Résumé

Combler le fossé :
 l'échange d’information sur les soins à domicile

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 Katherine Berg, Paul Stolee

Comme dans bon nombre de secteurs de la santé, des sommes importantes ont été investies dans les soins à domicile dans le but d’implanter des systèmes électroniques d'information sur la santé (SEIS) ainsi que les instruments d’évaluation normalisés qui s’y rattachent. Même si l’on reconnaît que ces systèmes offrent la possibilité d’améliorer la qualité des soins, leur adoption dans le secteur des soins à domicile au Canada est loin d’être achevée. Notre enquête visait à recueillir des données sur les facteurs qui font obstacle ou facilitent l’implantation des SEIS (n = 22). Les résultats ont été analysés dans le cadre d’un atelier (n = 30); de plus, une séance « World Café » a été menée pour envisager les stratégies et les interventions susceptibles d’améliorer l’échange de renseignements, notamment en ce qui touche les soins de réadaptation à domicile.

Mots clés : soins à domicile, systèmes électroniques d’information sur la santé, échange d’information, qualité des soins
Bridging the Information Divide: Health Information Sharing in Home Care

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As in many health sectors, in home care there have been significant investments made in electronic health information systems (EHIS) and accompanying standardized assessment instruments. While the potential of these systems to enhance the quality of care has been recognized, it has yet to be fully realized in Canadian home care settings. Data on EHIS barriers and facilitators were collected using a survey ($n = 22$). The results were discussed at a workshop ($n = 30$) and a “world café” session was held to consider strategies and interventions for improving health information exchange, with a focus on home care rehabilitation.

Keywords: aging, care delivery, gerontology, health services, home care, informatics

Introduction

In Canada approximately one in 10 persons aged 65 years or older receives formal home care services (Carrière, 2006). Home care “encompasses health promotion and teaching, curative intervention, end-of-life care, rehabilitation, support and maintenance, social adaptation and integration, and support for the informal (family) caregiver” (Ontario Home Care Association [OHCA], 2010a). In Canada home care has been called “the next essential service” (Romanow, 2002) and is one of the fastest-growing sectors in health care (Canadian Home Care Association, 2007). The escalating dependence on home care to address the needs of older adults renders health information use and sharing critical to ensuring an effective system of care because of the complex needs of clients, multiple providers working across settings, consultations needed for specialized care, and emergency department visits for acute care (Vaidya et al., 2012; Vimarlund, Olve, Scandurra, & Koch, 2008). Standardized assessments facilitate the sharing of health information across settings, providers, and organizations by establishing a common language and metrics to describe and communicate client needs (Stolee, Steeves, Glenny, & Filsinger, 2010) and by populating electronic health information systems (EHIS).
In Canada there are several examples of standardized assessments being used as routine clinical practice in various settings. These include OASIS (Outcome and Assessment Information Set) developed by the Centers for Medicare and Medicaid Services (2012), with items added by the Vancouver Coastal Health Authority in British Columbia. An additional assessment used is the Outil d’évaluation Multiclientèle (Multi clientele Assessment Tool), which includes the SMAF (Functional Autonomy Measurement System) mandated for use by the Quebec health and social services system (Santé et Services Sociaux, 2002). Ontario, in particular, has made significant progress towards the development of a fully integrated health information system by leveraging the standardization and harmonization of the interRAI suite of tools.

The importance of engaging health professionals and understanding their needs has been widely recognized as essential to introducing and sustaining change (Gauthier, Ellis, Bol, & Stolee, 2005; Rycroft-Malone et al., 2002), which includes the implementation of EHIS and other information technologies (Doebbeling, Chou, & Tierney, 2006). As stated by the Change Foundation (2011b), clinicians’ “involvement in the design and implementation of e-health components will be critical to the strategy’s success” (p. 26).

**Background**

Home care managers and providers have identified a number of challenges related to the effective use and sharing of health information in practice (Stolee, Steeves, Manderson, et al., 2010). These challenges include costs associated with the implementation and maintenance of new technology, training costs and initial loss of productivity related to learning a new system, staff resistance, and user resistance to technology and new systems. Vaidya and colleagues (2012) highlight other challenges related to point-of-care access and the need for health information to facilitate clinical decision-making.

