ORIGINAL RESEARCH

"There's Huge Value in Knowing What's Going On": a Mixed Methods Study to Explore Geriatricians' Perspectives on Best Practices for Information Transfer Between Hospital-Based Geriatricians and Primary Care Physicians

Sandrine Couture, MDCM[1], Dimitri Yang, BSc[2], Sabrina Lessard, PhD[3], Aigul Zaripova, MDCM[4], Jennifer Tchervenkov, MD[5], Carolyn Pavoni, MDCM[1], Claire Godard-Sebillotte, MD, PhD[1,2]

[1]Division of Geriatric Medicine, Department of Medicine, McGill University, Montreal; [2]Research Institute of the McGill University Health Centre, Montreal; [3]Centre for Research and Expertise in Social Gerontology (CREGÉS), Integrated Health and Social Services University Network for West-Central Montreal, Côte Saint-Luc; [4]Department of Family Medicine, McGill University, Montreal; [5]Division of Geriatric Medicine, Centre intégré universitaire de l'Ouest-de-l'Île-de-Montréal, Montreal, QC

https://doi.org/10.5770/cgj.28.830

ABSTRACT

Background

Geriatricians' work provides holistic recommendations to improve the health of older adults, considering medical, social, psychological, and functional domains. Their implementation most often relies on primary care physicians. Extant evidence suggests benefit from systematized information transfer between hospital-based specialists and primary care physicians. Yet, direct communication between hospitals and primary care physicians is rare. We aimed to describe the information transfer practice of hospital-based geriatricians in Quebec, Canada.

Methods

We sent a survey to all (146) geriatricians and Geriatric Medicine residents of Quebec on their current practice and opinions on information transfer and obtained 64 responses. We then performed 20-minute semi-structured interviews with 13 participants to further explore knowledge on information transfer, barriers and facilitators, risks and benefits, and recommendations to improve transmission.

Results

While geriatricians believe that their recommendations should be transmitted to primary care physicians and that the absence of a systematic information transfer procedure has a negative impact on quality of care, only 1.6% report having such a procedure in place in their practice. They think that the absence of information transfer procedures disrupts the communications of key diagnoses and medication changes, and leads to duplicated interventions. Harnessing technology to facilitate information transfer is viewed as a solution.

Conclusion

Information transfer between hospital-based geriatricians and primary care physicians in Quebec is rare. The absence of a systematic information transfer procedure is seen by geriatricians as a hindrance to the provision of safe, high-quality care to older adults.

Key words: transitions of care, discharge summary, geriatric consultations, communication

INTRODUCTION

Older adults with chronic diseases and frailty often require complex coordinated care between primary care and hospitals.(1) Hospital-based geriatricians provide holistic recommendations considering medical, social, psychological, and functional aspects and capabilities of older adults so as to optimize their health.(2) Evidence shows that these recommendations improve several health outcomes, including decreased mortality, increased likelihood of older adults being alive and in their own home at follow-up, decreased risk of institutionalization, and decreased risk of hospital readmission.(2,3) The implementation and monitoring geriatricians' recommendations most often relies on primary care physicians (PCP) after discharge. Indeed, in-hospital consults include new diagnoses that require longitudinal follow-up, medication changes that are to be continued after discharge, tests to be scheduled

as outpatient, and test results that are pending at discharge and need to be followed as outpatient. PCPs are the heart of continuity of care, which is described as "the connected and coordinated care that patients receive while between providers and the healthcare system".[4] The receipt of discharge information by a patient's PCP is associated with improved chronic disease management, fewer medication errors, and decreased readmissions.[5-8] On the contrary, breaches in the discharge process, which includes the discharge summary, discharge instruction, and continuity of care between inpatient and outpatient spheres, are associated with readmissions and ER visits.[9] Communication at the time of transitions of care is a World Health Organization (WHO) priority.[10] Older adults are considered particularly more vulnerable to adverse events following discharge from hospital.[11,12]

