

SCREENING TOOL FOR ACCESS TO HEALTHCARE IN RURAL COMMUNITIES

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Abstract

Residents of rural communities experience unique barriers to accessing healthcare. By assessing patients for these barriers, it can inform providers in ways they can mitigate these challenges and improve healthcare access. A literature review was conducted examining these barriers, and the findings were categorized into five main themes including geography, financial, availability, quality and cultural. The challenges within each of these were used to inform the development of a screening tool in the form of a questionnaire that can be implemented by healthcare providers to assess a patient's barriers they may be experiencing accessing healthcare in the rural context. Readily available resources and solutions were also discussed and incorporated into the tool to provide ideas for potential strategies to address some of these barriers. The use of this screening tool will ensure a thorough assessment of rural access barriers, enhance provider knowledge of these challenges, and facilitate provider-patient discussion about solutions and resources available to address them.

Keywords: rural, remote, barriers, healthcare, access, accessibility.

Introduction

Equitable healthcare access is one of the founding principles of the Canadian healthcare system (Canada Health Act, 1985). Despite this, there are significant disparities in healthcare access amongst rural Canadian communities (Bilbey, N., & Lalani, 2011; Health Canada, 2001; Nair et al., 2016; Regan & Wong, 2009; Wilson et al., 2020). Although this issue is well known at both the federal and provincial levels of healthcare, rural areas still continue to experience unique barriers that impose challenges to accessing healthcare (Wilson et al., 2020). As we wait for healthcare reform to continue to make improvements in addressing rural healthcare needs, in the meantime, healthcare providers in these communities need to have better tools and supports to help their patients overcome the barriers they are experiencing in obtaining health services.

Currently, there is no formal tool or standardized approach to assessing rural patient's barriers to accessing healthcare. A literature review was conducted to identify these barriers, with the findings being categorized into five main themes including geography, financial, availability, accessibility and cultural. The challenges within each of these were used to develop a streamlined tool that can screen the degree of accessibility and identify specific barriers that a patient is experiencing, allowing for interventions to be specifically tailored to addressing their needs, with the goal of improving their ability to access healthcare. Furthermore, the literature review extended to include potential readily available solutions to some of these barriers, with the purpose of providing resources and ideas for providers in ways to mitigate the identified barriers for their patients.

The role of the nurse practitioner and its implications to the findings of the literature review will also be discussed. A nurse practitioner bridges the empathy, holism and compassion of a nurse with the ability to provide comprehensive care through assessing, diagnosing,

managing illnesses, ordering/interpreting diagnostics, initiating referrals, educating and counselling. Nurse practitioners are an essential component of improving primary care access especially in rural, underserved communities.

This project will improve and increase awareness of healthcare accessibility for rural populations. It will help to identify barriers that patients are experiencing obtaining healthcare and aid in the healthcare provider's assessment in order to tailor solutions and resources to their patient's specific needs. In addition to increased awareness, the project will help address some of the inequities in rural healthcare access. By developing this screening tool, it can be easily incorporated as a routine assessment in the primary care setting as well as help providers identify what resources there are available within the community to address the issues. It will also bring attention to critical and common barriers that may have minimal solutions currently available and require further attention. By improving healthcare access within these communities it will reduce the inequities in health delivery that these residents currently face.

Description of the Problem

The rural context poses unique challenges that impede the ability to obtain healthcare. In Canada, several studies have demonstrated that rural populations have lower health status than their urban counterparts (Herbert, 2007; Subedi et al., 2019; Wilson et al., 2020). Rural populations experience a higher burden from chronic diseases and have overall increased mortality compared to urban areas, which further suggests the disproportionate access to healthcare between urban and rural (Canadian Institute for Health Information, 2012; DesMeules et al., 2006). With approximately one fifth (19%) of Canadians residing in rural areas, it is critical to investigate the barriers these individuals face accessing healthcare in order to identify strategies for reducing these inequities (Statistics Canada, 2011).

The purpose of this project is to develop a screening tool that will assess common barriers to accessing healthcare within rural populations. The goals of this project are to improve assessment and identification of these barriers within the primary care setting in order for healthcare providers to offer solutions and resources to improve their ability to obtain healthcare based on their specific needs.

The Health Belief Model will be used to guide the development of this tool (Jones et al., 2015). This model is based on the premise that individuals will change a health behavior based on six constructs: perceived susceptibility, perceived risk, benefits to action, and barriers to action, self-efficacy, and cues to action (Jones et al., 2015). The development of this screening tool will focus on the barriers to action construct of the model, and how assessing barriers will allow for potential solutions and resources to be tailored to the patients specific needs.

