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Rural Evidence Review

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Community-Level Strategies for Recruiting and Retaining Health Care Providers to Rural and Remote Areas

A Scoping Review

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Abstract

Introduction and Context

The recruitment of health care providers to rural and remote communities in British Columbia (B.C.) and other rural jurisdictions is a persistent challenge. The importance of community participation in the recruitment and retention of health care providers has been demonstrated through "proof of concept" projects in rural communities across B.C. and elsewhere, and reaffirmed through this scoping review. We anticipate that the evidence presented here will provide the platform for a robust provincial discussion and strategy.

Methods

This review asked the question: What are community-level strategies for recruiting and retaining health care providers to rural and remote communities?

A scoping review methodology was used and derivatives of the following terms were applied across five electronic databases (MEDLINE (Ovid), EMBASE (Ovid), Cumulative Index to Nursing and Allied Health Literature (CINAHL), CAB Direct, and Web of Science): rural; health care provider recruitment and retention; and community involvement. A six-point eligibility criteria assessment was used to determine inclusion, with non-English language publications excluded. 1810 records were initially identified. Following the removal of duplicate titles (n = 322) and application of the eligibility criteria to 1488 total citations and 56 full-text publications, 30 publications were selected for inclusion in the scoping review.

Findings

Positive community characteristics that supported recruitment included the friendliness, adaptability, and cohesiveness of rural communities, as well as strong local leadership. Strategies included the intentional integration of the care provider into the local community; support for the provider's family; assessment of local capacity for recruitment and retention; community 'marketing'; the role of a local 'recruitment coordinator'; community development activities; and incentives.

Recommendations

1: That the B.C. Ministry of Health, Health Authorities and other key stakeholders (UBCM) recognize the integrated nature of rural recruitment and retention to the viability of rural communities more generally.

2: In response to the need for health care professionals, rural communities be actively engaged in the recruitment and retention of health care providers.

3: As part of community discussions, local industry be included as key stakeholders as those with a vested interest in and potential support for local recruitment and retention efforts.

4: That the discrete recruitment and retention needs of rural Indigenous communities as articulated by the communities themselves be observed, particularly within the legacy of colonial health care and the need to ensure cultural safety and humility.

5: That the regional planning process be undertaken in a transparent way, with a clear rationale for resource allocation decisions.

6: That all collaborative (community-health system) recruitment and retention efforts be evaluated for: (a) the effectiveness of the approach; (b) the costs involved; (c) the sustainability of the candidate; and (d) lessons learned.

7: That communities that achieve their recruitment and retention goals through collaboratively designed and executed processes document their successes so they may be role models for other communities.

Introduction and Context

The recruitment of health care providers to rural and remote communities in British Columbia and other rural jurisdictions has been a persistent challenge due to increasing reliance on specialist support in health care together with the continued urbanization of health services. The implications of inadequate local rural health services are well documented and in response, health service planners have introduced system-level interventions including, for example, professional incentives to stimulate rural recruitment. These incentives have not been well evaluated; on the surface, the number of rural B.C. communities actively recruiting (n = 75) suggests a need for a more focused approach (HealthMatch BC, n.d.). One such potential solution is to support the groundlevel work that is already occurring in rural communities to recruit and retain local care providers. The emerging policy imperative of this involvement comes from both the unabated crisis and the system-level commitment to patient-centred care. The involvement of rural communities in strategic planning about their local health care is the next level of commitment.

There are logistical 'interface' challenges that must be resolved when planning for more systematized community participation in recruitment and retention and there are also resource issues. This is most salient for communities where health and social disparities already exist as there is a danger that without resources and processes tailored to the cultural needs of these communities, mandated community participation will further disadvantage those already compromised. In order for productive and lasting collaboration to work, attitudinal shifts may also be necessary, namely close examination of our orientation to rural health services, moving from the prevailing 'deficit' perspective with the attendant consequences of a focus on inadequacies, to an attributes focus where best practices in recruitment and retention can be realized and applied not only in other rural settings but urban communities as well.

The current health service delivery and political context in B.C. is amenable to recognizing the importance of community participation in health care planning, specifically rural recruitment and retention. This discussion, however, needs to be based on best available evidence from other jurisdictions interpreted through a lens that understands B.C.'s history, current context and challenges. This review sets out to comprehensively analyze this evidence and apply it to the local (B.C.) context. We anticipate this evidence will provide the platform for a robust provincial strategy.

Methods

This review asked the question: What are community-level strategies for recruiting and retaining health care providers to rural and remote communities?

A scoping review methodology was used and derivatives of the following terms were applied across five electronic databases (MEDLINE (Ovid), EMBASE (Ovid), Cumulative Index to Nursing and Allied Health Literature (CINAHL), CAB Direct, and Web of Science): rural; health care provider recruitment and retention; and community involvement. A six-point eligibility criteria assessment was used to determine inclusion, with non-English language publications excluded. 1810 records were initially identified. Following the removal of duplicate titles (n = 322) and the application of the eligibility criteria to 1488 total citations and 56 full-text publications, 30 publications were selected for inclusion in the scoping review.

Findings

The results of the scoping review yielded evidence on community characteristics that are favourable in recruiting and retaining health care professionals to rural settings, and on intentional strategies that can be applied at a local level. The themes are described below.

- The community characteristics that were described in the included literature to impact positively on recruitment and retention strategies include the friendliness, adaptability and cohesiveness of the community, and the strength of local leadership.
- The strategies were more encompassing and include the intentional integration of the care provider into the local community through positive engagement; by being respectful of their privacy; and by encouraging their participation in local groups and events.
- Alongside integration efforts were reports of the importance of support for the provider's family (perhaps the strongest predictor of long term sustainability). This includes the educational, employment and social opportunities available to the family, and is closely related to attention to the overall community infrastructure.
- An additional strategy involves assessment of community capacity for recruitment and retention, including a clear understanding of local health service needs.

- Marketing was identified as having a significant influence on local health care provider recruitment, and involves strategies to communicate the benefits of life and practice in the local community. Often included in marketing efforts is a well-planned site visit to maximize positive exposure to the community.
- Several publications emphasized the importance of using a recruitment coordinator for local-level recruitment and retention processes. However, it was noted that caution must be exercised if this activity is done from outside the community.
- A prominent theme that emerged is the importance of community development activities to promote supportive and vibrant communities for the success of recruitment and retention processes.
- Incentives (financial, housing and health service infrastructure) were noted as potentially beneficial, although not essential to recruitment efforts.

Discussion and Recommendations

Although the purpose and intent of this review was to document community-level strategies for recruiting and retaining health care providers, the importance of understanding how these strategies align with health system strategies is clear. There is already clear policy direction both at a provincial level through 'Delivering A Patient-Centred, High Performing and Sustainable Heath System in B.C.: A Call to Build Consensus and Take Action' (2015a), and nationally through the College of Physicians of Canada's 'Rural Road Map for Action' (2017), which states we must: "Engage communities in developing and implementing recruitment and retention strategies to strengthen the integration of physicians and their families into communities" (Action 14, p. 4). This re-articulation is apt in B.C. where, despite the imperative of decentralization that is described in the British Columbia Royal Commission on Health Care and Costs' (1991) 'Closer to Home' report, successive governments have moved the political agenda from actualizing public participation in health care decision making to focusing on managing health system resources through increased efficiency and accountability. This resulted in a diminished role for community voices.

Recommendation Preamble

The recruitment and retention of health care providers is a complex, dynamic, system-level issue that involves not only the need for attention to health services but also attention to the vibrancy and sustainability of rural communities. Investment in rural health services must be accompanied by investment in social and cultural community assets (physical infrastructure, schools and libraries, recreational facilities and local business). Concomitantly, we need to understand rural recruitment and retention as enmeshed in a complex and dynamic health system that may react to the vagaries of unpredicted social, economic and political influences. Finally, we must acknowledge the uniqueness of each rural community and the local conditions and vagaries that make an industrial approach not only unfeasible, but dangerous to local sustainability. Instead, each jurisdiction should apply the recommendations that follow after an 'analysis of fit' has been done to the local setting. Given this, the following recommendations are proposed:

Recommendations

1: That the B.C. Ministry of Health, Health Authorities and other key stakeholders (e.g., UBCM) recognize the integrated and linked nature of rural recruitment and retention to the viability of rural communities more generally.

2: In response to the need for health care professionals, rural communities be actively engaged in the recruitment and retention of health care providers. This requires:

- A: System-wide legitimacy and support for community participation in recruitment and retention processes;
- **B**: The development of durable mechanisms for consolidating community voice. This might involve the creation of community health boards;
- C: The development of durable mechanisms for including community voice in Health Authority and Ministry planning;
- D: Attention to additional resources and processes that may be needed in communities with fewer resources or social capital so that the existing disparities in health care are not widened.

3: As part of community discussions, local industry be included as key stakeholders as those with a vested interest in and potential support for local recruitment and retention efforts.

4: That the discrete recruitment and retention needs of rural Indigenous communities, as articulated by the communities themselves, be observed, particularly within the legacy of colonial health care and the need to ensure cultural safety and humility.

5: That the regional planning process be undertaken in a transparent way, with a clear rationale for resource allocation decisions. This might involve the implementation of a population-based metric for determining the number and type of providers required to meet population needs.

6: That all collaborative (community-health system) recruitment and retention efforts be evaluated for the:

A: Effectiveness of the approach;

B: Costs involved;

C: Sustainability of the candidate; and

D: Lessons learned.

7: That communities that achieve their recruitment and retention goals through collaboratively designed and executed processes be recognized and their successes documented, so that they may serve as role models for other communities.

Introduction and Context

The task of recruiting and retaining health care providers in rural and remote settings has been an arduous one in recent decades in Canada (Asghari et al., 2017; Cameron et al., 2010; Kulig et al., 2009) and other jurisdictions internationally (Kehlet & Aaraas, 2015; Terry et al., 2016; Prengaman et al., 2014; Lawn et al., 2008, c.f. Asghari et al., 2017). The implications of inadequate local rural health services (i.e., those that do not meet population need) have been well documented (Rourke, 2010; Sibley & Weiner, 2011; Mbemba et al., 2016; Rice & Webster, 2017) and include poorer health outcomes (Sibley & Weiner, 2011), difficulty retaining existing providers (Mbemba et al., 2016; Rice & Webster, 2017), loss of community confidence in local health services (Rice & Webster, 2017) and the potential weakening of the social infrastructure (Klein, Christilaw & Johnston, 2002). Many jurisdictions have introduced system-level interventions to mitigate the health service delivery challenges including, for example, financial and professional incentives (Behera et al., 2017; Bärnighausen & Bloom, 2009; Winn et al., 2014). Where evaluated, data has demonstrated variable results (Behera et al., 2017; Bärnighausen & Bloom, 2009; Smith et al., 2008; Wilson et al., 2009).

Alongside system-level actions and in response to the vulnerabilities experienced by rural residents where local health services are lacking, there has been growing rural community initiatives to address recruitment and retention challenges (Simpson & McDonald, 2011; Cameron, 2008). These community-level responses compliment health system initiatives by responding to local conditions and the contextual realties of each community; that is, they are the antithesis of a system-level (industrial) response. Both, however, are necessary to address the problem.

The urgency of supporting the retention of care providers in rural and remote communities in B.C. has been persistent: currently, 75 communities across rural B.C. are actively recruiting for a total of 384 care providers, the majority searching for physicians (185) and nurses (134), but allied health professionals are also in demand (HealthMatch BC, n.d.). In 2015, the provincial Ministry of Health recognized the need for a strategic approach to health human resource management and issued a cross-sectional policy discussion paper, 'Enabling Effective, Quality Population and Patient-Centred Care: A Provincial Strategy for Health Human Resources'. The strategy is built on recognition of the need for a broad-based solution that extends across health system geographies, delivery settings (urban-rural) and scope (public health, community, diagnostics and pharmacy, and hospital) (B.C. Ministry of Health, 2015b). Recruitment and retention are a part of the multi-pronged approach proposed, and within this the Ministry has recognized the importance of attention to rural and remote community needs, emphasizing the importance of "knowing what counts to employees and practitioners" (p. 5).

This is a critical starting point but must be understood within the larger system reality of undersupply and the logical corollary that there needs to be a cohort of available physicians to recruit from. The Canadian Community Health Survey, 2011 reported that 4.4 million Canadians (15.3%) aged 12 and over reported not having a regular medical doctor; in B.C. the proportion of residents without a regular medical doctor was slightly lower than the national average, at 13.9% (Canadian Community Health Survey, 2011). Other data acknowledges that the ratio of practicing physicians in Canada (2.3:1,000) was below the average in OECD countries (3.2:1,000) in 2008 (OECD, 2010). This is despite the continual (although modest) increase in the number of medical degrees awarded in Canada (an increase of 7.9% between 2012 and 2016) (Canadian Institute for Health Information, 2016). Likewise, the number of medical students entering programs in Canada increased 73% between 1995 and 2009 (Bates, Frost, Schrewe, Jamieson & Ellaway, 2011) and the number of practicing physicians increased 5.8% between 2015 and 2016

(CIHI, 2016). This does not, however, address the mal-distribution of care providers; less than 10% of the total physician workforce practice in rural settings (and only 2% of specialists), despite 18% of the population residing in rural areas (Malko & Huckfeldt, 2017).

It is also worth noting that while the contribution of Internationally Trained Medical graduates ('IMGs') may address physician shortfalls (Audas, Ross & Vardy, 2005; Dumont, Zurn, Church & Le Thi, 2008), there are numerous barriers to practice for this group including limited residency spots in B.C. (Obara, 2012) and expensive and time-intensive examinations (Bourgeault, Neiterman, LeBrun, Viers & Winkup, 2010). The OECD report, 'International Mobility of Health Professionals and Health Workforce Management in Canada: Myths and Realities,' noted that in 2008, 353 IMGs were matched and 946 remained unmatched, leading the authors to report that guaranteeing minimum available slots for IMGs will improve health workforce shortages (Dumont et al., 2008). The difficulty for IMGs to match to residency spots was also highlighted in 'Doctors Today and Tomorrow: Planning British Columbia's Physician Workforce', which noted that in 2010, 18% of IMG applicants were matched in the first iteration compared to 96.3% of Canadian medical graduates (Doctors of BC, 2011).

