Referral to specialized geriatric services

Which elderly people living in the community are likely to benefit?

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ABSTRACT

PROBLEM BEING ADDRESSED As the Canadian population ages, family physicians encounter increasing numbers of elderly people with medical, functional, psychological, and social difficulties. In the past two decades, most regions of Canada have developed systems of specialized geriatric services, available on a consultative basis, to assist family physicians evaluating and managing elderly patients with these difficulties. For many family physicians, however, it is often unclear which of their elderly patients are likely to benefit from referral to these geriatric services.

OBJECTIVE OF PROGRAM Using an interdisciplinary approach, specialized geriatric services seek to optimize health, maximize function, promote independence, and prevent or delay institutionalization of elderly people. Yet not all elderly people benefit from referral to specialized geriatric services. This article offers a clear and clinically practical framework to help family physicians identify elderly patients in their practices who are likely to benefit from referral to specialized geriatric services.

MAIN COMPONENTS OF PROGRAM By synthesizing previous work on the concept of frail elderly persons into a 2 x 2 matrix, the level and intensity of geriatric intervention most appropriate for different segments of the elderly population is clarified.

CONCLUSIONS Using the simple approach described in this article, family physicians should be able to use available geriatric resources easily and efficiently to optimize the health and function of their elderly patients.

RÉSUMÉ

PROBLÈME Avec le vieillissement de la population canadienne, les médecins de famille rencontrent davantage de personnes âgées aux prises avec des difficultés médicales, fonctionnelles, psychologiques et sociales. Depuis 20 ans, la plupart des régions du Canada ont mis sur pied des systèmes de services gériatriques spécialisés disponibles sur consultation pour aider les médecins de famille dans l'évaluation et le traitement des personnes âgées présentant ces difficultés. Pour de nombreux médecins de famille toutefois, il est souvent difficile d'identifier les patients âgés les plus susceptibles de profiter de ces services gériatriques.

OBJECTIF DU PROGRAMME L'approche interdisciplinaire utilisée par les services gériatriques spécialisés vise à optimiser l'état de santé, maximiser les fonctions, promouvoir l'autonomie et prévenir ou retarder le placement en établissement des personnes âgées. Mais ce ne sont pas toutes les personnes âgées qui profitent d'être référées aux services spécialisés de gériatrie. Cet article offre un cadre de travail clair et utile sur le plan clinique pour aider les médecins de famille à identifier les patients âgés susceptibles de bénéficier d'une consultation à des services spécialisés de gériatrie.

PRINCIPALES COMPOSANTES DU PROGRAMME Une synthèse dans une matrice 2 x 2 des travaux antérieurs sur le concept des personnes âgées à risque de perte d'autonomie permet de clarifier le niveau et l'intensité des interventions gériatriques les plus appropriées pour différents segments de la population gériatrique.

CONCLUSIONS En appliquant l'approche simple décrite dans cet article, les médecins de famille devraient être en mesure de faire appel, facilement et efficacement, aux ressources gériatriques disponibles afin d'optimiser l'état de santé et le fonctionnement des personnes âgées.

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Through accurate diagnosis and treatment, the goals of geriatric intervention are to optimize health, to maximize function, to promote independence, and (as a consequence of these) to prevent or delay institutionalization of elderly people.[1,2] Geriatric intervention is not the exclusive domain of formally trained geriatric specialists, but is the concern of all health professionals who care for elderly people. In fact, nearly all medical care for elderly people is provided by physicians without extensive formal training in geriatric medicine.

In the past two decades, most regions of Canada have developed systems of specialized geriatric services (SGS), available for consultation, to assist family physicians in evaluating and managing elderly patients with difficulties. Many family physicians, however, have difficulty identifying which of their elderly patients are likely to benefit from referral to these geriatric services, which include day hospitals, inpatient units, outpatient clinics, consultation teams, outreach teams, and rehabilitation services.

Specialized geriatric services take an interdisciplinary team approach (often including medical, nursing, physiotherapy, occupational therapy, nutritional, speech, recreational, and pharmacy professionals) to managing elderly patients' medical, psychological, functional, social, and environmental problems. Clearly, such an intensive approach generally involves a commitment of time and an application of diverse expert skills unavailable or impractical for most, if not all, family physicians. With referral to SGS, family physicians gain access to the expertise of members of the interdisciplinary geriatric team for evaluation and management of elderly patients with multiple, complex needs. The goal of this article is to provide family physicians with a practical guide to identify readily which of their elderly patients living in the community are likely to benefit from referral to SGS.