Nonetheless, direct communication between hospital physicians and primary care is rare. In a 2022 survey of primary care providers in eight large academic institutions in the US, 60% of responders reported that the discharge summary was their only source of communication with hospitalists, and 18% did not receive a summary by the time of their first posthospitalization visit.[13] Another US study demonstrated that only 31.1% of primary care physicians had access to a discharge summary >80% of the time.[14] A recent study from Ontario showed that, for patients with multiple emergency department (ED) visits, the rate of information transfer to primary care providers decreased from 58.2% to 45.7% between 2010 and 2015.[15] A 2020 Canadian Institute for Health Information report stated that 54% of PCPs received notification that there patient had been hospitalized, and 59% of PCPs received information from specialists about medications or care plan.[16] For both indicators, Quebec is the province that performed the worst, with 25% for notification of admission and 30% for information transmission from specialists.[16] In a 2018 survey, only 18% of Canadian specialists reported being able to exchange clinical summaries with doctors outside of their practice through their electronic medical record (EMR).[17]

An information transfer procedure can be defined as a set of steps that is the official, accepted way of performing this transfer. Having such a procedure to ensure continuity of care, rather than individual initiatives, is desirable as the patient safety literature demonstrates that a system approach is key in preventing human errors.[18,19]

There is no scientific literature addressing the current state of information transfer between hospital-based geriatricians and PCPs in Canada. The aim of this study was to describe the knowledge of geriatricians and their trainees regarding the transmission of their consultation notes and discharge summaries to primary care physicians, as well as barriers, facilitators, and best practices within the current Quebec health-care system regarding the transmission of notes pertaining to the older population. Quebec is one of the Canadian provinces with the most geriatricians whose practice and challenges might inform the growing number of geriatricians around the country.[20]

METHODS

Study Design

We conducted a sequential exploratory mixed methods study. The first phase was a quantitative study which consisted of one short survey sent to eligible physicians. In a second phase, we conducted semi-structured interviews of a sample of physicians and trainees recruited during the first phase. We then integrated the results of both phases. Qualitative description was deemed the most appropriate methodology for this study. Qualitative description focuses on gaining insights from informants on poorly understood phenomena and describing a phenomenon without developing theory.[21,22]

Participant Sampling and Recruitment

All geriatricians and Geriatric Medicine residents of the province of Quebec were approached to participate in the survey through the emailing list of the Association des Médecins Gériatres du Québec (AMGQ), the union representing all geriatricians, and a brief description of the study was provided to attendees at the annual scientific meeting of the AMGQ. Once a participant completed the survey, a last question was included to indicate interest in participating in an interview. We used a convenience sampling strategy, selecting all volunteers whom we felt had the most interest in the topic of our research. Volunteers were approached by email until saturation was achieved. Saturation occurs when new data becomes redundant of data previously collected.[23]

Survey Development and Administration

Development of individual questionnaire items was guided by standard methods of survey research,[24] published literature, and discussion within the research team. Initial questions explored the perception of a need for information transfer between Geriatricians and family physicians, and the presence/absence of a procedure in place. If respondents indicated that they did not have a procedure in place, further information was gathered about the impact of the absence of a transmission procedure and individual initiatives to counteract the absence of a systematic procedure. Questions were multiple-choice. The questionnaire was administered using Microsoft Forms. Invitations to complete the survey were sent out in May 2023 with two reminders over the next four months. Survey invitation explained to participants that the objective of this research was to improve communication to PCPs for frail older adults. Participants were excluded from survey results if they reported not doing inpatient consultations or admitting patients.

Semi-Structured Interviews

Semi-structured individual interviews were conducted by three researchers (DY, male medical student; SC, female Geriatric Medicine resident; and CP, female Geriatric Medicine resident; all trained in qualitative methods) using Microsoft Teams between August and November 2023. The interview guide was developed based on published literature and discussions within the research team (see Appendix A). Initial

questions focused on the information transmission procedure in the participants' practices. Participants were then asked to reflect on their past and current professional experience to explore barriers and facilitators to optimal information transmission, risks and benefits of transmission, and best practices for transmission. Lastly, participants were asked to make recommendations to improve information transmission in Quebec. Further questions were asked throughout the interviews for clarification and additional details.

Data Analysis

Descriptive statistics were used to analyze survey results. Multiple-choice responses were reported as counts and proportions.

Interview recordings (audio and video) were transcribed verbatim by Microsoft Teams live transcription tool. Transcripts were de-identified and checked for accuracy by the researcher who performed the interview. Each participant was assigned a unique identifying code comprising of four-digit number to indicate the order in which they were interviewed.

Following a familiarization phase that involved listening to the interview recordings, reading and rereading the transcripts, each transcript was analyzed independently by two researchers (DY and SC, and SC and AZ; AZ is a medical student trained in qualitative research) using an inductive reflexive thematic analytical approach and then compared.[25] The researchers met on several occasions throughout the coding process to discuss their approach to analysis. Codes were organized into overarching themes. The themes were reviewed and discussed within the research team, during which further refinement was done and disagreements were resolved.