Others have suggested the licensing challenges are embedded in biases to race, ethnicity and gender (Taghizadegan, 2013) while Paul, Martimianakis, Johnstone, McNaughton and Austin (2016) contend a more intricate relationship between the three policy subsystems of immigration, education and licensure, and health human resources, which conflict ideologically and therefore, create barriers to integration. Regardless of barriers to licensure, Dumont et al. (2008) suggest that IMGs are important to fill gaps in the health care work force, particularly in rural settings.

Community involvement is not a new concept. The dynamic engagement between provider and community has been a mainstay of rural health care throughout Canada's history, perhaps more of an assumption of necessary practice prior to the increasing urbanization of both health care and health service decision making that we have experienced in the past century. So although not new, it is not clearly acknowledged in policy literature. The ethos of community efforts have been captured in popular films such as 'La Grande Séduction', a 2003 Québec film that poignantly and colourfully narrates one remote community's efforts to attract a local physician and has also caught the attention of the press. For example, CBC News chronicled the activities of a community in rural Ontario to strengthen the local services, including to build a YMCA and upgrade the existing library as part of efforts to improve physician recruitment to the area (Carolyn Ray, 2018).

Others noted the ethical imperative of community involvement both from a systems perspective (Simpson & McDonald, 2011) and a community standpoint where participation in public life and the life of local health care is seen by some as a "duty" (Taylor et al., 2006). Beyond the more altruistic belief in the importance of ensuring access to health care, community members recognize the linkages between health care and economic and social viability and their role in strengthening both (Taylor et al., 2006) and many are prepared to "roll up our shirt sleeves and get involved" (Taylor, 2002, p. 40).

As discussed further below, there is growing consensus in the literature on the importance of recognizing, legitimizing and supporting community involvement at a systems level. This requires us to explore the nature of the interface between community and Health Authority or provincial agendas, particularly in instances where they may not align. This begins with an understanding of the structural disincentives of the health care system itself which may disincentivize community participation simply due to size and inevitable bureaucracy (Veitch & Grant, 2004; Veitch et al., 1999). Beyond this, there is potential for a lack of shared goals (local versus regional) and characteristics of one group that can, at times, be at odds with the other. For example, policy directions must be responsive to changing socio-economic circumstances but frequent system-level changes can be frustrating at a local level (Veitch & Grant, 2004). Similarly, many rural citizens have a long-term commitment to their community with the advantage of the historical memory of local health services, while government representatives frequently change.

A further indication of the nature of the community-health system interface is the extent to which each group recognizes the resource capacity of the other. From a health systems perspective, unrealistic expectations about local resources (either through under- or over-estimates) may lead to unachievable timelines and requirements for submitting funding proposals or strategic plans. Veitch and Grant (2004) remind us that "Many external agencies, driven by annual budgets and strategic plans, require rates of progress at variance from that of the communities that they profess to assist" (p. 7). In reverse, communities may over-estimate the capacity to dedicate resources to local initiatives when regional and provincial priorities have been established, and may lack awareness of the processes that must be adhered to when priorities are "actioned", processes that often involve a time lag that is not well understood "on the ground". In the context of scarce (health care) resources, this has the potential to exacerbate tensions between "competing and collaborating" (Simpson & McDonald, 2011), and disrupt the growth and trust that underscores productive collaboration. Despite this, internationally, there is a growing recognition that improvement in access to rural health services will be best accomplished through the strategic and intentional collaboration between citizens, providers and administrators (Bible, 1974).

These potential "interface challenges" are tempered by B.C.'s current policy commitment to growing and supporting partnerships between individuals, families, health care providers and the health care system as articulated in 'Delivering A Patient-Centred, High Performing and Sustainable Heath System in B.C.: A Call to Build Consensus and Take Action' (2015a). Beyond patient-centred health care (i.e., patient participation in their care and decision-making about their care, (B.C. Ministry of Health, 2015a), this includes citizen-patient involvement in health care redesign underscored by a commitment to collaboration (B.C. Ministry of Health, 2015c).

Authentic community engagement in a rural context, whether regarding recruitment and retention or other issues of health service collaboration, requires system and decision-maker self-reflexivity regarding overall orientation to rural communities. Alongside the cultural move toward the prioritization of urbanization that globalization has precipitated, a concomitant shift toward a 'deficit' perspective of rural health has also been made, one where provision of health services in rural settings is often seen as a problem that needs to be solved. This creates the tendency to focus on inadequacies, often at the cost of recognizing the attributes and innovation that also exist. Specifically applied to recruitment and retention, this becomes ethically challenging due to the concomitant assumption that communities are "problematic environments in which to work" (Bourke et al., 2010, c.f. Simpson & McDonald, 2011), and the potential for 'band-aid solutions' that ensure immediate local care without addressing long-term issues of sustainability (Simpson & McDonald, 2011).

As a values proposition, commitment to community involvement (or health system-community partnerships) in health care planning has emerged as an evidence-based policy direction. The body of literature that we review below suggests that there is strong evidence for the efficacy of this direction, specifically as applied to the topic of this review: rural recruitment and retention. Once we invoke a policy imperative to support community involvement, however, there are salient issues that need to be addressed. Simpson and McDonald (2011) articulated them as: (1) Who should be involved?; (2) Whose voices are heard and about what?; (3) How should disagreements

between system- and community-level concerns be resolved? These questions provide an opening to consider how power differentials between stakeholders, particularly in communities with a high level of population vulnerability, will be resolved. It also offers a warning against the unintended consequence of widening – instead of reducing – the health disparities that currently exist between communities. This requires an awareness of where additional resources and processes may be needed to ensure authentic community involvement (as opposed to a default system-driven process).

We applied an Indigenous lens to this search with the objective of including literature that specifically addressed the recruitment and retention needs of Indigenous communities, underscored by the context of the Truth and Reconciliation Commission calls to action. We specifically looked for literature to enable call 23, the call to i) Increase the number of Aboriginal professionals working in the health-care field; ii) Ensure the retention of Aboriginal health-care providers in Aboriginal communities; and iii) Provide cultural competency training for all health-care professionals (Truth and Reconciliation Commission of Canada, 2015). The absence of any literature speaking to the discrete needs of Indigenous communities must be interpreted as a call for Indigenously-led research in this area but also as a caution regarding the potential lack of transferability of the findings of this review to these communities.

The health care system can be seen as the 'macro' layer in health service delivery, juxtaposed with the citizen-patient (micro) and care provider (meso). These finer discriminations are helpful in understanding the relationship interfaces necessary to navigate community-level recruitment and retention. There has been increasing system support in British Columbia for meso-level (physician) involvement in health planning at local, regional and provincial levels through innovations such as the Divisions of Family Practice, the Doctors of B.C. Facilities Engagement Fund, and other initiatives through the Joint Clinical Committees. These opportunities have increased physician participation in macro health planning and decision-making, but micro-level interactions (with citizen-patients and communities) fall outside of these mandates. Despite this, growing research findings recognize the importance of physician involvement in local decision-making which involves the need for the democratization of decision-making at a local level through formal associations that "bridge the gap between the medical and at-large community" (Cutchin, 1997, p. 1672). Some jurisdictions have explicitly recognized the importance of this alliance (i.e., rural Arkansas and Illinois, USA) (MacDowell et al., 2006), while others suggest ways to facilitate such

alliances, such as through expert facilitation (Taylor et al., 2006). These relationships are more immediate than the health system (macro) relationships and can thus be more fraught with interpersonal challenges (i.e., for physicians, maintaining personal/professional boundaries (Chipp et al., 2011) and for community members, imbuing heightened importance to the relationship due to the sense of vulnerability that a lack of local health care creates). Simpson and McDonald (2011) suggest that the antidote for these challenges is bi-directional, clear communication regarding community expectations and health provider needs, expectations and intentions to avoid undermining trust.

The current health service delivery and political context in B.C. is one that is amenable to recognizing the importance of community participation in health care planning, and specifically rural recruitment and retention. This discussion, however, needs to be based on best available evidence from other jurisdictions interpreted through a lens that understands B.C. history, current context and challenges. This review sets out to comprehensively analyze this evidence and apply it to our local context. We anticipate this evidence will provide the platform for a robust provincial strategy.

Methods

Research Question

The objective of this research is to strengthen our understanding of community strategies for recruiting and retaining health service providers to rural and remote communities, which are relevant to the British Columbia context.

The research question is as follows:

What are community-level strategies for recruiting and retaining health care providers to rural and remote communities?

Scoping Review Method

The approach to the scoping review was informed by both Arksey and O'Malley's (2005) methodological framework for the conduct of scoping studies and the Joanna Briggs Institute (2015) approach to scoping reviews. A scoping review is useful to map the available evidence, including the major concepts underpinning an area of research, and the nature and breadth of this evidence (Arksey & O'Malley, 2005). In contrast to other review

methodologies, the scoping study method is guided by a more broadly defined research question and objective, and the obligation to identify all relevant literature regardless of research design (Arksey & O'Malley, 2005; JBI, 2015). In the present case, a scoping review methodology allowed for the exploration of a broad topic of research where multiple research designs were applicable, with the aim of summarizing and disseminating the research findings, which is a common reason for undertaking a scoping study (Arksey & O'Malley, 2005).

Eligibility Criteria

The eligibility criteria serve as the basis on which sources of information are considered for their inclusion in the scoping review (JBI, 2015). Arksey and O'Malley's (2005) methodological framework allows for the development of inclusion and exclusion criteria post hoc, based on increased familiarity with the literature. The present scoping review adopted this method.

Eligibility Criteria

- All research designs were considered eligible.
- Publications that described community processes or strategies to facilitate the recruitment and retention of health care providers to rural and remote settings were considered eligible.
- Publications that described community characteristics that influence the recruitment and retention of rural health care providers and that are amenable to local action were considered eligible.
- Publications that described interventions (local or external) to build rural community capacity for recruitment and retention processes were considered eligible.
- Publications were limited to the English language.
- Publications were limited to high-income countries, as classified by the World Bank (2018).
- Publications that described community engaged medical education or other medical educational initiatives (e.g., rural placements or residencies)

Search Strategy

The literature search was conceptualized and conducted by one reviewer (CC) in consultation with the Principal Investigator (JK) and the University of British

Columbia's Medical Liaison Librarian (KH). The following 5 databases were searched from inception until March, 2018: MEDLINE (Ovid), EMBASE (Ovid), Cumulative Index to Nursing and Allied Health Literature (CINAHL), CAB Direct, and Web of Science. The literature search was not limited by research design, date or language of publication. However, foreign language materials (i.e., non-English) were ultimately excluded due to limits on time.

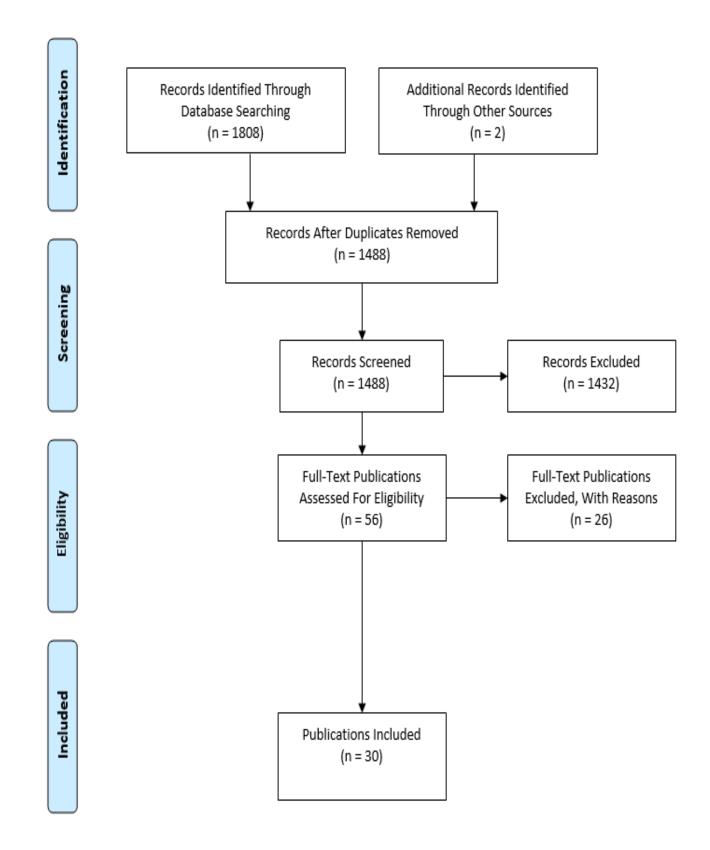
The concepts underpinning the literature search were identified and defined by one reviewer (CC) in consultation with the Principal Investigator (JK) and the Medical Liaison Librarian (KH) (see below). The Medical Liaison Librarian (KH) offered support to identify the keywords and the databases most likely to return the appropriate citations to answer the research question. The final version of the search strategy was first employed via the MEDLINE (Ovid) database and then converted for all subsequent databases. Proximity searching was used for the searches made in the MEDLINE (Ovid), EMBASE (Ovid), CINAHL, and CAB Direct databases due to the volume of retrieved citations in the absence of the limit and time constraints on the part of the review team; the groupings of keywords pertaining to the 'Community Involvement' concept were limited to within three words from one another.

Concept	Keywords	Reasoning
(1) Rural	<u>Keywords</u> : rural*, remote* <u>MeSH</u> : Rural Population Medically Underserved Area	The scoping review is specific to rural and remote communities (i.e., the population and context under study). The following keywords and subject headings were applied to limit the search to rural and remote populations and contexts.
(2) Health Provider Recruitment and Retention	Keywords: recruit*, attract*, retain*, retention Additional Keywords (Web of Science, CAB Direct): physician*, doctor*, "general practitioner*", "nurse practitioner*" MeSH: Rural Health Services/ manpower, organization and administration Personnel Selection Personnel Turnover Personnel Loyalty	The recruitment and retention of primary care practitioners was of particular focus, as the review topic emerged from the citizen-patient identified need for access to primary care. However, following the completion of the literature search, and based on feedback from rural community stakeholders, this limit on publications to include only primary care practitioners was expanded to include all health care providers. Note, the search strategy was not revised to reflect this change due to limits on time.