Elderly patients likely to benefit

Specialized geriatric services have been shown to improve function, increase quality of life, reduce rates of institutionalization, and even lower mortality in appropriately referred elderly patients.[3-5] However, not all elderly people benefit from SGS. Previous clinical trials have shown that effectiveness of SGS improves when elderly people who are healthy and functionally independent or have a poor prognosis are excluded.[6]

From these trials, the geriatric literature identifies elderly patients with several specific problems as being appropriate for referral to SGS (**Table 1**)[7-9]: those with "geriatric giants," safety concerns, frequent use of the health care system, and major changes in social needs. While these criteria help identify elderly patients with specific problems who are likely to benefit from referral to SGS, sometimes other elderly patients seem to be functioning poorly, yet it is hard to identify a single cause for their difficulties. These patients often have multiple, often subtle reasons for their poor overall function. A review of their situation from the varied perspectives of interdisciplinary team members is likely to be of benefit.

Table 1. Problems indicating elderly patients should be referred to specialized geriatric services

Recent onset of one of the "geriatric giants" (cognitive impairment, falls, incontinence, immobility, or polypharmacy)
Safety concerns
Frequent use of the health care system
Major change in social needs contemplated

Data from Williams et al,[7] Rubenstein et al,[8] and Dalziel et al.[9]

Recently, authors have suggested that the concept of "frail elderly persons" captures this population.[10] In fact, they go so far as to define frail elderly people as those who are likely to benefit from SGS. If this is so, then the question is, "Who among elderly people are frail?"

Frailty and geriatric intervention

Frailty is a common concept used by health care professionals who work with elderly people. Yet there has been neither consistency in its definition nor consensus on the characteristics of the population to which it applies. Frail elderly people are usually defined in one of two ways: those who are dependent in activities of daily living (ADLs)[11,12] and those who are at high risk of losing functional status.[13,14] With the latter definition, high risk is described as a lack of functional reserve[15] or a general vulnerability.[16]

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Table 2. Deciding which elderly people living in the community benefit from referral to specialized geriatric services

FUNCTIONAL STATUS:		Chronic dependency in activities of daily living? YES	Chronic dependency in activities of daily living? NO
Had recent decline OR Has high risk of future decline?	YES	**GROUP A** Unstable dependent elderly • Geriatric intervention: urgent assessment • Referral to SGS almost certainly of benefit	**GROUP B** Unstable independent elderly • Geriatric intervention: prompt assessment • Referral to SGS likely of benefit
	NO	**GROUP C** Stable dependent elderly • Geriatric intervention: secondary and tertiary prevention • Referral to SGS unlikely of benefit	**GROUP D** Well elderly • Geriatric intervention: primary prevention • Referral to SGS not of benefit

Attempts to achieve a consensus on a precise definition for frailty have been unsuccessful[17,18] because, when used alone, each of these individual definitions has clinical limitations.[13]

To illustrate which community-living elderly people benefit from SGS, the members of the Division of Geriatric Medicine at the University of Ottawa have developed a conceptual framework combining the two definitions of frailty into a 2 x 2 matrix (**Table 2**). This framework has not yet been tested empirically, but it has proven clinically useful in our practice for identifying which elderly people are appropriate for, and the urgency of, referral to SGS. The matrix divides elderly people into four groups: group A, the unstable dependent elderly; group B, the unstable independent elderly; group C, the stable dependent elderly; and group D, the well elderly.

Unstable dependent elderly. Group A, the unstable dependent elderly, require urgent geriatric intervention; referral to SGS is almost certainly of benefit. This group includes people who are chronically dependent in ADLs. Activities in daily living are defined in two ways: basic (shopping, handling finances, using the telephone, cooking, and cleaning) and instrumental (transferring, walking, dressing, bathing, and eating) They also have had a recent functional decline or are at high risk of further decline in the near future. Geriatric intervention is urgently required.

These patients' ability to live independently is precarious because of chronic ADL dependency. The unstable dependent elderly do not have the functional reserve to withstand further medical, psychological, or social stressors. Another such stressor will likely lead to further decline in function and loss of independent living status.

An example of an unstable dependent elderly patient is Mrs A, an 82-year-old lady who lives alone despite severe rheumatoid arthritis. She cannot

ambulate without a walker. She relies on relatives for support in such activities as shopping, banking, and heavy housework. She performs the rest of her ADLs independently, albeit with difficulty.

If Mrs A develops another condition that further impairs her functional status, urgent geriatric intervention is required. The cause, whether medical (eg, infection, medication side effect) or psychological (eg, major depression), would need urgent evaluation and management. To delay investigation and intervention would allow the functional loss to become permanent, with a resultant high risk of institutionalization. Referral to SGS allows a coordinated interdisciplinary approach to her evaluation, treatment, rehabilitation, and future planning.

Unstable independent elderly. Group B, the unstable independent elderly, require prompt geriatric intervention; referral to SGS is likely of benefit. This group includes elderly people who are independent in ADLs and either have a recent decline in functional status or are at a high risk of functional decline in the near future. Because these patients can perform ADLs independently, the unstable independent elderly have greater functional reserve to withstand further stressors. Geriatric intervention should be prompt, but is not as urgent as for group A.

