Assessment of the Integrated System for Frail Elderly People (ISEP): Use and Costs of Social Services and Healthcare

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Key Implications for Decision Makers

- People age 75 and older frequently have complex health problems, consisting of chronic disease, episodes of acute disease, physiological deficits, functional disabilities, and cognitive problems.

- Social and healthcare services available to frail elderly people are fragmented. Financial and organizational incentives of these services do not promote the use of the most suitable and often least costly approaches, and reliance on institutional services is still too common.

- A project to demonstrate a model of integrated services for frail elderly people adapted to a universal public health insurance system has been set up to demonstrate its ability to redirect use from institutional services to proximity services.

- The Integrated System for Frail Elderly People is responsible for services regardless of where the person is: at home, in a protected residential facility, in hospital, or at the nursing home, whether the person is using the services of a day centre or a day hospital. This responsibility is handled by a case manager and a multidisciplinary team.

- The project used an experimental approach with random distribution of the 1,230 participants in a test group receiving services from the integrated system and a control group receiving the usual services available in Quebec. The people admitted were aged 65 or older, had functional disabilities, and lived in a private household in three Montreal neighbourhoods. The project lasted 22 months, from June 1, 1999 to March 31, 2001.

- The average costs for the integrated services ($12,695) are $3,420 higher than the average costs for the control group ($9,275). This amount is offset by average costs that are $4,312 higher for institutional services in the control group ($22,896) compared with the average costs for intervention participants ($18,583). The total costs of $32,000 are comparable in both groups.

- The intervention’s ability to reduce the costs of institutional services by 20 percent is the result of a significant decline in in-patient waiting costs in short-term hospital beds and cumulative cost savings in emergency, hospitalization, and permanent housing costs.

- The effects of the intervention on the cost of services for people with several chronic diseases, several disabilities in activities of daily living, and those living alone were especially notable. These findings indicate that the effects of the intervention are not the same for the various groups.

- Integrated systems of services for frail elderly people can reduce the use and costs of hospital and housing services without increasing the overall cost of healthcare, reducing the quality of care, or increasing the burden on elderly people and their families.
Executive Summary

What is an Integrated System for Frail Elderly People?

People age 75 and older frequently have complex health problems, consisting of chronic disease, episodes of acute disease, physiological deficits, functional disabilities, and cognitive problems. They rely on assistance from social and healthcare programs, but their families provide most of the assistance and support they regularly require. Frail elderly people represent about 20 percent of the total elderly population and use a large share of social services and healthcare.

The social services and healthcare available to frail elderly people in Canada’s provinces are fragmented, financial and organizational incentives do not promote the use of the most suitable and often least costly approaches, and reliance on institutional services is still too common. However, projects examining integrated services for this population, such as that in the Bois-Francs and PRISMA in Quebec as well as CHOICE in Alberta, have generated growing interest.

Solidage, the Université de Montréal-McGill University Research Group on Integrated Services for Elderly People, designed a model of Integrated Services for Frail Elderly People, proposed a demonstration project, participated in its implementation, and was responsible for its assessment. The project is based on the following principles: 1) primary care services are the cornerstone of the model; 2) a local organization is responsible for healthcare and the use of services by frail elderly people in a given territory; 3) the integration of social services and healthcare is achieved through case management, in co-operation with the multidisciplinary team and through the application of care protocols; 4) the local organization mobilizes flexible, fast resources tailored to the needs of the frail elderly population; 5) it provides services adapted to the situations of these people; 6) a system of ongoing assessment of the quality of services and management ensures the receptiveness of local integrated services to the needs of frail elderly people and their families; 7) local programs take financial responsibility for all services; and 8) compatibility with the universal public healthcare system is assured.

Operation of the demonstration program:

The Régie régionale de la santé and des services sociaux de Montréal-Centre became involved in 1998 in a project to examine integrated services within its territory to assess the modifications in configurations of use and costs of social services and healthcare for frail elderly people attributable to the integrated system, with a view to expanding it throughout its territory or adopting the positive aspects. The demonstration project successfully implemented the clinical and organizational principles of the integrated services model, excluding responsibility for healthcare and all services for the entire frail elderly population and financial responsibility for these services.

