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ARTICLE

Healthcare providers' intentions to engage in an interprofessional approach to shared decision-making in home care programs: A mixed methods study

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In an interprofessional approach to shared decision-making (IP-SDM), an interprofessional team collaborates in identifying best options and helps patients determine their preferences, enabling them to take more control over the treatment plan. However, little is known about fostering IP-SDM in Canada's healthcare system. Therefore, we sought to evaluate health professionals' intentions to engage in IP-SDM in home care and explore the factors associated with this intention. A total of 272 eligible home care providers completed a questionnaire based on the theory of planned behavior. Eight managers and one healthcare team caring for the frail elderly were interviewed about possible barriers and facilitators. Analysis involved descriptive statistics and multivariate analysis of quantitative data and content analysis of qualitative data. On a scale of -3(strongly disagree) to +3 (strongly agree), the mean intention to engage in IP-SDM was positive (1.42 \pm 1.39). The intention was influenced by the following theory-based determinants $(R^2 = 57\%; p \le 0.002)$, i.e. cognitive attitude (p < 0.001)subjective norm (p < 0.0001) and perceived behavioral control (p < 0.0001), with variations depending on the type of provider. Barriers included lack of time, poor team cohesion and high staff turnover. Facilitators included team cohesion and shared tools. Future programs implementing IP-SDM could address these barriers and facilitators.

Keywords: Mixed methods, surveys, interprofessional collaboration, shared decision making, home care

INTRODUCTION

For an interprofessional (IP) approach to shared decisionmaking (IP-SDM), two or more health professionals collaborate with the patient in identifying best options, clarifying patient preferences and enabling patients to take more control over the treatment plan (Légaré et al., 2011a, 2011c). Interprofessional care and the engagement of patients as partners in their own care are increasingly seen as two key elements of high-quality and cost-effective healthcare services (e.g. Dagone, 2009). Combining interprofessional care, which involves collaboration among various health professionals (Oandasan & Reeves, 2005), with shared decision-making (SDM) is thus a logical and coherent way to integrate both these key elements into healthcare. It results in decisions by patients that may be more acceptable and, ultimately, more sustainable. Interventions promoting IP-SDM could improve healthcare in numerous ways by (i) improving the quality of decision support provided by team-based healthcare practices; (ii) bridging gaps between healthcare providers in the various health professions as well as between them and their patients and families, thereby breaking down the silos within the healthcare system (Reeves et al., 2008) and (iii) improving the fit between what patients prefer and what they receive. However, little is known about fostering IP-SDM in any healthcare system (Llewellyn-Thomas & Légaré, 2011).

The need for home care services is likely to increase significantly in Canada over the next few years (Canadian

Institute for Health Information, 2011). Of concern is the growing number of elderly patients and a concomitant growth in the prevalence of chronic age-related disease (Health Canada, 2001). Increasing services and mobilizing healthcare providers will be necessary to ensure that elderly people and their families can participate actively in decisionmaking and make informed value-based decisions. Older patients are of particular relevance in both IP and SDM endeavors. They face more complex decisions and may face greater risks linked to healthcare interventions than younger patients. In addition, factors such as cognitive impairment and cultural origins may also limit the ability to actively participate in the decision-making process (DeVoe, Wallace, & Fryer, 2009; Levinson et al., 2005).

In the present home care study, we used an IP-SDM model for primary care that we developed and tested earlier (Légaré et al., 2011a, 2011c). Our model was derived from an analysis of existing conceptual models and then validated in a primary care setting. The model consists of a structured decision-making process facilitating communication among all individuals involved in the various phases of decisionmaking and leading to a shared decision (Stacey, Légaré, Pouliot, Kryworuchko, & Dunn, 2010). The model includes the principal elements of both IP collaboration and SDM and explicitly includes the role of decision coach and family members (Stacey et al., 2008). With the goal of facilitating the implementation of IP-SDM in home care, our study objectives were twofold: to evaluate healthcare providers' intentions to engage in IP-SDM and to identify factors associated with their intentions.

