Role of family physicians in an urban hospital

Tracking changes between 1977, 1997, and 2014

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Abstract

Objective To investigate changes in family doctors' attitudes about and participation in hospital activities and inpatient care in an urban hospital family medicine department from 1977 to 1997 and 2014.

Design Cross-sectional survey design.

Setting The Department of Family Medicine at St Joseph's Healthcare Hamilton in Ontario.

Participants Family physicians affiliated with the Department of Family Medicine at St Joseph's Healthcare Hamilton were surveyed in 2014. Data were compared with findings from similar surveys administered at this institution in 1977 and 1997.

Main outcome measures Family physicians' roles in hospital activities, attitudes toward the role of the family physician in the hospital setting, and the barriers to and facilitators of maintaining this role.

Results A total of 93 physicians returned completed surveys (37.3% response rate). In 2014, half of the respondents provided some inpatient care. This patient care was largely supportive and newborn care (71.7% and 67.4%, respectively). In 2014, 47.3% believed the quality of care would suffer (compared with 92.1% in 1977 and 87.5% in 1997) if they were not involved in patient care in the hospital. There was also a considerable shift away from the 1977 and 1997 perception that the family physician had a role as patient advocate: 92.0% and 95.3%, respectively, compared with only 49.5% in the 2014 survey.

Conclusion Family physicians' hospital activities and attitudes continued to change from 1977 to 1997 and 2014 in this urban hospital setting. Most of the respondents had stopped providing direct inpatient care, with a few continuing to provide supportive care. Despite this, most respondents still see a role for the Department of Family Medicine within the hospital as a focus for identifying with their family physician community, a place to interact with other specialist colleagues, and a source of some continuing medical education.

EDITOR'S KEY POINTS

- Community-based primary care and hospital-based care provided by family doctors have been continuously changing over the decades. This 2014 survey sought to assess family doctors' attitudes about and participation in hospital activities and inpatient care and compare them with data from similar surveys in 1977 and 1997.

- While half of respondents reported providing some hospital care, very few acted as the most responsible physician for inpatients—a considerable decrease from previous surveys. In 2014, only 27.5% of respondents thought patients expected to see them in-hospital (compared with 100.0% in 1977 and 90.8% in 1997). Almost half (48.4%) believed that they could provide better overall care if they were able to attend in-hospital patients (compared with 87.4% in 1977), and 60.4% got satisfaction from attending inpatients (compared with 97.8% in 1977).

- Reasons for leaving hospital care varied. Almost all physicians (91.2%) in 2014 agreed that patient care in the community had become more complex and time-consuming, and that the shift of inpatient care to outpatient settings (84.4%) and shorter hospital stays (78.0%) have changed the role of family doctors and increased office workload. Remuneration for hospital visits was thought to be poor (74.7%), and 68.1% of respondents reported that electronic access to patient medical information lessened the need to attend patients in-hospital.

This article has been peer reviewed.
Can Fam Physician 2017;63:221-7

Le rôle du médecin de famille dans un hôpital urbain

Revoir les changements survenus entre 1977, 1997 et 2014

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Résumé

Objectif Déterminer les changements survenus entre 1977, 1997 et 2014 dans la participation des médecins de famille aux activités hospitalières et au traitement des malades hospitalisés dans le département de médecine familiale d'un hôpital urbain, et savoir ce qu'ils en pensent.

Type d'étude Une enquête transversale.

Contexte Le département de médecine familiale de *St Joseph Healthcare* à Hamilton, en Ontario.

Participants En 2014, on a mené une enquête auprès de médecins de famille associés au département de médecine familiale de *St Joseph Healthcare* à Hamilton. Les données obtenues ont été comparées à celles d'enquêtes semblables effectuées en 1977 et 1997 au même établissement.

Principaux paramètres à l'étude Le rôle des médecins de famille dans les activités hospitalières et ce qu'ils en pensent, et les facteurs qui les découragent ou les incitent à persévérer dans cette voie.

Résultats Au total, 93 médecins ont répondu à l'enquête (taux de réponse de 37,3%). En 2014, la moitié des répondants soignaient des patients à l'hôpital. C'était en grande partie des soins de soutien ou de maternité (71,7% et 67,4% respectivement). En 2014, 47,3% des médecins croyaient que la qualité des soins diminuerait (par rapport à 92,1% en 1977 et à 87,5% en 1997) s'ils ne traitaient pas de patients hospitalisés. De plus, l'enquête de 2014 révélait une différence majeure dans la proportion des médecins qui considéraient que le médecin de famille avait un rôle à jouer pour défendre ses patients; en 2014, cette proportion n'était plus que de 49,5% alors qu'en 1977 et en 1997, elle s'élevait à 92,0% et 95,3% respectivement.

