Evaluative Research on an Integrated Services Network Model with a Case Management Approach for Intellectually Challenged Elderly People

October 2006

Daniel Boisvert, PhD
Lucie Bonin, MD
Germain Couture, PhD
Clémence Dallaire, PhD
André Tourigny, MD

Decision Maker Partners:
Le Centre de services en déficience intellectuelle
de la Mauricie et du Centre-du-Québec
Le Centre de réadaptation en déficience intellectuelle de Québec
Le Centre hospitalier de Charlevoix

Funding Provided by:
Canadian Health Services Research Foundation
Le Fonds québécois de recherche sur la société et la culture
Le Ministère de la Santé et des services sociaux
Principal Investigator:

Dr. Daniel Boisvert  
Université du Québec à Trois-Rivières  
Boîte Postal 500  
Trois-Rivières, Québec, G9A 5H7  
Canada  

Telephone: (819) 376-5011 x 3204  
Email: daniel_boisvert@uqtr.ca

This document is available on the Canadian Health Services Research Foundation web site (www.chrsf.ca).

For more information on the Canadian Health Services Research Foundation,  
contact the foundation at:  
1565 Carling Avenue, Suite 700  
Ottawa, Ontario  
K1Z 8R1  
E-mail: communications@chrsf.ca  
Telephone: 613-728-2238  
Fax: 613-728-3527

Ce document est disponible sur le site Web de la Fondation canadienne de la recherche sur les services de santé (www.fcrss.ca).

Pour obtenir de plus amples renseignements sur la Fondation canadienne de la recherche sur les services de santé, communiquez avec la Fondation :  
1565, avenue Carling, bureau 700  
Ottawa (Ontario)  
K1Z 8R1  
Courriel : communications@fcrss.ca  
Téléphone : 613-728-2238  
Télécopieur : 613-728-3527
Evaluative Research On An Integrated Services Network Model With A Case Management Approach For Intellectually Challenged Elderly People

October 2006

Daniel Boisvert, PhD
Lucie Bonin, MD
Germain Couture, PhD
Clémence Dallaire, PhD
André Tourigny, MD

Acknowledgements:

The contribution of intellectually challenged elderly people was especially remarkable throughout the years in which we benefited from their co-operation. Similarly, a consistent contribution was made by CRDI staff who took part in this research as well as the people responsible for providing housing for elderly people.

This research was also made possible through many contributions that enabled us to conduct surveys of the elderly population and compile and process the data. Their work established reliable data and facilitated their analysis.

Furthermore, we read the various scientific and other literature following the fairly exhaustive bibliographic research conducted with attention to detail. We were grateful for the support of this team, particularly Suzanne Vincent, Annie Buissières, and Zorha Benouni.
Key Implications for Decision Makers

- The autonomy profile of people with an intellectual impairment reinforces the need for optimal accompaniment of elderly people with an intellectual impairment to ensure their social participation. The case management approach appears highly relevant for optimal monitoring of the personalized services plan covering all service needs of these people (promotion of health, integration into the community, work and recreation, transportation, rehabilitation, primary care, etc.).

- Full implementation of an integrated services network requires a few years, so the effects are more likely to appear over the medium term (three or more years) than over the short term (one to two years).

- Implementation of a client-group program and an integrated services network should always be supported by intervention protocols and systematic monitoring, especially for medication in elderly people with an intellectual impairment.

- The friendliness of clinical exchanges for interdisciplinary and network work, as well as access to reliable data for planning and organizing services, is a need clearly recognized by everyone and poses a major challenge for integrating information systems.

- The challenges posed by integration of services provide an incentive for developing a genuine partnership in the field of intellectual impairment, gerontology, and geriatrics.

- Ministry, regional, and local decision makers must incorporate services integration strategies into management agreements between organizations, ensuring access to the integrated services network of people with an intellectual impairment of all ages.

