs such as outpatient GEM clinics and day hospital programs can provide adequate interdisciplinary team assessments, intervention, and monitoring for many.⁴⁰⁻⁴³

Effectiveness of Comprehensive Geriatric Assessment

As this review suggests, the past two decades have seen a proliferation of *types* of CGA programs, if not a standardized CGA “package.” Table 3 classifies these types according to whether they are institutionally or community based (or cross-cutting), with a provision of references to recent or key descriptive or controlled clinical studies for each type. In addition, we have indicated which of these types have received relatively recent systematic review.

Interest in CGA effectiveness dates back to a landmark study of a hospital GEM unit in the early 1980s.¹⁸ This trial attracted widespread attention because the effects of the unit on health outcomes were so marked (eg, a reduction of 1-year mortality by 50% vs the control rate), while patients' community tenure was extended and per capita healthcare costs were reduced. Many trials of programs based on CGA began

Case Vignette

An 84-year-old widowed woman who recently completed chemotherapy for estrogen receptor-negative, node-positive breast cancer complained of intermittent chest pain, palpitations, weakness, and forgetfulness. Her family was concerned that she may be developing dementia. She lived alone in a one-bedroom apartment and had been managing all of her affairs independently. Her family was alerted when her telephone was disconnected for nonpayment of several bills. They also noted that she seemed thinner but attributed this to the chemotherapy. The apartment was disorganized, and the refrigerator was almost devoid of food.

A CGA revealed a probable diagnosis of major depression with underlying anxiety causing chest pain and palpitations and weight loss secondary to depression. Also, mucositis related to chemotherapy was noted, and polypharmacy contributed to weakness and fatigue, making it difficult to transfer out of chairs and the toilet. The team believed that the patient would need to be monitored after therapy to see if a diagnosis of dementia would be later confirmed. Social support and financial resources were considered adequate.

After discussion with the patient and family, a care plan was developed and instituted. Phase 1 included moving the patient to live with her daughter during this time of recuperation, with a trial at her apartment when the team felt she was ready to return. Her medications were streamlined to ensure that they were actually required and matched a diagnosis, and dosages were checked for appropriateness. If less expensive agents or those with improved side-effect profiles were available, a trial would be considered. An antidepressant and an analgesic were added for major depression and for mucositis. The patient was scheduled for outpatient physical therapy. A home evaluation determined that grab rails and an elevated toilet seat would assist with transfers in the bathroom. Armless chairs in the kitchen and dining area were replaced with appropriate height chairs with arms, and several throw rugs were disposed of because of the concern for fall risk. Based on the patient interview, the patient noted that she was concerned that she would have a cancer relapse, though there was no evidence of this to date. A list of breast cancer support groups was also provided to the patient. Over the next several weeks, the patient's mood, energy, and appetite all improved. Her chest pains and palpitations resolved with successful treatment of depression. Though she was still concerned about a cancer relapse, she felt the support groups were helpful. After a successful trial in her apartment, she returned to living independently, now with a home care aide visiting twice a week and with home-delivered meals.

to appear in the literature, reflected in the multiple service types discussed above and noted in Table 3.

While this literature documents the effectiveness of CGA in a variety of delivery forms for a range of outcomes, including improved or better maintained functional status, survival, increased community tenure, and other outcomes, such results have not been uniform or as impressive or comprehensive as those in the Rubenstein trial. As noted elsewhere,⁶¹ there are many reasons for this, including variability in the selection of patients, the complexity of the assessments and interventions, the diversity of clinical objectives in the management of geriatrics patients, and the improvement in medical care over time. Thus, even the best designed and described trials lack a fair measure of external validity; it is difficult to conclude what aspects of the particular CGA program (or usual care) may be responsible for the results seen.

Systematic reviewers have attempted to clarify the effectiveness of CGA and to explore aspects of program design that may be associated with improved outcomes.^{55-60,62,63} However, the complexity inherent in geriatrics interventions that makes single-site intervention trials irreproducible and multicenter studies prob-

lematic also creates problems for interpreting the results of such reviews.^{56,64}

In the early 1990s, Stuck and colleagues⁶² applied systematic review methods to CGA trials. The 28 trials that were available at that time were grouped into institutional and non-institutional intervention programs. Among institutional programs, hospital GEM units and inpatient geriatric consultation teams were identified as discrete types. The former were all geographic units in "control" of the treatments of their patients, at least during their stays. The latter were nongeographic, most did not have intervention "control" like the GEM units; instead, most of these services simply produced lists of treatment recommendations for the primary care physicians and did not follow patients past discharge. Non-institutional programs were "typed" as home discharge support services (facilitating home placement of elderly patients from acute hospitals), outpatient GEM clinics, and preventive home visit services.

Among the main effects of CGA interventions in the meta-analysis were significant reductions of mortality for GEM programs to 6 months and for preventive home visit programs to 3 years. The likelihood of living in the community at the end of follow-up was significantly greater for GEM unit care, home discharge support, and home visit services. GEM unit care was also associated with significant improvement in physical function (1 year).⁶² Favorable effects were also found for interventions that targeted patient selection, had clinical control over the delivery of interventions, and provided follow-up.