METHODS

Study design

We conducted a sequential explanatory mixed methods study that involved (i) a theory-based survey of all healthcare providers involved in the home care programs of a large primary care organization; (ii) a focus group with the healthcare team dedicated to the frail elderly and (iii) individual interviews with managers representing the diverse levels of the primary care organization. We chose the sequential explanatory mixed methods design to be able to triangulate quantitative and qualitative findings from the different sources so that we could evaluate healthcare providers' intentions to engage in IP-SDM and identify factors associated with their intentions. Full details of the study protocol have been published (Légaré et al., 2011b).

Setting, participants and recruitment procedures

The study was conducted in Quebec City, Canada, between November 2010 and October 2011. At the time of the study, 632 employees worked in the home care programs (part or full time), which are organized according to specific clienteles (frail elderly, palliative care, postsurgical care, etc.), with 566 of these employees directly involved in providing care. The healthcare providers included unlicensed home support workers (34%), nurses (24%), social workers (14%), occupational therapists (9%), physiotherapists (3%), activity coordinators (1%), dietitians (2%) and other types of workers involved in social support and rehabilitation (13%). Although physicians were not included as employees, 24 physicians (4% of all healthcare providers) were affiliated with the home care programs.

Eligible participants included all licensed and unlicensed healthcare providers in the organization. Eligible participants in the focus group were healthcare professionals in the only integrated home care team dedicated to the frail elderly (i.e. individuals older than 65 years who have functional impairments that require home care). This home care team was also singled out for the following reasons: (1) it focuses on a clinical issue with high prevalence and (2) it includes the most diverse group of health professionals. Eligible interviewees were administrators and managers who had varying levels of influence in the home care environment. Ethics approval was obtained from the local institution's ethics board. All participants signed consent forms for the survey, the focus groups and the interviews.

Data collection procedures

Survey data. One week before launching the survey, all healthcare managers/clinical coordinators from the home care programs received an introductory letter to inform them of the study. The survey was then administered by way of the employees' regular mailboxes using the healthcare managers/clinical coordinators' contact information for each healthcare provider. Follow-up emails were sent to all healthcare managers/clinical coordinators 2 weeks after the survey launch. Employees returned their completed paperbased questionnaire to a central regular mailbox set aside for the project. Surveys were coded with participants' mothers' initials and their own birthdates for recordkeeping.

To measure providers' intention to engage in IP-SDM in home care, we used a self-administered survey based on the theory of planned behavior (TPB; Ajzen, 1988). Our questionnaire was modeled on validated questionnaires developed earlier by our research team for similar projects studying the implementation of SDM in clinical practice (Stacey, Samant, Pratt, & Légaré, 2012). The TPB posits that intention is the immediate determinant for changes in behavior. It provides a theoretical account of the predictors of intention, namely, attitude (the perceived advantages and disadvantages of performing a behavior), subjective norms (perceived social pressure to perform the behavior) and perceived behavioral control (the respondent's perception of barriers and facilitators to his or her performing the behavior). The theory also suggests that theory-based interventions could reinforce the salient beliefs underlying those factors found to be associated with the intention to change behavior.

We presented participants with a detailed definition of IP-SDM in home care before they completed the guestionnaire. Recent work using the TPB has indicated the need to expand the theory-based variable "attitude" by dividing it into two types. The first, affective attitude, refers to the emotion felt by the respondent and the second, cognitive attitude, refers to the respondent's judgment. Therefore,

questions included measures of five theory-based variables: cognitive attitude (two items, Cronbach's $\alpha=0.74$); affective attitude (three items, Cronbach's $\alpha=0.88$); subjective norm (three items, Cronbach's $\alpha=0.75$); perceived behavioral control (three items, Cronbach's $\alpha=0.78$) and the intention to use IP-SDM (three items, Cronbach's $\alpha=0.87$). There were additional sections for sociodemographic information and for additional comments at the end of the questionnaire.