Clients have also recognized inadequate information sharing. In a population survey conducted in Ontario, 41% of respondents were not confident that their health-care provider had all the necessary information related to their health (Change Foundation, 2008), since information often is not conveyed on time or at all (Change Foundation, 2011b). In a study of health information exchange and personal health records from a consumer perspective, Patel and colleagues (2011) found that 61% of clients supported the electronic transfer of their health information across providers and settings and perceived the benefits of sharing information related to the completeness and accuracy of their medical records, receiv-
There have been significant EHIS investments in home care. The Resident Assessment Instrument–Home Care (RAI-HC) (Morris et al., 1997), developed by an international consortium of investigators, is mandated for use in several Canadian provinces — Alberta, British Columbia, Newfoundland and Labrador, Nova Scotia, Saskatchewan, and Yukon — and for partial use within individual organizations/health regions in Manitoba (Heckman, Gray, & Hirdes, in press). The RAI-HC contains over 300 items measuring health, functional status, and other client characteristics and is used to inform and guide comprehensive care and service planning in community settings (Hirdes et al., 1999; Morris et al., 1997). Components of the RAI-HC system include embedded outcome measures and quality indicators as well as algorithms that trigger clinical assessment protocols (CAPs) for specific assessment areas that require further investigation. The standardized format of the assessment tool and related applications supports effective information sharing between care settings and care providers. While these data are used for mandatory reporting, they are often underutilized in clinical practice (Egan et al., 2009; Stolee, Steeves, Manderson, et al., 2010).

Challenges with information sharing may be partly a function of how home care is organized and delivered. The role of Community Care Access Centres (CCACs) is to provide single-entry access to home care by determining a client’s eligibility for services and purchasing/coordinate these services (Canadian Healthcare Association, 2009), to be provided through a separate agency. The agencies are contracted by CCAC to implement care plans and conduct their own discipline-specific assessments (Ontario Association of Community Care Access Centres, 2010). In this model, the CCAC case managers oversee the administration of services, while contracted service providers are responsible for direct care.

The RAI-HC is used by CCACs in Ontario to assess home care clients who are expected to require services for 60 days or more (Canadian Institute for Health Information [CIHI], 2011). Although this assessment information is collected and used by CCACs to determine eligibility and coordinate services, the information or summary profiles are not often transferred to service providers (e.g., nurses, physical therapists, occupational therapists) or their respective agencies (Stolee, Steeves, Manderson, et al., 2010). As noted by De Vliegher, Paquay, Vernieuwe, and Van Gansbeke (2010), there is a “direct relationship between quality of care and the quality of information available to health care professionals and the process of clinical information and communication” (p. 508). While the capacity of these systems to enhance the quality of care has
been recognized (Russell, Rosenfeld, Ames, & Rosati, 2010), their potential has yet to be fully realized in Canadian home care settings.

The present investigation was part of an iterative study to identify factors and possible interventions that support or hinder health information sharing in home care, with a focus on home care rehabilitation. Earlier phases included focus group interviews with home care case managers (Egan et al., 2009), a systematic literature review (Stolee, Steeves, Glenny, et al., 2010), and three 1-day facilitated workshops — Knowledge Exchange Panels (KEPs) — with a total of 40 participants (Stolee, Steeves, Manderson, et al., 2010).

The goal of the present study was to develop an inclusive list of barriers and facilitators related to the effective use and sharing of health information in home care, through an iterative approach that included a stakeholder survey and a knowledge exchange workshop.

Methods

This study was guided in part by the iterative process outlined by Flottorp and Oxman (2003) for identifying barriers and developing “tailored interventions.” Results of previous work (Egan et al., 2009; Stolee, Steeves, Glenny, et al., 2010; Stolee, Steeves, Manderson, et al., 2010) were used to generate an extensive list of potential barriers to and facilitators of health information sharing in home care; these then formed the basis of a survey encompassing nearly 100 items. The PARiHS (Promoting Action on Research Implementation in Health Services) framework was applied in this study to organize the findings and assess the potential for use of health information in practice.

