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ABSTRACT

Objectives To describe how physicians were engaged in primary healthcare system change in a remote and rural Canadian health authority.

Design A qualitative interpretive study based on a hermeneutic approach.

Methods 34 transcribed in-depth interviews with physicians and administrators relevant to physician engagement were purposively sampled from a larger data set of 239 interviews gathered over a 3-year period from seven communities engaged in primary healthcare transformation. Interviews were coded and analysed interpretively to develop common themes.

Setting This research is part of a larger study, Partnering for Change I, which investigated the efforts of Northern Health, a rural regional health authority in British Columbia, to transform its healthcare system to one grounded in primary care with a focus on interdisciplinary teams. It reports how physician engagement was accomplished during the first 3 years of the study.

Participants Interviews with 34 individuals with direct involvement and experience in the processes of physician engagement. These included 10 physicians, three Regional Executives, 18 Primary Healthcare coordinators and three Division of Family Practice leads.

Results Three major interconnected themes that depicted the process of engagement were identified: working through tensions constructively, drawing on structures for engagement and facilitating relationships.

Conclusions Physician engagement was recognised as a priority by Northern Health in its efforts to create system change. This was facilitated by the creation of Divisions of Family Practice that provided a structure for dialogue and facilitated a common voice for physicians. Divisions helped to build trust between various groups through allowing constructive conversations to surface and deal with tensions. Local context mattered. Flexibility in working from local priorities was a critical part of developing relationships that facilitated the design and implementation of system reform.

INTRODUCTION

Context

Northern British Columbia covers over 500 000 km² of wild, varied and challenging

Strengths and limitations of this study

- This study drew on in-depth insights of those involved in primary care reform at the community level who were either physicians, or responsible for engaging with physicians, as partners in change.
- The findings resonated with both physicians and health authority planners.
- A hermeneutic approach, based on dialogue and respect of the participants' and researchers' experience, enabled the creation of understandings and insights in the area of physician engagement in a remote and rural area.
- As in all qualitative studies the interpretation is related to the unique context of the communities examined, including geography, climate and provincial and national remuneration systems.
- Qualitative studies are not generalisable, but they do have transferable elements that may be of relevance to not only rural, but also urban areas.

Canadian landscape beset by, at times, harsh weather and natural hazards such as avalanches, floods and wildfires. It is home to many remote communities. Approximately 300 000 people live in this area. The main centre is Prince George, population around 75 000, the regional referral centre for most medical services with links to tertiary care services in the lower mainland of British Columbia. This area is served by a single health authority, Northern Health (NH), that works in collaboration with the province-wide First Nations Health Authority and the Provincial Health Services Authority. In 2009 Northern Health, supported by a federal Primary Healthcare Transition Fund, began a process of primary care reform encompassing whole system changes with a focus on developing multidisciplinary primary care teams across several communities utilising the concepts of the primary care home,²³ patient



centred team based care and community and physician partnerships. The long-term vision was to integrate care in each community so that physicians and other health professions worked together with patients being supported by team members relevant to their needs, where patient information was shared across the teams and with acute care and where there was substantive local decision-making in terms of addressing health priorities.

In 2010, the British Columbia (BC) government and the Doctors of BC, the physician representative association, created Divisions of Family Practice. The Divisions are organised on a geographical basis to provide physicians with a common voice in advocating for family medicine and resources designed to enhance patient care through providing patient, practice and physician supports (https://www.divisionsbc.ca). In northern BC, there are six Divisions that encompass most, but not all, physician practices. Physicians are remunerated by a variety of provincial mechanisms including fee for service billings, sessional payments and quality and income guarantee arrangements. Most other health professionals such as hospital and community nurses are employed by the health authority. Family physicians in rural Canada have broad, generalist practices that can include working in clinics and in hospitals, staffing emergency rooms and developing enhanced skills including surgical skills, procedures such as caesarean sections, anaesthesia, oncology and mental health skills.