Reflexivity

C G-S is a staff geriatrician and clinician investigator who works with several participating geriatricians and has supervised participating residents. SC, CP, and JT are Geriatric Medicine residents who have relationships with several participants as co-residents and have been supervised in their clinical duties by participating geriatricians. DY and AZ are medical students who had no prior relationship with any participant. SL is a qualitative researcher who had no prior relationship with any participant.

Ethical Considerations

This study was approved by the McGill University Health Centre Research Ethics Board (2023-9021).

RESULTS

One hundred twenty-three geriatricians and 23 Geriatric Medicine residents were approached to complete our survey. We obtained 64 answers for a response rate of 44%. One geriatrician (2%) was excluded because they reported not doing consultations. Characteristics of survey responders and survey results are respectively presented in Tables 1 and 2. While 68.3% of geriatricians believed that their consults should

TABLE 1.
Characteristics of survey responders (N=64)

Responder Characteristic	*N (%)*
Age	
<35	24 (37.5)
35-59	37 (57.8)
≥ 60	3 (4.7)
Gender	
Female	44 (68.8)
Career Stage	
Geriatrician	53 (82.8)
Geriatric Medicine residence	11 (17.2)
Type of Practice	
Academic	39 (60.9)
Community	25 (39.1)
Years of Practice	
<5	30 (46.9)
5–9	10 (15.6)
10–19	10 (15.6)
>20	14 (21.9)

TABLE 2.
Survey results (N=63)

Question	*n (%)*
Should consult reports be sent to family physicians?	
Systematically	43 (68.3)
At the geriatrician's demand	15 (23.8)
At the demand of the patient, family, of family physician	5 (6.3)
Is there currently a procedure for transmission in your practice independent of individual initiatives?	
Yes	1 (1.6)
No	58 (92.1)
Do not know	4 (6.1)
If one is not in place, there should be a transmission procedure. (n=62, responder who had a procedure excluded from further questions)	
Agree	58 (93.6)
Disagree	1 (1.6)
Neutral	3 (4.8)
The absence of a transmission procedure has negative impacts on the quality of healthcare and patients' health. (n=62)	
Agree	58 (93.6)
Disagree	1 (1.6)
Neutral	3 (4.8)
Do you communicate consult reports to patient's family physicians on your own?	
Yes, 100% of the time	9 (14.5)
Yes, when necessary	38 (61.3)
Never, due to lack of time	14 (22.6)
Never, because it is unnecessary	1 (1.6)

be systematically sent to family physicians, only 1.6% had a procedure in place for information transmission in their practice. Furthermore, 93.6% of responders reported that the absence of such a procedure negatively impacted the care of older adults.

Twenty geriatricians and Geriatric Medicine residents agreed to participate in an individual interview. Thirteen interviews were conducted. Data saturation was reached after the 12th interview and no further recruitment took place after the 13th interview. Interviews were, on average, 16 minutes in duration (range 10 to 25 minutes). Participant characteristics are shown in Table 3.

Six overarching themes were generated from the data, detailed below.

Current Practices for Information Transmission

Most geriatricians and geriatric medicine residents reported not being aware of a systematic process for information transmission between their practice hospital and family physicians. They noted that efforts for transmission were often the result of an individual initiative from the physician or an allied health team member: "So it was almost easier for me just to start to fax and mail everything myself." (Participant 0003) And another participant said:

> There is no systematic process that's in place to transmit the discharge summaries or the consults at any of the centers I work with and a lot of the time it relies on having one very motivated and invested individual in the team. (Participant 0001)

Certain geriatricians benefited from administrative support from ward clerks and clinic administrative agents to assist with information transfer.

> For every new consultation, the notice is sent to the family physician who requests, or any physician who requested the consult, and for some of the follow-ups, I ask the coordinator of the clinic to also send my note. (Participant 0006)

TABLE 3.
Characteristics of interview participants (N=13)

Participant Characteristic	*N*
Gender	
Male	4
Female	9
Number of years of professional experience in Geriatric Medicine	
<5	8
5–9	2
10–15	1
>15	2
Type of practice	
Academic	8
Community, urban	4
Community, rural	1

Several participants pointed out that the Quebec provincial standard discharge summary form contains a line to request transmission to the patient's family physician. However, they were unsure if writing the contact information of the family physician was enough to trigger a transmission process.