Interviews and focus group data. Via a coordinator, we invited a variety of healthcare professionals in a home care team to take part in a focus group on the IP-SDM approach. We used both a focus group and individual interviews to obtain a variety of perspectives with the aim of soliciting the personal opinions of organization managers and stimulate discussion among those more directly involved in providing patient care. The focus group took the form of a round-table discussion to facilitate exchange between participants. We included three levels of potentially eligible managers/ administrators in the individual interviews: (1) the macro level, i.e. the administrators of the home care organization; (2) the meso-level, i.e. administrators' assistants and activity coordinators and (3) the micro level, i.e. home care team managers. Due to multiple locations and availability restrictions, interviews with managers/administrators were conducted individually.

We used structured interview guides for the individual interviews and the focus group in order to assess (a) participants' current practices and clinical problems; (b) barriers that might influence their implementation of the proposed IP-SDM in home care and (c) facilitators that might help them implement the approach in the home care setting. More specifically, we asked them about their current knowledge of IP-SDM, and we presented the model of IP-SDM, describing its key concepts and relational statements in detail. In addition, we showed a short clinical video to demonstrate IP-SDM in the case of a decision about location of care for an elderly patient who is losing the ability to live alone in her apartment. After watching the video, we asked participants first to identify facilitators that would help them use our IP-SDM model and then barriers that might impede its adoption. We also asked an open-ended question at the end of interviews and the focus group to collect participants' comments and suggestions. We audio-recorded and transcribed verbatim the focus group and all interviews. We designed the individual interviews to last approximately 60 minutes and the focus group to last 90 minutes.

Sample size and data analysis

In order to detect a clinically significant difference in the change of intention to engage in IP-SDM, with 80% power, at a 5% significance level in order to detect a mean difference of 0.5, one would require 126 health professionals to participate in the study. Anticipating a participation rate of 25–30%, *a priori*, we decided to distribute a total of 500 paper-based questionnaires to healthcare managers/clinical coordinators in the home care programs, who then distributed them to the healthcare providers. For the quantitative data pertaining to

the theory-based variables, we used descriptive statistics and conducted multivariate analyses. We identified covariates that showed a significant association (p < 0.10) with the main outcome (i.e. intention). We conducted multivariate analyses with data from all healthcare providers using a general linear regression and backward stepwise elimination for model selection. We also conducted subgroup analysis by types of providers (nurses, unlicensed home support workers, rehabilitation therapists, etc.). Consistent with the structure of the home care programs, we grouped occupational therapists, physiotherapists and dietitians in the rehabilitation professional cluster for the subgroup multivariate analyses. We performed statistical analyses using the Statistical Analysis System (SAS 9.1.3, SAS Institute, Cary, NC, USA).

For the qualitative data collected (from individual interviews, the focus group and open comments collected at the end of the TPB survey questionnaire), two research assistants (GM and SG) independently performed the content analysis using NVivo Version 8 (QSR International, Melbourne, Australia). The two coders performed peer debriefs to reach a consensus on the themes and the verbatims identified. We used an adapted version of a coding framework based on known barriers and facilitators associated with the implementation of SDM to guide qualitative analysis (Légaré, Ratté, Gravel, & Graham, 2008). Briefly, our content analysis consisted of a data-driven inductive approach for identification of new themes based on a deductive a priori template of codes approach (Fereday & Muir-Cochrane, 2008). We identified themes using an open coding procedure, sorting them into underlying determinants related to our coding framework (Boyatzis, 1998). Analysis involved (a) reading the transcripts and open comments (from questionnaires) in their entirety to obtain a sense of the overall data; (b) conducting a thematic analysis using the theory-based tree structure with open codes for new themes that were inductively derived and (c) comparing coders' findings to reach agreement about the main themes identified. Discrepancies were resolved in discussion with FL and DS.

RESULTS

Participants

Survey. Of the 500 questionnaires distributed to healthcare managers/clinical coordinators of the home care programs, 428 were potentially eligible participants. A total of 276 employees (64% of potentially eligible participants) completed the survey. Figure 1 shows the flow of participants.

A great majority of the participants were female (82.3%) with a mean age of 41 years old. Table I shows characteristics of survey participants.