Background

Previous research on health system reform consistently points to the critical importance of physician engagement. However, research also highlights the great difficulty in engaging physicians, particularly in primary care, where physicians often work more independently from the rest of the health system. 6 This lack of engagement is critical to address because developing new ways to provide primary care, such as collaborative team approaches, is essential to sustaining an efficient and effective healthcare system. 7-10 Physician relationships with healthcare organisations or health authorities provides a fundamental platform to support all other change initiatives. ^{11–13} In a synthesis of the literature and expert panel report on physician engagement and leadership Denis et al¹⁴ identified that much of the literature on engagement was based on managed care models in the USA and that gaps in knowledge existed about how different strategies, aimed at creating environments that support physician engagement, work on the ground in different contexts. Using a social identity approach that emphasised the differences between physicians and managers, Kreindler et al¹⁵ described the importance of intergroup dynamics as part of any attempt to engage physicians. This research also emphasised how different contexts needed approaches that varied depending on local relationships particularly within the power dynamics that are in play between physicians and administrators. In general, the literature focuses on how healthcare organisations

engage with physicians as individuals and leaders in order to try to facilitate system change and health improvement within those specific organisations. Engaging physicians in primary care settings, and in particular remote and rural ones, to bring about health system change, remains relatively unexplored in the literature.

This gap is particularly significant for rural Canada which, like many countries, struggles to deliver equitable access to healthcare for its rural populations, resulting in poorer health outcomes for those living in rural areas compared with their urban counterparts. ¹⁶ One of the reasons for this is a continuing maldistribution of physicians to rural areas. ^{17 18} While there are many ways of trying to provide supports to enhance recruitment and retention in rural areas ¹⁹ there remains little evidence on how to engage physicians in isolated rural areas in developing ways of creating and improving sustainable rural health services.

This article examines how a rural health authority and physicians have developed, and continue to engage in the development of, a partnership for the purposes of delivering healthcare and improving population health. Specifically, it aims to deepen understanding of the subtleties and complexity of engaging in system change within remote and rural areas.

METHODS Setting

This analysis is a component of an overall study, Partnering for Change I, designed to study how Northern Health and its physician and community partners undertook the transformation of primary healthcare. ²⁰ An interpretive approach, utilising philosphical hermeneutics, ²¹ was taken with the collection and interpretation of qualitative data from in-depth interviews from participants in seven communities and at the regional level.

Seven communities across Northern BC were selected because they represented a diversity of population size and economical, geographical, cultural and social contexts. Both purposive and snowball sampling²² were used to identify health administrators and healthcare workers within NH, along with general medical practitioners, municipal leaders and community based organisations outside of NH. A minimum of 10 participants per community were sought.

Data collection

In-depth, one-on-one, semi-structured interviews lasting 45 to 60 min using an interview guide were carried out between 2012 and 2015 by the principal investigator and a trained research associate both experienced in qualitative methods. Interviews were carried out in person at participants' place of work. Those participants who remained in their original or related roles were interviewed yearly over the 3 year data collection period. Questions were related to participants' experiences of the change processes, including the impacts of changes on relationships and

ways of working. Interviews were audio recorded and transcribed verbatim. Written informed consent was obtained prior to initial interviews and verbal consent obtained for subsequent ones. The overall data set was comprised of 239 interviews with 122 key informants.

Participants

This paper is based on the analysis of 34 interviews from the main data set. Participants were all those who were physicians or who expressed direct experience of engagement with physicians in the communities at any time during the data collection period. The intent was not to seek data saturation from within a large sample, but to explore in depth what physician engagement meant to those who actually spoke about it in the interviews about primary healthcare transformation. Ten interviews were with family physicians, three in separate years with Division non-physician leads and 18 with primary care co-ordinators. The primary care co-ordinators were hired to support the transition by working in communities with physicians and the developing interprofessional teams, communicating with community groups and liaising with regional managers and executives. They came from administrative or clinical backgrounds (including Public Health and Community Nursing, Mental Health Nursing and Occupational Therapy). Also included were three interviews with regional health authority leaders conducted towards the end of Phase 1 of the project which contained reflections on the first few years of primary care reform and were relevant to relationships with physicians.

Patient and public involvement

Patients and public were not involved in the interviews that informed the research reported here. The public were, however, involved through municipal leaders and community consultation by Northern Health in the discussion of the primary care reforms and were key informants in the Partnering for Change I study. All study findings, including those reported here, have been fed back to Northern Health Executive and Board through regular discussion and engagement with the research team and used to inform next steps in the processes of reform.