> On the discharge summary, however, there is a section where it's clearly written "send a copy to this physician" or "send a copy to that physician". And then you have to enter basically the information (…) Two years into my practice, something like that, I found out that archives doesn't do that. (Participant 0003)

Reflecting on their current practice for information transfer led participants to express their ideals for optimal transmission.

Optimal Form of Information Transmission

Most participants agreed that having an EMR that would communicate between hospitals and primary care in the entire province was the optimal form of information transmission.

Participants, however, noted that a universal EMR represented a drastic change from current health information systems, and that an alternative could be to create dedicated administrative positions for information transmission. Moreover, some participants advocated for harnessing technology to assist in information transmission. Suggestions included developing new secure lines of communications between health-care providers, such as email and secure instant messaging: "If we had a secure SMS line, and the person could print and add to the chart, I think it would be simpler." (Participant 0012)

Achieving these optimal modes for information transfers requires addressing the current barriers and facilitators in the process.

Barriers and Facilitators to Optimal Transmission

With regard to barriers to optimal transmission, participants noted that a lot of patients did not have a family physician to receive the information. When patients did have a family physician, participants reported having difficulty identifying this person and the right contact information. One participant exposed their concerns: "Just sometimes identifying who the primary care provider for a patient isn't that obvious." (Participant 0001)

The health-care system's suboptimal information systems technology was also perceived by most geriatricians and geriatric medicine residents as a barrier to optimal transmission of information. Their primary concern was the fragmentation of information between different EMRs at each hospital and clinic. As a participant said: "There's like more than 25 different EMRs that don't speak to each other." (Participant 0005)

Participants acknowledged that the province had an electronic platform, the Dossier Santé Québec (DSQ), accessible to physicians and residents, and containing the list of prescribed medications, as well as laboratory and imaging results. However, they felt that this technology was somewhat outdated.

> If we were to have computers that were working, if the DSQ would stop crashing, if the DSQ would be faster also because you know, sometimes it takes like a good 2–3 minutes before you actually get to the information. (Participant 0003)

Lastly, due to the absence of a systematic information transfer process, participants noted that transmitting the information required individuals to carry out multiple steps, increasing the chances of human error. And a participant observed that: "We rely on the good will, competence, and memory of people to do it." (Participant 0011)

In terms of facilitators to information transmission, a few participants who had access to an EMR with integrated external fax/messaging functions named technology.

> I work at an outside clinic from the hospital where we have an EMR. And basically, (…) I also have the option of faxing or emailing, and it's super, super easy because the way the system is set up. (Participant 0004)

Benefits/Harms of the Presence/Absence of Information Transfer

There was consensus amongst participants that the primary risk of the absence of transmission was the loss of information and duplication of investigations and interventions. "It duplicated requests. Family physicians react on medications according to their evaluation, without considering what happened during the hospitalization." (Participant 0012)

In parallel, improved continuity of care was largely viewed as the benefit of systematic transmission of information. A participant also reported that improving transmission of consultation notes in his practice had led to more open communication with family physicians and some productive exchanges: "Sometimes it happens that family physicians call me back after receiving my note because they want clarifications or have other questions. It also brings more discussions and more teamwork." (Participant 0010)

In terms of risks of transmission, especially if systematic, participants were concerned about risks of breaches in confidentiality. This perceived risk was enhanced by the difficulty of identifying the proper contact information for family physicians and the uncertainty of whether they were sending the notes to the right person.

> Given that there is no systematic way of identifying where, well, who was the physician that the notes should go to and what's the most optimal address where this should be transmitted, it could present with the risk of a confidentiality breach. (Participant 0001)

Several participants also raised the possibility of overloading family physicians with information and administrative tasks. In the word of one of them: "It would be, I guess, more paperwork for the family physician to have to go through and read. I know they get a lot of like faxes and a lot of things they have to read through." (Participant 0002)

No participant saw benefit to the absence of information transmission between geriatricians and family physicians.

The Legal Framework Surrounding Transmission

Most participants admitted to having very limited knowledge of the legal framework surrounding information transfer between geriatricians and family physicians.

Recommendations for Improving Information Transfer in Quebec

The overarching recommendation for improving information transfer in Quebec from most geriatricians and Geriatric Medicine residents was to develop a universal EMR for the province for both hospitals and outpatient primary care clinics.

Participants raised the possibility of improving the current provincial electronic platform, the DSQ, by including discharge summaries.