	Health Manpower Physicians/ supply and distribution, manpower Nurse Practitioners/ supply and distribution, manpower Primary Health Care/ manpower, organization and administration Family Practice/ manpower, organization and administration	
(3) Community Involvement	<u>Keywords</u> : (communit* OR citizen* OR public) AND (participat* OR involv* OR engag* OR development) <u>MeSH</u> : Community Participation	This concept aimed to capture the literature that addressed community involvement. The scope of the MeSH term 'Community Participation' captures the intent of the concept, described as: "Involvement of members of the com- munity in the affairs of that community" (https:// meshb.nlm.nih.gov/record/ui? ui=D003256). The keywords 'consumer*' and 'patient*' were trialed and abandoned. The citations added through inclusion of the terms were deemed inappropriate on the basis of title review.

The concept of 'strategies' was not pre-specified. This was deliberate to avoid unduly limiting publications that might include information that is relevant and useful to improve our understanding of rural community involvement in health care provider recruitment and retention. For instance, publications that consider community-led activities or programs, models or frameworks for community participation, or more broadly, other important considerations for rural communities to enhance their recruitment and retention efforts. Moreover, as a scoping study, the research team was interested to understand how authors in the field conceptualized strategies. Instead, the eligibility criteria, devised *post hoc*, reflected the concept and served to limit the publications accordingly.

A total of 1810 records were identified. Following the removal of duplicate titles, two reviewers (CC, KG) applied the eligibility criteria to the remaining records (n = 1488) to determine their relevance. 56 citations were deemed potentially relevant and their full-texts were assessed for eligibility for inclusion in the scoping review by two reviewers (CC, NLK). Following the assessment of the full-texts, 30 publications were selected for inclusion in the scoping review.



PRISMA Flow Diagram for the Scoping Review Process. Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. Ann Intern Med. 2009;151(4):264-9. (c.f., JBI, 2015).

Type and Nature of Included Studies

In accordance with the protocols of Arksey and O'Malley (2005) and the Joanna Briggs Institute (2015) for the conduct of scoping studies, and as noted above, the present scoping review has broad inclusion criteria regarding the type and nature of included studies. All literature were eligible for review, regardless of research design, methodology and sample size and the hierarchical ranking of evidence design was not employed.

30 publications were included for review. The types of evidence represented include interviews and focus groups, case studies, surveys, expert opinion pieces, literature reviews, and program overviews and evaluations. The jurisdictions from which the literature is derived include: Canada, Australia, the United States of America, and Norway. Four literature reviews include international evidence.

Data Extraction Process

The data extraction process – or 'charting the results', as it is referred to for scoping studies – is intended to produce a summary of the results of each included publication, guided by the question and the objective of the scoping study (JBI, 2015). In the present case, data extraction was performed alongside the methodological appraisal of the quality of the included literature, by two reviewers (CC, NLK). A combined data extraction and critical appraisal form was prepared. Our approach to quality appraisal was informed by the 'Meta-Tool for Quality Appraisal for Public Health Evidence' (MetaQAT) (Public Health Ontario, 2016). This tool is ideally suited to appraise heterogeneous evidence, such as that of our scoping study, being both flexible and specific, with broad utility while facilitating detailed assessment of publication-specific factors (PHO, 2016).

Limitations

A limitation of the present scoping study includes considering only English language publications. An additional potential limitation pertains to the transferability of the results to other health care providers beyond primary care practitioners, as the search strategy was specific to this medical specialty and a majority of the retrieved literature described rural physician recruitment and retention specifically. Moreover, due to limits on time, the literature search was confined to electronic databases. Additional relevant citations might have been identified through reference lists, citation searches and by hand-searching key journals.

Findings

The results of the scoping review yielded evidence on community characteristics that are favourable in recruiting and retaining health care professionals to rural settings, and on intentional strategies that can be applied at a local level. The themes are described below.



Community Attributes

The community attributes that impact positively on rural health care provider recruitment and retention include being welcoming, respectful and appreciative of the role of the health care provider; the active engagement of community members in recruitment and retention processes; being adaptable to changing circumstances; and a sense of community cohesiveness.

Several authors reported the importance of a community being welcoming toward health care providers (Asghari et al., 2017; MacDowell et al., 2006; Dywili et al., 2012; Beaton & Walsh, 2010, c.f. Dywili et al., 2012; Cameron, 2008; Cameron et al., 2010; Veitch et al., 1999). A gualitative study to explore the factors that influence the decisions of Canadian rural family physicians to practice in rural and remote settings reported that a welcoming community was considered attractive by physician participants (Asghari et al., 2017). Similarly, a cross-sectional survey of rural hospital chief executive officers (CEOs) in Arkansas and Illinois, USA revealed the friendliness of a community as an important community attribute (MacDowell et al., 2006). Dywili et al. (2012) cited Beaton and Walsh (2010), who reported that welcoming and accepting communities enhanced retention among overseas trained nurses in Newfoundland and Labrador, Canada. Likewise, Cameron (2008) cited 'active support', including welcoming and befriending physicians and their families, as a community factor important to physician retention. One physician's spouse commented on the impact of welcome efforts on their overall impression of and sustainability in - the community:

"Very, very friendly and there's lots to do which I found important. Like as soon as I moved in here, I was garage-sale-ing ... I got recruited to volunteering for [a local] council ... when we moved in here, the neighbours were coming over and introducing themselves and saying 'hi' and that's not something you see in a lot of other places" (Cameron, 2008, p. 194).

Finally, Veitch et al. (1999) reported the development of a welcoming process that supports incoming physicians and their families to settle into a community as a strategy to enhance medical practitioner recruitment and retention.

The literature included for review also highlighted the importance of a community being respectful of the workload and responsibilities of a physician (Asghari et al. 2017; MacDowell et al. 2006). Relatedly, a systematic review of the literature to investigate the experiences of overseas trained health professionals (OTHPs) in rural and remote areas of destination countries emphasized the importance of the acceptance of cultural diversity (Dywili et al., 2012), particularly in culturally homogeneous settings.

'Appreciation' emerged as an important community factor that positively impacts on physician recruitment and retention (Asghari et al., 2017; Cameron, 2008; Cameron et al., 2010). This included an appreciation for services rendered (Asghari et al., 2017), expressed through verbal feedback, acknowledgements in the newspaper, and personal cards and gifts (Cameron et al., 2010). Cameron et al. (2010) reported the impression of a hospital staff member in a rural community in Alberta, Canada:

> "All you have to do is just walk into a staff room on any given day and there's baskets and fruit and thank you cards from communities. The people do their bit all the time and they're continually thanking the physicians in the papers" (p. 80).

Cameron (2008) elaborated that feeling accepted and appreciated by a community might influence the sense of connection that a physician feels toward a particular area.

Reflecting on their experiences working with communities in rural and remote areas of Queensland, Australia, Veitch and Grant (2004) reported that the communities most likely to succeed at recruitment and retention are those that are active in the development, implementation and maintenance of community-based initiatives, as well as those committed to both the purpose and process of community efforts. In addition, the authors underscored that goals and expectations pertaining to provider recruitment and retention must be realistic, reflecting what is possible to achieve within a particular timeframe and resource base (Veitch & Grant, 2004). Moreover, there is a need for communities to remain adaptable, to satisfy the dynamic requirements of funding agencies and changing social expectations (Veitch & Grant, 2004).

Finally, the authors contended that it is important for communities to remain cohesive, as division within a community might impede its ability to respond rapidly to opportunities or to change (Veitch & Grant, 2004). The authors offered the following case example to demonstrate the consequence of division within one community:

"After trying for years to get additional health services buildings, a community was next on the 'priority list' of a federal department. A support agency helped to produce an application, but the town council could not agree on local input and the deadline was missed. As this was the last funding round of that program, the opportunity was lost forever" (Veitch & Grant, 2004, p. 4).

The authors stressed the importance of involving all sectors of the community in recruitment and retention processes, including keeping the broad community informed of progress and challenges, and giving all community members the opportunity to contribute, such as through public meetings or submissions. In addition, Simpson and McDonald (2011) contended that communities should discuss their expectations of community members as part of recruitment and retention processes, as these activities have the potential to create new and exacerbate existing tensions within communities.

Several authors reported that community involvement in recruitment and retention processes has the potential to serve as a unifying force to bring a community together and to build civic pride (Taylor, 2002; Simpson & McDonald, 2011).

Additional community attributes that emerged as salient to physician recruitment and retention include being family-oriented and supportive of physicians (MacDowell et al., 2006), as well as a community that offers security and privacy, while maintaining a sense of intimacy (Asghari et al., 2017).

Local Leadership

- Strong and positive local leadership is an important contributor to successful health practitioner recruitment and retention.
- The formation of a community committee dedicated to health practitioner recruitment and retention is an important local strategy.

Local leadership emerged as an enabler of successful recruitment and retention, whether by an individual community leader (i.e., a local champion) or a local committee dedicated to health practitioner recruitment and retention. Eight of 30 publications addressed this theme.

A survey of 50 "frontier" communities (i.e., those with fewer than 8,500 total people and six or fewer people per square mile) in six U.S. states found that poor community leadership increased the likelihood of a community being unsuccessful in retaining a nurse practitioner or physician assistant (Bailey, 1997). Interestingly, the strongest predictor of success in maintaining access to health care in the participating frontier communities appeared to be the combination of a high level of local leadership and a low per capita income (Bailey, 1997). The author elaborated that the majority of low per capita income communities also demonstrated good community leadership and therefore, it was posited that good community leadership might counteract the negative impact of low income (Bailey, 1997). The author elaborated that community leadership might take the form of identifying opportunities for outside assistance and collaborating with nearby communities (Bailey, 1997). Specific tasks undertaken by a strong community leader include having a meaningful role in promoting community cohesiveness and commitment to recruitment, as well as managing the community's goals and expectations to ensure that these remain realistic (Veitch & Grant, 2004).

The formation of a committee dedicated to recruitment and retention was a key finding from the literature (Perch et al., 1997; Koska, 1991; Veitch et al., 1999; Cameron, 2008; Shannon, 2003; Melton, 2013). Perch et al. (1997) presented several activities that a committee might perform. Activities may include conducting needs assessments and addressing needs; preparing and distributing information 'packets' to prospective physicians, including a job description, community profile and a letter of introduction; screening

candidates (e.g., via telephone); and scheduling and conducting site visits. Others noted the importance of local committees to interact with other key stakeholders (Veitch et al., 1999).

The literature included offered several examples of local recruitment and retention committees, such as in Weiser, Idaho, USA, where a 14-member recruiting committee was convened in response to the imminent retirement of the community's three family physicians (Koska, 1991). The committee was comprised of representatives from the county commissioner's office, city council, the economic development commission, the chamber of commerce and local business leaders, as well as the local hospital administrator and hospital governing board members (Koska, 1991). In this case, the recruiting committee led such fundraising activities as car washes, garage sales and raffles, raising \$50,000 USD toward the area's recruitment campaign. Similar efforts were reported by Cameron (2008), Shannon (2003) and Melton (2013).



Integration of Care Providers into the Local Community

- The integration of care providers into their practice community is important for the success of recruitment and in particular, retention processes.
- Communities can foster integration of rural health care providers through positive engagement; by being respectful of their privacy; and by encouraging their participation in local groups and events.

Community integration emerged as a salient consideration to improve the recruitment and especially, the retention of health care providers to rural areas, with six of 30 publications addressing this theme. That is, having care

providers feel a part of the social fabric of the community and as though they are full and participating members of the community, exceeding their role as health care providers. As one physician participant in Cameron et al.'s (2010) study noted:

"You stay because you feel connected to the community. You stay because, yeah, you're part of it more so than anyone, than your urban counterpart can feel ... you stay 'cause you're integrated into a community that you like" (Cameron et al., 2010, p. 80-1).

Similarly, Kulig et al. (2009) reported that local efforts to facilitate the development of a sense of belonging among Canadian rural and remote registered nurses (RNs) might improve their satisfaction with rural practice. Moreover, Han and Humphreys (2005, c.f. Dywili et al., 2012) reported that the successful integration of medical practitioners into rural Australian communities increased staff retention rates.

Cutchin (1997) made reference to the notion of core participation, which is described as the importance of intimacy and connection for personal identity and life experience (Selznick, 1992), and suggested that rural communities can generate core participation on behalf of a physician by promoting their involvement in local events and organizations, and community decision-making.

Similarly, Kulig et al. (2009) noted:

"When a nurse becomes 'part' of a community, the job satisfaction increases. I have worked in very remote nursing stations and keeping a 'balance' or playing sports and attending social events is so important. The nurses I see with poor job satisfaction isolate themselves from the community or socialize in select cliques" (primary care RN, p. 437).

Cameron (2008) cited a hospital staff member in a rural Alberta, Canada community who explained that their community strives to make the local physicians feel included in the community by "being the friendly, outgoing people that we are and, and, you know, continuing to provide them with the opportunities to become involved in the community" (p. 242-3). Moreover, a resident of the same community described the importance of making the area inviting in order to foster a sense of belonging among the local physicians:

"... if you can make it home, people will stay" (Cameron, 2008, p. 242).

In contrast, Cameron (2008) cited a lack of privacy as a risk to the connection that the physicians in one of the participating communities felt toward their community. For instance,

"... meeting your patients downtown and them just wanting a little quick advice from you" was a challenge for the local physicians (Cameron, 2008, p. 255).