Analysis

The qualitative approach taken was based on hermeneutics. ²¹ ²³ Hermeneutics is the study and interpretation of texts and, in contemporary research, this includes the texts generated from interviews. In this study, the area of interest was that of physician engagement and the analysis gave insights into the varied direct experiences of those interviewed in order to better understand the phenomenon of physician engagement in the context of the communities of Northern BC. This approach also recognises that researchers bring to the field, and to the interpretations, their own experiences and understandings. Instead of bracketing or setting those experiences aside, the researchers constantly keep their assumptions

in question. The analytical process itself is one of dialogue where the researchers' own understandings and assumptions are questioned as the researchers engage with the participants' transcripts. Through that process of questioning, the researchers gain a deeper understanding and new insights about the experiences expressed by the participants creating a plausible interpretation. Hermeneutics is seen as a way of better understanding interventions in complex systems seel as recognising the diversity of historical and cultural contexts that typify rural communities.

The first author analysed all interviews by reading them in depth and developing codes relevant to physician engagement using NVivo 11 (QSR International). He is a rural physician and experienced doctoral trained qualitative researcher who is familiar with the region and its communities having held educational leadership roles in the region. All authors had previously analysed all transcripts in the study and had identified physician engagement as an important area for further analysis.

The initial coding approach, analysis and preliminary interpretation were discussed with the other authors, the coding agreed and the interpretation refined based on further analysis and debate. The emergent themes based on the interpretation were shared with selected interviewees and found to resonate with their experience, thus further increasing the authenticity of the analysis.

RESULTS

The analysis of the interviews revealed a complex set of circumstances related to physician engagement. These included issues such as inter-group dynamics, historical differences between professional groups and descriptions of individual aspirations of what local healthcare change and priorities should be. Weaving the threads of the interviews to find patterns and themes related to the phenomenon of physician engagement resulted in three interconnected themes related to challenges in engaging physicians in system change and what supported that engagement.

Working through tensions constructively

At the beginning of the initiative physicians were seen by themselves and NH administrators as working independently from NH and the strategic direction of primary healthcare (PHC) transformation. They were also seen as having significant positional power.

You know our physicians do wield a fair bit of influence and power within the system and have the ability to move things forward or send them to a standstill if they want to...physicians are still practically in many ways outside of the system. And I'm talking about family physicians, like primary care practitioners in particular. They are their own unique businesses and so there isn't necessarily a bridge always between

those two worlds or a process to work on those issues. (PHC coordinator E)

This sense of professional power in the health system, while physicians were not actually within the system itself, created challenges for all in terms of working together.

The data described successes in terms of building bridges and agreeing on new ways of working together, but tensions were evident between administrators and physicians. Participants pointed to concerns regarding who was having conversations with whom, and the historical mistrust between professionals and health authorities. They spoke of how those trying to facilitate engagement could get caught 'in the middle'.

... cause I kind of sit in the middle, right, so I was sitting at a Northern Health table where we didn't have Divisions at the tables and the conversations were a lot about us and them. (PHC coordinator J)

The tensions identified in the interviews were often recalled as hidden and unacknowledged in the interactions between partners, but participants also recalled efforts to bring these tensions to the surface. Local administrators and the primary care coordinators could be caught between the organisational goals and the autonomy of physicians in their communities and needed to find ways of building relationships in both directions. They also had to find ways of translating language and intent from NH leadership to physicians and vice versa. Honest conversations and structures for communication were necessary. Through conscious dialogue, they could surface and work through tensions that developed when changes were made to how services were designed and delivered. These efforts have not been easy or straightforward. They have taken a long period of time, as foundations of commonly agreed-upon and deliberately purposeful actions have required an understanding of others' contexts.

