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Opening the Black Box of Clinical Collaboration in Integrated Care Models for Frail, Elderly Patients

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Purpose: The purpose of the study was to understand better the clinical collaboration process among primary care physicians (PCPs), case managers (CMs), and geriatricians in integrated models of care. ***Methods:*** We conducted a qualitative study with semistructured interviews. A purposive sample of 35 PCPs, 7 CMs, and 4 geriatricians was selected in 2 integrated models of care for frail elderly patients in Canada and France: System of Integrated Care for Older Patients of Montreal and Coordination of Care for Older Patients of Paris. Data were analyzed using a grounded theory approach. ***Findings:*** The dynamics of the collaboration process develop in three phases: (1) initiating relationships, (2) developing real two-way collaboration, and (3) developing interdisciplinary teamwork. The findings suggest that CMs and geriatricians collaborated well from the start and throughout the care management process. Real collaboration between the CMs and the PCPs occurred only later and was mostly fostered by the interventions of the geriatricians. PCPs and geriatricians collaborated only occasionally. ***Implications:*** The findings provide information about PCPs' commitment to the integrated models of care, the legitimization of the CM's role among PCPs, and the appropriate positioning of geriatricians in such models.

Key words: Primary care physician, Case manager, Geriatrician, Integrated models of care, Chronic care management

Recent developments in community-based care have made care management for frail elderly patients a priority (Boult & Wieland, 2010). In both research and practice, there is an increased interest in how integrated approaches and models of care can provide the linkages to improve the continuum of services necessary to care for community-dwelling populations (Johri, Beland, & Bergman, 2003). Integrated care is well recognized as a solution for improved quality of care and quality of life for patients with complex, long-term problems cutting across multiple services, providers, and settings

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(Kodner & Spreeuwenberg, 2002). It is generally defined as "a coherent set of methods and models on the funding, administrative, organizational, service delivery and clinical levels designed to create connectivity, alignment and collaboration within and between the cure and care sectors" (Kodner & Kyriacou, 2001). There are several dimensions to the integration process: funding (e.g., pooling of funds, prepaid capitation); administration (e.g., intersectoral planning); organization (e.g., discharge and transfer agreements); service delivery (e.g., joint training, centralized information, case/care management, multidisciplinary/interdisciplinary teamwork); and clinical expertise (e.g., standard diagnostic criteria; uniform, comprehensive assessment procedure; joint care planning; regular patient/family contact and ongoing support) (Kodner & Spreeuwenberg, 2002).

In the past 30 years, a wide variety of successful models have been developed for comprehensive care of older adults with chronic conditions (Boult et al., 2009). Until now, most of the studies on integrated care models have focused on their impacts and have yielded promising results, with better accessibility to services and improvement in health parameters for frail elderly patients (Boult et al., 2009; Low, Yap, & Brodaty, 2011). However, to achieve such impacts, collaboration between clinicians—within and across organizations—is critical, because it is a key component of both service delivery and the clinical dimensions of integrated care. Collaboration means sharing information, coordinating work, and making joint decisions during patient care (Zwarenstein & Bryant, 2006). Despite its importance for integration, the process through which new forms of collaboration develop has rarely been addressed, either theoretically or empirically (Zwarenstein & Reeves, 2000). In most studies, collaboration is treated as a black box, even though it constitutes one of the key conditions of successful care management (Kane, Homyak, Bershadsky, & Flood, 2006). There is still considerable uncertainty surrounding whether and under what conditions health professionals will collaborate.

Generally, the integrated care models that target the frail elderly patients are based on a multidisciplinary team, with key actors such as case managers (CMs), primary care physicians (PCPs), and geriatricians (Johri et al., 2003). Within the context of providing care to elderly patients, these key actors have very specific roles. CMs are health care professionals (e.g., nurse practitioners, registered nurses, social workers) who are primarily responsible for case management (i.e., the coordination of community-based health and social services and specialist services for older disabled patients). CMs are assigned to a limited number of patients and are responsible for needs assessments, care planning, implementation of care plans, monitoring, and follow-up (Challis, Darton, Hughes, Stewart, & Weiner, 2001). In collaboration with other social and health providers, PCPs assume responsibility for medical monitoring and treatment (Stille, Jerant, Bell, Meltzer, & Elmore, 2005). They also play a critical role in patient recruitment (Bula et al., 1995). It is because frail elders without a participating PCP often refuse to abandon their usual PCP and see another PCP practicing within the model (Gross, Temkin-Greener, Kunitz, & Mukamel, 2004). In contrast to PCPs, the geriatrician's role in integrated models of care is to meet the specialized care needs of elders with complex chronic conditions and help provide chronic care management so as to ensure that frail patients receive an appropriate care plan (Challis & Hughes, 2002).

Although close interactions between a CM and a PCP are said to play a critical role by enhancing the effectiveness of integrated models (Wagner, 1998), few studies have examined the collaboration between these two professionals in this type of organization. It has been shown that physicians and nonphysicians bring different perspectives and skills to patient care, and these practices result in additional value to patients in terms of quality and satisfaction (Flesner, 2009). Moreover, the rare studies on collaboration between PCPs and CMs have reported conflicting findings. One suggests that PCPs are generally reluctant to collaborate with CMs, which is associated with a gap in interprofessional communication (Feltes, Clemens, Crabtree, Dubitzky, & Kerr, 1994). Another has shown that PCPs will agree to delegate certain activities such as providing advice, reassurance, and screening to other clinicians, such as nurses (Jenkins-Clarke, Carr-Hill, & Dixon, 1998). Although it seems that geriatricians may reinforce PCPs' adherence to evidence-based chronic care, in addition to providing improved geriatrics competencies in primary care settings, there are still uncertainties surrounding how tasks should be shared between geriatricians and PCPs (Phelan et al., 2007). In addition, to our knowledge, no study has analyzed how geriatricians and CMs collaborate.

