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Professional, personal and community: 3 domains of physician retention in rural communities

Pamela J. Cameron, MSW, PhD
David C. Este, MSW, PhD
Faculty of Social Work, University of Calgary, Calgary, Alta.

Catherine A. Worthington, MSc, PhD
School of Public Health and Social Policy, University of Victoria, Victoria, BC

Correspondence to: Dr. David Este, Faculty of Social Work, University of Calgary, 2500 University Dr. NW, Calgary AB T2N 1N4; deste@ucalgary.ca

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Introduction: We sought to explore the professional, personal and community domains of physician retention in 4 rural communities in Alberta and to develop a preliminary framework for physician retention.
Methods: We used a qualitative, collective case study design to study 4 rural communities (cases) in Alberta that retained family physicians for 4 years or longer. Participants included physicians, staff members, spouses and community members. Data collected from interviews, documents and observations were analyzed individually, and similarities and differences across all cases were assessed.
Results: A range of factors that could influence physicians' decisions to stay in a particular community were described by participants. Within the professional domain, physician supply, physician dynamics, scope of practice and practice set-up were common across all communities, and innovation, and management and support emerged from some communities. The personal factors, goodness-of-fit, individual choice, and spousal and family support were present in all communities. Four community factors — appreciation, connection, active support, and physical and recreational assets — emerged across all communities, and reciprocity was present in 3 communities. From these data, we developed a preliminary retention framework.
Conclusion: Physicians, policy-makers and community members are encouraged to consider the 3 retention domains of professional, personal and community.

Introduction : Nous avons voulu explorer les dimensions professionnelle, personnelle et communautaire de la fidélisation des médecins dans quatre communautés rurales de l'Alberta et élaborer un cadre préliminaire de fidélisation des effectifs médicaux.
Méthodes : Nous avons employé un modèle d'étude de cas qualitatif et collectif pour analyser quatre communautés rurales (cas) de l'Alberta qui ont conservé leurs médecins de famille pendant quatre ans ou plus. Les participants incluaient des médecins, des employés, des conjoints et des membres de la communauté. Les données recueillies à partir d'entrevues, de documents et d'observations ont fait l'objet d'analyses individuelles et nous avons évalué les similitudes et les différences entre tous les cas.
Résultats : Les participants ont décrit un éventail de facteurs susceptibles d'influer sur la décision des médecins de rester dans une communauté en particulier. Pour ce qui est de la dimension professionnelle, l'offre de médecins et la dynamique des médecins, de même que le champ de pratique et l'organisation de la pratique ont été des facteurs communs à toutes les communautés, tandis que l'innovation, la gestion et le soutien se sont distingués dans certaines. Parmi les facteurs personnels, mentionnons le degré d'ajustement, les choix personnels et le soutien des conjoints et de la famille, observés dans toutes les communautés. Quatre facteurs communautaires, soit l'appréciation, les liens, le soutien actif et les installations matérielles et récréatives, sont ressortis dans toutes les communautés, tandis que la réciprocité a été notée dans trois communautés. À partir de ces données, nous avons élaboré un cadre préliminaire pour favoriser la fidélisation.
Conclusion : Nous encourageons les médecins, les décideurs et les membres de la communauté à tenir compte de ces trois dimensions de la fidélisation : professionnelle, personnelle et communautaire.

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INTRODUCTION

Primary care physicians provide a variety of health services to rural areas[1,2] and contribute to the health and well-being of rural residents and communities.[3] Yet, health care is a valuable resource in rural communities that is often in short supply.[4,5] Regardless of the number and nature of differences in rural communities internationally, rural communities in many jurisdictions face shortages of physicians.[6–8]

There is a small body of literature on retention of rural physicians. Rural physician retention has been attributed to a variety of personal and professional factors, such as job satisfaction,[9,10] background[11,12] and workload.[6,13] With respect to the role of community, Conte and colleagues[14] found that what recruited physicians to an area did not retain them, and that the broader community had an impact on retention in terms of geography (location) and support. Other studies have also recognized community factors as playing some role in physician retention.[6,15–17]

Given the variety of potential factors related to retention of rural physicians that have been identified, the purpose of this study was to examine multiple domains, including the personal, professional and community factors that may influence physician retention in 4 rural communities in Alberta. We used a qualitative, collective case study method[18,19] to explore specific factors and strategies of rural communities to retain physicians, and the actual and potential role of the community in retention.[20] Through an examination and comparison of these cases, we developed a preliminary retention framework.