Conclusion Entre les années 1977, 1997 et 2014, les activités hospitalières effectuées par les médecins de famille de cet hôpital urbain, et leur opinion à ce sujet, n'ont cessé de changer. La plupart des répondants avaient cessé de prodiguer des soins directs à des patients hospitalisés, alors que quelques-uns continuaient de fournir un certain soutien. Et pourtant, la plupart continuaient de penser que le département de médecine familiale de cet hôpital était toujours un point de rencontre où s'identifier avec le groupe des médecins de famille de la communauté, interagir avec d'autres spécialistes et profiter d'une formation médicale continue.

POINTS DE REPÈRE DU RÉDACTEUR

- Les soins dispensés par les médecins de famille au sein de la communauté et dans les hôpitaux ont subi des changements constants au cours des dernières années. Cette enquête de 2014 voulait connaître la participation des médecins de famille aux activités hospitalières et ce qu'ils pensent de ce type d'activité, pour ensuite comparer les résultats obtenus à des enquêtes semblables effectuées en 1977 et 1997.

- Même si la moitié des répondants déclaraient prodiguer des soins à l'hôpital, très peu agissaient comme principaux responsables de patients hospitalisés – une diminution considérable par rapport aux enquêtes antérieures. En 2014, seulement 27,5% des répondants estimaient que les patients s'attendaient de les voir à l'hôpital (en comparaison de 100% en 1977 et de 90,8% en 1997). Près de la moitié (48,4%) croyaient qu'ils étaient en mesure de fournir des soins globaux de meilleure qualité s'ils pouvaient traiter des patients hospitalisés (comparativement à 87,4% en 1977), et 60,4% retiraient de la satisfaction à traiter des patients hospitalisés (comparativement à 97,8% en 1977).

- Les raisons invoquées pour cesser de travailler à l'hôpital variaient. En 2014, presque tous les médecins (91,2%) pensaient que le soin des patients dans la communauté était devenu plus complexe et consommait beaucoup de temps, et que la transition des patients entre l'hôpital et la communauté (84,4%) et les séjours hospitaliers plus courts (78,0%) avaient changé le rôle du médecin de famille et augmenté la charge de travail au bureau. On estimait que la rémunération pour les visites à l'hôpital était plutôt faible (74,7%) tandis que 68,1% des répondants étaient d'avis que le fait d'avoir accès aux données médicales électroniques des patients réduisait la nécessité de traiter les patients hospitalisés.

Cet article a fait l'objet d'une révision par des pairs.
Can Fam Physician 2017;63:221-7

In the face of technological advances in medicine, the high cost of inpatient care, funding constraints, and restructuring and regionalization, hospital care has become specialized, more acute, and less accessible to urban family doctors. At the same time, family physicians have been tasked with providing increasingly complex outpatient, community-based primary health care. This care includes immediate hospital follow-up, long-term cancer survivorship care, comprehensive palliative care, postsurgical care, and long-term geriatric care along with the traditional comprehensive, continuous office-based care. With these varied pressures, and with opportunities for focused practice (eg, Certificates of Added Competence), the in-hospital role of family doctors in urban centres has changed. Family doctors in our urban hospital setting are leaving hospital patient care, with the exception of a few family doctors in very specific areas such as obstetrics, newborn care, or chronic complex continuing care.