Finally, Chipp et al. (2011) presented the recommendations of rural health care providers in Alaska and New Mexico, USA regarding how to become involved in rural communities. These included participation in informal community activities (e.g., attending church and visiting the local grocer); socializing with community members; remaining open to new experiences; and avoiding self-isolation. The authors contended that the provider recommendations may be used by rural communities and rural health care providers, in collaboration, to establish supports for providers to help them to integrate into a community.

Support for the Provider's Family

- The contentment of the provider's family is a salient determinant of health provider recruitment and retention to rural areas.
- It is important to consider the educational, employment and social opportunities available to the provider's family during recruitment and retention processes.

The literature included for review emphasized that special care must be paid to meeting the needs of a rural provider's family, and in particular to matching the locally available educational, employment, and social opportunities to the family's needs.

Several authors described the importance of offering support to a provider's family for the success of rural recruitment and retention (Cameron, 2008; Dywili et al., 2012; Terry et al., 2016), and in particular spousal support (Schmitz et al., 2011; Terry et al., 2016; Cameron, 2008). Schmitz et al. (2011)

delivered the 'Community Apgar Questionnaire' among hospital administrators and physician leaders in rural Idaho, USA and reported that spousal satisfaction, or a lack thereof, was frequently named as a barrier to attracting and retaining a physician to the participating communities. Terry et al. (2016) implemented the same questionnaire across 14 district health facilities and three general practices in rural north-eastern Victoria, Australia and learned that spousal satisfaction is among both the greatest challenges and most important factors for general practitioner recruitment and retention to the participating communities. Likewise, Cameron (2008) reported that, for some of the participants of a multiple case study of four rural communities in Alberta, Canada, spousal satisfaction and integration into the community were perceived to be integral to physician retention:

"...that brings you to the retention piece. The most critical thing is that your spouse is happy. You know, that's probably the number one [thing] that we find" (physician, Cameron, 2008, p. 142).

Comparatively, a multiple case study of four rural communities in Kentucky, USA illustrated the importance of the physician's immediate family for physician integration, and therefore retention, into a rural setting; the family must remain content in order for physician integration to be successful (Cutchin, 1997). The author highlighted the significance of the ability of family members to connect with local groups and the local culture, and to integrate in their own way into a community (Cutchin, 1997). Cutchin (1997) made the argument that integration into a rural community is the foundation for physician retention.

The included literature also highlighted the importance of the educational, employment, cultural and recreational opportunities available to provider families (Kearns et al., 2006, c.f. Dywili et al., 2012; Dywili et al., 2012; Terry et al., 2016; Asghari et al., 2017; Curran et al., 2008, c.f. Dywili et al., 2012; Schmitz et al., 2011; Paliadelis et al., 2012; Cameron, 2008; Cameron et al., 2010). 'Educational assets' are frequently cited as factors that influence the decisions of health care providers to practice in rural and remote settings (Kearns et al., 2006, c.f. Dywili et al., 2012; Dywili et al., 2012; Terry et al., 2016; Asghari et al., 2017). A systematic review of the literature referenced Kearns et al. (2006), who reported poor secondary schooling as a factor that negatively impacts on the integration of OTHPs in rural and remote areas of destination countries (Dywili et al., 2012). Likewise, Terry et al. (2016) reported that adequate schooling is among the greatest challenges in rural north-eastern Victoria, Australia. Local key stakeholders recommended to engage local schools and government to address educational issues (e.g., poor school bus services or zoning that precludes students from attending a GP-preferred school) as a solution to enhance rural physician recruitment and retention (Terry et al., 2016). Moreover, Asghari et al. (2017) cited the recommendation of Canadian rural family physicians to address the adequacy of education for children to improve retention in rural practice, specifically. Finally, Paliadelis et al. (2012) explained that several communities in rural New South Wales, Australia have been successful at recruiting health care providers by identifying appropriate options for children's schooling.

Equally important is the availability of spousal employment for the success of health care provider recruitment and retention (Dywili et al., 2012; Curran et al., 2008, c.f. Dywili et al., 2012; Kearns et al., 2006, c.f. Dywili et al., 2012; Schmitz et al., 2011; Terry et al., 2016; Asghari et al., 2017; Paliadelis et al., 2012). Dywili et al. (2012) reported a lack of employment for the spouses of OTHPs as a barrier to the integration of OTHPs in rural and remote areas of destination countries (Curran et al., 2008; Kearns et al., 2006). Similarly, Schmitz et al. (2011) cited inadequate employment as a factor relevant to spousal dissatisfaction that was identified by hospital administrators and physician leaders in rural Idaho, USA. Terry et al. (2016) reported the recommendation of hospital chief executive officers, directors of clinical services, general practitioners and general practice managers in rural northeastern Victoria, Australia to address spousal employment by offering employment within a local health facility or engaging a local employment agency to identify employment opportunities.

Furthermore, the included literature revealed that a lack of cultural and recreational amenities is a risk to the recruitment and retention of the rural health care workforce (Schmitz et al., 2011; Cameron, 2008; Cameron et al., 2010; Terry et al., 2016). Schmitz et al. (2011) cited a lack of cultural opportunities as being associated with spousal dissatisfaction among rural communities in Idaho, USA. Additionally, Cameron (2008) reported that the recreational, cultural and lifestyle opportunities available to physicians and their families were important determinants of rural physician retention; if a community was unable to offer a physician's family the cultural and lifestyle elements that they desired, their retention was at risk. A physician participant noted:

"It's those [recreational] sort of things that keep my wife happy, which therefore keeps me happy" (Cameron, 2008, p. 142).

Community Capacity Assessment

- Rural and remote communities are encouraged to perform an assessment of local capacity for recruitment and retention and of community health needs for their successful involvement in recruitment and retention processes.
- The Community Apgar Questionnaire and Nursing Community Apgar Questionnaire are instruments intended for use by rural communities to evaluate their strengths and weaknesses with regard to rural physician and nurse recruitment and retention.

Three of 30 publications included for review underscored the importance of conducting an assessment of local capacity for recruitment and retention, and of community health needs for the success of recruitment activities and the sustainability of their outcomes (Bible, 1974; Smith, 1978; Veitch & Grant, 2004). Smith (1978) introduced a four-step method for attracting local providers, the first step involving an assessment of need for physicians by a hospital administrator and board, and community leaders. This involves surveying the age and health of the existing general practitioners and projecting their plans for retirement and their attitude toward onboarding new, younger colleagues (Smith, 1978). In addition, asset-mapping, including determining physicians who might offer support to an incoming (and especially, young) physician; the availability for cross-coverage from peers; and the availability of office space should be completed (Smith, 1978). Finally, the author stressed the importance of remaining proactive in the assessment of need for physicians (Smith, 1978).

In a reflection on their experiences facilitating community participation in medical practitioner recruitment and retention, Veitch and Grant (2004) recommended to perform an audit of community capacity and local needs for successful community involvement in recruitment and retention processes. The authors offered several considerations for such an audit, including the collective knowledge, abilities and resources within a community, as well as the knowledge, abilities and resources required for a successful outcome and the opportunities for local capacity building (Veitch & Grant, 2004). In addition, Veitch and Grant (2004) reported that information collected by a needs assessment is intended to inform the development and implementation of recruitment and retention initiatives and should reflect the needs and

priorities of the community. Moreover, the authors contended that the local focus of the process generates community ownership of medical practitioner recruitment and retention (Veitch & Grant, 2004).

Three additional publications describe tools by which rural communities are able to assess their strengths and weaknesses as they pertain to health professional recruitment and retention (Schmitz et al., 2011; Terry et al., 2016; Prengaman et al., 2014).

Schmitz et al. (2011) presented the 'Community Apgar Questionnaire' (CAQ), a tool comprised of 50 factors related to physician recruitment and retention that are evaluated according to their level of advantage and importance, using 4-point Likert scales ('major advantage' = 2, 'minor advantage' = 1, 'minor challenge' = -1, 'major challenge' = -2; 'very important' = 4, 'important' = 3, 'unimportant' = 2, 'very unimportant' = 1). The application of the CAQ among hospital administrators and physician leaders in rural Idaho, USA led to the conclusion that the tool might allow rural communities to identify modifiable factors and the factors most important to address, to enhance their recruitment and retention efforts (Schmitz et al., 2011). Additionally, the CAQ enables rural communities to monitor their progress over time (Schmitz et al., 2011).

To build upon the work of Schmitz et al. (2011), Prengaman et al. (2014) designed the 'Nursing Community Apgar Questionnaire' (NCAQ), a tool intended for rural communities and their critical access hospital partners to evaluate their strengths and weaknesses with regard to rural nurse recruitment and retention. The authors suggested that, with knowledge of the factors impacting on rural nurse recruitment and retention, activities may be tailored to highlight the identified strengths to make more effective use of scarce resources and to improve recruitment and retention outcomes (Prengaman et al., 2014).

Marketing the Community

- Marketing emerged as a significant influence in local health care provider recruitment, including strategies to communicate the benefits of life and practice in the local community.
- A site visit offers an opportunity to highlight the positive features of a rural community and practice, and should be planned with the interests and needs of a provider and their family in mind.

The notion of 'marketing the community' emerged as an enabler of local health care provider recruitment, which refers to the strategic marketing of rural life and the advantages of rural practice.

The key marketing strategy addressed was persuasive communication (Koska, 1991; Simpson & McDonald, 2011; Paliadelis et al., 2012; Wakerman et al., 2009; Perch et al., 1997). Koska (1991) reported the importance of "selling a lifestyle" in a positive, unapologetic way (Koska, 1991, p. 27). This was understood within the context of the risks of overselling and the potential for exploitation of health professionals by rural communities (Simpson & McDonald, 2011). Simpson and McDonald (2011) recommended that communities strive to fairly represent themselves, as deceptive practices might undermine the trust relationship between a community and a health professional. In addition, the process of devising a "sales pitch" for a community that includes strengths and attributes over other strengths might challenge a community's cohesiveness, exposing divisions within the community (Simpson & McDonald, 2011). Perch et al. (1997) suggested a marketing strategy should include information pertaining to a community's existing businesses as well as opportunities for new businesses, which might help a physician spouse to locate a potential employer or other opportunities for employment. It should also include information relevant to the local schools (i.e., awards or other recognitions achieved, and school performance on standardized tests), information regarding an area's cultural and recreational assets (i.e., nearby parks) and information pertaining to an area's demographics and economic health.

Several authors offered strategies to advertise available positions to prospective health care providers. Veitch et al. (1999) reported a common strategy for medical practitioner recruitment and retention that was identified by two rural communities in North Queensland, Australia, involving the development of information packages for prospective applicants. Perch et al. (1997) recommended that a 'community profile' be attached to a job description, conveying the community qualities described above (i.e., quality of life, and local educational, cultural and recreational opportunities). Cameron (2008) presented the activities of four rural communities in Alberta, Canada to advertise physician opportunities, including posting job opportunities in academic journals and bulletins; attending recruitment fairs; and through word of mouth. One physician in Cameron's (2008) study explained: "...We're always advertising. We're trying to both word of mouth and we pay for advertising in bulletins and publications. When, each year we go down, either myself or one of the other docs goes down to the recruitment and retention fairs that are held by the universities. Word of mouth, if, we're always talking to other docs in other communities or at courses that we take and letting [them] know we're looking for people" (p. 177).

An additional strategy to enhance local marketing efforts is to hire a marketing consultant (Perch et al., 1997).

The importance of marketing for the success of recruitment initiatives is reflected in the activities of the 'HealthFind' program in Texas, USA, through which rural communities were provided training to guide their development of a marketing strategy specific to primary care physician recruitment (Koska, 1991). The participating communities were taught "how to market themselves, how to assess their physician needs, how to interview a physician and how to understand what a physician is looking for" (Koska, 1991, p. 26).

The Site Visit as a Marketing Strategy

Five of 30 publications included for review described a 'site visit' to a community by a physician candidate and their family as an opportunity for the community to market itself. The included literature emphasized the importance of highlighting the positive features of rural life and practice through the lens of the candidate's interests and priorities, during the site visit.

It is during the site visit that a community can showcase the "warmth of small-town life" (Koska, 1991) and the positive experiences of those who have moved to the community (Perch et al., 1997), while being transparent about any challenges the community or position may face (Perch et al., 1997). Failure to do the latter will compromise building a trusting relationship.

Smith (1978) emphasized the importance of giving full consideration to the candidate's spouse (see 'Support for the Provider's Family'), including highlighting the opportunities for local employment. Similarly, Terry et al. (2016) reported the recommendation of key stakeholders in rural north-eastern Victoria, Australia to include spouses as part of the recruitment process in order to enhance rural physician recruitment and retention.

Smith (1978) suggested to include the following activities into a site visit: the opportunity to meet with community leaders (e.g., through a luncheon or dinner); the opportunity to speak with other physicians; a tour of the hospital service area; a tour of the school district, including the opportunity to meet with the superintendent or principal of a local school; and a tour of residential neighbourhoods, delivered ideally by a local realtor. Additionally, the author cautioned to remain sensitive to generation gaps and to avoid surrounding a young physician with older company throughout their visit (Smith, 1978). Moreover, Smith (1978) advised that, during the site visit, the community assess the compatibility of the physician candidate with the community through, for example, inquiring about where they grew up and the types of recreation that they enjoy.

The Recruitment Coordinator

- The included literature revealed the importance of a recruitment coordinator to recruit and in some instances retain rural health care providers.
- The efforts of a recruitment coordinator might include a focus on both recruitment and retention, including for example, to provide direction to the processes and to support communities to secure funding and to prepare action plans, as well as to facilitate the integration of incoming providers and their families into a community.

The literature included for review highlighted the importance of a recruitment coordinator (or recruiter) to attract and in some instances retain a rural health care provider (Asghari et al., 2017; Taylor, 2002; Felix et al., 2003). Several authors depicted the activities (potential or real) of a recruitment coordinator to enhance recruitment and retention (Felix et al., 2003; Asghari et al., 2017; Veitch & Grant, 2004). For instance, the scope of practice of a coordinator in rural Arkansas, USA included both activities to solicit candidates for an open position (i.e., 'traditional recruitment activities') and community development activities to design and deliver community improvements to enhance the attractiveness of the area to incoming and existing providers (Felix et al., 2003). For instance, the recruiter assisted the participating communities in preparing grant proposals to secure resources for the community; united local health care providers, community leaders and residents into action groups and

supported the action groups to develop action plans to address identified challenges and enhance identified assets; and offered technical support to strengthen community capacity to audit local needs and resources (Felix et al., 2003). Note, in this case, the recruiter position was established through the Arkansas Southern Rural Access Program (i.e., externally) and was grant-funded.