Survey

A survey was distributed to the 40 original KEP participants, located in three regions of Ontario (Stolee, Steeves, Manderson, et al., 2010). Respondents were asked to rate the importance of each item on a 10-point scale (with higher values indicating greater importance) and to identify additional items that they felt were missing from the lists. The survey was distributed as an online form and was available to participants over a 3-month period. The purpose was to uncover the relative importance of the items, to ensure that the list of factors adequately reflected the experience of the participants, and to reduce the possibility of social desirability bias (i.e., difficulty with openly sharing information based on occupation and/or role) (Schwartz, Verkasalo, Antonovsky, & Sagiv, 1997). Survey data were entered and analyzed using IBM SPSS version 19 (2010).
Mean ratings were used to rank items in various categories in terms of importance; standard deviation was used to indicate the variability in responses. A comparison of means was used to analyze responses from two groups of participants (CCAC representatives and respondents from contracted provider agencies). Additional items generated by respondents through the open-ended fields were examined and it was concluded that all participant-generated items had been included under other sections of the survey. The results were then presented and discussed at a workshop, as a base of information for exploring strategies for improving information sharing in home care.

Workshop
Following completion of the online survey, a 1-day workshop was held in Toronto, Ontario. Of the 30 people who attended, nine were original survey respondents and the remaining 21 were other stakeholders: researchers and graduate students (n = 8), CCAC administrators (n = 5), policy-makers (n = 4), quality improvement leads (n = 3), and a facilitator (n = 1). We included the additional stakeholder groups (beyond the original KEP participants) to assess the transferability of the findings by highlighting their applicability to other roles in home care (Golafshani, 2003).

The first half of the workshop focused on disseminating the findings from the survey and engaging attendees in a collaborative process to ensure that the interpretation of the results properly reflected the experiences of all participants (Mays & Pope, 2000) and that no notable items were omitted. The second half comprised a series of presentations highlighting current interventions and policies in home care followed by a "world café" session. The world café allowed small groups of participants (3 to 5 individuals) to move through a series of stations to collaboratively discuss and answer predetermined questions and thus to foster the cross-pollination of ideas (Schieffer, Isaacs, & Gyllenpalm, 2004). The benefit of using the world café technique is that groups build on the responses of others, enabling everyone to take part in the discussion.

Participants were asked to reflect on and discuss strategies for enhancing use of the RAI-HC. Specifically, they were asked to give direction on how to develop and provide educational opportunities to use the RAI-HC and to identify information applicable to their work, as well as to indicate how improved use of health information supports the goal of integrated client services.

The world café data were analyzed using a hybrid approach to thematic analysis combining the processes of inductive and deductive reasoning (Fereday & Muir-Cochrane, 2006; Hsieh & Shannon, 2005). The units of analysis were the recorded notes derived from the predetermined question topics. The data were initially analyzed using
the deductive framework outlined by Elo and Kyngäs (2008). Two researchers individually condensed meaning units and coded and categorized the responses into subthemes according to predefined categories (guided by the discussion questions). The researchers then met with a third party (who was otherwise unattached to the research) to review the data, discuss the final coding structure (Larsson, Nordholm, & Öhrn, 2009), and help ensure the credibility of the findings (Graneheim & Lundman, 2004; Hsieh & Shannon, 2005). The data were then aggregated across questions and analyzed inductively (Elo & Kyngäs, 2008; Graneheim & Lundman, 2004) (Figure 1). The higher-level themes, subthemes, and categories were incorporated into the PARiHS framework under the categories of context, facilitation, and evidence (Figure 2). Specifically, the context domain includes culture, values, decision-making processes and feedback mechanisms, and physical resources. Evidence consists of research and reflects clinical experiences, client references, and information from the local context. Lastly, facilitation is aimed at easing/enabling actions or processes, including the achievement of specific tasks, skills development, process changes, and attitudinal changes. While the PARiHS framework traditionally involves three domains, Conklin and Stolee (2008) include a fourth domain, “results,” to ensure consideration of the desired clinical or program outcomes of

Figure 1  Data Analysis

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subthemes</th>
<th>Categories</th>
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<tbody>
<tr>
<td>Effective use of health information in home care rehabilitation</td>
<td>Improved home care rehabilitation</td>
<td>• Increasing access/reducing barriers</td>
</tr>
<tr>
<td></td>
<td>Alternative care models</td>
<td>• Roles and responsibilities</td>
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<tr>
<td></td>
<td>Increase case manager and provider involvement in EHIS/RAI</td>
<td>• Responsibilities for training</td>
</tr>
<tr>
<td></td>
<td>Education in the RAI</td>
<td>• Education strategies</td>
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<tr>
<td></td>
<td></td>
<td>• Benefits/uses of the RAI</td>
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<td></td>
<td></td>
<td>• Address perceptions and misconceptions</td>
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</tbody>
</table>
Figure 2  PARiHS Framework