Given the importance of achieving effective collaboration among CMs, PCPs, and geriatricians in order to improve patient care, this study was

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undertaken to understand better the dynamics of clinical collaboration in integrated care models for frail elderly patients. We therefore examined actual practices and the intricacies of professional collaboration in two similar models of care (one in Canada and another in France) using a grounded theory approach. Our findings allowed us to comprehend better the emergence of collaboration among health care professionals and revealed its underlying dynamics. The findings also revealed that in order for integrated models of care to work well, a certain level of collaboration is required among the key actors, in this case, the CMS, PCPs, and geriatricians. In addition, from the findings, we obtained information about PCPs' commitment to the integrated models of care, the legitimization of the CM's role, and the appropriate positioning of geriatricians in such models.

Methods

Given the lack of knowledge about the complexity of the process of collaboration (Pope & Mays, 1995), a qualitative method was deemed appropriate. We adopted an inductive strategy to investigate collaboration among health care professionals in two integrated models of care using a grounded theory approach in our data analysis (Strauss & Corbin, 1998).

Description of the Case Studies

For this study, we relied on theoretical sampling (Patton, 2002; Strauss & Corbin, 1998) for select two cases: SIPA (a French acronym for a System of Integrated Care for Older Patients) (Bergman et al., 1997) of Montreal, Quebec, Canada and COPA (a French acronym for Coordination of Care for Older Patients) (Vedel et al., 2009) of Paris, France. These two models were selected because they (1) focus on the two dimensions of integration (service delivery and clinical expertise) associated with the collaboration of the key actors; (2) have many similarities, because COPA was derived from SIPA (as explained later); (3) are implemented in similar health care systems, as both systems are publicly funded and considered fragmented (Bergman et al., 1997; Henrard, 2002). Indeed, in these two countries, multiple health care professionals and organizations work in silos—focusing and acting in parallel without adequately appreciating their relation to the whole. There is a lack of effective communication, sharing of information, and care coordination. These fragmentation issues affect health and social services, community-based and hospital-based services and long-term care and acute care. The two integrated models of care are described in Table 1. Details regarding the role of the CM, the PCP and the geriatrician are provided in Table 2.

Two research physicians specialized in public health and trained in qualitative research performed recruitment of participants, data collection, and analysis. These two physicians were not part of the PCPs involved in the model.

Study Participants

The SIPA model was implemented in 1999 and the COPA model, which was derived from SIPA, was implemented in 2006. The face-to-face semistructured interviews were conducted from 2003 to 2004 in SIPA and from 2009 to 2010 in COPA. The duration of the professionals' participation in the model was similar and lasted more than one year. The managers of the model (consortium, see Table 1) provided the names of all the PCPs, CMs, and geriatricians who participated in the model.

Under both models, 20% of the participating PCPs in the model were randomly selected for our study: 22 PCPs from a group of 114 registered physicians in SIPA and 13 PCPs from a group of 62 registered physicians in COPA. A total of six PCPs declined the interview, so more names were drawn (four from SIPA and two from COPA). No differences were noted between the profile of our respondents and the profile of those who declined the interviews (in terms of demographic and practice characteristics). We interviewed all the CMs (four from SIPA and three from COPA) who participated in the model, except those who had either retired or moved away (three from SIPA and one from COPA). All the geriatricians participating in the models were also interviewed (two from SIPA and two from COPA). Demographic and practice information about participants is provided in Table 3.

Data Collection

Face-to-face semistructured interviews were conducted using three interview guides that were developed, one for each type of professional. The protocol helped us tackle questions that were unanswered in the extant literature concerning collaboration between professionals in integrated care models. The resulting interview guides were refined in the field following four pilot interviews (two

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Table 1. Description of the Two Integrated Models of Care: System of Integrated Care for Older Patients (SIPA) and Coordination of Care for Older Patients (COPA)

Aims

SIPA and COPA: These two integrated models of care are community-based care organizations that apply a patient-oriented model. They are designed to meet the needs of a defined population: the frail elderly patients residing in a given area. They manage the delivery of health and social primary care services and organize the links with the hospital settings. They provide comprehensive and continuous care to frail older populations and mobilize a needs-based, flexible, and rapid response with case management programs, geriatric assessments and evidence-based protocols.

Territories

SIPA and COPA: The two integrated models of care have been implemented in urban territories.

SIPA: in two districts of Montreal (233,000 inhabitants), Quebec, Canada beginning in 1999 and providing care for 600 patients.

COPA: in one district of Paris (150,000 inhabitants), France beginning in 2006 and providing care for 300 patients.

Target population

SIPA and COPA: The target population was frail elderly outpatients with severe disabilities living in the community. The eligibility criteria were being older than 64 years and community dwelling, residing in the territory where the care model was implemented, and being disabled. Disability was assessed using a scale that included activities of daily living, communication and cognition.