Moreover, Veitch and Grant (2004) recommended that an 'external facilitator' could help to provide direction and momentum in the recruitment process; manage community expectations; circumvent 'local politics'; and offer information and experience relevant to recruitment and retention that might not be available within the local community. However, the authors stressed that the external facilitator is not intended to replace community involvement (Veitch & Grant, 2004). In fact, the authors contended that the communities that increasingly assume leadership of medical practitioner recruitment and retention processes, and use the external facilitator as a resource rather than as a leader, are exemplars of active participation (Veitch & Grant, 2004). Recall, Veitch and Grant (2004) asserted that active and committed communities are most likely to be successful at local recruitment and retention.

Felix et al. (2003) detailed the retention-specific activities of recruiters, including maintaining contact with incoming providers to ease their transitions, integrating providers into their practices and communities, and connecting the incoming physicians with available resources to support the growth of their new practices (Felix et al., 2003). Others have suggested that a recruitment coordinator could assist an incoming physician to become integrated into the community and be available for ongoing support (Asghari et al., 2017). Asghari et al. (2017) noted:

"I think the people that end up being the recruiters don't really get the personal factors that are going to get someone to move to a community. I think they waste a lot of time on flashy adverts and this and that, but what they really need to do ... [is], they just need to sit down ... and develop a personal relationship with each of the [physicians]" (p. 97).

Community Development

The included literature revealed the importance of community development activities to promote supportive and vibrant communities for the success of recruitment and retention processes.

The literature included for review described the importance of local interventions to promote attractive and supportive rural communities for the successful recruitment and retention of health care providers (Henning-Smith & Kozhimannil, 2016; MacDowell et al., 2016; Bailey, 1997). MacDowell et al. (2016) stressed the importance of regional or community planning to enhance recruitment, as candidates for employment might perceive community planning as evidence of cooperation and of a shared vision across community sectors, versus a lack of consensus about the direction for a community. Moreover, Bailey (1997) concluded that greater attention must be paid to community development activities to improve the leadership capacity and the socio-economic status of remote ("frontier") American communities, two contributing factors toward maintaining a nurse practitioner or physician assistant-based health care system. Bailey (1997) elaborated that better guality local leadership and increased socio-economic status will enable frontier communities to work alongside rural health care providers and other actors to reduce the "dissatisfiers" in rural practice, including poor working conditions (e.g., long hours, professional isolation, and a lack of qualified nursing and administrative support staff) and the negative impacts on personal life (e.g., inadequate time to spend with family and "nothing for the family to do") (Bailey, 1997, p. 151).

Several authors offered recommendations regarding salient areas of focus for community development activities (Henning-Smith & Kozhimannil, 2016; Veitch et al., 1999; Cameron, 2008; MacDowell et al., 2016). Henning-Smith and Kozhimannil (2016) reported that the adequate supply of child care is an important contributor to livable and supportive communities (American Planning Association, 2011). Additionally, adequate housing was identified as a strategic advantage (Veitch et al., 1999). The importance of recreational amenities for physician retention specifically was supported by the results of a multiple case study (Cameron, 2008), with one physician participant noting, "They've got good facilities ... we've got a swimming pool ... we've got a good church. We've got a good pastor. So, that's an important part of our life" (Cameron, 2008, p. 245). Cameron (2008) elaborated that support for local physical and recreational assets (e.g., protecting or upgrading existing assets, or building new assets) might be perceived as 'infrastructure security', and can reinforce the strength and vibrancy of a community for physicians. However, one physician participant cautioned that activities to enhance local recreational and physical assets should aim to benefit the larger community, and not physicians specifically:

"I think there is so much that the community in, in say, like the Chamber could do. I think to have a vibrant community who is willing to, you know put in no smoking by-laws, to put in, make sure that they have some kind of infrastructure like a swimming pool, a movie theatre, a Tim Horton's. You know, that's cool, but that's, that's helping everybody ... The only thing is, is a community that is forward-thinking enough, vibrant enough to, to be a good community for any human being and if it's a good community for any human being then doctors will be happy" (Cameron, 2008, p. 303).

The importance of community development activities for rural health care provider recruitment and retention was reflected in the activities of two programs: the Arkansas Southern Rural Access Program (ASRAP) and the Recruitable Community Program (RCP) (Felix et al., 2003; Shannon, 2003; Melton, 2013). The ASRAP employed a 'regional recruiter-community development' strategy to address inadequate health care in the Mississippi Delta region of Arkansas, USA. In collaboration with a regional recruiter, the participating communities designed and implemented community improvements to enhance the attractiveness of the area to incoming and existing providers (Felix et al., 2003). Similarly, the Recruitable Community Program (RCP) in West Virginia, USA aimed to enhance the capacity of the participating communities to recruit health care personnel through community development activities (Shannon, 2003; Melton, 2013). As a component of the RCP, the participating communities welcomed a university-based 'Community Design Team', which supported the communities to perform selfassessments and together, plan for community development and recruitment (Shannon, 2003). For example, the areas for development that were addressed by the participating communities included community revitalization and leadership, transportation, housing, educational opportunities, health care opportunities, recreational amenities, tourism and historical preservation (Shannon, 2003; Melton, 2013). The authors reported that both the ASRAP and RCP were successful at attracting rural health care providers and attributed the success of the programs, at least in part, to their respective community development strategies (Felix et al., 2003; Shannon, 2003).

Incentives

- Incentives emerged as an important asset for rural communities to remain competitive in recruitment and retention processes.
- The included literature reported local efforts to provide financial incentives (e.g., repayment options for student loans or funding for professional development activities), housing inducements (e.g., to provide accommodation or an allowance for housing), and support for the local medical centre (e.g., through efforts to fundraise to contribute to the local health facility) to attract and retain care providers.

Incentives emerged as a pertinent consideration to attract and retain health care providers to rural areas. Cameron (2008) and Taylor et al. (2006) reported the impressions of rural physicians in Alberta, Canada and Australia, respectively, regarding the role for rural communities to provide incentives to attract and retain health care providers. A rural physician in Alberta, Canada explained:

"I think community things may be more important in the future ... I think it's gonna have to be along the lines of financial incentives or hiring incentives or something like that that make it easy for people to come" (Cameron, 2008, p. 183).

Likewise, Taylor et al. (2006) cited the impression of a rural Australian general practitioner regarding the importance of community involvement to support the local provider:

"The future of general practice in rural areas these days is going to depend more on community participation to support the local GP. So you get to the point of where communities need to take responsibility for their living and working arrangements" (p. 146).

Financial Incentives

Johnson (1994) described the need for communities to offer a financial incentives package to incoming physicians and cited repayment options for student loans as an important component of the packages. The author elaborated that the funds for incentive packages can be generated through community-led fundraising, federal and private grants, and the creation of a tax-supported hospital district. Additionally, several authors addressed local efforts to finance medical students through school in exchange for practice years in the community following their graduation (Johnson, 1994; Felix et al., 2003; Kulig et al., 2009; Cameron, 2008).

For instance, Felix et al. (2003) reported the efforts of a rural community in Arkansas, USA to successfully recruit a primary care practitioner by entering into a 'community match contract', whereby an Arkansas medical student was contracted to provide full-time primary care in the community post-graduation in exchange for financial assistance for medical school financed by both the community and the state (50-50 match). Similarly, Kulig et al. (2009) reported that rural communities must consider incentives to enhance the likelihood that student nurses will return to their home communities post-graduation. However, Cameron (2008) reported the impression of a hospital staff member in a rural community in Alberta, Canada, who regarded the strategy as unfavourable, yet inevitable:

"... it's awful to think that because what you're going to end up with is rich communities and poor communities ... the community has to embrace that and encourage [physicians] to stay here and there has to be incentives" (Cameron, 2008, p. 250-1).

Also thematic in the included literature was the recommendation to finance health practitioners' professional development as a strategy to improve their recruitment and retention to rural areas (Wakerman et al., 2009; Perch et al., 1997; Cameron, 2008). For example, attendance at workshops and conferences in urban centres. Perch et al. (1997) promoted this as a strategy to address the professional isolation that rural health care providers experience. In addition, Cameron (2008) reported the activities of rural communities in Alberta, Canada to incentive rural practice, including to pay for a physician's professional dues. The literature included for review reported several additional financial strategies that were employed by rural communities to improve rural recruitment and retention. Paliadelis et al. (2012) reported that several communities in rural New South Wales, Australia attracted health care professionals by refunding the costs associated with their relocation. Additionally, Wakerman et al. (2009) outlined the retention strategies employed by health service managers in rural and remote areas of Australia, including child care allowances and compensation for visits home. Moreover, Cameron (2008) reported that rural communities in Alberta, Canada financed annual holidays for physicians and their families as a means to incentivize rural practice.

Housing

Housing emerged as an important consideration to improve rural recruitment and retention. Several authors reported the efforts of rural communities to provide housing for incoming health care providers and their families as a means of incentivizing rural practice (Taylor, 2002; Cameron, 2008; Wakerman et al., 2009). Taylor (2002) cited a newspaper report that commented on the effort of a rural South Australian community to build a house for an incoming practitioner:

"It is nothing more than a concrete slab at the moment, but when completed it will be much more than someone's home. The new doctor's house ... will be symbolic of a country community's positive spirit and its endeavour to enhance the medical services in the area. It is being built with the support from the farming community for the doctor" (Littlely & Pengelley, 2000, p. 11).

The author added that, at the time of publication, the rural South Australian community continued to contribute toward a building program to provide personal accommodation for additional general practitioners. The literature included for review offered additional strategies to equip incoming health care providers with suitable personal accommodation, including providing a housing allowance (Wakerman et al., 2009), providing a rental property and purchasing a house for a provider and their family (Cameron, 2008).

Terry et al. (2016) cited the recommendation of hospital chief executive officers, directors of clinical services, general practitioners and general practice managers in rural north-eastern Victoria, Australia to provide attractive leasing agreements to enhance general practitioner recruitment to rural areas. Moreover, Asghari et al. (2017) reported the impression of Canadian rural family physicians that having temporary housing arranged for an incoming physician would be helpful to reduce the stress associated with relocating to a new community (Asghari et al., 2017). Finally, Paliadelis et al. (2012) reported that local efforts to seek accommodation for incoming providers in rural New South Wales, Australia have been successful to enhance health care provider recruitment.

Community Support for the Rural Practice

The included literature revealed several examples whereby rural communities mobilized to support the local rural practice or hospital (Taylor, 2002; Cameron, 2008; Johnson, 1994; Terry et al., 2016; Taylor et al., 2006). Taylor (2002) and Cameron (2008) reported that rural communities in South Australia and Alberta, Canada, respectively, fundraised for their local medical facilities in order to support their physicians. For instance, Cameron (2008) explained that in one of the rural communities in Alberta, Canada, the health foundation fundraised for new surgical equipment and according to one staff member, the surgical program has helped to retain surgeons in the community. Likewise, Taylor (2002) described the efforts of a rural South Australian community to fundraise for the local medical centre in order to purchase medical equipment. One hospital board member explained:

"My involvement is about contributing to our community. The financial contributions that we have achieved towards our health services are community assets" (Taylor, 2002, p. 41).

Johnson (1994) described the efforts of communities to build and operate a fee-for-service medical clinic and to salary their physicians as a strategy to recruit and retain primary care physicians. The author elaborated that salaried positions are desirable among newly graduated physicians to avoid the economic uncertainty that accompanies starting a practice and the business aspects of medical practice (Johnson, 1994). In addition, Cameron (2008) reported that rural Albertan communities paid the rent or subsidized the

overhead for the clinic on a physician's behalf to improve physician retention. Finally, Terry et al. (2016) cited the recommendation of study participants to provide attractive leasing agreements for practice accommodation, to enhance GP recruitment and retention.

Taylor et al. (2006) performed an analysis of community involvement in organizing rural Australian general practice in one remote and two rural communities and learned that community participants perceived their participation to involve making in-kind and financial contributions to the practice.

"As a community member, I see myself as owning the health centre and so this means to me that we have to support it. If we want to retain our services then we need to do whatever we can to help the doctors whether it is just moral support, friendship, fundraising, or sitting on the board" (community member, Taylor et al., 2006, p. 146).

Cautions

Despite the reported efficacy of incentives, several authors suggested that they were not always effective. For instance, Kehlet and Aaraas (2015) reported that offers of extra wages and low household costs were tried in Senja, Norway in response to challenges recruiting and retaining general practitioners without improving recruitment and retention to the area. Asghari et al. (2017) cited the impression of Canadian rural family physicians, who considered financial remuneration beneficial for recruitment, but not often promotive of retention to rural areas. One physician participant explained:

"Communities don't want physicians who are there for the money. They want physicians who will come and who will stay" (Asghari et al., 2017, p. 97).

Similarly, Cameron (2008) and OReilly (1998) reported skepticism by physicians with regard to the effectiveness of incentives. A physician in northern, Ontario explained:

"... it's not as easy as a signing bonus or a low-rent house: communities have got to build something that lets doctors have an attractive lifestyle" (OReilly, 1998, p. 1517).

A physician in rural Alberta, Canada described:

"I know there are communities where, you know, the community's gotten together and they try and offer this, that, and the other thing ... we make very, very good salaries rurally now, and especially in the last sort of four or five years, and so I don't think throwing another \$10,000 at people, you know, really is going to make a big difference in the big picture" (Cameron, 2008, p. 351).