CONTEXT
(e.g., culture, values, physical resources)

Increasing access/reducing barriers

Roles and responsibilities

Alternative care models

Increased case manager and provider involvement in EHIS/RAI

Effective use of health information in home care

RESULTS
(e.g., desired state)

Improved home care rehabilitation

EVIDENCE
(e.g., clinical experiences, client preferences)

Benefits/uses of EHIS/RAI

Address perceptions and misconceptions of EHIS/RAI

FACILITATION
(e.g., skills development, process changes)

Education in EHIS/RAI

Responsibilities for training

Education strategies

Effective use of health information in home care

Education strategies

Responsibilities for training
the exchange of knowledge or information. In this case the desired outcome was improved home care rehabilitation through increased information sharing among home care administrators and providers. The complexities and relationships between the context, evidence, and facilitation domains needed to be understood and considered, as they related to effective use of health information before strategies to improve home care rehabilitation (results) could be implemented.

Ethics clearance was secured from the research ethics offices at the universities of Waterloo and Toronto. Clearance to recruit at participating agencies was obtained and key administrative staff assisted with recruitment. Submission of the completed survey signified consent to participate (as outlined in the information letter). Workshop participants provided written informed consent prior to the start of the session.

Results

Survey

We received 22 responses to the survey (55% response rate). The majority of respondents were female (n = 19). Combined, 11 participants were administrators from service provider agencies (n = 6) and CCAC case managers (n = 5) (most case managers are registered nurses), five were physical therapists, four were occupational therapists, and two were nurses.

The responses (ratings on a 10-point scale) were combined across all participants to find the mean rating and standard deviation for each item. Factors categorized as facilitators of health information sharing were viewed as important by all participants (see Table 1). Rank ordering of responses by participant group (i.e., respondents from CCACs vs. those from service provider agencies) differed for items related to the application and utilization of EHIS in home care (e.g., RAI-HC CAPs to inform care were viewed as important by both groups, but outcome-based assessments and quality indicators were ranked as essential only by CCAC respondents). In terms of preferred modes of communication, CCAC respondents preferred phone and fax while service providers preferred phone and e-mail. Also, important details to have when using health information (e.g., Personal Health Profile [PHP]) in home care varied by respondent group. While both groups rated all items as important in a PHP, the rank order differed (e.g., CCAC respondents rated information about the clients’ emergency room reports and medical orders as more important, whereas service provider respondents rated information about safety needs and functional status as more important).
### Table 1  Mean Ratings for Survey Items