> We have to take advantage of our informatic technology. And improve the system by integrating even all the informatic technology (…) which to me would include to create in the DSQ, which is the provincial health system charts, you know, a possibility to deposit in there these notes. (Participant 0006)

Finally, some participants emphasized the importance of geriatricians learning about the information transmission procedures in place—or the lack thereof—in their practice settings, and advocating for improved transmission given the complexity of their patient population. "I do want to state that it's something that's extremely important, right, as our patients are getting more complicated. There's huge value in knowing what's going on." (Participant 0009)

DISCUSSION

This mixed-methods study explored geriatricians and Geriatric Medicine residents' current information transfer practices and opinions regarding optimal transmission of hospital consultations and discharge summaries to primary care physicians. While most participants did not have a systematic procedure for information transfer to primary care physicians, they agreed that such a procedure should be implemented and would have benefits in terms of continuity of care and avoiding duplicated interventions. Technology was perceived as both a barrier when outdated or convoluted, and as a facilitator when harnessed to automatize information transmission. Participants cautioned that systematic information transfer could have potential adverse consequences including breaches in confidentiality and overloading primary care physicians with information.

Our study is the first study in Canada asking geriatricians about the issue of information transfer and, to our knowledge, worldwide. Previous studies have primarily focused on database and survey data, and were interested in the perspective of primary care providers and long term care physicians.[5,13,14,26]

The Quebec Code of Ethics of Physicians establishes the deontological obligations of physicians with regard to information transmission in the province. It states that a physician must promptly answer a consultation request in

writing to the referring physician.[27] Furthermore, it states that the physician is responsible to ensure the medical follow-up required by the patient following his intervention.[27] Both code articles suggest that a specialist, such as a geriatrician, must share all the necessary information to patients' primary care physicians to ensure proper follow-up. In March 2024, the Institut national d'excellence en santé et en services sociaux (INESSS) published a practical guide for best practices to improve the continuity of transition care for older adults with neurocognitive disorders. This guide emphasizes that all professionals should document all relevant information in the patient's health record and share it with all involved professionals for continuity of care.[28] Thus, clear national recommendations exist to support systematic transmission of information, but, as demonstrated in our study, are not systematically followed in the care of older adults. Next steps in our research include a deliberative dialogue workshop with key stakeholders to develop evidence-based recommendations to improve information transfer in the province.

Leveraging technology to support information transfer was a common recommendation in our interviews. Previous quantitative studies support the effectiveness of information technology in the shared care of patients with chronic diseases. A 2017 systematic review showed that EMRs are associated with fewer readmissions, while electronic text-based communication applications lead to a positive effect on the number of PCPs contacting hospitals and on PCP confidence.[29]

Participants in our study suggested developing a common EMR in the province to facilitate information transfer. The government of Quebec announced in August 2023 the progressive implementation of a provincial EMR, Epic Systems, with a pilot project in two regions starting in 2025.[30] The government's priorities in selecting this EMR are to improve access to patient medical information and fluidity of data-sharing across the health-care network.[30] This aligns with geriatricians' aspiration of having a universal EMR for information sharing in the province. Epic Systems is the EMR that was selected across multiple health-care organizations across Ontario. With its Care Everywhere feature, the EMR has allowed data exchange and interoperability between organizations within and across cities.[31] Lessons can be learned from Ontario, which has an established EHR Connectivity Strategy to allow timely transmission of health-care information across organizations.[32] Its equivalent of the DSQ allows access to specialist consultations and discharge summaries from participating organizations. Alberta is currently the Canadian leader in connectivity, with its province-wide clinical information system, Connect Care, that not only is in place in hospitals, but also in community care, home care, public health services, and correctional facilities.[33]

While technology has the potential to revolutionize information transfer in health care, there are possible adverse effects associated with EMRs. A notable potential adverse effect is information overload, which can be associated with decreased efficiency and lead to medical errors.[34] EMRs should be well designed for people to be able to access the information in the time constraint of a primary care encounter with the notification that the patient has been to the ER or hospitalized.

Our study has several limitations. First, our study only recruited geriatricians and Geriatric Medicine residents from Quebec. Our results are therefore context-specific and not generalizable to other health-care systems and jurisdictions. Second, only one geriatrician who disagreed with the need for information transfer to primary care physicians was reached through the survey, and none participated in the interview process. It is possible that geriatricians who do not prioritize information transfer in their practice were less inclined to participate in the study, and we may have missed enriching insights from these dissenting opinions. In addition, social desirability bias may have affected answers to some questions of the survey and could explain why we only had one dissenting opinion. Lastly, our study included geriatricians whose insights only reflect one side of the information exchange with primary care. Primary care experiences are required to understand the full interaction.