This changed relationship with primary care and partnership between the physicians, that's a big change in how we deliver care. Primary care physicians we think of as within their private business purview. We really respect and they highly prize their autonomy so another thing that keeps me up at night is thinking about how we get those initial critical conversations off to a good start so that we grow those teams and primary care homes together. (Regional leader 3)

In addition, coordinators had to be able to have difficult conversations in order to surface tensions:

So, I spent a lot of time a year ago calling people on the 'us and them' in order for us to move the work forward and highlighting that we can't move if we're in this, 'us and them'. So, trying to shut those conversations down at both of those sides. Whereas now there's absolutely none of that at all going on in relationship (between) the health authority and Division. (PHC coordinator J)

Approaches like this allowed NH and physicians to develop working relationships focused on improving care for the people they served, which allowed tensions to be identified, managed and worked through. Actions were focused on what could be done together to improve patient care, such as the creation of an unattached patient clinic, the development of a family practice clinical teaching unit and actively helping people learn about others' working contexts, such as nurses job shadowing General Practitioners (GPs) and GPs doing joint home visits with nurses. Not all physicians interviewed were involved in Divisions of Family Practice, which was also a source of tension.

So, there's a tension there and different communities have different structures in place to support this work. So here we don't have a Division of Family Practice and the Primary Healthcare language. In a lot of work they keep talking about using the Division of Family Practice to move this work forward... We don't have that here, so you kind of find yourself in this defensive position where you're saying all the time, 'but we don't have a Division of Family Practice, we have this'. (PHC coordinator D)

Tensions are inevitable in whole system change and the key for those NH administrators based in the communities was to be able to act as a go-between for physicians on the ground and the leaders at various levels of NH. Engaging physicians effectively required good listening, flexibility at the local level and support from NH leadership to allow discussion of local solutions to local problems within a framework of integrated primary care teams. Underpinning this coordinated action was the need to find ways to surface tensions in order to deal with them.

Drawing on structures for engagement

Divisions of Family Practice allowed for a structured dialogue and for a way of recognising and dealing with tensions between different elements of the healthcare system and communities. NH attempted to partner with the physicians through the Divisions to develop common plans. NH openly shared their initial goals and ideas and ensured that local administrators were aware of the need to allow some flexibility in local communities in terms of determining healthcare priorities. NH's approach of sharing what they were trying to do at the community level was noted by a family practitioner.

... the health authority has come to the table and they've been good partners with openness and transparency and they have allowed us to, you know, look inside their organisation, you know, they've shared, they've shared freely a lot of the things that they're doing. (Physician G)

The Divisions of Family Practice allowed physicians to have a common voice, as within the Divisions the physicians developed their own priorities and vision. The same family physician said. I think it was with the formation of the Division that family doctors have a voice as a collective group in partnering with Northern Health, to have input into how we might deal with and spend resources that were available. (Physician G)

A sentiment echoed by a physician colleague from another community also described how the Divisions provided some continuity which, in turn, provided an environment that supported and encourage partnering.

... it's the organisation of physicians so that there's one voice to talk about the aspirations or the needs in primary care. So that there's somebody that the health authority can communicate with, rather than picking the champion who might be the champion this year but has moved away next year. Or is over-extended in his practice and now has kind of lost interest. Now there's this more durable entity that you can actually talk with and partner with and that's accelerated us in ways that I wouldn't have expected. (Physician A)

The Divisions encouraged physicians to have collective conversations about priorities which were then shared with NH. One of the outcomes was that NH and physicians found they shared common ground in terms of improving the health of their populations, which had some interesting impacts on how family physicians felt about their work.

You start to enjoy your work. That's the thing. That's the main thing for me. You do a lot of stuff which actually just becomes a ritual, do prescriptions every day for diabetics and hypertension patients. Now suddenly, you're seeing other possibilities. (Physician J)

Working with structures that were designed to give physicians a collective voice helped build relationships, find common ground, encourage dialogue and enhance continuity. They enabled the physicians and NH alike to better withstand the inevitable changes of personnel that are a feature of small rural communities.

Facilitating relationships

Trusting relationships were critical to the process. Finding effective ways of engagement helped build trust and flexibility on all sides. Physicians and NH were able to form common goals as well as act flexibly at the local community level to set appropriate priorities that were agreed on in each community. The effort required to build relationships was considerable, and in a remote and rural area this also meant finding time for physician leaders to engage with communities and to have time to be involved in planning, as the process of change took time:

I need to do way more travel, way more communication and relationship building out in the peripheral areas and sure it takes more time, but without it you can't move... the first 2 years we didn't actually achieve a lot except a lot of careful planning and strategic thinking, but now it's led to a place where we actually are acting on that strategic thinking and maybe this is the year that we're all going to do it. (Physician A)

Where physicians, local administrators, community leaders and the other health professionals could agree on common goals they spoke of a better sharing of skills and integrating of care among different team members.