METHODS

A collective case study methodology allows researchers to undertake an in-depth analysis of a single case or multiple cases,[21] covering contextual conditions and using multiple sources of evidence.[19] Four rural communities in Alberta that successfully retained at least one primary care physician for 4 years or more were selected as cases. Retention was defined as 4 years or longer, based on previous research suggesting rural physicians often migrate after about 4 years.[22,23] Cases were examined independently, followed by comparative analysis of the data.

Sampling and recruitment

Based on a review of the literature, committee discussions and discussions with representatives from the Alberta Rural Physician Action Plan (RPAP), we developed a typology of 7 factors, including proximity to the nearest urban centre, access to health care resources, community size, geographical location in the province, practice type, number of years at least one physician was retained and community resources. A matrix with 4 cells evolved from this typology: southern farming, urban-edge, micro community and northern resource-based. Various communities were considered that might fit this matrix within rural Alberta. Discussions with 3 representatives from RPAP, reviews of data documenting retained physicians in Alberta and reviews of community profiles available online were undertaken to narrow down potential communities that would be invited to participate in the study. After reviewing information from the Alberta Medical Association and the College of Physicians and Surgeons of Alberta, reviewing the data available and hearing suggestions regarding the suitability of particular communities from RPAP, we compiled a list of potential communities. The first author then contacted the communities regarding participation via email or fax. Communities were matched as closely as possible to the matrix quadrants.

Once a contact physician from each community agreed to participate in the study, the corresponding health region was contacted. Community A was a small southern ranching community, community B was situated in a busy western industrial area, community C was a small eastern remote community and community D was a northern community largely supported by oil, agriculture and tourism. Participants within each community were either recruited by the contact physician or responded to advertisements independently. Data were collected in a 1-week period within each community. Communities A, B and D estimated their catchment areas to have populations greater than 10 000, and community C estimated their catchment area to be populated by fewer than 10 000 people. There were hospitals in all of the communities studied. Communities were located about 1–4 hours from their respective nearest urban centre. Three of the communities studied (A, B, D) had access to family physicians and some specialists, whereas community C did not have local obstetric or surgical opportunities.

Data collection

We used individual interviews, document review and personal observation to collect data. The first author conducted individual interviews with participants (including physicians, spouses, hospital or

office staff, and community members) in each community. We used a general interview guide approach,[24] consisting of about 20 questions for each participant type. The questions related to participants' community, physician recruitment and retention, and community actions. In addition, specific questions about each community emerged during the interview process with participants.

Physicians and managerial, nursing, reception, radiography and nurse's aide staff were interviewed. Community members interviewed were patients in their local communities, including business people, journalists, parents, mayors and town councillors. Because of the ethical parameters of the study, the lead author was unable to approach individuals directly regarding participation and therefore relied on the contact physician in each community, word of mouth and local advertisements to enrol participants.

Data analysis

Interviews were tape recorded with the consent of the participants and transcribed. Individual transcripts were sent to interested participants for member checking (i.e., personal interview transcripts were reviewed for confirmation and further commentary[18]). Verified transcripts were uploaded into the qualitative analysis software program ATLAS.ti 5.0 to be coded. A separate code list was built for each community. The lists were compared to create a final code list used for coding all interviews. Four cases, based on the 4 communities, were built individually, and the similarities and differences between cases were then examined, using matrices based on Miles and Huberman's "stacking comparable cases"[30] as well as cognitive mapping to illustrate retention domains, the relations between the domains, and specific retention factors, and to develop a preliminary retention framework.

This study was approved by the University of Calgary Conjoint Health Research Ethics Board, and agreements were made with each community's health region with respect to data collection, analysis and dissemination.

RESULTS

Data from 43 participants were collected in 41 interviews (2 interviews were conducted with 2 participants each), ranging from 9 to 12 interviews per community (Table 1). Of the 15 physician participants, 80% were male, with ages ranging from about 30 to 60 years (Table 2). Duration of practice in each rural community ranged from 4 to more than 30 years. Seven physicians were Canadian-born, with 8 others born in 4 other countries. The foreign-trained physicians were fluent in English. All physicians interviewed were part of a physician group (or partnership in the case of community C) in the community. Of the 15 physician participants, 13 were married.