CONCLUSION

Geriatricians and Geriatric Medicine residents in Quebec perceive systematic information transfer to primary care physicians as a key intervention for the provision of safe, high-quality care to older adults. Most of them, however, do not currently have such a procedure in place. Improving health-care technology and electronic medical records is viewed as an important step to facilitate information transfer.

ACKNOWLEDGEMENTS

We would like to thank the Association des Médecins Gériatres du Québec (AMGQ) for supporting this project. We would also like to thank Dr. Philippe Desmarais and Dr. Quoc Dinh Nguyen for their contributions to the elaboration of our survey.

CONFLICT OF INTEREST DISCLOSURES

We have read and understood the *Canadian Geriatrics Journal*'s policy on disclosing conflicts of interest and declare that we have none.

FUNDING

This research was supported by the Helen McCall Hutchison Award of the Foundation of the Montreal General Hospital and by the McGill Faculty of Medicine and Health Sciences Research Bursary Program. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

REFERENCES

1. Health Council of Canada. Canadians' Experiences with Chronic Illness Care in 2007: A Data Supplement To *Why*

Health Care Renewal Matters: Learning from Canadians with Chronic Health Conditions. Toronto: The Council; 2007.
2. Pilotto A, Cella A, Pilotto A, Daragjati J, Veronese N, Musacchio C, *et al*. Three decades of comprehensive geriatric assessment: evidence coming from different healthcare settings and specific clinical conditions. *J Am Med Dir Assoc*. 2017 Feb 1;18(2):192.e1–e11. Epub 2017/01/05. doi: 10.1016/j.jamda.2016.11.004.
3. Ellis G, Gardner M, Tsiachristas A, Langhorne P, Burke O, Harwood RH, *et al*. Comprehensive geriatric assessment for older adults admitted to hospital. *Cochrane Database System Rev*. 2017 Sep 12;9(9):CD006211. doi: 10.1002/14651858.CD006211.pub3.
4. College of Physicians and Surgeons of Ontario and Citizen Advisory Group. Continuity of Care: Guide for Patients and Caregivers. n.d. [cited 2024 Jan 31]. Available from: https://www.cpso.on.ca/getmedia/6e4cf71b-eb41-40cb-96f5-99426a9da3d8/coc-guide-patients-caregivers.pdf
5. Kripalani S, LeFevre F, Phillips CO, Williams MV, Basaviah P, Baker DW. Deficits in communication and information transfer between hospital-based and primary care physicians: implications for patient safety and continuity of care. *JAMA*. 2007 Feb 28;297(8):831–41. Epub 2007/03/01. doi: 10.1001/jama.297.8.831.
6. Uppal NK, Eisen D, Weissberger J, Wyman RJ, Urbach DR, Bell CM. Transfer of care of postsurgical patients from hospital to the community setting: cross-sectional survey of primary care physicians. *Am J Surg*. 2015 Oct 1;210(4):778–82. Epub 2015/06/17. doi: 10.1016/j.amjsurg.2015.03.006.
7. Moore C, Wisnivesky J, Williams S, McGinn T. Medical errors related to discontinuity of care from an inpatient to an outpatient setting. *J Gen Intern Med*. 2003 Aug;18(8):646–51.Epub 2003/08/13. doi: 10.1046/j.1525-1497.2003.20722.x.
8. van Walraven C, Seth R, Austin PC, Laupacis A. Effect of discharge summary availability during post-discharge visits on hospital readmission. *J Gen Intern Med*. 2002 Mar;17(3):186–92. Epub 2002/04/04. doi: 10.1046/j.1525-1497.2002.10741.x.
9. Couturier B, Carrat F, Hejblum G. A systematic review on the effect of the organisation of hospital discharge on patient health outcomes. *BMJ Open*. 2016 Dec 1;6(12):e012287. Epub 2016/12/23. doi: 10.1136/bmjopen-2016-012287.
10. World Health Organization. Transitions of Care: Technical Series on Safer Primary Care. 2016 Dec. Available from: https://www.who.int/publications/i/item/transitions-of-care
11. Halasyamani L, Kripalani S, Coleman E, Schnipper J, van Walraven C, Nagamine J, *et al*. Transition of care for hospitalized elderly patients--development of a discharge checklist for hospitalists. *J Hosp Med*. 2006 Nov;1(6):354–60. Epub 2007/01/16. doi: 10.1002/jhm.129.