Moreover, Cameron (2008) cited the importance of exercising caution regarding financial incentives, in particular if there are inequities within and across communities in terms of the incentives that physicians are offered:

"I think trying to buy them with too much wealth can, can backfire ... it brings friction if, you know, 'I've dedicated my life to this community but you're gonna give that guy a new house to come here?' Suddenly I'm saying 'Well what did you do for me?'" (community member, p. 351).

Finally, the author referenced one physician who warned that financial incentives offered to physicians might appear as privilege to a community, which could be damaging:

"You need to be careful because doctors are already looked as an elitist group as it is ... You make special dispensation for them, things like that, and that is looked upon by the community or some community members as privilege and I think you do an awful lot of damage" (Cameron, 2008, p. 351).

Discussion

Although the purpose and intent of this review was to document communitylevel strategies for recruiting and retaining health care providers, the context for the review acknowledges and appreciates the need for a productive interface between such strategies and system-level initiatives. This interface both appreciates and emphasizes the understanding that the recruitment and retention of health care providers is a complex, dynamic systems issue that involves not only the need for attention to health services but also attention to the *élan vital* of rural communities. That is, the recruitment and retention of rural health care providers will be challenged – at best – if we do not also foster vitality in rural communities by investing in schools and libraries, recreational facilities and local businesses. An integrated systems approach provides the backdrop for further activities.

They next layer up requires prioritizing and investing in the rural health human resources and workforce itself. This has traditionally been recognized as a health systems domain and we must exert caution to not 'down load' our collective (systems) responsibility to communities entirely. We need to keep our systems-level focus on the ethical principle of justice, that is, ensuring equity in access to care across the population. This involves the multi-faceted commitment from many social sectors; the 'WHO recommendation on recruitment and retention of staff in rural and remote areas' (2018) recommends that "Policy-makers should consider educational, regulatory, financial, and personal and professional support interventions to recruit and retain qualified health workers in rural and remote areas". The gap in this statement of assets is the role of rural communities in both identifying local level supports and contributing a local perspective on enacting them. At a national level, Canada has taken a decisive step in this direction through Action 14 in the 'Rural Road Map for Action' (Advancing Rural Family Medicine: The Canadian Collaborative Taskforce, 2017) which states we must "Engage communities in developing and implementing recruitment and retention strategies to strengthen the integration of physicians and their families into communities" (p. 4). Authors included in this review (e.g., Johnson, 1994) have long since argued that "Rural health care is in jeopardy. Community involvement and commitment are essential elements of its salvation" (82).

The mechanisms of community input into health care in B.C. have changed over the course of the last two decades. The original imperative of decentralization described in B.C.'s Royal Commission on Health Care and Costs ('The Seaton Commission') (1991, appointed by B.C.'s New Democratic government) was both intended to quell the need for – and sequela from – rural patients traveling to access care and to allow the local community to remain attuned to local needs so health care resources could be directed to regions where they would be most productive (British Columbia Royal Commission on Health Care and Costs, 1991). The vision included enhanced public participation in health system decision making to offset the influence of interest groups (including health care providers and political interests). As noted in Kornelsen et al. (2003), "Public participation was embraced as a mechanism to increase local responsiveness and understanding of the health care system."

The recommendations from the Seaton report to achieve local control over health care went through several iterations, the first being the creation of 82 Community Health Councils (CHCs) and 20 Regional Health Boards (RHBs) (B.C. Ministry of Health & Ministry Responsible for Seniors, 1993). The objective of these structures was to ensure the fit between provincial and regional policy, and local needs. This vision was soon replaced with a constricted model of 34 CHCs, 11 RHBs and newly formed Community Health Service Societies for a total of 52 regional health authorities (B.C. Ministry of Health & Ministry Responsible for Seniors, 1995). A significant accompaniment to the reduction in CHCs and RHBs was the shift from elected to appointed boards and councils, which meant that authority became delegated by the provincial government through an appointment process (Kornelsen et al., 2003). This managerial approach was maintained by the Liberal government in 2001 when, backed by critiques of the excessively bureaucratic distributed system and a lack of a framework for accountability, the new government introduced the currently recognizable system of five geographically based health authorities, the Provincial Health Services Authority (PHSA) and the Nisga'a Health Authority (B.C. Ministry of Health Planning, 2001).

It is important to understand that with the shift in the number of Health Authorities and regional boards also came a shift in health authority mandate from local support and representation in decision-making to increased efficiency and accountability through decentralization. Davidson (1999) described it as a shift from meeting local needs to foster health and well-being to meeting provincially imposed standards in a decentralized structure. These fundamental differences, and the provincial direction ultimately taken, have had the ripple effect, particularly through rural B.C., of diminished local community input and accountability.

Community members, who have been around long enough to remember the Community Health Councils, more often than not lament their disappearance but, more telling, lament that they were not replaced with any entrenched mechanisms for local community voice in health care decision making.

It is possible that we have a framework to address these concerns through the priority given to the patient-centered care framework (B.C. Ministry of Health, 2015c). Although this paradigm has the potential to evolve to include recognition of the importance of community-centered care and the value of community voice (for input, advocacy and collaborative problem solving), current wording does not address the centrality of 'community' within a patient-oriented model. And, as noted above, we must continually revisit attention to who becomes involved in community-led coalitions and who they represent. This calls into focus the need to be aware of class and other divisions that separate an individual from others in the community.

The efficacy of this approach has been shown across Canada. For instance, by the success of a municipal council in raising more that \$4,000,000 to address infrastructure and recruitment concerns in Nova Scotia (Michael Gorman, CBC News February 12, 2018). Importantly, there are already recruitment and retention successes at a local level in B.C. and elsewhere which need to be documented so others can learn what has worked and of the pitfalls to be avoided.

Recommendations

Preamble

The recruitment and retention of health care providers is a complex, dynamic systems issue that involves not only the need for attention to health services but also attention to the vibrancy and sustainability of rural communities. Investment in rural health services must be accompanied by investment in social and cultural community assets (physical infrastructure, schools and libraries, recreational facilities and local businesses). Concomitantly, we need to understand rural recruitment and retention as enmeshed in a complex and dynamic health system that may react to the vagaries of unpredicted social, economic and political influences. Finally, we must acknowledge the uniqueness of each rural community and the local conditions and vagaries that make an industrial approach not only unfeasible, but dangerous to local sustainability. Instead, each jurisdiction should apply the recommendations that follow after an analysis of fit has been completed.

Recommendations

(1) The Ministry of Health, Health Authorities and other key stakeholders (e.g., UBCM) recognize the integrated and linked nature of rural recruitment and retention and the viability of rural communities more generally.

(2) In response to the need for local health care professionals, rural communities be actively engaged in the recruitment and retention of health care providers. This requires:

- A) System-wide legitimacy and support for community participation in recruitment and retention processes;
- **B)** The development of durable mechanisms for consolidating community voice. This might involve the creation of community health boards;
- **C)** The development of durable mechanisms for including community voice in Health Authority and Ministry planning;
- D) Attention to additional resources and processes that may be needed in communities with less resources or social capital so that existing disparities in health care are not widened.

(3) As part of community discussions, local industry be included as key stakeholders as those with a vested interest in and potential support for local recruitment and retention efforts.

(4) That the discrete recruitment and retention needs of rural Indigenous communities, as articulated by the communities themselves, be observed, particularly within the legacy of colonial health care and the need to ensure cultural safety and humility.

(5) That the regional planning process be undertaken in a transparent way, with a clear rationale for resource allocation decisions. This might involve the implementation of a population-based metric for determining the number and type of providers required to meet population needs.

(6) That all collaborative (community-health system) recruitment and retention efforts be evaluated for the:

A) Effectiveness of the approach;

B) Costs involved,

C) Sustainability of the candidate, and

D) Lessons learned.

(7) That communities that achieve their recruitment and retention goals through collaboratively designed and executed processes be recognized and their successes documented, so that they may serve as role models for other communities.

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Citations Table

Bibliographic reference	Jurisdiction	Research Question	Context	Evidence Type	Main Findings
Asghari S, Aubrey- Bassler K, Godwin M, Rourke J, Mathews M, Barnes P, et al. Factors influencing choice to practise in rural and remote communities throughout a physician's career cycle. Can J Rural Med. 2017;22(3):92-9.	Canada	To explore factors that influence Canadian family physicians' decisions to work in rural and remote communities through qualitative analysis.	 The proportion of rural Canadians without access to a family physician is very high. The relative importance of factors that influence the recruitment and retention of physicians to rural communities is not consistent throughout the literature. A Canada-wide perspective will add depth to the current level of understanding and assist with the development of targeted and appropriate strategies in order to optimize the number of family physicians working in rural and remote communities in Canada. 	Qualitative Interviews	 Participants felt that problems with recruitment and especially retention can be mitigated through efforts made by the community to make physicians feel welcomed, integrated and respected. Issues related to family and spousal support, the ability to attend professional education and to connect with specialists and tertiary care centres were identified as the most significant challenges to encouraging physicians to practice in rural and remote areas. Providing opportunities for professional development and developing a supportive and stimulating work environment were some of the strategies identified to address low recruitment and retention of physicians to rural and remote areas.
Bailey BE. Vast territory surrounded by vast territory: a development and maintenance theory of access to primary health	Rural USA: Colorado, Montana, North Dakota, South Dakota,	• To examine why some small population communities are able to maintain access to primary health care services through	While the recruitment of physicians to rural communities has been extensively studied, there is little research that explores how communities retain physicians. This study examines the role of	Survey, Interviews	 Communities with the highest success rates in maintaining nurse practitioners and physician assistants for longer than 3 years were those that had good community leadership and high per capita income. Communities with low per capita income and poor leadership were 10 times more

care on the frontier. 1997. [Doctoral Dissertation]	Utah, Wyoming	the use of NPs and PAs, while other similar communities are unable to do so. • To examine the characteristics of both the community and provider in successful and unsuccessful NP/PA-based systems of health	communities in retaining physicians.		 likely to be unsuccessful in retaining a NP/PA. A comprehensive approach designed to enhance leadership and socio-economic status should be used in community development.
		care delivery in frontier areas of the United States, identifying and analyzing those characteristics that lead to differing outcomes.			
Bible BL. Road ahead - challenges for cooperative action. J Med Assoc Ga. 1974;63(10):394- 8.	Georgia, USA	Practical suggestions are given on the development of rural health systems and the recruitment of physicians.	 Medical manpower and the organization of health services are the two basic health care issues confronting rural areas. Solving either issue would facilitate solving the other. 	Expert Opinion	 There is a need for an area health service approach to planning, with emphasis given to the group organization of practice, health education, increased use of allied health professionals, improved rural emergency services, and strengthened relationships with extra-local players. The communities in a logical service area should plan together to develop health care systems on a regional basis, in order to

Cameron PJ. Physician retention in four rural communities in Alberta: a collective case study. University of Calgary. ProQuest Dissertations Publishing. 2008. NR44385.	Rural Alberta, Canada	To explore the physician retention factors and strategies of four rural communities in Alberta, and to consider the role of the community in rural physician retention.	To fill a void in the rural professional retention literature in the following areas: (1) the existing literature focuses on recruitment rather than retention of rural professionals, (2) physician retention literature lacks qualitative research, and (3) research about the role of the community is scant.	Qualitative, Collective Case Study	 attract appropriate health manpower working in a group to provide care. Establishing a group practice can make attracting and retaining physician manpower easier to accomplish. There is no single solution applicable to all medically underserviced rural communities; instead, each area must develop its own plan, incorporating those approaches most appropriate to its particular needs, to the local geography, and to the resources available to the locale. Professional, personal and community factors were identified for the successful retention of physicians in four rural communities in Alberta, Canada. This study highlights the importance for planners and policymakers to consider various factors, such as scope of practice, physician family support and actively engaged communities.
Cameron PJ, Este DC, Worthington CA. Physician retention in rural Alberta: key community	Alberta, Canada	As part of a larger case study exploring physician retention factors and the strategies employed by rural	• The availability of health care providers, including physicians, is a persistent issue for rural	Qualitative, Collective Case Study	 5 themes were found to influence a physician's decision to remain within a rural community: Showing them appreciation; Building connections with them and their families;

factors. Can J Public Health. 2010;101(1):79-82.		communities, this analysis explores the community factors that promoted physician retention.	communities across Canada. • Recruitment and retention strategies for rural areas may enhance health care accessibility. • There is limited conclusive evidence regarding retention factors and in particular, community factors that influence physician retention.		 Active support of the physician and the healthcare facilities; Maintaining/improving physical and recreational facilities; Nurturing reciprocity; This study supports the idea that the community domain should be considered when planning and implementing strategies to retain physicians in rural communities.
Chipp C, Dewane S, Brems C, Johnson M, Warner T, Roberts L. "If only someone had told me": lessons from rural providers. J Rural Heal. 2011;27:122- 30.	Alaska and New Mexico, USA	 The purpose of this study is to enhance knowledge and understanding of the preparatory needs of professionals embarking on careers in rural health care settings. The ultimate aim of this study is to inform future practitioners, educators, and policy makers on 	Practicing in a rural setting presents unique challenges to healthcare providers that they may not be adequately trained to navigate, resulting in burnout and high turnover.	Qualitative Focus Groups	 Themes emerging from rural healthcare practitioner focus groups coalesced into three overarching themes addressing practice-related factors surrounding the challenges, adaptations, and rewards of being a rural practitioner. A series of recommendations are offered to future rural practitioners related to community engagement, service delivery, and burnout prevention.