- In intellectual impairment, very few service integration experiments between various partners have been systematically conducted. Even fewer studies describe or, in particular, assess the potential effects on this client group of integrated service models recognized as effective. The findings presented here encourage continued research in conjunction with decision makers over the longer term.
Executive Summary

Research problem

Aging of people with an intellectual impairment, their increased life expectancy, and the individualized nature of their needs pose new challenges for an adapted services organization. These people usually have fewer resources than younger people with an intellectual impairment and other elderly people in general. The World health Organization also recognized that elderly people with an intellectual impairment are often the last to benefit from primary care services. Following a survey on the characteristics and needs of elderly users age 55 and older in 1994, a client-group program was implemented by the Centres de réadaptation en déficience intellectuelle (CRDI) participating in the research (Québec, Charlevoix, and Mauricie/Centre-du-Québec). The research conducted since 2001 was designed to assess the effects on elderly people with an intellectual impairment of the integrated services network model accepted for various vulnerable client groups (mental health, frail elderly) and specifically including the case management approach, a single service point, and monitoring of the personalized services plan, as defined in the PRISMA model.

Summary findings

Implementation of the program for people with an intellectual impairment and the integrated services network was slower than expected. A small proportion (15 percent) of people with an intellectual impairment included in the evaluative research was exposed to case management. Another important observation is that most people with an intellectual impairment in the two research cohorts have an autonomy profile comparable to the client group that was supposed to benefit from case management. The integrated services network had no effect on functional autonomy, drug use, or reliance on medical and hospital services. However, the people
questioned — decision makers, managers, and workers — did not question the model but in fact proposed several adjustments. Changes in the practices of CRDI workers require essentially the same appropriation efforts as those required by introduction of the integrated services network. Decision makers in the Mauricie/Centre-du-Québec centre, in conjunction with teams, will have to analyze the risk of duplication of duties between educators and case managers and perfect the appropriation of this approach at all levels. The scarcity of research on integrated services networks and elderly people with an intellectual impairment forces us to discuss the findings in light of those on all elderly people. The lack of effect on functional autonomy was also highlighted in the PRISMA study. However, that study showed a significant effect on functional decline in the last two years of monitoring of a four-year cohort. Just like this study, it was marked by much slower-than-anticipated implementation of the integrated services network. The proportion observed in this study of people taking at least one drug (between 91 and 97 percent) is higher than that for research conducted with elderly people age 65 and older living in the community (about 85 percent). It is more comparable to the observed proportion of 97 percent for a homecare client group in the United States or 94 percent for an institutionalized client group in Quebec. The proportions of potentially inappropriate prescriptions are high in both groups. They are comparable to those measured by Stuart in people younger than age 65 with disabilities in the United States (31.5 percent) or elderly people age 65 and older from 10 American HMOs (23 to 36.5 percent), but higher than those in a nursing home (16 percent) and those living in the community in the United States in 1996 (21.3 percent). Appropriate drug use linked to diseases and disabilities accounting for their autonomy profile should be better evaluated and monitored. There are several strategies for improving drug use, and their applicability should be discussed with this population. For example, Saskatchewan identifies five of the most effective drugs in the elderly population. These strategies are interdisciplinary teamwork with the presence of a case manager and
community pharmacists; continuing education for professionals through pharmacists, physicians, or nurses specifically trained for this role; feedback and setting of performance criteria; decision-making support systems; and regulatory approaches. Very little research has highlighted the effects of integrated services networks on the use of PRISMA services, and the research conducted in the Bois-Francs region had no effect on reliance on hospitals or physicians. To actually produce an effect on use of services, it appears that the experiments that succeeded needed to rely on very intense co-ordination and the presence of intervention protocols or monitoring of client groups. Consequently, research combining case management and disease management, with intensive monitoring and clearly established care protocols, report notable effects on use of hospital services, emergency services, or medical consultations. However, evaluation of implementation confirms the evaluation tools recommended in the client-group program are not extensively used. Increased presence of the expertise of pharmacists was not possible. In conclusion, the lack of effects should not be interpreted as evidence of the ineffectiveness of integration of services with this client group. In fact, both the program and the integrated services network suffered from slower-than-anticipated implementation, and case management in particular encountered many clinical obstacles. However, introduction of the case management approach is highly relevant based on the observed autonomy profiles of people with an intellectual impairment. The positive perceptions of managers and workers instead encourage more research while emphasizing the importance of providing an adequate appropriation period for service integration strategies. These findings will support decision-making on the consolidation of CRDI participation in the local services network now in place and the generalization and adaptation of the case management approach for people with an intellectual impairment.