Despite geographic, demographic, economic and health-resource, and other contextual differences among the 4 communities studied, common retention strategies emerged. Factors that were positively associated with retention in terms of professional, personal and community domains are discussed first, followed by the presentation of a preliminary retention framework.

Professional domain of retention

There were 4 key factors within the professional realm of retention that were common across all of the communities studied: physician supply, physician dynamics, scope of practice and practice set-up (Table 3). Two professional factors were found only within certain communities: innovation, and management and support. Innovation emerged within communities A and D. References to management and support factors were found in communities A, C and D.

Physician supply

Physician participants repeatedly discussed the im-

Table 1. Study participants

Participant type	Community				Total
	A	B	C	D	
Physician	4	5	2	4	15
Spouse	1	1	1	1	4
Staff	2	2	6	4	14
Community member	2	3	3	2	10
Total	9	11	12	11	43

Table 2. Age of participants

Participants	Community; age, range (mean) yr				Total
	A	B	C	D	
Physicians*	30–60 (47.7)	30–60 (44.6)	40–50 (46.5)	35–50 (45.5)	30–60 (46.0)
Other†	32–77 (51.2)	30–52 (43.8)	32–59 (44.8)	41–69 (50.4)	30–77 (47.5)

*Age ranges of physicians are approximate to conceal their identities.
†Includes all other participant types (spouse, staff, community member).

portance of an adequate physician supply to retention. One physician in a remote community explained, "If I were to stay here myself, I don't think I am going to stay very long 'cause I'm going to be on call every night." In this case, having another physician to practise with was essential to retention. A male physician illustrated the importance of adequate numbers of physicians and how recruitment had an impact on retention:

> There was a time when there was only 5 of us here ... it was nuts ... we hung on ... I think had it gone on for very much longer, we would have had to do — you know, we would have died. And so the South Africans [recruited as physicians] saved our souls.

Thus, recruiting physicians was necessary to avoid burning out the existing physicians in the community. The fact that the physicians "hung on" was a testament in part to their physician dynamics.

Physician dynamics

Many participants acknowledged the importance of the physician complement. For example, "You help each other ... when we're swamped. People say, 'Can I help you?' It makes a huge difference" [female physician]. A male physician highlighted the importance of these dynamics: "I don't think I can emphasize how important it is to have ... a group that works and pulls together ... I think it had a lot to do with why we've had so many docs stay so long." Participants recognized that physician dynamics influenced retention in the communities studied.

Scope of practice

A major retention theme that emerged was the importance of a diverse scope of practice for rural physicians. A male physician provided an example of this factor: "I've stayed because, primarily, it's a very supportive group who I feel privileged to have worked with, and they've allowed me to sort of develop areas of expertise that wouldn't normally be available to me." Another male physician explained,

> Why do I stay here? Because I can do the stuff that I'm trained to do here. If I move to [nearest city], they won't allow me to do [procedures] or look after sick patients ... I would be put into family practice, not rural general practice.

Retention was clearly linked to the ability to practise medicine in a broad sense.

Practice set-up

Practice set-up emerged across each community studied. This factor included the physical space, and financial and workload issues, with workload issues referring to a reasonable pace of practice. Participants explained the benefits of the practice set-up in their community, using phrases such as "everybody in the practice feels like they get a fair shake" [male physician], demonstrating their attempts to make the practice collaborative. A female physician summarized the benefits:

> I think things are good enough already with the clinic and the community and the specialist connections we have that keeps CME [continuing medical education] up to date. There's really nothing more anyone could ask.

Such arrangements made a difference to physicians' satisfaction with their professional responsibilities.

Innovation

Physicians in communities A and D demonstrated an interest in innovation, change and growth. A male physician stated, "We're doing it. We're the driving force." This quotation was indicative of the innovative spirit of many rural physicians. One female staff member explained that physicians in her community were not satisfied with the status quo and were "competitive and they want to be at the top of the game." Innovation was summarized well by a female community member who remarked,

> I believe the ones that are retained enjoy having the extra control, power and influence that they do have in a smaller hospital/health community. In a rural area they have a much greater ability to exert influence and create the work environments and conditions they desire.

Table 3. Professional retention factors

	Community			
Factor	A	B	C	D
Physician supply	X	X	X	X
Innovation	X			X
Physician dynamics	X	X	X	X
Scope of practice*	X	X	X	X
Management and support†	X		X	X
Practice set-up‡	X	X	X	X

*Includes access to hospital practice.
†This does not refer to physicians' own management within the clinic setting. Physician management would fall under practice set-up.
‡Financial and workload issues are included.