Cutchin MP. Community and self: concepts for rural physician integration and retention. Soc Sci Med. 1997;44(11):1661- 74.	Rural Kentucky, USA	avenues through which to enhance training, recruiting, and maintaining a rural workforce across multiple health care domains through the exploration of experienced rural providers' knowledge and lessons learned. This paper introduces and elaborates a categorization of "domains" that come together in a rural setting when private practice physicians locate and attempt to integrate.	 The poor level of physician availability in rural areas of the United States is a long-standing issue. The majority of the literature has focused on the locational decisions of physicians – why physicians do or do not locate in rural areas – in order to understand the causes of the issue. The retention literature is limited but developing, with the retention of physicians once they have made the initial move into 	Case Study	 Three domains emerge as important to the integration process: (1) the physician's self, (2) the local medical community, and (3) the rural community-at-large. The domains of integration are universal across integration situations; however, the combination of dimensions that characterize each of the domains will vary across cases. The concepts of social capital, core participation, and community reconstruction are useful to understand the relationships among domains, and direct attention to actions that bring the physician, medical community and the local community closer together by changing the relationships among domains.
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Dywili S, Bonner A, Anderson J, O'Brien L. Experience of overseas-trained health professionals in rural and remote areas of destination countries: A literature review. Aust J Rural Health. 2012;20:175-84.	International evidence is included.	The objective of this literature review was to better understand the experiences of overseas-trained health professionals (OTHPs) in rural and remote areas of their destination countries.	a rural community a growing concern. • The decision to locate in a place is different from the decision to remain in that place. • There is a global health care professional shortage that disproportionately affects rural areas, in both developing and developed countries. • The Organization for Economic Cooperation and Development countries demonstrate a significant reliance on OTHPs to address health care professional shortages. • It is important to understand the experiences of OTHPs in rural and remote areas of destination countries as their professional performance and retention, and the continuity of patient care might be impacted.	Systematic Literature Review	Effective orientation and communication coupled with organizational support and acceptance of cultural diversity within a community create a good environment for successful integration and adaptation of overseas-trained healthcare professionals.
Felix H, Shepherd J, Stewart K. Recruitment of	Mississippi Delta,	The purpose of this article is to describe a	An emerging strategy, borne out of the Robert Wood Johnson	Case Study	• The regional recruiter strategy, which combines traditional recruitment efforts with community development activities,

rural health care providers: a regional recruiter strategy. J Rural Heal. 2003;19(5):340-6.	Arkansas, USA	promising approach to recruiting and retaining primary care providers in rural areas that combines regional recruiter and community development strategies developed under the Arkansas Southern Rural Access Program (ASRAP).	Foundation's Southern Rural Access Program (SRAP), effectively uses a targeted regional approach to assist rural communities and health care facilities in assessing health care needs and recruiting primary care providers. At the time of publication, the authors of this study were unable to find documented examples of a program similar to the one considered in this article after a review of the literature and discussions with national health policy experts.		has been successful in recruiting health care providers to rural communities. The cost-effective strategy can be easily replicated in other rural states. • Community factors affect provider decisions on practice locations. Addressing community factors in recruitment efforts through community development activities may increase their success.
Henning-Smith C, Kozhimannil KB. Availability of child care in rural communities: implications for workforce recruitment and retention. J Community Health. 2016;41:488-93.	Wisconsin, USA	The aim of the present study was to measure the association between geographic location and availability of child care in Wisconsin, USA, with a focus on rural-urban differences, and to describe the	 The recruitment and retention of health care providers to rural areas are consistently cited among the top workforce challenges by rural hospitals and communities. Interventions to recruit and retain clinicians must move beyond a focus on individual incentives toward addressing the 	Secondary Analysis of Data	 Rural counties in Wisconsin were found to have significantly fewer child care slots than in metropolitan counties, and this difference was not explained by differences in family structure or women's labour force participation. Rural counties in Wisconsin were found to differ from metropolitan counties across multiple socio-demographic characteristics, including for example rates of unemployment and children in poverty, with rural areas nearly always seeming to be more disadvantaged.

		implications for	broader family and		• Effort to increase the availability of child
		recruitment and	community contexts.		care is a potential policy solution to
		retention of the	Access to child care is		address rural health care workforce issues.
		healthcare	important to the health		address ful al fleatth care workforce issues.
		workforce.			
		worktorce.	and vitality of rural		
			communities, including		
			their capacity to attract		
			and support health care		
			providers and their		
			families.		
			 Earlier studies on child 		
			care in rural communities		
			in the US are limited in size		
			and scope, are dated, and		
			do not address access to		
			child care in the context of		
			current shortages of health		
			care providers in rural		
			areas.		
Johnson L. Saving	Rural USA	To explore how	• Health care in rural areas	Editorial	 Some factors contributing to rural
rural health care:		communities and	has been threatened by a		hospital closures such as low occupancy
Strategies and		healthcare	significant number of		rates and poor management can and
solutions. J Heal		facilities can better	hospital closures and an		should be addressed through hospital
Care Poor		recruit and retain	insufficient supply of		networking, strategic planning, and well-
Underserviced.		healthcare	primary healthcare		focused marketing.
1994;5(2):76-82.		practitioners as	practitioners.		• Strategies including the development of
		well as achieve	 Individual facilities are 		financial-incentive packages and
		financial	unable to address some		alternatives to fee-for-service models
		sustainability.	factors contributing to		including establishing a community-based
			hospital closures, however		health maintenance organization, or
			there are factors such as		founding a community-owned and
			low occupancy rates and		operated medical clinic staffed by primary
1				1	operated medical entite starred by printary

			 poor management that can and should be addressed at the facility level. Communities can play a critical role in both primary care recruitment and retention as well as health facility sustainability. 		care providers may improve the ability of rural communities to recruit and retain primary healthcare providers.
Kehlet K, Aaraas I. "The Senja Doctor": developing joint GP services among rural communities in Northern Norway. Rural Remote Health. 2015;15.	Rural Northern Norway, Island of Senja	This publication details the establishment of a joint rural healthcare service in Senja, Norway. The authors discuss the importance of local involvement and ownership in that process and the effects of creating a robust professional environment for the support and guidance of young doctors.	Senja is a large island located in Northern Norway consisting of four municipalities. All of Senja's municipalities have experienced decades of difficulty attracting general practitioners to serve their communities due to their rurality. In 2001 a plan to improve GP service through inter-municipality collaboration was put forth by the county medical officer but rejected by the municipalities. In 2007, one of Senja's municipalities proposed an inter-municipality health service initiative closely resembling the one suggested previously by the county medical officer; this time, the other	Project Report	 The process of changing healthcare services should be based on local involvement and control. Models for inter-municipal healthcare services should be developed in an environment of mutual participation and cooperation between politicians, administrators, and the healthcare workforce. Evidence is presented to suggest that young doctors prioritize professional support and teamwork over income level as motivation for long-term commitment in rural areas.

Koska MT. Community participation drives rural recruiting campaigns. Hospitals. 1991;65(22):26-8	United States of America (USA)	To explore community participation in rural recruiting campaigns through case examples.	municipalities eventually supported the initiative and created Senjalegen (The Senja Doctor), an inter-municipal GP service. In small rural towns across the US, physician shortages might result in hospital closures and reduced access to care. As physician shortages can devastate small towns both economically and socially, community leaders are working in tandem with hospitals to lure primary care practitioners to country practices.	Case Examples	 The author introduces the 'HealthFind' program in Texas, USA, a state-sponsored initiative to support rural communities to recruit primary care physicians, through a capacity building workshop to guide their development of a marketing strategy and a rural recruitment fair. The author describes the efforts of the rural community of Weiser, Idaho, USA to welcome a physician candidate and his wife to the community by showcasing the "warmth of small-town life" during a site visit.
Kulig J, Stewart N, Penz K, Forbes D, Morgan D, Emerson P. Work Setting, community attachment, and satisfaction among rural and remote nurses. Pub Hlth Nurs. 2009;26(5):430- 9.	Rural Canada	To describe community satisfaction and attachment and the links to work satisfaction among rural and remote registered nurses (RNs) in Canada.	Understanding the factors affecting the decisions of health care practitioners to practice and remain in rural settings is critical for the development of effective recruitment and retention efforts. Community satisfaction and community attachment have been identified as potentially important factors affecting	Cross- Sectional Survey	 Recruitment and retention strategies need to include mechanisms that focus on community satisfaction which will enhance job satisfaction. Data provided demonstrate that for some RNs, attachment to rural settings was related to physical features while for others it was the social characteristics.

MacDowell M, Glasser M, Fitts M, Fratzke M, Peters K. Perspectives on rural health workforce issues: Illinois-Arkansas comparison. Jour Rur Hlth. 2006;25(2):135- 40.	Rural Illinois and Arkansas, USA	To compare rural hospital chief executive officers' reported shortages of health professionals and their perceptions about recruitment and retention in Illinois and Arkansas.	the decision to practice and remain in rural settings and have not been studied formally amongst rural community and homecare nurses. One of the authors previously did a study assessing the extent of healthcare professional shortages by asking CEOs in Illinois their perspectives on rural health care workforce shortages. The authors concluded that Illinois continues to experience shortages and suggest various recruitment and retention difficulties associated with the rural health care workforce. To confirm these findings, the Illinois study was replicated in Arkansas because of its large rural population.	Cross- Sectional Survey	 Rural hospital CEOs should work with other community leaders on a long-term basis to improve key attributes of the community that contribute to strong public education systems, economic development, and the overall quality of life to improve recruitment and retention. Similarities in shortages and attributes influencing recruitment in both states suggest that efforts and policies in health professions workforce development can be generalized between regions. This study further reinforces some important known issues concerning retention and recruitment, such as the importance of identifying providers whose preferences are matched to the characteristics and lifestyle of a given area.
Melton NC. Recruitable community program. A plan of action for	West Virginia, USA	Not Applicable	Maintaining dependable health care is a major concern for many rural West Virginia communities. It is one of	Program Overview	• The Recruitable Community Program (RCP) is a collaborative effort between the Division of Rural Health and Recruitment, professional community development

community involvement and revitalization. West Virginia Medical Journal. 2013;109(4):81.			the most important and practical investments that a community can make. The ability to provide quality health services is a vital element in promoting community growth and prosperity. Failure to retain health services can decrease a community's potential to attract new businesses and other entities so vital to community sustainability.		agencies and institutions, community stakeholders and local health care facilities. • RCP aims to equip a rural community with the necessary skills, tools and education to develop and strengthen its health care recruitment/ retention potential. • All aspects of the community and its health care system are evaluated by a professional team, which might include landscape architects, city planners, public administrators, public health professionals, engineers, historians and economic development specialists, and subsequently, the team's observations, conclusions and suggestions are furnished to the community through public presentations and detailed written reports; • The professional team provides guidance and assistance to establish a community plan of action and offer ideas and suggestions on how the plan may be brought to fruition.
OReilly M. A Marathon session: a town's MDs develop a philosophy to call their own. CMAJ. 1998;158(11):1516- 7.	Marathon, Ontario, Canada	Not Applicable	 The remote Northern Ontario community of Marathon, with a long history of being chronically underserviced, saw more than 75 doctors come and go in a period of 10 years. With the advent of the Marathon Family Practice, 	Program Overview	 The Marathon Family Practice (MFP) was built on a philosophy of sustainability and long-term physician retention; the practice aims to recruit people who are "looking for life, not just a well-paying job" (p. 1516). Leadership by physicians at MFP has contributed to new services and enhanced patient care in the community, and the

			the community went from "medical rags to riches"; from a single overworked doctor to a group practice of 7 physicians.		 development of a practice that is attractive to incoming physicians. As a next step, the practice intends to move away from the fee-for-service payment model toward a globally funded group practice (GFGP) agreement, which offers a global budget for medical services in the community and is better aligned with the group's philosophy. "We've got to have a change in public policy so that it supports the idea of sustainability or we are going to lose what we've gained" (p. 1517)
Paliadelis P, Parmenter G, Parker V, Giles M, Higgins I. The challenges confronting clinicians in rural acute care settings: a participatory research project. Rural Remote Health. 2012;12.	Rural New South Wales, Australia	 The major aims of this study were to better understand the challenges faced by rural acute care clinicians and the impact of these challenges on their capacity to carry out their roles. A secondary aim was to explore and prioritize strategies to address selected challenges. 	There is a lack of literature exploring the challenges faced by a range of healthcare professionals that choose to practice in rural acute care settings. This study aims to develop a better understanding of the challenges faced by rural acute care healthcare providers and the effects of these challenges and to develop strategies to address these challenges.	Mixed Methods - Survey, Focus Groups, Workshops	 The most important challenges for rural healthcare providers as identified by study participants were (from highest to lowest importance): 1. Workforce issues (e.g. workload, workplace culture and employment practices) 2. Access, equity and opportunity (e.g. access to professional development and mentorship) 3. Resources (e.g. administrative and IT resources) 4. Contextual issues (e.g. geographic isolation)
Perch A, Yallapragada R, Birkenmeier B,	Rural USA	• To discuss what makes it so difficult to recruit	 There are several factors that may negatively impact a rural 	Expert Opinion	• There are several strategies that rural communities could employ to improve their recruitment and retention of