The whole process of engagement and development of common goals, however, was sensitive to the varied community contexts. This meant that approaches to reforming how healthcare was delivered were influenced by individual community priorities.

... we're being told to and rightly so I think, that from community to community this may look different and maybe realised in different ways because of different practical realities so I'm encouraged to hear that. (PHC coordinator E)

Trust was at the heart of this sharing and took time to build through learning about the visions, goals and abilities of team members. Trust, however, only came with practical actions.

So, I think there's more trust because we share more. It's not silos. Even to trust the specialist. If you see a specialist here and he talks to you about patients, and have the conversation, it's even more trust than phoning that guy, see what he thinks about stuff. It opens doors and beaks down silos. It is just funny how trust is very core. (Physician K)

The maintenance of trust could not be assumed. For some, the worry of demonstrating results was always in the background.

I think that there's still, there's always that element of wanting to see results and so I think right now we have the commitment and trust that they will come and we're working towards it, but it's always there in the back of my mind that we need to be demonstrating progress and to continue to build trust. I struggle with that sometimes, how we define progress, how we evaluate the work that we're doing and make improvements. (PHC coordinator E)

Once trust was developed it was just as important to find some early wins to show progress was being made as described by one physician talking about improving how quickly patients could be seen in their primary care clinic.

Advanced access is a great example. It was an idea that was around when we started talking about (primary care reform). And I started talking about it with the office manager and I don't know who mentioned it first, but it just kind of came and everyone was on board and it was total collaboration. (Physician A)

Investing time in local relationship-building, despite the strain of the required time commitment in an underserved rural area, served as a means to work through tensions.

I'd have to say overall that I feel I can sit down and talk to the local administrator and while I may not agree on everything, I feel heard. (Physician F)

Only through sound relationships and constructive conversations was sufficient trust developed to create an environment ready for major system change.

... people are developing completely different relationships and when you think that so much of our past and some of our current system, so much of what works well is because of the relationships. (Regional Leader 2)

Interpretation

Trying to change the healthcare system in any setting can be an elusive and frustrating goal. Physicians are critical players in any attempt to reform a healthcare system as they hold considerable power and influence in their communities. 14 Physicians may not always be aware of the power they hold but, nevertheless, it can be used, consciously or unconsciously, to stall or derail any attempts at changing healthcare systems. ²⁶ While existing literature emphasises engaging physicians through developing relationships and providing leadership training, 14 much of the focus is on the engagement of physicians within institutions like health authorities and healthcare facilities. The context of rural and remote areas presents a different challenge where physicians are an influential voice in their communities. Emerging from this study were different ways of approaching physician engagement that worked in the very different contexts of several widely scattered rural communities. One important facet was that physician engagement was helped by the creation of the Divisions of Family Practice which provided a structure for the health authority to engage with physicians in the development of shared visions, goals and collective actions. The Divisions are physician-led and were created through the provincial physician representative association. There appears little in the literature on the existence of physician-led groupings beyond financial ones, although the social identity literature suggests that two different groups such as physicians and administrators can only begin to collaborate once they are secure in their own identity. 15 Lack of attention to this can create problems such as those described by Kreindler et al where engagement of primary care physicians in a primary care renewal process was unsuccessful as their group identity was not sufficiently supported to allow them to feel equal partners.²⁷ The presence of the Divisions provided physicians in scattered communities such an identity and a common and local voice to develop agreed local priorities in partnership with the health authority. In addition, an emphasis on building relationships, particularly

those at the community level, was important in establishing partnerships between physicians, administrators and healthcare teams. The relationships enhanced the journey towards a system of primary care interdisciplinary team-based care focused on the patient needs.

While relationship building appears as critical in the literature on physician engagement, ¹⁵ there is a paucity of description on what is effective within on-the-ground relationships in primary care. Tensions between various groups are inevitable in times of large-scale change. In Northern BC finding the tensions, describing and confronting them allowed them to be worked through. Ways of surfacing tensions through conversation with primary care coordinators as the facilitators of conversations were an important finding in this study.