<table>
<thead>
<tr>
<th>Category</th>
<th>Items</th>
<th>Mean Rating</th>
<th>SD</th>
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<tbody>
<tr>
<td><strong>Facilitators of Sharing Health Information</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processes for improving information sharing</td>
<td>Consistency in client information collected</td>
<td>9.00</td>
<td>.98</td>
</tr>
<tr>
<td></td>
<td>Uniform procedures used to share information</td>
<td>8.55</td>
<td>1.18</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing client information with others</td>
<td>Peer consults</td>
<td>8.29</td>
<td>1.35</td>
</tr>
<tr>
<td></td>
<td>In-home conferences</td>
<td>8.23</td>
<td>1.88</td>
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<tr>
<td>Factors for creating a supportive work environment</td>
<td>Opportunities to engage in continuing education</td>
<td>8.50</td>
<td>1.26</td>
</tr>
<tr>
<td></td>
<td>Management support for learning new tools/strategies for improved</td>
<td>8.38</td>
<td>1.43</td>
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<td></td>
<td>client care</td>
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<td></td>
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<tr>
<td>Using EHIS to communicate with others</td>
<td>Easily accessible</td>
<td>8.91</td>
<td>1.41</td>
</tr>
<tr>
<td></td>
<td>Clearly formatted</td>
<td>8.86</td>
<td>1.46</td>
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<td></td>
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<tr>
<td>Supports for users when adopting EHIS</td>
<td>Technical support</td>
<td>9.14</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>Training using the system (e.g., IAR)</td>
<td>9.00</td>
<td>1.20</td>
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<td></td>
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<tr>
<td>Supportive factors for adoption of EHIS</td>
<td>User participation at the time of development</td>
<td>8.86</td>
<td>1.32</td>
</tr>
<tr>
<td></td>
<td>Managerial support</td>
<td>8.68</td>
<td>1.04</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issues when using EHIS to collect client information</td>
<td>Security/client confidentiality is maintained</td>
<td>9.59</td>
<td>.96</td>
</tr>
<tr>
<td></td>
<td>Maintaining a client-centred focus during visits</td>
<td>9.59</td>
<td>.59</td>
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<table>
<thead>
<tr>
<th>Category</th>
<th>Items</th>
<th>Mean Rating</th>
<th>SD</th>
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<tbody>
<tr>
<td><strong>Facilitators of Sharing Health Information</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Applications of EHIS in home care</td>
<td>To use data for care planning</td>
<td>8.95</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>To show outcomes on home care-based rehabilitation</td>
<td>8.73</td>
<td>1.24</td>
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<tr>
<td><strong>Barriers to Sharing Health Information</strong></td>
<td></td>
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<tr>
<td>Ability to share information effectively with other providers</td>
<td>Lack of detail in referrals</td>
<td>8.05</td>
<td>2.26</td>
</tr>
<tr>
<td></td>
<td>New referrals missing basic information/referral reason</td>
<td>7.95</td>
<td>2.84</td>
</tr>
<tr>
<td>Ability to use information effectively in home care</td>
<td>Lack of common platform for information sharing</td>
<td>7.50</td>
<td>2.24</td>
</tr>
<tr>
<td></td>
<td>Quantity of information gathered by tools differs</td>
<td>6.36</td>
<td>2.42</td>
</tr>
<tr>
<td>Organizational factors for communicating</td>
<td>Limited time to communicate with providers</td>
<td>7.55</td>
<td>2.13</td>
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<tr>
<td></td>
<td>Large caseloads</td>
<td>7.45</td>
<td>2.28</td>
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Follow-up Knowledge Exchange Workshop

The results of the survey were presented to workshop attendees, who were then asked to respond and comment on omitted and/or unexpected results. Attendees were able to provide as many responses as they wished. Their issues/concerns about the findings are explored below (only differences are noted).

Comments focused on the use of shared information systems that allow for consistent client information to be utilized by all providers involved in the client’s circle of care. Incorporating shared information systems into practice to promote communication and exchange of valuable patient information among all providers was a frequent topic. For instance, one respondent stated that there is a “need [for] more sharing of information, particularly the specialized assessments completed by the provider.” Another respondent expanded on this idea, noting the usefulness of “having CCAC and service providers input information directly in the same client record. This would improve access to consistent information.” The lack of joint information systems and transfer of RAI data between CCAC and service provider agencies “result[s] in duplication of services; impedes common goals and continuity of care [so that] outcomes can be measured to ensure effective and efficient utilization of services and resources to improve accountability.”

Attendees commented on their preference for e-mail over telephone, indicating that e-mail was not being used by all home care professionals because of privacy concerns. One respondent said, “There’s no secure network between the CCAC and service provider agencies.” Further, the home care sector is “looking [at] how to use e-mail more when a great deal of sectors are discouraging its use” because of both security and policy issues.

Cost was not a central component of the survey, as participants had little say in the purchase of programs and tools that are mandated for use. However, one participant noted that cost should be highlighted as a barrier, stating, “Service providers end up paying for any of these progressive measures themselves,” and that this should therefore be included when assessing the feasibility, uptake, and use of EHIS among home care professionals.

Another topic of discussion was the RAI-HC. The importance of provider agencies receiving outcome measures from the RAI-HC was discussed. One attendee stated, “[I’m] surprised by the lack of reference to outcome measurements that could be leveraged in the RAI. I think this omission reflects a lack of understanding of RAI.”
World Café Session

The world café responses were coded deductively (guided by the discussion questions) and aggregated inductively to create six higher-level categories and four subthemes organized around one central theme (Figure 1). The central theme, effective use of health information in home care rehabilitation, was used to contextualize and categorize the results into subthemes and categories. It included having access to standardized, complete, up-to-date information in order to construct a more informed client profile.