Recruitment process of the target population at the single entry point

SIPA and COPA: The target population was recruited mainly from different home-care services, and a single entry point was used to refer eligible patients to case managers (CMs).

Implementation of the models

SIPA and COPA: As there is no formal education on interdisciplinary care and case-management in Canada and France yet, the CMs were specifically trained for this intervention. Training was focused on the case management process and in performing comprehensive geriatric assessments. Plenary sessions were held to provide additional information on the model characteristics and objectives.

SIPA: The primary care physicians (PCPs) were contacted by the CM and asked to participate in the program only after their patients had been recruited.

COPA: The PCPs received more information about how the model of care worked before their patients were recruited.

SIPA and COPA: Governance was provided by a nonprofit consortium including managers from the community-based services and hospital settings. The consortium received public funding from Medicare for the salaries of the CMs (full-time) and the geriatricians (half-time) and to pay for PCP participation (stipend by patient included).

PCPs, one CM and one geriatrician). A sample of the final revised guides is provided in the Supplementary Material. The interview guides all began with a general question on professional practices and then moved on to more specific questions to explore practices and collaboration in two areas: (1) patient care processes—assessments of patient needs and the development of care plans, care plan implementation and resource mobilization, and patient monitoring; and (2) collaboration processes within the models—information exchange between professionals, that is, collaboration between case managers and primary care physicians, case managers and geriatricians, and primary care physicians and geriatricians. Interviews ended with general questions on the models' impacts.

The two research physicians specialized in public health collected the data. Each conducted half of the interview sessions. Each interview lasted between 45 and 60 min, was recorded in its entirety and transcribed verbatim. Because most of the interviews were conducted in French, the same professional who had expertise in translating and copy-editing health care-related research papers translated data from the interviews. The senior lead author of the paper has prior training and accreditation in translation; she ensured that the translated data were true to the original data.

Data Processing and Analysis

The coding and analysis was performed using the Strauss and Corbin grounded theory approach, consisting of open, axial, and selective coding, in order to identify relevant categories and relationships and develop the conceptual framework that emerged from the data (Strauss & Corbin, 1998). Nvivo8 was used for data coding and analysis. We first proceeded with a round of open coding of the interviews. Then, following an axial coding strategy (Strauss & Corbin, 1998), codes with the same content and meaning were grouped into

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Table 2. Roles of the Care Managers (CMs), the Primary Care Physicians (PCPs), and the Geriatricians

Role of the CMs

SIPA (System of Integrated Care for Older Patients) and COPA (Coordination of Care for Older Patients): The (CMs) were typically nurses. They were responsible for overseeing the entire intensive case management process. Each CM had a caseload of 40 outpatients in order to improve the fit between patient needs and the services offered.

The CMs performed comprehensive assessments of the elderly patients' needs using the SMAF—a French acronym for Functional Autonomy Measurement System (Hebert, Carrier, & Bilodeau, 1988)—in SIPA and the RAI-HC—Resident Assessment Instrument Home care (Morris et al., 1997)—in COPA.

Based on this multidimensional assessment, an individualized care plan was developed, taking into account the patients' specific health conditions. The CMs participated in the development and implementation of the care plan, which was based on evidence-based protocols.

During the follow-up, the CMs coordinated all of the patient's support needs (with social and health professionals as well as caregivers). The CMs reassessed patient needs every six months to adjust the care plan as required. They oversaw adequate, pro-active patient follow-up until the patient was moved to a nursing home or until death. Even if the role of CM was mainly performed in the community, CM coordinated care with hospital services when needed; if one of their patients was hospitalized, CM provided information about their patients' health conditions and collaborated in the development of the hospital discharge plan.

Role of the PCPs

SIPA and COPA: The ongoing role of the PCPs was to collaborate with the CMs in the care management process and to share information on their very frail patients included in the program. They were responsible for the primary care of their patients. They received a stipend per patient to participate in the model ($400 in SIPA and 250 euros in COPA).

Role of the Geriatricians

SIPA and COPA: The role of the geriatricians was not very clearly defined at the onset. In a nutshell, following a PCP request, the geriatrician (playing the role of a consultant and not that of a PCP) carried out in-home geriatric assessments, developed interdisciplinary protocols and organized hospitalizations for patients with more complex conditions. For these patients, the evidence-based protocols were based on results from the need assessment process performed by the CM. These protocols were reviewed by the geriatrician during the development of the care plan. The geriatricians spent half their time working in the community, sharing an office with the CMs, and the other half of their time working in a nearby hospital geriatric ward in order to reinforce the links between community services and hospital settings. The geriatrician received a salary and was not assigned to a defined number of patients.

Table 3. Characteristics of Participants

Characteristic	Primary care physicians (n = 35)	Care managers (n = 7)	Geriatricians (n = 4)
Age, in years (range in years)	42–70	40–56	30–41
Length of experience caring for the elderly patients (range in years)	10–35	4–10	3–8
Number of patients in the model	2.8	40	—

categories. Through selective coding, patterns were then analyzed, linking the core category (e.g., collaboration between CMs, PCPs and geriatricians) to other categories (e.g., initiating relationships, developing collaborations, developing interdisciplinary teamwork). Three researchers, who used a consensus approach to resolve discrepancies, validated the coding (Larsson, 1993). The analytical process was repeated until theoretical saturation (Strauss & Corbin, 1998), the point at which additional analysis repeatedly confirms previously made interpretations.

