Conference abstract

PRISMA in Québec and France: implementation and impact of a coordination-type integrated service delivery (ISD) system for frail older people

Réjean Hébert, MD, MPhil, Dean, Faculty of Medicine and Health Sciences, Université de Sherbrooke, 3001 12è avenue Nord, Sherbrooke, Québec, J1H 5N4, Canada

Suzanne Durand, GA, MSc, DBA (cand), Professor, Unité d'enseignement et de recherche en sciences de la gestion, Université du Québec en Abitibi-Témiscamingue, 445, boul. de l'Université, Rouyn-Noranda, Québec, J9X 5E4, Canada

Dominique Somme, MD, PhD, Service de Gériatrie-Pôle Urgence Réseaux, Hôpital Européen Georges Pompidou, 20-40 rue Leblanc, 75908 Paris Cedex 15, France

Michel Raîche, MSc, PhD (cand), Research Center on Aging, CSSS-IUG of Sherbrooke, 1036, Belvédère Sud, Sherbrooke, Québec, J1H 4C4, Canada

Correspondence to: Réjean Hébert, Phone: +1-819-564-5201, Fax: +1-819-564-5420, E-mail: Rejean.Hebert@USherbrooke. ca; Suzanne Durand, Phone: +1-819-762-0971 ext 2696, E-mail: suzanne.durand@uqat.ca; Dominique Somme, Phone: (+33) 1 56 09 27 26, Fax: (+33) 1 56 09 38 21, E-mail: dominique.somme@egp.aphp.fr; Michel Raiche, Phone: +1-819-821-1170 ext 45652, Fax: +1-819-829-7141, E-mail: Michel.Raiche@USherbrooke.ca

Abstract

Introduction: Several models of integrated service delivery (ISD) networks are presently experimented in Canada and elsewhere, but most of them are designed according to a full integration model (PACE, S-HMO, SIPA). PRISMA is the only example of a coordinated-type model to be developed and fully implemented with a process and outcome evaluation.

The PRISMA model includes the following components to enhance the integration: 1) co-operation between decision-makers and managers of all services and institutions, 2) the use of a single entry point, 3) case management process, 4) individualized service plans, 5) a unique disability-based assessment tool (SMAF) with a case-mix system (Iso-SMAF profiles) and case-finding tool (PRISMA-7), and 6) a computerized system for communicating between institutions and professionals.

The PRISMA model: The PRISMA model was implemented in three areas (urban, rural with or without a local hospital) in Québec, Canada and research was carried out using both qualitative and quantitative data to evaluate its process and impact. An efficiency study was carried out, considering societal costs and all population impacts.

Based on the population impact demonstration, the PRISMA model has also been adapted and implemented in France. This symposium will present the implementation, impact and efficiency of the Québec experimentation, and the implementation transfer in France.

The 4 abstracts related to this project presentation:

1. Description and implementation of the PRISMA ISD system in Québec

Hébert R, Veil A, Raîche M, Dubois M-F, Dubuc N, Tousignant M

Components: The six components of the PRISMA model will be presented. The model was implemented in three areas (urban, rural with or without a local hospital) in Québec, Canada and the implementation evaluation was carried out using mixed (qualitative and quantitative) methods. Over four years, the implementation rates went from 22% to 79%. The perception of integration by managers and clinicians working in the different organizations of the network shows that most interactions are perceived at the cooperation level and some getting to the highest collaboration level. The perception of efficacy of case managers was very high. Implementing such model is feasible and decision to generalize it was made in Québec.

2. Population impact of PRISMA on frail older people and utilization of health and social services Hébert R, Raîche M, Dubois M-F, Gueye NR, Dubuc N, Tousignant M

Objective: The objective of the population impact study was to evaluate the impact of the PRISMA model on health, satisfaction and services utilization of frail older people. It was a population-based study with a quasi-experimental design. From a random selection of people over 75 years old, a sample of 1501 persons identified at risk of functional decline was recruited in the three experimental areas (n=751) and three comparison zones (n=800). Subjects were measured at baseline and yearly for four years on functional autonomy, satisfaction with services and empowerment. Functional decline was defined as a loss of five points on the SMAF disability scale, institutionalization or death. Information on utilization of health and social services (public, private and community) was collected by bi-monthly phone questionnaires.

Results: When the last two years (where implementation rate was over 75%) were compared with first two years, the experimental group presented a difference of 6.3% on functional decline prevalence (p=0.03). Satisfaction and empowerment were significantly higher (both p<0.001) in the experimental group. For health services utilization, a 20% reduction of visits to emergency room (p<0.001) was observed in the experimental cohort. The hospitalization rate was also lower in the experimental group but the difference was not statistically significant (p=0.19). No significant effect was observed on other services.

3. Efficiency of the PRISMA model regarding population impacts

Durand S, Hébert R, Blanchette D, Buteau M

Efficiency: Assessing the efficiency of PRISMA is based on a comprehensive economic evaluation, with a societal approach. Given the implementation complexity of the six components in this innovative integration model, a micro-analysis was performed to assess its implementation and operational costs for the three experimental areas. The impact on residential, health and social services expenditures was also valued, based on use data collected during bimonthly interviews. Unit costs of these numerous services were estimated according to the opportunity cost approach. All these economic data were compared with the results of the population impact study through a cost-consequences analysis in order to measure PRISMA efficiency.

Results: The overall cost was not higher in the experimental group. It seems that implementation and operational costs of the PRISMA were offset relatively quickly by the savings likely stemming from better-adapted services. Also, the PRISMA had no effect on the mix of public, private and community costs. The population impact study showed positive impacts on functional decline prevalence, on handicaps, and on older people's satisfaction and empowerment. The only negative impact on the population is caregiver burden. Overall, these findings add evidence in support of increased efficiency under PRISMA.

4. Poster abstract: the PRISMA France study: implementation rate and factors influencing this rate

Somme D, Trouve H, Etheridge F, Gagnon D, Couturier Y, Balard F, Saint-Jean O

See elsewhere in this supplement.

Keywords

PRISMA model, integrated service delivery

Presentation slides