Focus group. The home care team included a physician, a nurse, a social worker, an occupational therapist, a physiotherapist, a dietitian and an unlicensed home care support worker. Ages ranged from 20 to 49 years old, and all were females. Typical work experience in the home care environment was 5 years (we used the median because it

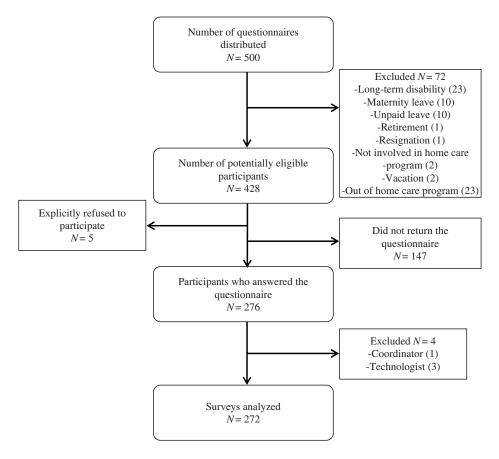


Figure 1. Flow of participants.

Table I. Characteristics of survey participants.

| N = 272 | % |
|-----------------------------------|------|
| Sex | |
| Female | 82.3 |
| Male | 17.7 |
| Age (years) | |
| < 30 | 21.3 |
| 30-39 | 24.6 |
| 40-49 | 25.8 |
| 50-59 | 23.5 |
| ≥ 60 | 4.8 |
| Job experience (years) | |
| < 5 | 41.6 |
| 5-9 | 20 |
| 10-14 | 22.1 |
| 15-19 | 6.1 |
| 20-24 | 5.3 |
| 25-29 | 1.6 |
| > 30 | 3.3 |
| Healthcare provider groups | |
| Physician | 1.5 |
| Nurse | 23.2 |
| Social worker | 22.4 |
| Home support worker | 30.9 |
| Rehabilitation | 18.4 |
| Occupational therapist $(n = 28)$ | |
| Physiotherapist $(n = 16)$ | |
| Nutritionist/dieticians $(n = 6)$ | |
| Activities coordinator | 2.5 |
| Unknown | 1.1 |

was a very small group). The length of the focus group was 98 minutes.

Individual interviews. Eight out of the 20 administrators, representing various levels in the primary care organization, participated in the interviews. Four were females and four were males, and all were between 40 and 50 years old. They had worked in the organization for 4-33 years and had occupied their current position for 1-6 years. The median length of the interviews was 62 minutes.

Intention and its influencing factors

On a scale from -3 (strongly disagree) to +3 (strongly agree), overall, the mean intention to engage in IP-SDM was positive (1.42 \pm 1.39) (See Table II).

Bivariate analyses demonstrated that intention was significantly associated with the "profession" variable (p = 0.02). In contrast, the variables "gender" (p = 0.72), "job experience" (p = 0.62) and "age" (p = 0.26) were not associated with the behavioral intention. Overall, in multivariate analyses, cognitive attitude (p = 0.001), subjective norm (p < 0.0001) and perceived behavioral control (p < 0.0001) were significantly associated with the respondents' intention to engage in IP-SDM and explained 57% of the variance of the behavioral intention in the model (R^2) (see Table III).

SDM among healthcare providers from all disciplines ΙΡ ii. engage Table II. Intention to