Findings

Based on our results, we were able to identify the process by which collaboration emerged between the PCPs, the CMs, and the geriatricians. The analysis of the interviews revealed that this process involved a series of different stages: initiating collaboration, developing real two-way collaborations, and developing interdisciplinary teamwork. In each stage, we also identified the dynamics underlying the collaboration that took place between these three types of professionals as it evolved over time. There were no major differences in the perceptions of the PCPs, the CMs, and the geriatricians. Figure 1 presents the dynamic process by which collaboration developed over time.

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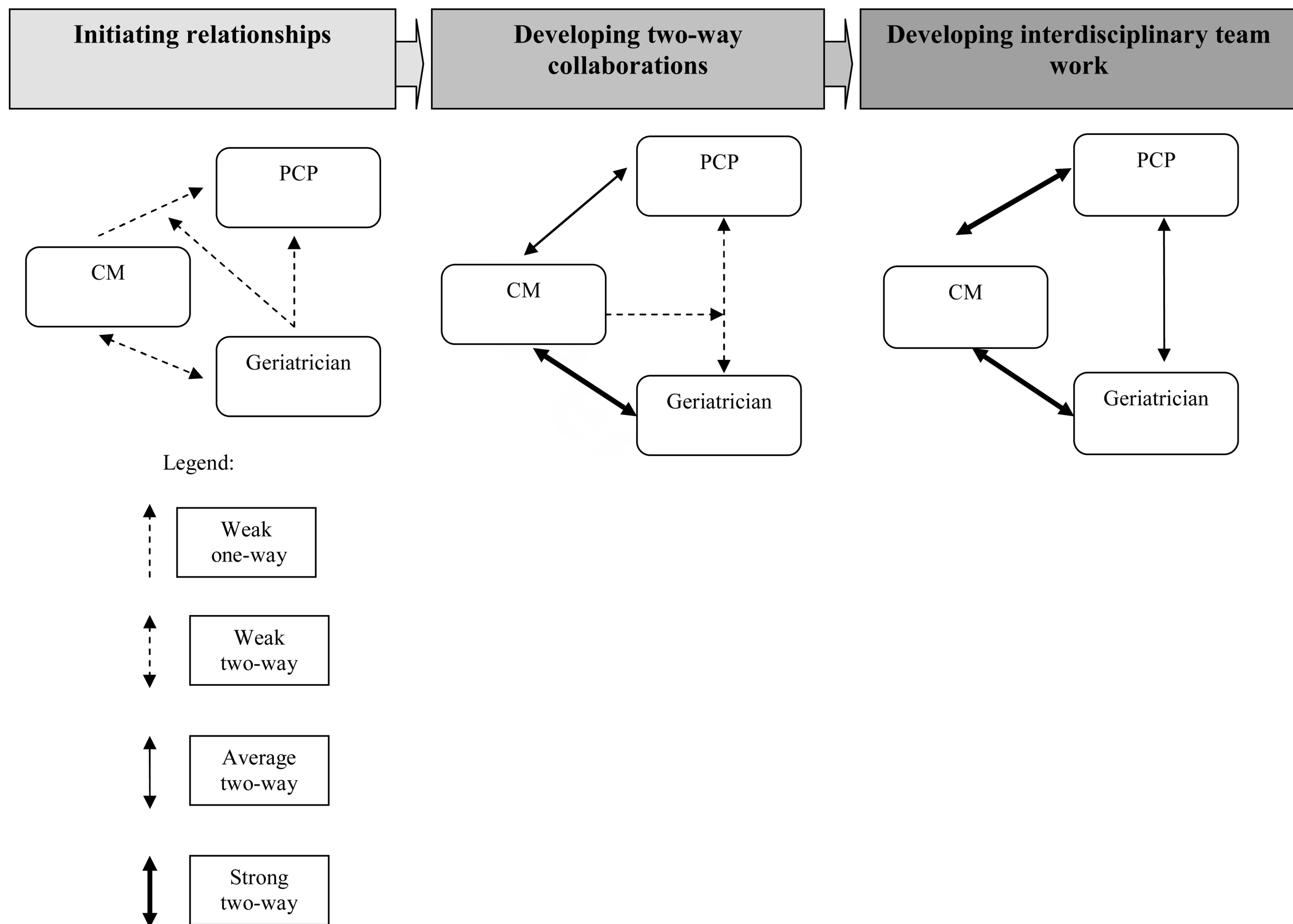

Figure 1. Building collaboration over time: A dynamic process.

Initiating Relationships

The analysis revealed that relationships between the CMs, PCPs, and geriatricians emerged early in the process through their first contacts that occurred as soon as a patient was accepted for case management. One of the overarching goals of these new partnerships—here referred to as coconstructed relationships. CMs, PCPs and geriatricians were hoping to establish bi-directional, mutually supportive relationships. All three groups were involved in modifying, designing, reconfiguring and shaping their relationships. The geriatricians often played an intermediary role to allow relationships to develop between the CMs and the PCPs. During this phase, we observed that the relationships were mostly one-way, except between the CMs and the geriatricians, who were able to develop two-way relationships from the start.