The population targeted by the demonstration project, the methods for implementing the demonstration project, the financial and human resources invested, the choice of implementation sites, the assessment approach and the work calendar were developed and selected by the Solidage group and the Régie régionale in close co-operation.
The demonstration project used an experimental approach with random distribution of the 1,230 participants in a test group receiving integrated services and a control group receiving the usual services available in Quebec. The people admitted were aged 65 or older, had functional disabilities, suffered from incontinence, physical mobility problems, communication problems, or cognitive problems. They lived in a private household in one of three Montreal neighbourhoods. The project ran from June 1, 1999 to March 31, 2001.

The demonstration project was implemented in the territories of the Côte-des-Neiges and Bordeaux-Cartierville CLSCs in Montreal. Elderly people in part of the territory of the Saint-Laurent CLSC were also recruited. A regional monitoring committee formed of researchers, representatives of the Régie régionale, the three CLSCs, hospital, and other organizations tracked the demonstration project from the start of the experiment.

The independent teams for local demonstration projects, established in the Côte-des-Neiges and Bordeaux-Cartierville CLSCs, managed their own budget. This budget was supposed to allow them to provide intensive primary care services, implement case management and a multidisciplinary team, as well as provide new telephone and protected residence services.

Clinical tools were created for the project, such as interdisciplinary intervention protocols; the guide for contact with physicians in private practice; the assessment grid for interdisciplinary intervention plans and integrated services plans; a tool for tracking case discussions; and processes for managing critical services (such as visits to the emergency room, hospitalization, housing).

The case managers were responsible for 35 to 45 cases. They played the pivotal role in the experiment as each provided clinical and administrative management of one of the multidisciplinary teams. They ensured team members complied with the parameters of the model, ensured supervision of personnel, and chaired clinical and administrative meetings of their team. From a clinical point of view, their duties consisted of assessing the needs of elderly people and their next of kin, drawing up a plan of services, ensuring its application, monitoring progress of the situation, quickly mobilizing resources as required, overseeing adaptation of the plan of services, and ensuring that the clinical and administrative information on changes in patient status were entered into files and information systems. The case managers also had to maintain close contact with the attending family physician and monitor the elderly person during the time spent in various institutions and services.

The local multidisciplinary teams had case managers, nurses, social workers, occupational therapists and physiotherapists, nutritionists, visiting homemakers, and community organizers. Physicians were members of the teams, although most participants kept their family physician.

The people assigned to the control group received the services usually available to frail elderly people in Quebec. In Quebec, the CLSCs were the main authorities responsible for delivering services in these people’s homes based on the ministry’s homecare policy in effect at the time.
The main objective of the assessment of integrated services was to examine the differences in the use and costs of social services and healthcare between the test and control groups. The introduction of integrated services was supposed to increase the availability of nursing services, visiting homemakers, rehabilitation services, and social workers while decreasing the use and cost of institutional services, specifically short-term hospitalization, hospital emergency services, in-patient waiting times in short-term hospitals, and living in institutions.

Findings:

The average cost of integrated services ($12,695) was $3,420 higher than the average cost for the control group ($9,275). This amount was offset by average costs that were $4,312 higher for institutional services in the control group ($22,896) compared with the average costs for intervention participants ($18,583). The total costs were comparable for both groups, around $32,000 over 22 months.

What explains the intervention’s success in replacing institutional services with proximity services? The costs of in-patient waiting in short-term hospitals were twice as high in the control group than in the test group. The differences in the cost of other institutional services were not statistically significant. However, the average cost of emergency care and short-term hospitalization for intervention participants was approximately 10 percent lower than for the control group.

Major differences in the cost of the various services were observed based on health and living conditions. First, the availability of homecare services was greater in the intervention group compared with the control group, for people with more chronic diseases. Moreover, housing costs were $9,600 less in the intervention group for people with fewer chronic diseases. Integrated services reduced permanent housing costs by $14,500 for people living alone. Finally, short-term hospitalization costs were cut by $4,000 to $5,800 among people in the test group, compared with those in the control group, for people with disabilities in activities of daily living.

The main objective of the project was achieved. An average transfer of $4,000 per person from institutional services to community services was observed under the intervention. The reduction in waits in short-term hospitals for people with disabilities in activities of daily living indicates that the intervention’s main effect on hospitals was that of a “safe conduit” to housing. Planning hospital discharges was an important responsibility of case managers, who could mobilize the community resources required by the hospitalized person following release.

In conclusion, the experiment shows that it is possible to become involved in ambitious, strictly controlled demonstration projects in Canada. The findings show that integrated systems of services for frail elderly people can be expected to reduce the use and cost of hospital and housing services with no overall increase in the cost of social services and healthcare, without reducing the quality of care and without increasing the burden on elderly people and their families.