Management and support

The management and support factor emerged in communities A, C and D. This factor referred to administrative management and staff support, rather than physicians' own management skills within the clinic setting. A female physician contemplated the importance of staff to her retention:

> I would not function if I didn't have help ... If I didn't have someone to bounce ideas off, who wasn't helping me get myself organized with patients, to answer those calls. It was ... key, having that kind of staff and that kind of relationship.

A male staff member shared, "The whole thing about recruitment and retention, everything has to do with culture. If you create the right culture, people — then you feel part of it." The positive attitude of management supported professional retention.

Personal domain of retention

Three personal retention factors emerged that were common across all communities: goodness-of-fit, individual choice, and spousal and family support. The first 2 factors were related to a physician's personal attitude, and the last was related to spousal and familial relationships. Goodness-of-fit and individual choice are examined separately because they were discussed in different ways. Goodness-of-fit was discussed by participants as the way in which the physician fit into the community — how his or her personality and lifestyle fit with the local culture. Individual choice was discussed in terms of a physician's personal decision to embrace the community and make a conscious decision to become involved and stay in a particular place.

Goodness-of-fit

According to a female physician, retention is encouraged when professional and personal fulfillment is attained. She described why this personal goodness-of-fit was so important:

> What I heard from a neighbouring community is something as silly as the waiting list to get a docking place for your boat at one of the lakes is something like 2 years. So one of the docs was commenting ... 'Well maybe I should look for some other place to go dock my boat.' And a week later he got a phone call from the town council: 'We have a spot for your boat' [laugh]. But to me that kind of almost borders on blackmail ... To me it's more about, 'Am I able to work the way I want to work? Am I able to establish a quality of life for me and my family?' ... To me, that is my money.

It appears that the participant was able to find an appropriate goodness-of-fit for herself in her community. A male physician explained, "If they threw $10 000 at me a year extra and later $20 000, would I stay because of it? Not really ... the money's not really going to make me happy. So, it's more the quality of the practice, the town, the lifestyle."

Individual choice

To be retained personally, a physician's lifestyle needs to mesh with what is available within the community. One male doctor frankly stated, "To live in rural communities, you've got to be an outdoors person to some extent. If you're interested in opera, well, you know, you're screwed." A male physician offered the fact that he took personal responsibility for his satisfaction within the community:

> I think we created this for ourselves. This was kind of an internal thing that we were motivated to being in a rural community so we came in with a positive outlook on things ... we're looking for a rural community and that's what we found and that's fitted our needs perfectly.

In essence, physicians in these communities "wanted a community and that's what they found" [female staff member].

Spousal and family support

A female staff member declared that "for my experience anyways, the family had better be happy in the community, and if they're not happy in the community, then ... no amount of money is going to keep them here." A male physician referred to the spouse as the "anchor," and a female physician commented, "that brings you to the retention piece. The most critical thing is that your spouse is happy. You know, that's probably the number 1 [thing] that we find." One spouse thought part of the reason they were still in the community was "because I'm happy. If I ... weren't happy, I think [physician] would have said, 'Let's go.'" A female spouse of a physician who was retained for a substantial length of time shared her feelings about living well in her community: "I love the small town community. I love being able to go for groceries and you know what? If it takes me 3 hours 'cause I have to stop and talk to 30 people, I'm okay with that!"

Spousal satisfaction and integration into the local community were considered to be fundamental to retention for some participants.

Community domain of retention

Appreciation, connection, active support, and physical and recreational assets were positively related to physician retention in the 4 rural communities studied (Table 4). Reciprocity emerged as a community retention factor in 3 of the 4 communities (all but community B). A more detailed discussion of the factors within the community domain can be found elsewhere.[25]

Appreciation

Physicians cited a number of examples of how the community appreciated and accepted them. A female physician highlighted her community's appreciation of local physicians through gestures such as sending physicians Christmas cards, chocolates or flowers periodically. The community too, recognized acceptance and appreciation as important. A male community member commented, "They are very much part of the community and I think very much appreciated."

Connection

Physicians underscored the value of feeling connected to the community. A male physician commented, "I really enjoy this small town atmosphere, knowing people, knowing our neighbours." Another physician highlighted the connection to the community and its relation to retention: "The things that I would say that keep me ... in the community, would be just the people."