Coconstructed One-Way Relationships—CMs and PCPs.—The fact that the CMs considered the PCPs crucial partners, because the PCPs had known their patients for many years, and the fact that the CMs needed to know the patients' clinical histories in order to assess their needs were the main drivers of initial collaboration. According to one CM:

> In any event, the attending physician is essential. He knows the person, and often he knows their family situation, their medical history and everything that has been tried but didn't work in the past. (CM 1 COPA)

Despite the CMs' willingness to collaborate with the PCPs, it was proved difficult to establish concrete collaborative practices, and collaboration remained superficial and infrequent. For example, despite their many attempts, the CMs frequently had difficulties getting in touch with the PCPs, making several attempts before they could reach them:

> It's really extremely difficult to reach a family physician, to get one on the phone. You have to keep calling back, leaving messages with secretaries; generally, they end up calling you back, but it's difficult, and one of the first questions we ask in an assessment is, "Who's your family physician?" (CM 3 SIPA)

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Paradoxically, even if the PCPs were not making themselves very available, they still wanted to be informed about the CM's interventions with their patients. One PCP made the following observation:

> How does the CM introduce herself to the patient when she goes to make the assessment? I don't agree with her going into a patient's home unless I am associated with the visit. (PCP 8 COPA)

Coconstructed Relationships—CMs and Geriatricians.—From a clinical perspective, the CMs' interventions during needs assessments proved difficult because the patients had multiple health problems that required collaboration with a physician, yet the PCPs were difficult to reach or unavailable. The CMs therefore turned to the geriatricians, who were more available and could perform the in-depth needs assessments required. As illustrated in the subsequent comment, the CMs needed geriatric competencies to identify some syndromes and, in particular, cognitive impairments, mainly with patients who had recently been included in the case management process.

> You realize that there really are memory problems; that's the real question. You get the feeling that there's something missing, even if the person is not necessarily dependent, or for whom we know that we won't be able to organize much. But that's when we need the expertise in geriatrics. (CM1 SIPA)

Overall, the geriatricians responded positively to the CMs' requests, and some collaboration quickly ensued between them. With the guidance provided by the geriatricians' reports, the CMs felt better equipped to contact the PCPs, provide new information, and ask for the PCPs' collaboration. One CM made the following report:

> It was just to see if we were on the right track, if yes or no. It happened that we went to see the geriatrician for someone taking several medications, to see if this would be the cause of the symptoms we were seeing. Sometimes we consulted in order to better determine what we were seeing before speaking with the family physician. (CM 2 COPA)

Coconstructed Relationships—PCPs and Geriatricians.—Once they had heard about the problems that the CMs were having initiating collaboration with the PCPs, the geriatricians spoke to their colleagues and encouraged them to collaborate with the CMs. The geriatricians had to explain the CMs' role in the integrated models of care to the PCPs. According to one geriatrician, these physician-to-physician, face-to-face contacts appeared to help build PCPs' trust in the CMs and raise awareness about the importance of PCPs participating in the model:

> I personally met with some physicians in the community. And just the fact of having met face-to-face produced an enormous change in their collaboration. . . . It was very hard for them to grasp it all and understand what we were dealing with. And I believe in human relations; it isn't enough to just send someone a piece of paper. . . . Physicians in the community are unfamiliar with the role played by the case manager, so they won't take the call. (Geriatrician 1 SIPA)

Developing Real Two-Way Collaborations

During this phase, PCPs' perceptions of CMs and the integrated model of care began to change and the real premises of collaboration between them began to emerge with commitment on the part of the PCP, because the two-way communication increasingly characterized the relationships. However, the contacts between the PCP and the geriatricians remained occasional.

Coconstructed Two-Way Collaborations—CMs and PCPs.—PCPs became more invested in the plan implementation phase, which they perceived as more concrete, because it addressed real patient needs and had positive effects on their professional practices. The PCPs were willing to let the CMs take on some of their time-consuming nonmedical activities, and this allowed them more time to focus on providing medical care. The PCPs wanted their frail patients to be closely monitored so that services could be set up and coordinated for in-home care:

> The CM does what I don't have time to do, i.e. organizing the environment, like contacting nurses, family members and assistants, giving shape to this process, making appointments, contacting ambulance services, etc. This is an unending chore. It's also a big benefit to know that these things are going to get done, and it's different from before when we could recommend things, but there was no follow-through. (PCP 6 COPA)

Most of the PCPs felt that the CMs' comprehensive assessments of their patients improved the quality of their interventions. Most of PCPs expected the CMs to act as a centralized source of information that could guide patient follow-up activities. This desire was stronger among PCPs

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who did not make home visits and wanted a clear assessment of the patient's situation in the home in order to adjust treatment accordingly. One PCP gave the following explanation:

> The CM makes precise needs assessments, evaluating the individual's mobility and their ability to prepare meals, for example. . . . This is where it's a big help, by giving me a more comprehensive view of the problem and allowing me to give my patients better treatment. (PCP 4 SIPA)

PCPs expected CMs to filter everyday nonmedical calls concerning their patients. They said that they did not want to be bothered with problems beyond their competencies. According to one PCP, this was particularly true of PCPs who had many elderly patients and who were often contacted by their patients' families.