12. McMillan A, Trompeter J, Havrda D, Fox J. Continuity of care between family practice physicians and hospitalist services. *J Healthc Qual*. 2013 Feb 1;35(1):41–49. Epub 2011/11/19. doi: 10.1111/j.1945-1474.2011.00165.x.
13. Silver AM, Goodman LA, Chadha R, Higdon J, Burton M, Palabindala V, *et al*. Optimizing discharge summaries: a multispecialty, multicenter survey of primary care clinicians. *J Patient Saf*. 2022 Jan 1;18(1):58–63. Epub 2021/01/05. doi: 10.1097/pts.0000000000000809.
14. Robelia PM, Kashiwagi DT, Jenkins SM, Newman JS, Sorita A. Information transfer and the hospital discharge summary: national primary care provider perspectives of challenges and opportunities. *J Am Board Fam Med*. 2017 Nov 1;30(6):758–65. Epub 2017/11/29. doi: 10.3122/jabfm.2017.06.170194.
15. Jaakkimainen L, Chung H, Lu H, Pinzaru B, Candido E. The receipt of information by family physicians about their patient's emergency department visits: a record linkage study of electronic medical records to health administrative data. *BMC Fam Pract*. 2021 Dec;22(1):235. Epub 2021/11/23. doi: 10.1186/s12875-021-01582-x.
16. Canadian Institute for Health Information [CIHI]. How Canada compares: results from the Commonwealth Fund's 2019 international health policy survey of primary care physicians—Accessible Report. Ottawa: CIHI; 2020.
17. Canadian Health Infoway. 2018 Canadian physician survey-physicians' use of digital health and information technologies in practice. Toronto: Canada Health Infoway; 2018.
18. Sameera V, Bindra A, Rath GP. Human errors and their prevention in healthcare. *J Anaesthesiol Clin Pharmacol*. 2021 Jul 1;37(3):328–35. Epub 2021/11/12. doi: 10.4103/joacp.JOACP_364_19.
19. Reason J. Human error: models and management. *BMJ*. 2000 Mar 18;320(7237):768–70. Epub 2000/03/17. doi: 10.1136/bmj.320.7237.768.
20. Basu M, Cooper T, Kay K, Hogan DB, Morais JA, Molnar F, *et al*. Updated inventory and projected requirements for specialist physicians in geriatrics. *Can Geriatr J*. 2021 Sep 1;24(3):200–08. Epub 2021/09/07. doi: 10.5770/cgj.24.538.
21. Polit D, Beck C. Essentials of nursing research: appraising evidence for nursing practice, 10th edition [paperback]. Philadelphia, PA: Lippincott Williams & Wilkins; 2021.
22. Sandelowski M. Whatever happened to qualitative description? *Res Nurs Health*. 2000 Aug;23(4):334–40. Epub 2000/08/15. doi: 10.1002/1098-240x(200008)23:4<334::aid-nur9>3.0.co;2-g
23. Grady MP. Qualitative and action research: a practitioner handbook. Arlington, VA: Phi Delta Kappa International Inc.; 1998.
24. Burns KE, Duffett M, Kho ME, Meade MO, Adhikari NK, Sinuff T, *et al*. A guide for the design and conduct of self-administered surveys of clinicians. *CMAJ*. 2008 Jul 29;179(3):245–52. Epub 2008/07/30. doi: 10.1503/cmaj.080372.
25. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qualitat Res Sport, Exercise Health*. 2019 Aug 8;11(4):589–97.
26. Clark B, Baron K, Tynan-McKiernan K, Britton M, Minges K, Chaudhry S. Perspectives of clinicians at skilled nursing facilities on 30-day hospital readmissions: a qualitative study. *J Hosp Med*. 2017 Aug;12(8):632–38. Epub 2017/08/09. doi: 10.12788/jhm.2785.
27. Government of Québec. Ministère de l'Emploi et de la Solidarité sociale. M-9, r.7: Code of ethics of physicians. Publications Québec; updated to 1 May 2024.
28. Institut national d'excellence en santé et en services sociaux (INESSS). Best practices for improving the continuity of transition care services for seniors living with a major neurocognitive disorder and their caregivers: practice guide. Québec, QC: INESSS; 2024.
29. Kooij L, Groen WG, van Harten WH. The effectiveness of information technology-supported shared care for patients with chronic disease: a systematic review. *J Med Internet Res*. 2017 Jun 22;19(6):e221. Epub 2017/06/24. doi: 10.2196/jmir.7405.
30. Giguère U. 2023. "Québec choisit la firm américaine Epic." *La Presse*. Samedi 28 juin.
31. Epic Systems Corporation. A collaborative approach to interoperability in Canada. July 2023 [cited 2025 February 3].