This change has been discussed in the literature,[1-5] albeit largely in the past 2 decades since the trend first became evident. In 1994, Bass et al reported that only 34% of family doctors provided inpatient care.[1] In 2002, Chan reported that family doctors doing only office care rose from 14% in 1989 and 1990 to 24% in 1999 and 2000.[6] In 2003, the College of Family Physicians of Canada (CFPC) reported a general exodus of family physicians from hospital care across Canada and outlined barriers and concerns around provision of hospital care by family doctors.[2] A 2005 Institute for Clinical Evaluative Sciences report highlighted a disconnection of family physicians from the hospital environment and the concerns this trend raises in relation to continuity of care.[5] The report lists the decline in physician supply, transfer of some workload to other specialists, and the role (or lack) of financial incentives as a few of the possible reasons for the decline of family doctor hospital work. For office-based family doctors who could include inpatient hospital work, Wong and Stewart suggested that geographic practice location was the strongest predictor of scope of practice that includes hospital-based care.[7] A review of results from the National Physician Surveys over recent years confirms the exodus from hospital care. In 2007, 32.2% of family physicians and general practitioners cited a community hospital as one of their practice settings in Ontario. This declined to 29.1% in 2010, to 25.1% in 2013, and to 20.6% in the most recent results from 2014. This decline was mirrored nationally, from 39.3% of family physicians and general practitioners listing a community hospital as part of their practice setting in 2004 to 23.4% in the 2014 survey. Most recently, some well-known physicians taking a more informal pulse on community family doctor activities and attitudes questioned the hospital role of family doctors in urban settings.[3,4] In 2014, CFPC Past President Kathy Lawrence, in discussing both barriers to and positives of family doctor hospital roles, asked, "Can family physicians continue to provide care to patients in-hospital while practising in the community?"[3] She concluded the answer might depend on the community and the individual doctor but hoped there would always be an opportunity to provide this care. In February 2014, John Crosby, community family physician and author of much informal practical advice for family doctors, noted the same exodus of family doctors from hospital work.[4] He referenced such reasons as risk, efficiency, and costs.

The Department of Family Medicine at St Joseph's Healthcare Hamilton in Ontario has had the unique opportunity of tracking changes in family physicians' attitudes about physician hospital activities and their inpatient care role over the past nearly 4 decades: first in 1977,[8-11] again in 1997,[12] and most recently with our 2014 survey. The initial survey in 1977 resulted from a desire of the department to look at the discrepancy between department members fearing loss of a hospital role and hospital access ("loss of beds," "loss of prestige") and perceived threats from the new medical school (at McMaster University) with its influx of learners and specialists, and the department's own survey results that showed family doctors were already leaving hospital care in 1977. The study highlighted "how little we knew about ourselves and that perhaps we were not what we thought we were."[8] Our study aimed to assess if there have been further changes in family physicians' attitudes and activities in hospital care and reflect on what we think we are and what we know about ourselves today.

METHODS

A cross-sectional survey design was used. All active family physicians associated with the Department of Family Medicine at St Joseph's Healthcare Hamilton were invited to participate. The list of family physicians was received from the department administrator who maintains and updates the list on a continual basis. Approval was received from the Hamilton Integrated Research Ethics Board.

The survey was sent by mail (with a fax-back option) and by e-mail (with a link to an online survey). Survey items included questions about the physician's current role in hospital activities (eg, patient care, continuing education), as well as their attitudes toward the role of the family physician in the hospital setting and the barriers to and facilitators of improving this role. A reminder, with a second copy of the survey, was sent 2 weeks after the initial mailing in an effort to increase the response rate. We compared the current 2014 results with findings from similar surveys administered at this

institution in 1977 and 1997. Several new questions were added to the 2014 survey to reflect changes to family practice since the previous surveys. The methodology used reflects the methodology used in 1977[8-11] and 1997.[12] Categorical data were summarized using proportions and continuous data were summarized using means and 95% CIs; χ^2 and 1-way ANOVA (analysis of variance) tests were carried out using SPSS, version 22.

RESULTS

Participant characteristics

A total of 93 physicians returned completed surveys (37.3% response rate). Most physicians in our survey (89.2%) held Certification from the CFPC, compared with 38.6% in 1977 and 77.3% in 1997. In 2014, 53.8% of respondents were men, compared with 92.0% in 1977 and 59.1% in 1997.

Direct inpatient care

In 2014, about half of the respondents indicated that they provided some type of inpatient care. This patient care was largely supportive care and newborn care (71.7% and 67.4%, respectively). Total care, where the family doctor was the most responsible physician, was undertaken only by those physicians working in the complex continuing care unit (3 doctors with 6 others providing on-call assistance) and some of those (n = 31, 33.3%) providing newborn care. Four respondents provided obstetric care and 3 provided surgical assistance. This was a continuing decrease of total care provision from 1977 when 44.9% looked after general medicine inpatients and 17.0% looked after stroke and rehabilitation patients. By 1997 this care had already dropped to 3.0% for general internal medicine and 1.5% for stroke and rehabilitation care.

Attitudes and perceptions

Family doctors in all 3 surveys (92.3% in 2014, 93.8% in 1997, and 92.0% in 1977) saw their role in hospitals as changing. A complete comparison of the changes in attitudes and perceptions over the 3 survey periods can be found in **Table 1**. Additionally, the changes with the most variation over time are highlighted in **Figure 1**.