> The CM must be able to respond to complaints and "small" daily patient issues that do not always require a physician's opinion. (PCP 15, SIPA)

In terms of collaboration, the PCPs wanted the CMs to be available on demand. During this phase, the PCP–CM relationships were still quite hierarchical. The PCPs wanted to be able to easily contact the CM throughout the patient management process. They expected the CM to be accessible and available. For the PCPs, contacting CMs should be simple and not take much time. According to one PCP:

> We want to be able to ask for some information, pose a question and have a clear response. I want to be able to pick up the phone and speak to her directly. (PCP 9, COPA)

Coconstructed Two-Way Collaboration—CMs and Geriatricians.—The geriatricians mainly became involved in the development of the care plan after the CM had made an assessment of the patient's needs. The geriatricians used evidence-based protocols in each patient's care plan, in collaboration with the CM. According to the report of one geriatrician, the CMs would then implement the care plan with other professionals.

> We try to have an evidence-based practice (with the CM), one based on proof. We work on the medical and pharmaceutical care plans, and it's very cutting-edge. Each case took some time to manage well. (Geriatrician 2 SIPA)

According to the geriatricians, their exchange of information with the CMs appeared balanced. Indeed, the CMs and the geriatricians were engaged in multidisciplinary collaboration, frequently sharing information in both directions and clearly segregating duties. This may be explained in part by the fact that the geriatricians were available to the CMs and worked in close proximity to them, often in the same office:

> I had the medical side, and they took care of social issues, care and assessments. They were the ones referring the person, and it's true that collaboration is very easy, particularly when you're in the same office, so these things are easy. . . . The CMs can ask me questions at any time of the day, and in the same way, I can ask them for information. I find it a real sharing relationship. The hierarchy doesn't enter into it much at all. (Geriatrician 2 SIPA)

Coconstructed Two-Way Collaboration—PCPs and Geriatricians.—During the day-to-day patient follow-up, the PCP collaborated mainly with the CM and rarely had any contact with the geriatrician. One PCP made the following comment:

> The geriatrician, I don't see him much and we rarely speak on the phone. The person I speak to most is the CM. (PCP 13 SIPA)

Thus, collaboration between the geriatrician and the PCP was not always easy, and the PCPs sometimes felt that the geriatrician was playing "big brother" when the time came to prepare a care plan. Indeed, some PCPs even strongly resisted sharing the list of their patient's prescribed medications. They did not want the geriatrician to be able to review some of their therapeutic prescriptions. One geriatricians made the following comment:

> The doctors sometimes suggested that that there was someone looking over their shoulders, like a big brother. This means that the geriatrician could see everything the physician was doing, and they were afraid of being watched. (Geriatrician 2 SIPA)

However, when the CMs had problems with a patient presenting an acute medical problem, they used the geriatrician as an intermediary who could pass along certain messages to PCPs who then preferred physician-physician contacts.

> When a problem occurs—Doctors talk to doctors—and it's true. . . . It's just something I say, but it's really important, and we can pass along messages from the geriatrician to the attending physicians. (CM 3 SIPA)

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Developing Interdisciplinary Teamwork

During this phase, the CMs consolidated their collaboration with the PCPs, relationships stopped being hierarchical, and joint decision making began. During Phase 1 (initiating relationships), the PCPs would give orders to CMs to request services based on their hierarchical position. With time, they consolidated their collaboration: the PCP acted in response to patient needs as assessed by the CM. Care planning became an occasion for PCPs and CMs to share their points of view and decide together what services could be implemented at home for a frail patient. But there were still times when their collaboration could be undermined by poor information sharing. The geriatricians helped PCPs organize hospitalizations.

Coconstructed Teams—CMs and PCPs.—Continued exchanges with a CM allowed the PCPs to learn to truly work as a team with a case manager. Patients with more complicated and unstable conditions provided more opportunities for CM–PCP exchanges. Collaborative practices developed at the same time as trust developed in the PCP–CM relationship. Once the PCP was confident in the CM's interventions with patients, the CM felt authorized to shoulder more responsibility, and the collaboration between them became more balanced and less hierarchical. According to one CM:

> Sometimes I'll speak with the family physicians several times a week for situations that we are following together and, over time, we establish a relationship, one based on trust. At one point the trust is there, and I'm able to intervene and do more, and he'll say, "OK." (CM 2 SIPA)

The CMs reported that the PCPs began to let them play their case management role, particularly since they began to see benefits in terms of quality of care as well as in their own practices:

> Overall, they nevertheless let us do our work, because we are helping them. (CM 2 COPA)

Eventually, the collaborative practices between the PCPs and the CMs began to go beyond service planning and shared decision making. This often occurred in situations where the patient presented with behavioral problems and the burden on family caregivers too great. The CMs began to make proposals, alongside the PCPs, particularly regarding changes to nonpharmaceutical and even pharmaceutical therapies. This was the phase during which the CMs and PCPs began working as a real team:

> And then, in general, when we recommend something, whether it's physiotherapy or a slight change to treatment, because there, really the person is too aggressive. The PCPs follow our evaluation and modify the treatment. They do it naturally, without it causing any problems. (CM 3 COPA)

Nonetheless, most of the PCPs were reluctant to formalize information exchanges with the CM. Some PCPs even developed negative perceptions of the care plans, which they considered purely administrative tools. Overall, as illustrated by the subsequent quote, the PCPs were often reticent about using any form of formalized, written care plan and following care protocols:

> So, the CM got me involved in it in the beginning, but we stopped managing this kind of administrative paperwork. I should say right away that it remains something verbal, a bit automatic. There is no real formalization. (PCP 11 COPA)