As seen in Table 3, some of the more recent available reviews cut across the program "types" as given here and in fact overlap with one another in terms of trials included (if not methods of review). In their study of 12 controlled day-hospital trials, Forster et al⁵⁵ found that patients attending day hospital had significantly lower odds of functional deterioration and "poor" outcome (death or institutionalization) than controls in the subset of studies comparing day hospital with noncomprehensive, usual care services; there were trends for reduced hospital bed use and long-term institutional placement. In an overlapping review of 45 trials,⁵⁶ no particular outcome advantages were found for day-hospital models, ACE units, and related services. However, different patterns of positive findings (eg, improved survival, home discharge and tenure, functioning) were found for hospital discharge support services, GEM units, and stroke (but not gero-orthopedic) units. The more focused review of hospital discharge support⁵⁷ found evidence for increased patient/family satisfaction and trends for reduced length of index stay and subsequent readmission. In contrast, the review by

Table 3. — Programs Employing Comprehensive Assessments

Program	Recent Systematic Reviews
Hospital-based:	
- ACE units and related acute services ³⁶	Forster et al ⁵⁵ Parker et al ⁵⁶
- GEM units ^{18,44}	Parker et al ⁵⁶
- Geriatric consultation services ⁴⁵	
- Syndrome-specific units/teams ⁴⁶	Parker et al ⁵⁶
Community-based:	
- Hospital discharge support services ^{47,48}	Parker et al ⁵⁶ Parkes and Shepperd ⁵⁷ Hyde et al ⁵⁹
- Hospital-at-home ⁴⁹	Shepperd and Iliffe ⁵⁸
- Day hospital ³³	Forster et al ⁵⁵ Parker et al ⁵⁶
- Geriatric home care ⁵⁰	
- Outpatient GEM clinics ^{40-42,44}	
- Preventive home visit programs ⁵¹	Stuck et al ⁶⁰
Nursing home:	
- Sub-acute units ⁵²	
- Primary-care teams ⁵³	
Integrated service/financing models:	
- Chronic care management model ⁷	
- Program of all-inclusive care for the elderly ^{8,54}	
ACE = acute care for the elderly	
GEM = geriatric evaluation and management	

Hyde and colleagues⁵⁹ of nine hospital discharge support studies found evidence of a significantly greater likelihood of remaining at home at 6 to 12 months for the supported group. A review of 16 hospital-at-home trials⁵⁸ suggested no significant health benefits. The recent meta-analysis by Stuck et al⁶⁰ of preventive home visit programs found no overall effect on survival, nursing home admission, and function. However, services providing more follow-up visits successfully prevented nursing home placement, and those high-visit programs adding multidimensional assessment were more successful at delaying functional decline.

Consistent with the findings of many of the reviews, a recent randomized controlled trial of both inpatient and outpatient GEM units performed at 11 VA medical centers found no effect on survival but significant improvements in functional status as well as mental health with no associated cost increase.⁴⁴ The lack of mortality reduction in newer trials as opposed to those from earlier decades may be due to factors discussed above as well as the improvement in medical care over time that affect both intervention and control groups.

In sum, many controlled and randomized clinical trials of CGA have been conducted since the late 1970s, and their results are often positive. Attempts to move the field forward may have been limited by the diversity of elderly patients selected, the variable organization of these interventions (not to mention that of “usual care”), the inherent complexity of geriatric evaluation and management making “standardization” premature and possibly harmful, the inconsistent measurement and reporting of multiple health and other endpoints, and the difficulty in replicating successful single-site studies. However, properly focused and interpreted meta-analytic reviews lend at least some support to the proposition that CGA can be effective and provide general support to the association with benefit of common organizational elements such as targeting, clinical control, and long-term follow-up.⁶¹

Applicability of Comprehensive Geriatric Assessment to Clinical Oncology

We cannot provide here a full review of the role of CGA in the management of elderly cancer patients; more extensive treatments of this topic have been published elsewhere.^{3,39,65,66} However, given the CGA process described here, several points can be made concerning a research and practice agenda.

We cannot expect all older cancer patients to benefit from CGA, but which subsets are likely to benefit? Clinical oncology is in no better position than other

subspecialties in knowing which of its treatments are applicable to the benefit of its older patients, partly because elderly patients with cancer and other comorbid conditions — not to mention “geriatric” syndromes, impairments, or disabilities — are often excluded from clinical trials, and also because they may not be offered oncologic treatments due to untested assumptions about toxicities and poor prognosis. Under these circumstances, comprehensive geriatric and multidimensional assessment may improve the knowledge base in determining which older patients with cancer may benefit from active cancer treatment and who may benefit from clinical oncologic and geriatric co-management. A more accurate evaluation of prognostic indicators that includes CGA parameters could lead to a higher number of older patients being included in clinical cancer trials and being treated effectively in practice. It would also indicate whom to target among the frail, impaired, and disabled for gero-oncologic CGA and ongoing management aimed at maintaining function and community living. While there is much to learn about targeting CGA in older cancer patients, the development and interest in clinical geriatric oncology make it reasonable to consider whether cancer patients over a certain age — perhaps 80 years — should routinely undergo multidimensional geriatric screening in health-care settings where expertise in geriatric assessment and consultation is available.

Conclusions

Trials of the cost-effectiveness of gero-oncologic assessment and management will be of interest once leading service models have become highly experienced and efficient. CGA practice in such centers may modify and expand the basic components of CGA listed in Table 2, integrating a different mix of physiologic, functional, psychosocial, and health-related quality of life indicators that are appropriate for the targeted population. A description of these new assessments — and their applicability to monitoring clinical and functional outcomes — will be valuable. The development of effective treatment and management strategies for this population can occur only in such enriched clinical research environments.

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