The first subtheme, improved home care rehabilitation, included increased awareness of the underutilization of rehabilitation services in home care and appropriate use of rehabilitation services to enhance outcomes (e.g., preventing admission to long-term care). The second, alternative care models, included suggestions for bundling rehabilitation services by using a lead provider agency as a primary contact and allowing for the adjusting and tailoring of care plans throughout the rehabilitation process (e.g., allowing for more communication between individual providers). The third subtheme, increased CCAC case manager and provider involvement in EHIS/RAI, covered two categories: (1) increasing access/reducing barriers (e.g., increasing the timely exchange of information across settings and between providers); and (2) roles and responsibilities (e.g., allowing care providers to conduct assessments typically done by case managers). The final subtheme, education in using the RAI, comprised four categories: (1) responsibility for training (i.e., who should provide training?); (2) education strategies (e.g., establishing a standardized mode of delivery across sectors); (3) education in the benefits/use of RAI (e.g., the ability to communicate in a common language across sectors); and (4) addressing perceptions and misconceptions (e.g., the role of the RAI-HC and its potential applications in improving care delivery and outcomes of care are not well understood).

Discussion

Applying the results to the PARiHS framework allowed for a comprehensive understanding of factors to consider when attempting to improve home care rehabilitation (Figure 2). The theme and subthemes were mapped using the PARiHS framework depicting the interrelationships within each domain (context, evidence, facilitation, and results).

The workshop revealed a lack of understanding regarding the applications of standardized assessment information in home care (e.g., client populations, underserved client groups, the quality of care provided), and thus a lack of understanding of the current context. While evidence of the benefits of using and applying information collected from the RAI-HC
was discussed, facilitation is needed in order to implement the tools. One focus of discussion was the lack of knowledge about the use and applications of the RAI-HC. While some participants understood the benefits of using the RAI-HC for assessment purposes, many were unaware of how the information collected could be utilized by other health professionals for benchmarking and improving quality (OHCA, 2010b). With the introduction of tools such as the Integrated Assessment Record (IAR) (Community Care Information Management [CCIM], 2012) and client health summaries such as PHPs, health professionals will have to be educated in information uses and applications, as integration of services could result in client records becoming available to all health professionals involved in the client’s circle of care before and after the provision of home care. Who should be responsible for the training associated with the RAI-HC? This has yet to be determined. Suggestions ranged from CCAC case managers to governing bodies and centralized organizations (e.g., CIHI). Regardless, participants conveyed the idea that training must be standardized across all sectors in order to ensure a more sustainable system.

Information sharing and the use of standardized assessment information can lead to more effective integration of care and improved outcomes (Change Foundation, 2011a, 2011b; Hirdes, 2006; OHCA, 2010). However, barriers to information sharing (Stolee, Steeves, Manderson, et al., 2010) need to be considered and addressed in the tailoring of programs and interventions within the home care sector. When respondents were asked about the type of information they would like to have about a client, the priorities differed for case managers/administrators and home care providers. This suggests a need for tailored interventions (Flottorp & Oxman, 2003) along with a need for strategies that support the sustainability of changes in practice (Rycroft-Malone et al., 2002).

This study focused on the use of the RAI-HC as an example of an EHIS that provides context about the issues of disconnect between CCAC/provider information needs. Future studies might consider comparing different components and types of EHIS, such as the effectiveness of the IAR in meeting the information needs of health professionals across the care continuum and determining whether access to more information improves client outcomes and quality of care. Also, training considerations need to be informed by the user’s data-input methods and system-navigation needs. Education could focus on the importance of the aggregate health data collected through EHIS and on using data to inform practice and advocate effectively for clients.

A limitation of the study was the time lapse between the initial KEP sessions and the distribution of the survey. This likely served to reduce the response rate and heighten the importance of the final workshop.
also distributed the survey to people who attended a home care association event but did not attend the original KEP sessions, and found similar results. In order to maximize the generalizability of the findings, we conducted the research at centres located in large cities, mid-size cities, and rural areas. Since the study was an initial step in understanding the barriers to and facilitators of information sharing, clients and their informal caregivers were not included. Future studies could examine the importance of information sharing from the perspective of clients and their families, to ensure that the information being collected meets the needs of all parties (Sidani & Braden, 2011).