But sometimes the collaboration between the CMs and the PCPs concerning a frail patient remained fragile, because some PCPs had difficulty routinely passing along patient information to the CMs. They often only contacted the CMs when there was an emergency and did not always remember to send them patient follow-up information. Some PCPs had difficulties anticipating problems and focusing their practice on the chronic needs of patients in order to prevent acute situations. According to one CM:

> So, maybe sometimes, even though they know that we are monitoring the person, well, there are things that are deteriorating at home. They go home and we aren't informed, and then, all of a sudden, everything blows up and we get a call, but we're missing bits of the story. (CM 2 COPA)

Coconstructed Teams—Geriatricians and CMs.—For the CMs, the steady presence of geriatricians gave credibility to their actions. With the support provided by the conclusions of the geriatricians' reports, the CMs felt better equipped to contact the PCPs, provide new information and ask for the PCPs' collaboration. In this case, the CMs felt that their role in patient monitoring was legitimized to the PCPs as well as to other professionals:

> There are benefits, the fact that we are collaborating with the geriatrician, and I think that in fact the attending physicians take into account what we are proposing. I mean, we have more the impression that we're being listened to, recognized by the doctors and caregivers. (CM 3 COPA)

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The geriatricians clearly identified the CMs as responsible for the case management process. This is why the geriatricians began withdrawing from the PCP–CM relationship, focusing on providing pure geriatric expertise, even though they remained available in case of problems. In the words of one geriatrician:

> It's just simpler if the CM who is (following the patient) is regularly in touch with the attending physician. We work with the case managers, and they work with the attending physicians. (Geriatrician 1 COPA)

Overall, the geriatricians made recommendations but did not prescribe treatment. They considered this their way of showing that they were not there to replace the PCP. However, the CMs would have preferred having the geriatricians able to intervene more, including prescribing treatment, particularly when the PCP was not being sufficiently responsive to the CM's requests:

> The geriatrician only gives an opinion, he does not prescribe, so it isn't an easy position, and in situations that require some decisions, when the attending physician isn't moving things forward, it's often difficult. (CM 3 COPA)

Coconstructed Teams—Geriatricians and PCPs.—In both SIPA and COPA, the notion of "geriatrician/PCP team" ultimately remained limited. The team collaboration centered on hospitalization. Indeed, the PCPs typically had problems gaining access to hospital care for their patients. The geriatricians who were recruited under both models maintained both a hospital practice and a community practice. The PCPs liked this positioning of the geriatricians and did not hesitate to call them for easy and direct access to hospitalization.

> I have more need for a geriatrician when I'm dealing with an acute case or to organize a hospitalization, find a place in a day hospital, or deal with the pathology of an acute case. They help us hospitalize patients, find a day hospital or somewhere for a short geriatric hospital stay, provide a medical opinion in the home in a given situation to support an opinion. (PCP 5 COPA)
>
> They (the PCPs) call more often to request a hospitalization or for an opinion on something very specific, and I can call them when there's a real medical problem. It's just given as a warning, because I don't want to take their place. (Geriatrician 2 COPA)

The geriatricians appeared to be very aware of their "appropriate" position in the model of care, which was based mainly on developing a good relationship with the PCPs. Making recommendations and leaving responsibility for prescriptions to the PCPs appear to have been the prerequisite to the geriatricians' collaboration with PCPs, and they indicated that they did not want to take the PCPs' place in the patient relationship. One geriatrician explained:

> We only intervene (with a patient) when a doctor asks us to, and we're there to make recommendations. The doctor makes referrals in the management of patients. He's the one making prescriptions; we only make recommendations. (Geriatrician 1 COPA)

Discussion

Collaboration developed in similar ways under SIPA and COPA. Indeed, the CMs and the geriatricians collaborated well from the start and right through the care management process. The collaboration between the CMs and the PCPs emerged later on and was partly facilitated by the geriatrician. Collaboration between the PCPs and the geriatricians was more occasional and remained fragile.

Although the PCPs were not truly against the idea of developing a close relationship with the CMs and the geriatricians, they did not spontaneously collaborate, either. Extant literature on integrated models suggests that in order to foster new collaborative practices, the PCP participation is essential (Boult, Counsell, Leipzig, & Berenson, 2010). However, it seems that the most significant barrier to PCPs' collaboration is the lack of knowledge about the role played by nonmedical professionals (Moser & Armer, 2000). Our study has shown the usefulness of a two-pronged approach to convince PCPs of the value of collaboration: having CMs contact PCPs when their patients are being included in the program and during the long-term chronic care management process and having geriatricians describe the case managers' role to the PCPs.

Our results also suggest that, because PCPs are so short of time, they need help implementing services and managing the follow-up. We know that frail elderly patients present complex needs (Sands et al., 2006) and that PCPs find caring for this population difficult (Adams et al., 2002). Our data indicate that having CMs coordinate interventions and having geriatricians give advice on acute geriatric situations, foster PCPs collaboration.

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They also imply that PCPs want to maintain decision-making power over their patients' cases. Maintaining their prescribing role serves as a guarantee that they will remain in control of their patient's care and avoids confusion between the PCP's role and the geriatrician's role. Indeed, the ongoing therapeutic relationship between a patient and his or her PCP is the core value in family practice (McWhinney, 1998). However, our study suggests that the collaboration of PCPs cannot be taken for granted, and routine transfers of information are difficult to achieve. PCPs who have many frail patients are the ones most likely to commit to models of integrated care (Kane, Homyak, & Bershadsky, 2002). In addition, the recruitment of a significant number of patients per physician into a model of care reinforces the physician's commitment and shows the important role played by the initial selection of PCPs (de Stampa, Vedel, Bergman, Novella, & Lapointe, 2009).