Hospital presence and effects on patient care. In the earlier surveys, most family doctors believed that patient care would suffer if they were not involved in hospital care (92.1% in 1977 and 87.5% in 1997). In 2014, only 47.3% believed the quality of care would suffer. There was also a considerable shift away from the perception that the family physician had a role as patient advocate in hospital care: 92.0% in 1977 and 95.3% in 1997 to 49.5% in 2014. Also, only 27.5% thought that patients expected to see them in-hospital. In 1977, 100.0% of the doctors thought that their patients expected to see them in-hospital, as did 90.8% of respondents in 1997. Almost half of the 2014 respondents (48.4%) still believed that they could provide better overall care if they were able to attend in-hospital patients (compared with 87.4% in 1977), and 60.4% got satisfaction from attending their inpatients (compared with 97.8% in 1977).

Reasons for leaving hospital care were varied. Almost all physicians (91.2%) in 2014 endorsed that patient care in the community had become more complex and time-consuming. The shift of inpatient care to outpatient settings (84.4%) and shorter hospital stays (78.0%) have contributed to the changed role of family doctors and increased office workload. Remuneration for hospital visits was thought to be poor in 2014 (74.7%). New to this last survey is the role of electronic connectivity: 68.1% of respondents reported that electronic access to patient medical information lessened the need to attend patients in-hospital.

Relationships with consultants and hospitals. More than half of 2014 respondents thought that poor relationships with residents, consultants, and nursing staff were ongoing, as they were in 1977 and 1997. Communication issues remained in 2014: respondents cited not being advised of patient admissions or transfers to other hospitals or wards. Interaction with emergency department staff, consultants, and booking personnel remained problematic. Communication with hospital administration was thought to be poor. In 2014, much as in 1997, few physicians (15.4% and 15.2%, respectively) felt needed by the hospital, compared with 50.6% in 1977. In 2014, many (64.7%) family doctors felt impotent to make changes within the hospital; although, more (89.6%) felt this way in 1977. Today, as in 1977, family physicians perceived they were not adequately represented in hospital policy (52.7% and 55.7%, respectively).

Reasons for hospital activities and the role of the Department of Family Medicine. Continuing medical education remained a main reason for coming to the hospital for those who did attend (87.1% in 2014, similar to previous surveys). However, only 21.0% attended the educational rounds regularly, citing as reasons time, availability of other sources for continuing education, and quality of the education.

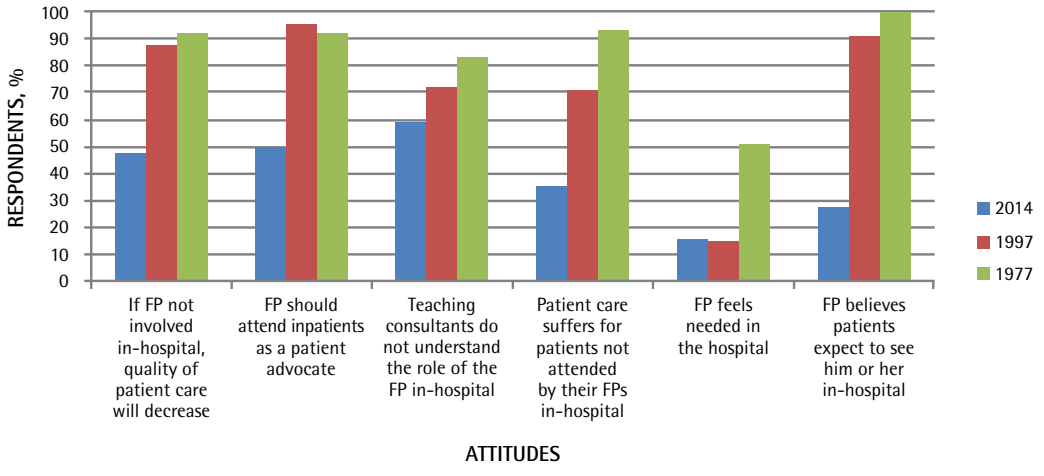
A total of 95.6% of respondents in 2014 saw a role for the Department of Family Medicine during the next 5 to 10 years, and most thought that this department provided a voice for in-hospital care, especially for obstetric and newborn care.