Active support

Participants provided concrete examples of how the community mobilized to assist and show support for physicians. There were many attempts to financially support the facilities in which the physicians operated (e.g., fundraising). There was also community pressure on politicians when there were threats of facility closures: "the political pressure [from the community] to make this happen ... was really strong ... 'cause we all knew if they closed the hospital, 5 of us would be gone" [female physician]. Informally, communities also support physicians: "when the chips are down, people are all people, and they've been great ... if I'm ever in trouble, everyone will come" [female physician].

Physical and recreational assets

The physical and recreational aspects of the community were also a factor in retaining physicians in the 4 communities. Highlighting several local recreational assets, one physician stated, "They've got good facilities ... we've got a swimming pool ... we've got a good church ... that's an important part of our life." A wide variety of recreational opportunities for physicians and their families were highlighted in the 4 communities.

Reciprocity

As noted previously, reciprocity emerged as a community retention factor in communities A, C and D. The relationship between physicians and the community was perceived as mutually beneficial, with physicians working hard to care for patients and contributing to the community, while community members showed gratitude and respect through community initiatives and continuing support as patients. A male physician explained, "You do have to pay back ... we as physicians here do very well ... our patients treat us well ... you have to be seen in the community." As a male community member explained, "It's a 2-way street. The physicians here have been fantastic ... we'll do everything we can to keep them both personally and council [local government]–wise."

Table 4. Community retention factors

	Community			
Factor	A	B	C	D
Appreciation	X	X	X	X
Reciprocity	X		X	X
Connection	X	X	X	X
Active support	X	X	X	X
Physical and recreational assets	X	X	X	X

Connections among domains

Although factors were described as individual entities and divided into 3 domains, the factors involved were interrelated. A female physician explained the dynamic relation among these domains as follows:

> The challenge I've faced personally has been in maintaining those boundaries of being a professional in a community ... having friends that are patients. It's that endless boundary difficulty ... you can't talk about work and work is your major stressor ... your friends are often your patients or your neighbours. … [They] cross that boundary. ... It can be quite lonely in rural practice. Not being able to talk about lots of things that are upsetting you, even to your spouse.

Based on these findings, one could speculate that if the practice set-up is excellent, but the community lacks physician supply, professional retention may be threatened. If the physician enjoys the community but her spouse does not, personal retention may be threatened. If there is active support from the community but not sufficient recreational assets, community-based retention may be threatened. Between-domain examples are also relevant: if the scope of practice is adequate, but a physician feels unappreciated by the community, retention may be threatened.

Physician retention in rural communities: a preliminary framework

Based on themes generated in the 4 communities, we developed a physician retention framework (Fig. 1) including the 3 retention domains. This framework illustrates the different elements of retention for these 4 communities and how these factors are interrelated. In these communities, each domain was important for retention of rural physicians. Some of the factors within domains were expressed more fully in some communities than in others. For example, community A cited many examples of active support, whereas community B provided few examples. In community D, participants discussed physician supply at great length, whereas in community C this factor was not as prominent.

DISCUSSION

Participants were rooted in their communities; their perceptions, actions and interactions told the story of successful retention in the 4 communities studied. Their personal observations formed the basis of the themes generated, and these themes suggest a number of lessons that can be learned from this study.

- Each community was unique, and every physician was unique. There was no "one size fits all" retention strategy.
- Recruitment was intricately linked to retention. They influenced each other and acted in a cyclical fashion.
- The relationship between the physician and community was relevant to retention.
- The actual and potential role of the community varied but had considerable potential in physician retention.
- Personal, professional and community factors were relevant to retention in these rural communities. Without fulfillment in each domain, retention may be at risk.
- There was no singular role for any person or group. Retention was a dynamic and creative concept, and was not the responsibility of any one person.
- Recruitment strategies were often formal, whereas retention strategies were largely informal.
- Retention strategies could be physician- or community-led; physicians and communities could play roles in retention strategies.