| | | | | | 1 | | | | |
|--|---------------------------|---|------------------|---|-------------------|-----------------|----------------------------|---|-------------------------|
| Variables | Overall model Nurses* | | Social workers C | Social workers * Occupational therapists * Physiotherapists * | Physiotherapists* | Dietitians* | Physicians | Home support workers [†] Activity coordinators | Activity coordinators † |
| Number^{\sharp} | 272 | 63 | 61 | 28 | 16 | 9 | 4 | 84 | 7 |
| Intention | 1.42 ± 1.39 | 1.42 ± 1.39 1.19 ± 1.49 1.38 ± 1.36 | 1.38 ± 1.36 | 2.05 ± 0.92 | 1.51 ± 1.36 | 1.80 ± 0.82 | 2.17 ± 0.65 | 1.33 ± 1.45 | 1.98 ± 1.55 |
| Range | [-3; +3] | [-3;+3] $[-3;+3]$ $[-2.33;+$ | [-2.33; +3] | [-0.66; +3] | [-1.16; +3] | [+0.66;+3] | [+1.5; +3] | [-3; +3] | [-1.33; +3] |
| Median | 1.83 | 1.50 | 1.83 | 2.17 | 1.75 | 1.83 | 2.08 | 1.83 | 2.33 |
| Cognitive attitude | 2.31 ± 0.89 | 2.15 ± 0.97 | 2.27 ± 0.94 | 2.61 ± 0.55 | 2.00 ± 0.95 | 2.59 ± 0.80 | 2.50 ± 0.41 | 2.39 ± 0.87 | 2.64 ± 0.47 |
| Range | [-1.5; +3] | [-1.5; +3] | [-1.5; +3] | [+1;+3] | [-0.5; +3] | [+1;+3] | [+2;+3] | [-1; +3] | [+2;+3] |
| Median | 2.5 | 2.00 | 2.50 | 3.00 | 2.00 | 3.00 | 2.5 | 3.00 | 3.00 |
| Affective attitude | 1.82 ± 1.09 | 1.39 ± 1.33 | 1.66 ± 1.06 | 2.36 ± 0.65 | 1.79 ± 0.84 | 1.94 ± 0.88 | 1.42 ± 1.13 | 2.05 ± 0.99 | 2.5 ± 0.69 |
| Range | [-3; +3] | [-3; +3] | [-1; +3] | [+1;+3] | [-0.33; +3] | [+1;+3] | [0.33; +3] | [-1.66; +3] | [+1.33;+3] |
| Median | 2.00 | 1.66 | 2.00 | 2.33 | 2.00 | 1.66 | 1.16 | 2.33 | 2.83 |
| Subjective norm | 1.96 ± 0.84 | 1.90 ± 0.84 | 1.96 ± 0.77 | 2.21 ± 0.67 | 2.00 ± 0.72 | 1.94 ± 0.61 | 2.5 ± 0.64 | 1.86 ± 0.98 | 2.57 ± 0.53 |
| Range | [-0.66; +3] $[-0.33; +3]$ | [-0.33; +3] | [0; +3] | [0.66; +3] | [+1;+3] | [+1.33; +3] | [+1.66; +3] | [-0.33; +3] | [+1.66; +3] |
| Median | 2.00 | 2.00 | 2.00 | 2.33 | 2.00 | 1.66 | 2.66 | 2.00 | 2.66 |
| Perceived behavioral control 1.15 ± 1.14 0.95 ± 1.16 | 1.15 ± 1.14 | 0.95 ± 1.16 | 0.90 ± 1.21 | 1.38 ± 0.88 | 0.94 ± 1.38 | 0.72 ± 0.83 | 1.75 ± 0.96 | 1.44 ± 1.08 | 2.07 ± 0.6 |
| Range | [-3; +3] $[-3; +3]$ | [-3; +3] | [-2;+3] | [-0.66; +2.66] | [-2;+3] | [-0.33; +2] | [-0.33; +2] [+0.33; +2.33] | [-1.66; +3] | [+1.33;+3] |
| Median | 1.33 | 1.33 | 1.00 | 1.66 | 1.16 | 0.50 | 2.16 | 1.66 | 2.00 |

* Healthcare professionals (licensed); * Unlicensed workers; * Due to missing values, the number of participants included in the analyses may differ from the original sample size. We only considered the participants who provided answers to all the variables (unknown profession; N =

As shown in Table III, the subgroup analyses demonstrated differences between types of providers. Briefly, among home support workers, cognitive attitude (p < 0.007), subjective norm (p < 0.008) and perceived behavioral control (p < 0.02) were significantly associated with the respondents' intention to engage in IP-SDM. Among nurses, subjective norm (p = 0.004) and perceived behavioral control (p < 0.0001) had a significant association with the intention. We found similar significant associations with intention for subjective norm (p = 0.012) and perceived behavioral control (p = 0.0007) among social workers. Finally, only affective attitude (p < 0.02) was significantly associated with the rehabilitation team members' intention to engage in IP-SDM.