Available from: https://www.epicshare.org/share-and-learn/ontario-canada-interoperability
32. eHealth Ontario. An overview of Ontario's EHR connectivity strategy: the vision for 2015 And Beyond. Toronto: 2015.
33. Alberta Health Services. Connect Care in more sites, programs in Alberta [news release]. Nov 2024 [cited 2025 February 3]. Available from: https://www.albertahealthservices.ca/news/Page18624.aspx
34. Nijor S, Rallis G, Lad N, Gokcen E. patient safety issues from information overload in electronic medical records. *J Patient Saf*. 2022 Dep 1;18(6):e999–e1003. Epub 2022/08/20. doi: 10.1097/pts.0000000000001002.

Correspondence to: Claire Godard-Sebillotte, MD, PhD, Montreal General Hospital, 1650 Cedar Ave., Montreal, QC H3G 1A4
E-mail: claire.godard-sebillotte@mcgill.ca

APPENDIX A. Interview Guide

Video Interview
Initial Questions
Role: geriatrician vs. geriatric resident vs. other role, please specify.
Primary practice location: Community vs. University or other, please specify.
Number of years of practice:

[For geriatricians and geriatric residents, members of the multidisciplinary team, administrative staff]

a. How are geriatric consultation notes / geriatric discharge summaries transmitted in your practice setting?
   i. Is this transmission the result of your initiative or a standardized process at your institution, division, or team?
b. What do you think would be an optimal transmission?
   i. Type of professional involved in the transmission
   ii. Necessary steps for optimal transmission
   iii. Transmission channels (email / fax / mail)
   iv. Systematic or optional and according to which factors?
c. What are the barriers and facilitators to optimal transmission to frontline teams?
d. What are the benefits / harms of the presence / absence of communication of geriatric consultation notes / geriatric discharge summaries to front-line professionals on the elderly and their loved ones?
   i. According to you, would there be undesirable effects to a systematic transmission?
e. Do you know the legal framework surrounding this transmission?
f. Do you know of any other best practices for forwarding consultation notes/discharge summaries to frontline teams?
g. Do you have any recommendations for improving the delivery of consultation notes/discharge summaries to frontline teams?

The following questions will be used depending on the situation.

[In the questionnaire, you answered that you think notes should not be sent.]

a. Can you explain your answer to me?

[For those familiar with the legislative framework governing the communication of hospital medical records to front-line teams: hospital legal service, Collège des Médecins du Québec, Canadian Physicians Protective Association]

a. What is the legal framework surrounding the transmission of geriatric consultation notes / geriatric discharge summaries to front-line professionals in Quebec: Who has the right to make the decision to pass it on and under what conditions (e.g. patient and caregiver consent)? To whom can they be transmitted? (for example: patient's family doctor (formally or not formally affiliated, patient's family medicine group, other specialist, CLSC professionals) By what means can they be transmitted: fax, mail, email…? Which email address is accepted (MSSS.SSS only or all sender and recipient email addresses?
b. [If applicable] Do you know how geriatrician notes are transmitted in your practice environment; leave summaries?
c. Do you have an opinion on the barriers and facilitators to optimal transmission to frontline teams?
d. What do you think would be an optimal transmission?
   i. Type of professional involved in the transmission
   ii. Necessary steps for optimal transmission
   iii. Transmission channels (email / fax / mail)
   iv. Systematic or optional and according to which factors?
e. What are the barriers and facilitators to optimal transmission to frontline teams?
f. What are the benefits / harms of the presence / absence of communication of geriatric consultation notes / geriatric discharge summaries to front-line professionals on the elderly and their loved ones?
   i. According to you, would there be undesirable effects to a systematic transmission?
g. Do you know of any other best practices for forwarding consultation notes/discharge summaries to frontline teams? For example in other institutions / jurisdictions / provinces / countries?
h. Do you have any recommendations for improving the delivery of consultation notes/discharge summaries to frontline teams?