Authement J, Roe		and retain	community's ability to		healthcare practitioners including
C. Recruitment of		physicians in rural	recruit and retain		establishing a recruiting committee,
primary healthcare		settings, what is	healthcare providers		working to establish a regional healthcare
physicians in rural		currently being	including the professional		network, and developing a marketing
areas. Hosp Top.		done about the	isolation of recruited		strategy to attract the largest possible pool
1997;75(4):29-33.		situation, what	providers, a lack of		of potential candidates.
		physicians think	professional development		 As recruiting candidates into a facility
		about rural	and educational		that does not exist is difficult, hospital
		practice, and what	opportunities, and lack of		closures are liabilities for any rural
		it would take to get	access to acceptable		community trying to recruit physicians.
		them there.	facilities, technology and		
		•	equipment.		
		Recommendations	 Rural hospital closures 		
		are offered for	have become more		
		what a rural area	common across the United		
		needs to do to	States of America, further		
		recruit physicians.	threatening the ability of		
			rural communities to		
			recruit and retain		
			healthcare providers as		
			they view hospitals as		
			important resources to		
			their practices.		
Prengaman MP,	Idaho, USA	To develop a tool	• There is a shortage of	Literature	The Nursing Community Apgar
Bigbee JL, Baker E,	and review	with which rural	nurses across the US, and	Review,	Questionnaire (NCAQ) is a 50-factor
Schmitz DF.	of	communities and	this shortage is particularly	Questionnaire	tool, intended for rural communities to
Development of	international	their critical access	acute in rural settings,	Development	evaluate their strengths and
the Nursing	literature	hospital partners	where nursing vacancies		weaknesses with regard to rural nurse
Community Apgar		can evaluate the	are more commonplace		recruitment and retention.
Questionnaire		factors impacting	and nursing recruitment is		• With knowledge of the factors
(NCAQ): a rural		their rural nurse	a continued challenge, and		impacting on rural nurse recruitment
nurse recruitment					and retention, local activities may be
L	1		l	L	

and retention tool.		recruitment and	where significant health		tailored to highlight the identified
Rural and Remote		retention.	disparities persist.		strengths, to make more effective use
Health.			• The recruitment and		of scarce resources, and to improve
			• The recruitment and retention of rural nurses		recruitment and retention outcomes.
2014;14:2633.					recruitment and retention outcomes.
			has both health and		
			economic implications.		
Schmitz D, Baker E,	Rural Idaho,	The purpose of this	 The continuing rural 	Questionnaire	The Community Apgar Questionnaire
Nukui A, Epperly T.	United	study was to	physician shortage in the		(CAQ) seems to discriminate between
Idaho Rural Family	States of	develop an	USA will impact the state		communities with differing assets and
Physician	America	evaluation	of Idaho in particular, as it		capabilities based on historical
Workforce Study:		instrument	is a predominantly rural		community-specific workforce trends.
the Community		(Community	state with an ageing		 CAQ assessment may allow for
Apgar		Apgar	physician workforce. With		identification of both modifiable and non-
Questionnaire.		Questionnaire)	no medical school in the		modifiable factors and also may suggest
Rural Remote		useful to rural	state of Idaho, rural Idaho		which factors are most important for a
Health. 2011;11.		Idaho communities	communities have limited		community with limited available
		in their assessment	connection to graduating		resources to address.
		of the assets and	physicians for recruitment		
		capabilities related	and retention when		
		to physician	compared with rural		
		recruitment and	communities in states with		
		retention.	medical schools. A rural		
			Idaho community's		
			understanding of critical		
			factors involved in		
			successful recruitment and		
			retention and appreciating		
			their relative importance		
			from the physician's		
			perspective to improve		
			their strategies is therefore		
			crucial for access to health		

			services in these		
			communities.		
			• "Limited community		
			resources require		
			addressing the most		
			important factors affecting		
			physician choices and		
			satisfaction. Knowledge of		
			these most crucial		
			modifiable factors		
			becomes invaluable to		
			strategic planning,		
			including understanding of		
			comparative advantages in		
			the marketing process.		
			Therefore, recruitment and		
			retention self-assessment		
			becomes critical to		
			addressing physician		
			shortage problems in		
			Idaho." (p9)		
Shannon CK. A	West	 To describe an 	Small rural communities	Program	The author described the 'Recruitable
community	Virginia,	innovative	have long had difficulties	Overview and	Community Project', whereby rural
development	USĂ	approach to	recruiting health care	Evaluation	community capacity for recruitment and
approach to rural		address West	providers. The role of rural		retention is enhanced through the
recruitment.		Virginia's rural	communities in the		provision of skills, tools and education.
Journal of Rural		health care	recruiting process has		The project includes community
Health. 2003;19		provider	been uncertain, and rural		education, whereby the participating
Suppl: 347-53.		recruitment needs:	community members have		communities learn of salient recruitment
		the Recruitable	traditionally lacked		issues and initiatives that might help to
		Community	experience in recruiting,		overcome the identified barriers, and offers
		Project.	often not addressing links		support to plan for community

•	 To investigate 	between community	development and local recruitment.
t	the basic RCP	development and	• The author reports that the preliminary
	premise that	recruiting potential.	evidence indicated that a proactive
	health care	Lifestyle and cultural	approach toward community development
	provider	issues have been	and recruitment can successfully attract
	recruitment to	important in rural	health care providers.
	rural communities	recruitment. However,	
	can be enhanced	there is no consensus on	
	through general	how these issues should	
	community	be addressed or whether a	
	development.	combined community	
		development and	
		education effort may have	
		utility in making	
		underserved rural	
		communities more	
		attractive to health care	
		providers or in promoting	
		community recruiting	
		readiness.	
		West Virginia is a poor	
		rural state with many	
		unmet health care needs	
		(50 of 55 counties have	
		medically underserved	
		areas or health	
		professional shortage	
		areas, despite the	
		presence of 3 medical	
		schools and multiple rural	
		training sites for health	
		8	
		professions students, and	

			there have been reports of a decrease in the number of physicians in the state due to a variety of factors); it is essential that West Virginia develop new approaches to enhance rural recruitment to avoid a worsening shortage of providers.		
Simpson C, McDonald F. 'Any body is better than nobody?' Ethical questions around recruiting and/or retaining health professionals in rural areas. Rural and Remote Health. 2011;11:1867.	International evidence is included.	It is the objective of this article to make the argument that it is important for all stakeholders involved in rural recruitment and/or retention processes to consider their decisions and actions from an ethics perspective. It is the intention of this article to outline a conceptual framework for ethical analysis which can be utilized in a variety	 There is a paucity of literature that asks critical questions about the ethical dimensions of recruitment and retention strategies to rural areas. Recruitment and retention policies and practices are not value neutral; they have ethical dimensions that should be explored to understand what societies, communities and individuals value, and how their values are put into practice. 	Literature Review	 It is important to consider the ethical dimensions of rural recruitment and retention strategies to better understand and appreciate the issues confronting all stakeholders that are involved in these processes. An analysis of recruitment and retention processes at three levels of governance - macro (health system), meso (community) and micro (individual health professional) - identified the cross-cutting issues of managing trust relationships, power imbalances, negotiating vulnerabilities and competition among actors that underlie recruitment and retention strategies. The ethical issues encompassing rural recruitment and retention require further analysis, not only by ethicists but also by those involved in these processes.

			1		1
		of practice			
		settings,			
		regardless of how			
		the particular			
		context is defined.			
		This article offers a			
		discussion of a			
		series of ethics			
		issues and			
		questions related			
		to recruitment and			
		retention of health			
		professionals at			
		the macro			
		(government/			
		health system),			
		meso			
		(community), and			
		micro (individual			
		health			
		professional)			
		levels. A			
		comprehensive			
		analysis of each			
		level and the			
		interrelationships			
		between these			
		levels is			
		performed.			
Smith S. Small	USA	To present and	At the core of the small-	Expert	The successful placement of physicians in
towns need big-		discuss a	town medical community	Opinion	small-community hospitals involves a four-
time tactics to find		successful method			step method, including:

physicians.		for placing new	is the supply of general		
Trustee.		physicians in	practitioners.		1. Assessing the need for physicians
1978;31(5):35-7.		small-community			2. Conducting the search
		hospitals,			3. Arranging the visit
		emphasizing what			4. Negotiating the agreement
		hospital trustees			
		should know about			
		placement.			
Taylor J.	The	• To identify	In response to difficulties	Literature	• The author introduces three conceptual
Understanding	literature	different	experienced by some	Review, Case	approaches to describe community
community	review	understandings	South Australian rural	Example	participation in health services
participation in	includes	about community	communities in attracting		development: the contributions approach,
rural health service	international	participation in	general practitioners to		the instrumental approach, and the
development.	evidence.	health from the	provide medical services,		developmental approach.
Rural Social Work.	The case	national and	some communities have		• The policy implications of these models
2002;7(2):36-46.	example is	international	become actively involved		of community participation in health
	ofa	literature.	in the recruitment of		services planning are discussed.
	community	• To group relevant	general practitioners, and		
	in South	literature	in the development of		
	Australia.	according to	models for general medical		
		whether it	practice. These rural		
		illustrates a	communities initiate the		
		'contributions',	activities and community		
		'instrumental' or	members voluntarily		
		'developmental'	undertake the bulk of the		
		approach to	work (although they might		
		community	use rural work force		
		participation;	medical consultants and		
		 To use a case 	the University Department		
		example to apply	of Rural Health to assist).		
		and explore the	Literature that analyses		
		conceptual	community participation		

community participation that may be most effective in developing general participation in organizing rural general practice.models for rural general practice is scarce. This paper contributes to the literature through addressing the above research objectives.Multisite, EmbeddedTaylor J, Wilkinson D, Cheers B. Community participation in organizing rural general practice.Analysis of community practice is scarce. This issues in recruiting and retaining a general practice workforce in Australian rural and remote locations. In order to attract doctors to their taylor J, Wilkinson participation in organizing rural general practice.Multisite, Embedded Case Study- Community participation in organizing rural medical practice workforce in Australian rural and remote locations. In order to attract doctors to their to attract doctors to their may contribute their time, financial resources, and may provide governance for the gractice, through their local hospital boards and organizations (Veitch & Grant, 2004). However, there is little research evidence to support, sustain and develop roles for community members in helping to organize rural general practice and other+ Community participation in organizing rural medical practice, housing assistance and housing assistance and organizations (Veitch & Grant, 2004). However, there is little research evidence to support, sustain and develop roles for community members in helping to organize rural general practice and otherMultisite, embedded community members and inclusive decision making processes. • Adopting a community hell may be beneficial.			approaches to	processes in developing		
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			Research to date has focused on the rural medical workforce. There is less evidence to suggest what community factors may be associated with viable general practice services.		
Terry D, Baker E, Schmitz F. Community assets and capabilities to recruit and retain GPs: the Community Apgar Questionnaire in rural Victoria. Rural Remote Health. 2016;16	Rural north- eastern Victoria (Hume region), Australia	To use the Community Apgar Questionnaire (CAQ) in rural Australia to examine its utility and develop a greater understanding of the community factors that impact general practitioner (GP) recruitment and retention	 The Hume region has a population of >300,000 that is spread across 12 local government areas and encompasses 27 health facilities, 3 public hospitals in major centres, 3 private hospitals in major centres, 19 district health services which include 3 private health services and 2 remote nursing services. The Community Apgar Questionnaire (CAQ) is a tool used to assess characteristics associated with successful recruitment and retention of rural physicians. The CAQ was first developed in Idaho, USA, and has since been applied and validated across the USA. 	Questionnaire	 This study was the first to implement the CAQ internationally, and its reliability and validity as a tool was indicated to be moderate to high. Participation in the program was reported to be useful as it helped health services ascertain how they were performing and highlighted areas for improvement in terms of recruitment and retention. Top ten important factors across all 50 factors for recruitment and retention of rural GPs were spousal satisfaction, call/practice coverage, hospital leadership, perception of quality, adequacy of schools, employment status, nursing workforce, internet access, GP workforce stability, and physical plant and equipment.

Veitch C, Grant M. Community involvement in medical practitioner recruitment and retention: reflections on experience. Rural Remote Health. 2004;4(2):261.	Queensland, Australia	This article is a reflection on the authors' experiences of working with rural and remote communities in Queensland, Australia, with the key purpose of facilitating active community involvement in the recruitment and retention of medical practitioners. Particular focus is given to the barriers and opportunities to community involvement, and working with other agencies.	Problems of insufficient medical practitioners in rural areas and the associated issues of recruitment and retention are universal. Rural communities can play an important role in the recruitment and retention of health professionals, particularly in terms of aiding the integration of health professionals and their families into the community.	Reflection	 Community involvement in healthcare planning must be active, have goals that are achievable in the short and long term and outcomes that are sustainable. Healthcare planning agencies must take care to avoid setting unrealistic expectations and to ensure that engagement with communities is consistent, forthright, honest, and seen through to whatever conclusion.
Veitch C, Harte J, Hays R, Pashen D,	North Queensland,	 To assist two North Queensland 	To apply an approach to recruitment and retention	Case Study	• Rural and remote communities can play important roles in the recruitment and
Clark S.	Australia	communities, each	which has proved		retention of health care practitioners.
Community		with poor	successful in North		• A community facilitation process to
participation in the		recruitment and	America to two		involve rural communities in planning for,
recruitment and		retention histories,	communities in North		and recruiting and retaining health care
retention of rural	1				

doctors: methodological and logistical consideration. Aust J Rural Health. 1999;7:206-11.		broadly based community action plan. • To explore how communities could work with government and the medical profession in order to improve recruitment and retention.	the Australian context); and more broadly, to explore the role that communities can play in GP recruitment and retention. Note, the underlying philosophy was that each community shared responsibility for finding solutions to local problems and that locally supported solutions were better than imposed solutions. Distribution of rural healthcare practitioners is insufficient and difficult to predict. Not enough is known about how communities can improve recruitment and retention of doctors in the		for rural communities, government, Divisions of General Practice and academic institutions to work together to recruit and retain medical practitioners. • The participating communities identified common strategies to improve their recruitment and retention, suggesting their wider applicability.
Wakerman J, Humphreys J, Wells R, Kuipers P, Jones J, Entwistle P, et al. Features of effective primary health care models in rural and remote Australia: a case-	Australia	To describe the factors and processes that facilitate or inhibit implementation, sustainability and generalization of effective models of primary health	 Australian setting. Approximately one third of Australians live outside of major cities, many of whom live in remote communities with fewer than 5,000 residents. Many of these rural inhabitants face health access and health 	Case Study	• Analysis confirmed the usefulness of a conceptual framework, which identified three key "environmental enablers" (supportive policy, federal and state/ territory relations, and community readiness) and five essential service requirements (governance, management and leadership, funding, linkages, infrastructure, and workforce supply).

study analysis.	care (PHC) service	outcome disadvantages	Systematically addressing each of these
Med Journ Aust.	delivery in rural	compared with their urban	factors improves the effectiveness of and
2009;191(2):88-	and remote	counterparts.	lessens the threat to public health care
91.	Australia.	 There is insufficient 	services.
		empirical evidence to	There is a need for improved governance,
		account for the failure of	management, and community involvement
		implementation of rural	as well as strong, visionary political
		health policy, the lack of	leadership to achieve a more responsive
		sustainability of rural	and better-coordinated health system.
		primary health care	
		services, and the failure to	
		generalize successful	
		programs in rural and	
		remote Australia.	

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