Barriers and facilitators

Table IV shows perceived barriers and facilitators associated with implementing IP-SDM in home care as identified by (i) comments from 122 healthcare providers out of the 276 who completed the TPB surveys; (ii) seven healthcare providers in the focus group and (iii) eight interviewed managers/ administrators. The most-cited barrier to the implementation of IP-SDM in a home care program was time constraint. Many participants underlined that staff workloads could be a barrier. Other barriers identified were the difficulty of coordinating professionals, failure to synchronize their interventions in the patient's care, lack of human resources and high staff turnover. They also reported a lack of cohesion among professionals in the teams, and that they often had different work methods and did not have a common vocabulary. Participants proposed appointing facilitators who could help implement IP-SDM in the home care teams. They suggested involving all professionals from the outset in the management of a case and providing tools for singling out cases for which an IP-SDM approach is appropriate. They also suggested that planned team meetings, better team cohesion and shared work methods could facilitate the implementation of IP-SDM (Table IV).

DISCUSSION

Our study results indicate that overall, in the context of home care, healthcare providers have positive intention to engage in IP-SDM. However, the level of this intention and, more importantly, the factors influencing this intention vary across types of providers. Consideration of these findings leads us to make three principal observations.

First, although we could not find any other studies that target the intention of multiple types of healthcare providers to engage in IP-SDM in the context of home care, a number of surveys have shown that most health professionals (e.g. physicians, nurses and psychologists) have a positive attitude toward SDM in diverse clinical contexts (Légaré et al., 2008). However, previous studies indicate that few health professionals have implemented SDM in their practice (Pellerin et al., 2011). Our study provides insight into why there is a behavior-intention gap. We found that factors associated with this intention vary depending on the type of

Table III. Multivariate analyses of factors influencing the behavioral intention for the overall model and for each group of providers.

| Variables | Overall model | Home support workers | Nurses | Social workers | Rehabilitation team |
|------------------------------|---------------|----------------------|------------|----------------|---------------------|
| Participants (N) | 257* | 76 | 62 | 58 | 50 |
| Cognitive attitude | 0.30 | 0.51 | -0.13 | 0.31 | 0.24 |
| | p = 0.001 | p = 0.007 | p = 0.55 | p = 0.07 | p = 0.22 |
| Affective attitude | 0.13 | 0.17 | 0.15 | 0.13 | 0.61 |
| | p = 0.102 | p = 0.32 | p = 0.31 | p = 0.47 | P < 0.02 |
| Subjective norm | 0.45 | 0.38 | 0.56 | 0.45 | -0.004 |
| | p < 0.0001 | p < 0.008 | p = 0.004 | p = 0.012 | p = 0.99 |
| Perceived behavioral control | 0.39 | 0.33 | 0.62 | 0.42 | 0.17 |
| | p < 0.0001 | p < 0.02 | p < 0.0001 | p = 0.0007 | p = 0.32 |
| R^2 | 57% | 64% | 59% | 67% | 48% |

Notes: R^2 = explained variance. * Due to missing values (N = 15), the number of participants included in the analyses may differ from the original sample size. We only considered the participants who provided answers to all the variables. Physicians and coordinators were not considered in the analyses given the weak number of participants (N = 4 physicians and N = 7 coordinators).

provider even if they work within the same clinical setting, in our case home care, and for the same organization. This would mean that for IP-SDM to be translated into a specific clinical setting, the implementation intervention would need to be tailored to each group of providers even if they work together as a team. For example, the only factor that was associated with intention in the rehabilitation cluster was affective attitude, indicating that rehabilitation therapists need to find engaging in IP-SDM pleasurable. This is congruent with a recent study which indicated that primary care providers were more likely to attend a training program in SDM if they perceived it to be pleasurable (Allaire, Labrecque, Giguere, Gagnon, & Légaré, 2012). In contrast, the behavioral intention to engage in IP-SDM among nurses, home support workers and social workers was strongly associated with the variables of perceived behavioral control and subjective norm. In other words, for these groups of providers, implementation interventions need to address the barriers they perceive to engaging in IP-SDM and emphasize that other people who are important to them support this approach (employers, colleagues, etc.). Among home support workers, cognitive attitude was the most important variable associated with intention, meaning that for this type of provider, the implementation intervention would need to build on the fact that engaging in IP-SDM would turn out to be useful for their work.