The key finding of this case study was the importance of the interplay between professional, personal and community factors. These results support and expand results from the small number of existing retention studies. Strong community links, professional support and local practice arrangements,[6]

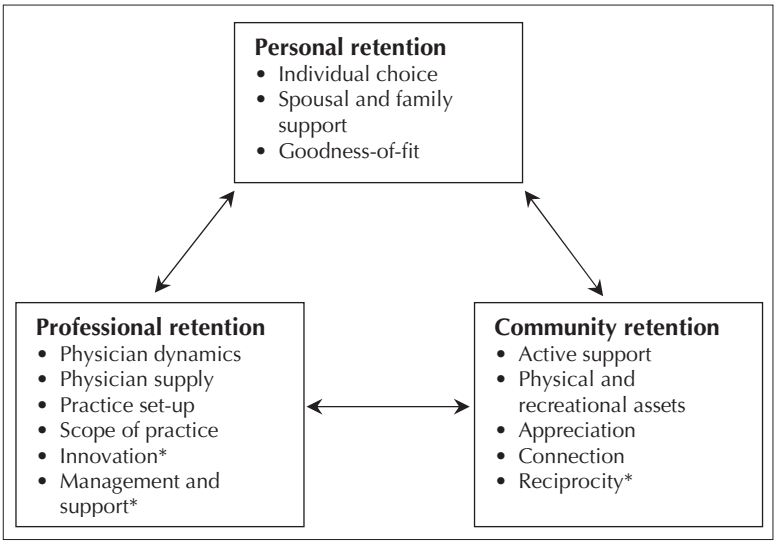


Fig. 1. Three domains of physician retention in rural communities: a preliminary framework.
***Factor that emerged in some, but not all communities.**

varied practice, recreational opportunities, working relationships,[26] preference for a rural lifestyle, desire for autonomy, a wide scope of practice, close relationships with their community,[15,27,28] and personal, professional and community concerns[16] have been linked to physician satisfaction and retention.

Limitations

This study employed a case study method, and thus reader or user generalization[29] is appropriate; study results, however, may not be generalizable beyond the 4 specific cases. In addition, member checking did not occur beyond the initial transcript with participants who were interested. Thus, there was no additional audit for clarity or confirmation. The first author was unable to approach individuals directly regarding participation because of the ethical parameters of this study, and enrolment of participants was therefore subject to the efforts of the local contact physician and word of mouth. This constraint may have excluded additional participants with insight into retention.

The finite time available to spend in each community was another limitation; this did not allow for full immersion in local culture. Threats to validity exist with each method employed. Data source and methods triangulation were used as a "corrective tactic"[30] to enhance the trustworthiness of the data. In addition, an interview schedule was used in which participant groups were asked the same core questions,[24] discussions took place among the authors regarding interview schedule during data collection and throughout analysis, and notes were taken for journals (personal observations) and for making interview summaries after the completion of each interview. Finally, the preliminary framework for physician retention was intended to provide a preliminary illustration of retention. It was not intended to be definitive and has not been validated. Furthermore, each rural community is unique and individual community context must be central.

CONCLUSION

Rural physicians are part of the fabric that holds rural communities together. Physicians who understand various retention factors at play may be more readily able to identify and direct action at domains that need reinforcement or attention. This understanding may enhance physicians' experience with rural practice and their lifestyle, and thereby encourage physician retention. Rural communities can foster positive doctor–patient relationships, work to promote healthy and strong communities, and work with physicians to sustain and improve local community and health services. This study speaks to the importance of rural professionals to the health of rural communities and highlights important issues for physicians, communities and policy-makers to contemplate and act on with respect to recruiting and retaining rural professionals.

Competing interests: None declared.

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Doctors Speak Out

Podium — Letters to the Editor — Editorials

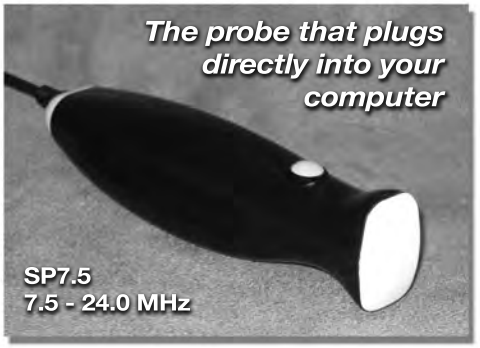
We invite physicians to speak out on issues that concern them.
Send your submissions to Suzanne Kingsmill, Managing Editor,
CJRM, 45 Overlea Blvd., P.O. Box 22015,
Toronto ON M4H 1N9; cjrm@cjrm.net

Les médecins s'expriment

La parole aux médecins — Lettres à la rédaction — Éditoriaux

Nous invitons les médecins à commenter les questions qui les intéressent.
Faites parvenir vos textes à Suzanne Kingsmill, rédactrice administrative,
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