Literature on physician engagement notes that tensions are particularly evident among professional groups, particularly between physicians and administrators. It is important to find ways to identify and deal with, often hidden, traditional hierarchies and professional power.²⁰ One step in working through such tensions is in the co-creation of changed identities²⁸ through purposeful attention to ongoing relationships that can help people to work together collaboratively. A second key step is to ensure that small incremental changes are successful.²⁹ The role of the coordinators and local administrators in terms of facilitating conversations and bridging between physicians, community and health authority could be seen as similar to the roles described in the literature on boundary spanners or boundary crossers, 30 31 roles that may be foundational in facilitating system change at the local level.

In this study physicians were able to shift their professional stance from being autonomous to being team players when aided by frequent conversations, which have led to a mutual understanding of goals and potential roles of the healthcare team. These shifts were helped by the Divisions of Family Practice which built cohesion among physicians to provide a common voice and make it possible for Northern Health and physicians to create shared visions and joint actions. Such processes take time and there may be no such thing as implementing wholesale system change quickly. Building and maintaining relationships, working with tensions and listening to communities is an iterative process that takes many years. System change is a journey with many twists and turns in the route and it is important to look for signs of change and progress over time and not expect quick fixes.

CONCLUSIONS

This study suggests that when a health authority attempts to achieve whole system change in a rural primary care context, approaches based on relations of trust, flexibility, adaptability and compromise appear to have been effective in engaging physicians as partners in reform. These approaches have been aided by structures to engage physicians, approaches that allow tensions to be surfaced and a commitment to honest conversations.



This is a qualitative study in one health authority in a northern and rural area of Canada. While research like this is highly sensitive to local contexts, such as geography and climate, and to national contexts, like remuneration and employment models, there may still be elements which are transferable to other settings contemplating system change. For example, the concepts of relationship building, surfacing tensions and working with structures for engagement may be relevant to those contemplating large-scale change in primary care, including larger urban settings.

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Contributors MM and NH are Principal Investigators, and TR and DS Co-Investigators, of the Partnering for Change I study. MM, NH, TR and DS were involved in the original conceptual design of the study, its methodology, data collection and analysis. For the analysis of Physician Engagement MM, NH, TR and DS all contributed to the study in terms of methodological design and data handling. DS analysed all the data and developed the initial coding framework and interpretation. MM, NH and TR contributed to the coding framework and interpretation through analysis, discussion and debate. DS wrote the first draft of the article and MM, NH and TR contributed to subsequent drafts. DS wrote the draft of the revised final version and MM, NH and TR contributed to the final revisions. DS, MM, NH and TR all agreed the final version.

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Competing interests None declared.

Patient consent for publication Not required.

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Data sharing statement The data in this work is highly confidential and although all quotes given are anonymised and de-identified the data set which consists of individual interviews contains data that could lead to identification of participants. This is particularly so in terms of some of the communities in which the study took place where many individuals know each other. For this reason, the interviews cannot be made public. This is also a requirement of our Ethics Board approval.

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REFERENCES

- British columbia population estimates. 2018 https://www2.gov. bc.ca/gov/content/data/statistics/people-population-community/ population/population-estimates (Cited 18 Oct 2018).
- A Vision for Canada: Family Practice, the Patient's Medical Home. 2011 https://www.cfpc.ca/uploadedFiles/Resources/Resource_ Items/PMH_A_Vision_for_Canada.pdf.
- Hanlon N, MacLeod ML, Reay T, et al. In: Halseth G, Markey S, Ryser L, eds. Partnering for Health Care Sustainability in Smaller Urban Centres: Why and How a Health Authority Chose to 'Go Upstream', in Service Provision and Rural Sustainability. New York: Routledge, 2018.