Literature Review

Search Strategy

A systematic search was conducted using the databases Cumulative Index of Nursing and Allied Health Literature (CINAHL) and Google Scholar. Search parameters were set to include articles within the last 10 years and in English. A variety of combinations of keywords and subject headings were used including: “rural OR remote”, “barrier* OR challenge* OR obstacle*”, “health OR healthcare OR health care”, “access OR accessibility”. The titles of articles were initially reviewed, looking for relevance to the topic. From the apparent relevant articles, abstracts were skimmed and then if appropriate, the entire article was reviewed. From articles selected in this search, references used in these articles were also reviewed and several were selected from this process as well. I also utilized Google search engine to find resources on the internet including webpages from the government and health authorities.

Rurality

The rural context poses significant barriers that create challenges for residents in accessing health care. A thorough literature review of these barriers as well as potential solutions to some of these challenges was conducted. The findings were categorized into five main categories including geography, affordability, availability, quality and cultural.

An important concept that requires articulation before evaluating these challenges is how the rural environment is defined. Rurality is a dynamic term that can be considered on a continuum, from remote northern communities that may be only accessible by boat or plane to larger rural communities that are a considerable distance to urban areas. For the purpose of this research, rural areas will be defined broadly and will include a range of contexts from small towns to isolated communities/areas, where the individual(s) identify their geographic location as a barrier to accessing healthcare (K. A. Campbell et al., 2019).

Geography

Distance

Firstly, the most apparent and possibly most significant barrier to rural healthcare is the ability to physically access healthcare services (Brundisini et al., 2013; Buzza et al., 2011; Douthit et al., 2015; Mattson, 2011; Nair et al., 2016; Regan & Wong, 2009). Rural populations are required to travel further distances to obtain health services, especially with respect to specialty services (Douthit et al., 2015; Mattson, 2011). Several studies found a correlation between distance to services and usage known as the “distance decay” effect, in which the farther people live from services, the less likely they are to use them (Douthit et al., 2015; Regan & Wong, 2009).

The causes of these geography barriers are multi-factorial, and overlap with the other categories of barriers. Firstly, the inherent nature of rural areas with less dense populations and vast land access makes for homes and businesses to be more spaced, resulting in farther travel distances to any types of services. Although this is a concept somewhat expected when moving or residing in a rural area, the issue is confounded by the lack of services available rurally and financial burden incurred to travel these distances. The sparsity of services, especially specialty services, in rural communities results in residents traveling far distances often to urban centres where this is available (Buzza et al., 2011; Douthit et al., 2015; Nair et al., 2016).

Weather

Another major concern with the geography of the rural environment is the safety of travel in more extreme climates (Brundisini et al., 2013; Nair et al., 2016; Regan & Wong, 2009). Weather is often a barrier for rural residents especially in the winter, where road conditions can become dangerous. This coupled with the farther travel distances required can often result in people not being able to reach the services they need (Brundisini et al., 2013; Nair et al., 2016; Regan & Wong, 2009). In more remote northern communities, travel may be only be via plane or boat, resulting in access to these areas being subject to weather conditions (Huot et al., 2019). These climates often experience very extreme winters, resulting in limited access for sometimes several months at a time (Huot et al., 2019). Travel safety also concerns the quality of roads, which were noted by several studies as often in poor condition in rural communities and made travel even more challenging (Mattson, 2011; Nair et al., 2016).

Transportation

The geography barriers outlined are amplified by the limited public transportation options available in rural communities (Brundisini et al., 2013; Hansen et al., 2020; Regan & Wong,

2009). As a result, access to a personal vehicle is considered a necessity in rural areas for transportation, and lack thereof serves as a significant barrier to health services (Brundisini et al., 2013; Hansen et al., 2020). This issue most significantly affects the older adult population, who with increasing age and declining health, eventually are unable or limited in their ability to drive, and consequently become reliant on other modes of transportation (Hansen et al., 2020). Those that do not have access to a personal vehicle or are unable to drive due to old age or health concerns, often rely on friends or family to access health services (Brundisini et al., 2013). The lack of alternative transportation options in rural communities results in driving cessation having significant impact on rural residents overall quality of life, and significantly impairs the ability to access healthcare (Hansen et al., 2020). Moreover, the ability to drive for the elderly in these communities would be further exacerbated by the previously discussed geography barriers including longer travel distances, road safety and weather.