Second, barriers and facilitators identified by the healthcare providers and managers help us populate the underlying salient beliefs associated with some of the theorybased variables assessed during the survey. For example, as regards the perception of control variable, healthcare providers identified the major barrier to engaging in IP-SDM as a lack of time, which is the most widely reported barrier across numerous cultural and organizational contexts when implementing change (Légaré et al., 2008). While there is no robust evidence to support the contention that more time is required for IP-SDM compared to conventional care (Stacey et al., 2011), the universal perception of this as a major barrier seems insurmountable. It is possible that this is the case because providers perceive that they need to add IP-SDM to their current tasks rather than to modify the way they are working with their patients. High staff turnover was another barrier identified specifically by providers. This factor may produce conflict and affect team cohesion and communication and is likely to directly impact the quality of the professional-patient relationship, as well as the relationship among professionals (Gaboury et al., 2011). In contrast, managers most frequently reported lack of human resources as a barrier, another factor that is frequently identified across multiple organizational contexts (Légaré et al., 2008). Also, some managers themselves suggested interventions for levering IP-SDM, such as planning team meetings on a more frequent and regular basis, since in the current situation it appears that team meetings rarely occur. As described in the IP-SDM model, a supportive work environment is crucial, and the implementation of an IP infrastructure including regular team meetings may well help healthcare providers engage in IP-SDM (Bridges et al., 2011).

Third, overall, our study confirmed that perceived behavioral control is the factor most closely associated with intention to engage in IP-SDM. This is congruent with systematic reviews of studies that have used socio-cognitive theories to predict behaviors among healthcare providers as a whole (Godin et al., 2008). However, our study is unique because it shows variation across healthcare provider groups as regards this important variable for the same clinical behavior. For example, dietitians showed the lowest level of perceived behavioral control, while activity coordinators showed the highest. This means that dietitians perceive that they have less control than activity coordinators in engaging in IP-SDM. This may reflect the fact that activity coordinators are in the position of managing team efforts and thus perceive that they have access to more resources to address potential barriers to engaging in IP-SDM. On the other hand, dietitians may feel that they are peripheral to the overall care process and thus perceive more barriers to engaging in IP-SDM with their patients and the rest of the team. It is worthy of note that home support workers showed a relatively high level of perception of control, similar to that of occupational therapists and physicians. This is important because home support workers are typically the largest group of providers for the elderly in home care contexts, and yet are perceived, at least to a certain extent, as occupying the lowest position in terms of status. However, our study results tend to indicate that they feel confident in their ability to

Table IV. Barriers and facilitators perceived to influence implementation of IP-SDM.