**Recommendations and Conclusion**

Four core recommendations emerged from the study. These are discussed in light of models of care, e-health developments, policies, and organizational structures. Recommendations include the need to: (1) engage stakeholders in a consultative process when creating, designing, and implementing interventions aimed at improving the quality and consistency of information exchange; (2) create and use summary client profiles such as PHPs to inform an appropriate care plan and to identify the potential for rehabilitation and service provision; (3) ensure that client information is comprehensive and meets the information needs of the different health professionals within the client’s circle of care; and (4) educate health professionals in the benefits of using standardized assessments and EHIS for care planning and outcome measurement.

Consistent with recommendation 1 is how organizational structures benefit from the input and participation of organizational members (Boissy, Brière, Tousignant, & Rousseau, 2007; Vimarlund et al., 2008). The benefits of participating in a consultative process are on-the-job training, enhanced understanding of the needs of the organization, and the involvement of members in a learning process that lends itself to greater information sharing and communication within the team (Vimarlund et al., 2008).

The context of home care is changing with the adoption of new models of care, including a population-based/specialized model used in CCACs. This change in care delivery and practice philosophy enables a deeper, more focused understanding of client populations, their caregivers, and their care needs (Falode, Raymond, Sheehy, & Wise, 2011). While models of care are changing and evolving, so too are the uses of e-health systems. For instance, implementation of the IAR allows authorized users to work in collaboration with other care providers to effectively plan and deliver services (CCIM, 2010). Recommendation 2 concerns the potential for generating and using abstracted summary
information from standardized assessment tools (thus ensuring that it is tailored to the needs of the recipient) (Vaidya et al., 2012). The RAI-HC can be used to abstract specific summary information, which can then be transferred to health-care providers using the client’s PHP. It is important that the different information-sharing systems and the content of the exchange be tested with a variety of home care professionals and that their possible impact on outcomes and quality indicators be understood. The client experience can be greatly improved through effective implementation and use of EHIS (Change Foundation, 2011b), with benefits for providers and clients alike.

The development and implementation of new models and approaches to care introduce the potential for changing roles and responsibilities and for improving access to health information. Even though these approaches are aimed at reducing inefficiencies in the system by enhancing the integration of care, attention needs to be given to keeping the client at the centre of care and using standardized assessments to generate a common language among home care professionals.

Our findings highlight policy issues and organizational structures that impede the sharing and use of health information. Our analyses of the survey results confirm that the list of barriers and facilitators largely reflects the perspectives of home care professionals. The findings suggest possible differences in information needs based on the roles and responsibilities of home care professionals and the model of care guiding assessments and care delivery. Thus, to facilitate the effective use of information collected using standardized assessment tools such as the RAI-HC, summary information (e.g., PHPs) may need to be tailored according to when providers enter the client’s circle of care, providers’ respective roles and responsibilities, and the purposes of the information being communicated.

As stated in recommendation 3, abundant information is being collected about clients’ needs, health status, and functional abilities. The role of policy-makers is to ensure that clients’ privacy is protected. A current issue with the use of EHIS is the question of when a health-care provider enters a client’s circle of care and when he or she should have access to the client’s records. While this issue is being considered, other issues of point-of-care and cross-sectoral access are also being discussed, as are the benefits of clinical decision-making and the quality of care (Vaidya et al., 2012).

The recommendations presented here are one step in addressing the barriers to and facilitators of sharing health information in home care, with the goal of improved home care rehabilitation. Evaluation of initiatives such as the PHP (derived from EHIS and electronic health records) and the IAR will be conducted in a subsequent phase of the research in
order to improve the context of home care rehabilitation for older adults with complex medical needs.

Recommendation 4 concerns the education of health professionals in the use of EHIS for care planning and outcomes measurement and in client advocacy (e.g., more resources or longer interventions if justified by aggregate person-level data). Databases that include all recipients of care can provide important evidence for prognosis and response to interventions. This is especially critical for rare or complex conditions that would not be included in randomized clinical trials. Training within professional clinical programs such as nursing will help us to understand different assessment systems and their applications. Research is also needed in working across health-care disciplines, to determine what information is needed to improve the delivery of home care services to clients across Canada.

The dialogue resulting from this study is a first step in understanding the information needs of health professionals working in home care. The sharing of information across disciplines also offers advantages outside of each profession, creating a system of client-centred care that is more efficient and that ensures improved continuity for the patient.

References


Health Information Sharing in Home Care


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