Table 1. Changes over time in respondents' attitudes about the role of family physicians in the hospital

STATEMENT	PROPORTION OF RESPONDENTS WHO AGREED		
	2014	1997	1977
The role of the family physician in the hospital has changed	92.3	93.8	92.0
The shift of inpatient medical care to outpatient settings and decreased lengths of stay have changed the role of the family physician in-hospital	78.0	NA	NA
Patient care has become increasingly complex, demanding more in the office, with less time available for hospital care	91.2	NA	NA
The shift to outpatient care has increased the office workload	84.4	NA	NA
If family physicians do not continue to be involved in the hospital setting, the quality of patient care will decrease	47.3	87.5*	92.1†
The family physician should attend hospital inpatients to function as a patient advocate in the hospital system	49.5	95.3‡	92.0‡
Hospital work is a waste of time for family physicians	20.9	28.1	18.1
Specialists would benefit from participation of family physicians in the hospital	71.4	NA	NA
Full-time teaching consultants do not perceive a (understand the) role for family physicians in-hospital	59.3	71.9	82.9
Family physicians in St Joseph's Healthcare Hamilton should have input in teaching residents	64.8	NA	83.0
Patient care suffers if patients are not attended by their own family physician while in-hospital	35.2	70.8*	93.2†
I can provide better overall care if I am able to attend my patients in-hospital	48.4	NA	87.4‡
I get satisfaction from attending my patients in-hospital	60.4	NA	97.8§
I feel needed by the hospital	15.4	15.2	50.6†
My patients expect me to see them in-hospital	27.5	90.8†	100.0†
Family physicians feel impotent to make changes within the hospital	67.4	NA	89.6
The Department of Family Medicine at St Joseph's Hospital offers little of value to the practising family physician	13.2	27.7	18.2
A main role to be played by the Department of Family Medicine at St Joseph's Healthcare Hamilton should be in the realm of continuing education	76.7	84.5	92.0
Family physicians are not adequately represented in hospital policy decisions	52.7	NA	55.7
Remuneration for hospital visits is poor	74.7	NA	NA
Geographic spread of patients over the city makes it impractical to visit hospital inpatients	91.2	NA	NA
Information technology has lessened the need to attend the hospital to obtain patient medical information	68.1	NA	NA

NA—data not available in previous survey or question was not asked.
*Significant change (compared with 2014 results) measured by *z* test of difference of proportions, $P = .002$.
†Significant change (compared with 2014 results) measured by *z* test of difference of proportions, $P < .001$.
‡Significant change (compared with 2014 results) measured by *z* test of difference of proportions, $P = .001$.
§Significant change (compared with 2014 results) measured by *z* test of difference of proportions, $P = .005$.

Figure 1. Attitude changes showing the most variation over time



DISCUSSION

At St Joseph's Healthcare Hamilton during the past nearly 4 decades, family doctors have continued to leave hospital work. In our 2014 survey, few physicians continue to provide inpatient care. A small number of doctors admit their obstetric patients and a few doctors look after newborns. A small rota group (9 doctors) is responsible for all patients admitted to the complex continuing care unit while another rota group (14 doctors) cares for newborns. These 2 groups resemble the hospitalist model. Two doctors work in a shared care model in palliative care. These latter groups receive Ministry of Health and Long-term Care funding.

Reasons for not attending the hospital in the 2014 survey reflect current realities of urban practice: geography, hospital specialization, the shift to outpatient care and shorter stays, and the increased breadth and complexity of office and community care. Other reasons for leaving hospital care, such as problematic relationships with hospitals and staff, are similar to those already noted in the CFPC's discussion paper from 2003.[2] These forces have led to increasing complexities of both community and hospital care. The response of our colleges, hospitals, and the Ministry of Health to this complexity has been to standardize and formalize care with ensuing rules, regulations, and requirements to decrease risk. But these then often become barriers to care. Our survey suggests family physicians are finding it difficult to navigate increasing system barriers to hospital practice. Furthermore, expectations of care by family doctors no longer dictate that they provide hospital care. Our hospital, for example, no longer allows direct admissions to medical beds by family doctors, and recently, more conditions have been added to providing newborn care.