- Boelen C. Towards Unity for Health: Challenges and Opportunities for Partnerships in Health Development. WHO/EIP/OSD/2000.9. Geneva, Switzerland: World Health Organisation, 2000.
- Marsden J, van Dijk M, Doris P, et al. Improving care for British Columbians: the critical role of physician engagement. Healthc Q 2012;15 Spec No:51–5.
- Skillman M, Cross-Barnet C, Singer RF, et al. Physician engagement strategies in care coordination: findings from the centers for medicare & medicaid services' health care innovation awards program. Health Serv Res 2017;52:291–312.
- Romanow RR. 2002. Building on values: the future of health care in Canada- final report. Ottawa: Commission on the Future of Health Care in Canada. https://www.canada.ca/en/health-canada/services/ health-care-system/health-human-resources/strategy/romanowcommission.html. CP32-85/2002E-IN.
- Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005;83:457–502.
- Reay T, Goodrick E, Casebeer A, et al. Legitimizing new practices in primary health care. Health Care Manage Rev 2013;38:9–19.
- Braithwaite J. Changing how we think about healthcare improvement. BMJ 2018;361:k2014.
- Snell AJ, Eagle C, Van Aerde JE. Embedding physician leadership development within health organizations. *Leadersh Health Serv* 2014;27:330–42.
- Norris JM, White DE, Nowell L, et al. How do stakeholders from multiple hierarchical levels of a large provincial health system define engagement? A qualitative study. *Implement Sci* 2017;12:98.
- Snell AJ, Dickson G, Wirtzfeld D, et al. In their own words: describing Canadian physician leadership. Leadersh Health Serv 2016;29:264–81.
- Denis J-L, Baker GR, Black C, Langley A, Lawless B, Leblanc D, Lusiani M, Pomey M-P, Tre G. 2013. Exploring the Dynamics of Physician Engagement for Health System Improvement. Ottawa: Canadian Foundation for Healthcare Improvement. https://www. cfni-fcass.ca/sf-docs/default-source/reports/Exploring-Dynamics-Physician-Engagement-Denis-E.pdf.
- Kreindler SA, Larson BK, Wu FM, et al. The rules of engagement: physician engagement strategies in intergroup contexts. J Health Organ Manag 2014;28:41–61.
- Pong RW, Desmeules M, Lagacé C. Rural-urban disparities in health: how does Canada fare and how does Canada compare with Australia? Aust J Rural Health 2009;17:58–64.
- 17. Supply, Distribution and Migration of Physicians in Canada 2015: Quick Stats. 2016;18 https://www.cihi.ca/en/quick-stats.
- Colborne M. Taskforce aims to bolster rural physicians. CMAJ 2016:188:E100.
- Grobler L, Marais BJ, Mabunda S. Interventions for increasing the proportion of health professionals practising in rural and other underserved areas. Cochrane Database Syst Rev 2015:CD005314.
- Hanlon N, Reay T, Snadden D, et al. Creating Partnerships to Achieve Health Care Reform: Moving Beyond a Politics of Scale? Int J Health Serv 2019;49:51–67.
- 21. Moules NJ, McCaffrey G, Field JC, et al. Conducting Hermeneutic Research: from Philosphy to Practice. New York: Peter Laing, 2015.
- Patton MQ. Qualitative Research and Evaluation Methods: Integrating Theory and Practice. 4th Edition. Thousand Oaks, California: Sage, 2015
- McCaffrey G, Raffin-Bouchal S, Moules NJ. Hermeneutics as Research Approach: A Reappraisal. *International Journal of Qualitative Methods* 2012;11:214–29.
- 24. Gadamer H-G, Weinsheimer J, Marshall DG. *Truth and Method. 2nd, rev. ed.* London; New York: Continuum, 2004:601.
- Thirsk LM, Clark AM. Using Qualitative Research for Complex Interventions: the Contributions of Hermeneutics. *International Journal of Qualitative Methods* 2017;16:1–10.
- Spiegal N, Murphy E, Kinmonth AL, et al. Managing change in general practice: a step by step guide. BMJ 1992;304:231–4.
- Kreindler SA, Struthers A, Metge CJ, et al. Pushing for partnership: physician engagement and resistance in primary care renewal. J Health Organ Manag 2019;33:126–40 https://doi.org/.
- Reay T, Goodrick E, Waldorff SB, et al. Getting Leopards to Change their Spots: Co-creating a New Professional Role Identity. Acad Manage J 2017;60:1043–70.
- Reay T, Golden-Biddle K, Germann K. Legitimizing a New Role: Small Wins and Microprocesses of Change. Acad Manage J 2006:49:977–98.
- Aldrich H, Herker D. Boundary spanning roles and organization structure. Acad Manage Rev 1977;2:217–30.
- Kilpatrick S, Cheers B, Gilles M, et al. Boundary crossers, communities, and health: exploring the role of rural health professionals. Health Place 2009;15:284–90.