| | Durieto una idematoro percerrea to initachee imp | Administrators/Managers | Healthcare providers $N = 129$ |
|--|--|--|--|
| Themes Barriers · Subthemes | Examples of verbatim transcription (translated from the original French) | (individual interviews) $N = 8$ | (122 in the survey and 7 in the focus group) |
| | (· · · · · · · · · · · · · · · · · · · | Number of respondents (Range of quotes) | Number of respondents (Range of quotes) |
| IP-SDM approach is time-intensive (i.e. lack of time) • Extra work (administrative tasks) | "An IP-SDM takes time that we do not always have to devote to the very large number of files we need to process." "it is encouraged but limited by the workload and the schedule of each and every person." | 3 (1–5) | 40 (1-2) |
| Difficulty coordinating IP meetings (availability of professionals): • Mobilizing more than two professionals • Different work schedules • Frequent home visits | "The availability of other stakeholders to participate in case discussions can be limiting." | 5 (1-2) | 21 (1-2) |
| Non-synchronized professional interventions • Delays due to waiting lists • Uncoordinated patient care (time and information lapse) | "the pressure of waiting lists and the cooperation of all stakeholders are obstacles." "this is ideal when all players are in the same room at the same time." | 3 (1–2) | 10 (1-1) |
| Lack of human resources High staff turnover • Illness, vacations, retirement, new employees, etc. | "Every time the staff changes and has to learn to use the record, there really is a waste of time. But it is difficult to solve the problem of staff stability." | 5 (1-3) 0 | 2 (1-1) 5 (1-1) |
| Lack of cohesion among pro- fessionals • Practicing in silos • Imbalance of power among professionals | "Currently there is much, much work in silos. We have nursing services that are the concern of nurses. There are the social workers who have psychosocial concerns. The same holds true for rehabilitation workers, but in all this, there is nothing that brings all these people together." | 5 (1-2) | 15 (1–1) |
| Different working methods Different professional vocabulary Diverse evaluation tools, not standardized | "We don't have a common language; even worse we have lots of different models. Here the occupational therapists use COPM. The physiotherapists are using a model which is somewhat a derivative of DCP. As for the nurses, I imagine they use something that is unique to them. So there are no points of convergence for all these people that could also be of benefit to the user." | 4 (1-2) | 3 (1–1) |
| Facilitators Involving all professionals at once in case management | "if it was possible to establish synchronized support, it might be easier to structure the teams from the beginning to follow-up on the client." | 3 (1–2) | 7 (1–2) |
| Tools for targeting cases for which an IP-SDM approach is appropriate | "Perhaps it should be recognized that it may not apply in all situations. And maybe these would be tools to help us identify situations where it is more appropriate to do so." | 3 (1–3) | 4 (1-1) |
| Planned team meetings | "Time slots for consultation, for communication, where we'll be in common time. That's easier in-house. | 3 (1–3) | 0 |
| Team cohesion with Common vision and shared vocabulary Effective communication Balance of power among professionals Understanding the roles of different professionals | "if you really want it to work, we should reach an agreement with physicians to determine what is the quickest way to contact them, including what is preferred and whether it is possible to establish a direct link." "Having a physician as part of the team at the same level would be great. It would help us a lot in teams." | 7 (1–2) | 5 (1-1) |
| Shared working methods · Standardized evaluation tools · Implementation of a common computer platform · Integration of decision aids | "but if there is no work order, if there are no common work tools or a common language, it is difficult to arrive at something efficient." | 6 (1-1) | 5 (1-1) |

address barriers to engaging in IP-SDM. Therefore, implementation interventions to translate IP-SDM in home care settings will need to take this important group of providers into account. Our IP-SDM model has the potential to help overcome many of the identified barriers with only slight adaptations to each organizational structure. Future studies will involve the development of standardized evaluation and tools such as decision aids to support the implementation of IP-SDM.

Our study has limitations. First, there was a low response rate among some types of providers (i.e. physicians). This limited participation may have biased responses in favor of endorsing IP-SDM. Second, among other types of providers, there were few eligible respondents (specifically dietitians and activity coordinators). Taken together, these two limitations made interpreting some of our results for these groups more difficult. Additional limitations were that the survey itself was not validated but was modeled on validated surveys used in earlier studies, and although the qualitative portion of our study helped us populate the underlying salient beliefs associated with the theory-based variables assessed during the survey, we cannot assume that we have identified them all. We also acknowledge the high proportion of women respondents, although this proportion reflects the overall gender predominance among home care organization employees. Also, we used a frequency count to judge the relative importance of the salient beliefs. This may be overestimating the true importance of some factors and underestimating that of others. The past experience of investigators and interviewers may have affected how focus groups and interviews were designed and run, but we used a structured interview grid and standardized forms to keep the process systematic.

CONCLUDING COMMENTS

Overall, healthcare providers involved in home care demonstrated a positive intention to engage in IP-SDM when caring for elderly patients losing their ability to live alone. However, the factors influencing this intention and their relative importance differed according to the type of provider. This suggests that implementation strategies for translating IP-SDM into clinical practice should be tailored to match the factors most influencing intention for each type of provider. The absence of implementation strategies tailored to specific groups of providers may explain the behavior-intention gap observed in previous studies where interprofessional teams are targeted. The barriers and facilitators could be addressed in future programs that target engagement in IP-SDM.

Declaration of interest

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