In both models, the CMs were primarily nurses. The CM function is difficult, given the complexity of the situations and the coordination required of professionals around the patient's needs (Murphy, 2004). Our study has shown that CMs look forward to collaborating with PCPs, but that this process is not always smooth. The PCPs only truly agreed to collaborate with the CMs when they had seen that the CM's interventions improved quality of care. Previous studies have shown links between the central role of perceived quality of care and the participation of PCPs in models of care (Landon, Reschovsky, Reed, & Blumenthal, 2001). Even the PCPs who were interested in having the CM help with their frail patients initially saw their collaboration with the CM as a hierarchical relationship. One of the issues is how to legitimize the CM role in the eyes of PCPs and train CMs and PCPs to work together as a team. The role of geriatrician and the use of assessment and planning tools helped the CMs leave their former professions behind and adopt this new position. In contrast with a study that showed that nurses are not always comfortable "challenging" physicians by providing a different point of view (San Martin-Rodriguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005), the CM nurses being interviewed were able to negotiate with the PCPs. Our results suggest that the more that a PCP and a CM are in contact with each other concerning a patient and the more that the PCP feels that the CM is helping, the more trust is built in the relationship, reinforcing collaboration. Eventually, the collaborative practices of the PCPs and the CMs began to go beyond from service planning to shared decision making. But at times, this was difficult for the PCPs. This is a consistent theme in the literature, which indicates that changes in roles and identities across the professional boundaries between physicians and nonphysicians in primary care may create a culture of uncertainty among PCPs (Williams & Sibbald, 1999).

We know that implementing expertise in geriatrics needs to become an objective in primary care in order to meet the needs of aging populations (Wenger et al., 2003). Our data indicate that PCP–geriatrician collaboration is not straightforward, as PCPs have difficulty adopting the evidence-based protocols provided by geriatricians. Geriatricians and PCPs appear to be in "competition" over their medical knowledge. But our results suggest that when CMs provided advice on geriatric care, the PCPs more easily accepted it. Furthermore, the CM role allows PCPs to benefit from skills related to nonmedical knowledge (Boult et al., 2010). The results suggest that geriatricians can play a role in models of care, primarily with CMs by teaching them principles of geriatric medicine and by answering their questions on managing patients with complex health conditions. In this sense, geriatricians may also serve to bolster the case management process and avoid variations in the quality of interventions (Challis, Stewart, Donnelly, Weiner, & Hughes, 2006). Our study underscores the value of the geriatrician's position between community care and hospital settings, which serves to strengthen linkages between community services and hospital settings. In particular, the geriatricians were able to organize planned hospitalizations (direct hospital admissions, without going through the emergency department), which was very important to the PCPs. It has been shown that, in order to be efficient, intensive case management requires closer linkages between primary care and secondary care such as geriatric services (Challis & Hughes, 2002).

Our comparison of the two models may be relevant to the planning and development of similar models in international health care systems. Whereas the behaviors of clinicians should derive from the construction of the intervention in terms of the roles defined in the model, professional behaviors also seemed to depend on the level of collaboration between PCPs, CMs, and geriatricians. Based on these findings, and in light of

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extant literature, three essential features need to be included in integrated models of care in order to encourage PCP participation. First, PCPs should be trained in interdisciplinary collaboration for a better understanding of the roles played by the other professionals (i.e., CMs and geriatricians). Second, for each physician, a significant number of frail patients with complex needs should be recruited in order to reinforce the collaboration with the CM. Third, PCPs need to be supported by geriatricians practicing in the community and in hospitals to optimize care paths (e.g., planned hospitalizations) with a geriatrician who is involved in a case as requested.

We should acknowledge some of the limitations of this study. The sample of PCPs at the two sites consisted of individuals who volunteered to register in integrated models of care. This probably indicates that they were seeking assistance in the management of their frail elderly patients and were, therefore, more willing to collaborate with a CM than the physicians who did not register. This clinical collaboration was also implemented in integrated models of care where multidisciplinary approaches are common, so it does not accurately reflect what occurs in more traditional forms of professional collaboration. In addition, the PCPs, CMs and geriatricians who participated in this study had already been collaborating with each other for more than a year, and their responses may have been influenced, positively or negatively, vageshhh the quality of these personal relationships. Finally, we did not interview patients as part of this study. However, given the essential role of the PCP–CM–geriatrician team, our results still provide critical information regarding the collaboration process within integrated models of care. It should also be noted that the similar practices of professionals at these two sites increase the credibility of our findings. Finally, the use of iterative coding and its validation by three researchers provided additional rigour.

The findings of this study allow us to better understand the underlying dynamics of clinical collaboration in an integrated model of care for frail elderly patients. Overall, the three types of professionals we interviewed rarely interacted at the same time, but each clinician played an important role vis-à-vis the frail elderly patients. Our results indicate that geriatric competency may be brought into primary care by implementing an integrated model of care. However, more research is needed to assess the exact impact of this collaboration on professional practices and on the participation of patients and family caregivers in the multidisciplinary team.

Supplementary Material

Supplementary material can be found at: http://gerontologist.oxfordjournals.org.

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