Hospitals, for their part, have moved to other providers such as physician assistants and hospitalists. The hospitalist model is increasingly used across Canada, and the CFPC called for ongoing study of the effects of this model on patient care and the role of family physicians.[2] A discussion of their role versus that of the family doctor was reported in *Canadian Family Physician*.[13] Yousefi and Maslowski reviewed the hospitalist literature and described a complex interplay of drivers for the hospitalist programs in Canada: physician-related drivers, system-related drivers, and patient-related drivers.[14] These drivers increasing hospitalist numbers parallel the reasons why family doctors are leaving hospital work, particularly with respect to the physician- and patient-related drivers such as patient medical complexity, the aging population, physician workload, physician remuneration, subspecialization, and work-life balance.[14] The hospitalist trend has also been well documented in the United States,[15] with ongoing questions about how hospitalists will affect family medicine.[16] The United States has seen the same decline of family physician inpatient care.[17] A newer type of provider working in both outpatient and inpatient care is the physician assistant. This role is still evolving, again, with some debate.[18]

The continuing exodus from hospital work in urban settings by family doctors and discussion around the effects of this trend lead to an underlying question: Should family physicians have a formally defined hospital role or obligation to do hospital work? The premise that family doctors should attend or manage inpatients appears to be one of an assumed, traditional requirement and model, which reflected necessity and practices in former times and perhaps still does in our remote and rural communities where family doctors might be the only doctors and might provide all hospital and outpatient care.

The 4 principles of family medicine speak to comprehensive and continuous care and that the "family physician may care for patients in the office, the hospital (including the emergency department), other health care facilities, or the home."[19] The 1996 Provincial Coordinating Committee on Community and Academic Health Science Centre Relations outlined the core activities that should be provided by family physicians, making all non–office-based activities optional and discretionary, and indicating hospital care and home care should be provided "where applicable and where possible."[20] A new model of comprehensive care was outlined that recognized that the traditional role of the family doctor working in all primary care settings was not tenable.[20] The new model was one of group practice teams in which family doctors with a special interest or expertise in hospital care would provide this care for the patients of others on their team.

Subsequent policy papers of national and provincial organizations continue to focus on developing this community model of interdisciplinary team care,[21-23] suggesting that as "it is no longer possible for individual physicians to offer all services, a comprehensive basket of services will be offered by physicians working in groups."[21] These policy papers speak to caring for patients in a variety of settings, including hospitals. More research needs to be done to see if this model of delegated inpatient care to a specific group of family doctors has increased the number of family doctors providing hospital care and to determine what is needed to develop more such groups.

Limitations

The study came from the initiative of a very small, informal group of 7 family doctors in our Department of Family Medicine with an interest in looking at issues raised by our community colleagues interfacing with

our hospital and specialists. Hence, the study is limited to our one hospital (93 respondents) and might not be generalizable to the rest of Ontario or Canada. Further, there might have been a response bias, with those having strong feelings about hospital care being more likely to respond, and thus respondents might not be representative of all family physicians in the department. Also, ours is an urban setting and will not reflect the rural experience, where the family doctor role is usually very different. To our knowledge, the original and secondary questionnaires were not validated elsewhere, and ours was not either. Questions were worded as closely as possible to the ones previously used in 1977 and 1997 for comparison purposes, and new ones were added that were applicable to current practice (eg, use of electronic medical records).

However, the study has the advantage of continuity with a community of family doctor respondents, including some participating in all 3 surveys.

Conclusion

Our surveys over more than 3 decades at St Joseph's Healthcare Hamilton have tracked family physicians leaving direct inpatient hospital care, reflecting current realities in health care delivery systems, the huge scientific advances in medicine, and physicians' practice lives. The discipline of family medicine and the roles and interests of family practitioners are evolving. Care is now moving to team-based, community care in our area, although solo practices are still part of the landscape. The perceived importance in previous surveys of the dimensions of advocacy, comprehensiveness, and continuity of care with respect to hospital work has decreased in this latest review. This survey, as an updated response to what we "knew about ourselves" and "what we thought we were,"[8] finds that, in evolution from previous decades, while family doctors are still present in our hospital, other than in obstetrics and newborn care, no family doctors, as the most responsible physician, admit patients. Hospital-based work is still done by our doctors but it is done much less, and this is largely supportive. Maintaining hospital privileges as active staff also allows access to resources such as Clinical Connect systems for patient information and certain outpatient clinics. The Department of Family Medicine is valued for its provision of some continuing education, acting as an intermediary with the hospital and providing a sense of belonging to a community of family physician colleagues and identifying with the hospital institution over years of practice.

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Contributors

Ms Gaebel contributed to the concept and design of this study, collected the data and performed the analysis, revised the article for critically important intellectual content, and gave final approval of the version submitted. **Drs Neimanis, Woods, Zizzo, Dickson, Levy, Goebel,** and **Corsini** contributed to the conception and design of the study, interpreted the data, revised the article for critically important intellectual content and gave final approval of the submitted article. **Ms Burns** contributed to the analysis, revised the article for critically important intellectual content, and gave final approval of the submitted article.

Competing interests

None declared

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