An example of the unstable independent elderly is Mr B, a functionally independent 78-year-old man who had a recent series of unexplained falls. Thus, he became vulnerable to the multiple consequences of falls, which can be physical (eg, fractures and head injuries), psychological (eg, reduced mobilization secondary to fear of falling), and social (eg, reduced participation in activities outside the home). Because falls are often multifactorial in origin (eg, medical conditions, medication side effects, environmental hazards, improper use of walking aids), the interdisciplinary approach of SGS is likely to be of benefit. Prompt, but not necessarily urgent, geriatric assessment and intervention is appropriate for diagnosis, prevention, and rehabilitation of these falls.

Another example of the unstable independent elderly is Mrs C, an 86-year-old lady who lives alone and was functioning independently until a few months ago. Since then her daughter noticed her mother's steady decline in energy level, appetite, gait stability, and ability to manage her medications appropriately. Mrs C had also forgotten to pay her regular bills. Prompt referral to an interdisciplinary team at SGS would ensure a complete evaluation of Mrs C's problems. Team members provide diagnosis and treatment of the underlying causes (eg, dementia, sepsis, organ system failure, medication side effect, major depression) of her decline. A reactivation and rehabilitation program will maximize her functional status. The team will also provide cognitive, functional, and nutritional assessments with subsequent recommendations for appropriate future living arrangements.

Stable dependent elderly. Group C, the stable dependent elderly, require secondary and tertiary geriatric prevention. They are unlikely to need referral to SGS. This group includes people with chronic ADL dependency and a low risk of functional decline in the near future. Even with intensive input from SGS, reversal of the ADL dependency is unlikely given its chronicity.

An example of the stable dependent elderly is Miss D, a 76-year-old lady who many years ago suffered a disabling stroke with resulting serious functional deficits. She is now stable from medical, psychological, and social perspectives. Referral to SGS is of little benefit because there is likely no reversible aspect to her functional deficits, and she does not appear to be at imminent risk for future functional decline. However, family physicians can contribute to her care through programs to retard future losses (secondary prevention) or lessen the impact of her stroke (tertiary prevention).

Well elderly. Group D, the well elderly, require primary geriatric prevention and have no need for referral to SGS. This group has excellent functional status and no medical, psychological, or social stressors to increase the likelihood of future functional decline. The well elderly do not benefit from input by SGS, but are excellent candidates for primary prevention. Examples of primary prevention pertinent to this population include promoting regular exercise, smoking cessation, proper nutrition, and screening programs.

Practical clinical considerations of the framework

The proposed framework highlights the heterogeneity of the elderly population. For family physicians, it clarifies the level and intensity of geriatric intervention that is most appropriate for different segments of the elderly population. It also reinforces the central role of family physicians in early recognition of elderly people's possibly treatable medical, functional, and psychological difficulties.

The concept of frail elderly people is used to help target those who would most benefit from referral to SGS. The framework operates on the assumption that all elderly people can in some way benefit from health care workers adhering to geriatric principles through intervention or prevention programs.

Functional loss in elderly people often occurs in a pattern that is quite predictable. There is initial loss of ability to perform instrumental ADLs, followed by loss of capability to perform basic ADLs. This is especially true for people with primary neurodegenerative dementias (eg, Alzheimer's disease), who often have gradual and insidious cognitive and functional declines.

Often the first evidence of loss of ability to manage instrumental ADLs independently signals increased risk of further functional loss. Geriatric intervention or referral to SGS is likely to be most effective at this point, as it is easier to develop effective management strategies for patients and caregivers in anticipation of, as opposed to during, severe functional decline. Early referral will become even more important as effective treatments for Alzheimer's disease and its related disorders become available.

People who are already chronically dependent in ADLs have little functional reserve. Any further stressor, whether medical, psychological, or social, is likely to further impair function. If additional stressors are present or can be anticipated, then the person changes from low risk to high risk of further functional loss. Referral to SGS then becomes appropriate.

Limitations of the framework

It would be an oversimplification to think that a 2 x 2 framework could delineate the proper course of action for all people in such a heterogeneous group as the elderly. For example, people with an unalterable, rapidly fatal clinical course (eg, people with metastatic adenocarcinoma) are at high risk of future functional decline. However, at present, they do not derive benefit from geriatric intervention. Referral to palliative care services is of more benefit to these patients. The combination of an unalterable clinical course with a rapid decline makes geriatric intervention ineffective. Thus, such persons need to be excluded from the framework. If further advances in medicine allow for improvement in the clinical course of these patients, they then can potentially benefit from geriatric intervention.

If in doubt about the best course of action for a patient, seeking the advice of a geriatrician is prudent. Even considering these limitations, we still believe that our framework provides family physicians with an excellent guide for referring their elderly patients to SGS.

Conclusion

By synthesizing previous work on frail elderly patients, this article has attempted to develop a framework for a practical approach to identifying elderly people who are likely to benefit from geriatric intervention and referral to SGS. We believe present and future generations of seniors will benefit from such an approach to their health care.

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