Financial

In evaluating economic barriers to healthcare for rural communities, it is essential to highlight the financial disparities in rural versus urban areas. Rural areas have lower income rates, higher rates of poverty and less job availability compared to their urban counterparts (Bolin et al., 2015; Singh, 2002). Poverty is a well-known risk factor for poor health outcomes, which, coupled with decreased job access, is a predictor for mental and physical health issues (Bolin et al., 2015).

Travel

The economic barriers to rural healthcare are intertwined with the geographic barriers previously outlined. In rural communities, there are larger geographic barriers to overcome due to the sparsity and greater travel distances between resources, resulting in these individuals

incurring greater financial burden to access healthcare (Evans et al., 2013; Regan & Wong, 2009; Rocque et al., 2019; Syed et al., 2013). Some of the extraneous costs associated with this travel include time off work, childcare, overnight stays and gas (Buzza et al., 2011; Regan & Wong, 2009). In a study by Regan and Wong (2009) examining rural patient experiences accessing healthcare in British Columbia, several patients described their inability to obtain specialist care in regional centres such as Vancouver, due to the high cost associated with such travel. The costs associated with accessing distant services can also result in individuals traveling alone, without their family or friends (BC Ministry of Health, 2007). This can incur stress, feelings of isolation, and lack of support for the patient, as well as for the family.

Prescriptions

Although Canada's healthcare system prides itself on universal inclusion and affordability to all, unfortunately, rural Canadian's are found to have less drug insurance coverage compared to their urban counterparts (D. J. Campbell et al., 2014; Hajizadeh & Edmonds, 2020; Kapur & Basu, 2005; Mathews et al., 2009). Consequently, rural residents also experience a higher burden as a result of lower drug coverage (Kapur & Basu, 2005). Campbell et al. (2014) suggest potential reasons for the lack of coverage, citing that rural residents tend to be self-employed or work for small businesses that do not offer drug insurance.

Availability

Providers and Services

It is well known that rural communities have decreased availability of all forms of healthcare services (Bolin et al., 2015; Bouldin et al., 2018; Brems et al., 2006; Brundisini et al., 2013; Douthit et al., 2015; Regan & Wong, 2009). There are limited healthcare providers, specialists, hospitals, diagnostics, clinics, long term care facilities and rehabilitation centres

available in rural areas (Bouldin et al., 2018; Brundisini et al., 2013; Douthit et al., 2015; Regan & Wong, 2009). This is a major factor in the necessity of travel to access services, as rural residents are forced to travel long distances to obtain the services lacking in their own community. Recruitment and retention issues are some of the main reasons for this (Fleming & Sinnot, 2018). Fleming and Sinnot (2018) discuss the Canadian physician shortage, citing that only 9.3% of physicians practice in rural areas. There are many factors that have been documented as reasons for recruitment and retention problems, some of which include lack of supportive resources, limited career advancement opportunities, reduced opportunities for children's education and less employment options for spouses (Charbonneau, 2018; Fleming & Sinnot, 2018). The lack of providers extends beyond just physicians and includes practitioners of all forms such as nurse practitioners, dentists and pharmacists (Bolin et al., 2015). It is all members of the healthcare continuum that contribute to maintaining optimal health, and consequently rural communities suffer poorer health outcomes as a result of decreased access to these services (Buote et al., 2019; Romanow, 2002).

Specialists

As mentioned, the lack of healthcare services and providers includes a significant lack of specialists in rural areas (Bolin et al., 2015; Huot et al., 2019; Nair et al., 2016; Regan & Wong, 2009). Specialty care plays a vital role in disease management, and lack thereof can have serious outcomes on disease progression. Brundisini and Argáez (2019) discuss the impact of this within the context of breast cancer treatment, stating that rural residents who are required to travel to access radiation or chemotherapy services may be more likely to choose mastectomy surgery at early cancer stages to avoid the extensive travel involved to access the other forms of treatment. Nair et al. (2016) examine this similar effect on rheumatoid arthritis patients in rural

Saskatchewan, citing that lack of rheumatologists available resulted in longer wait times for an initial assessment and consequently delayed initiation of disease-modifying antirheumatic treatment. Some rural communities are fortunate enough to have access to traveling specialists that may visit monthly, however, often those requiring frequent assessments/follow-up this may not be often enough to ensure optimal disease management (Regan & Wong, 2009).

Quality

Timely Care

The ability to access healthcare services within a timely manner has been identified as an area of necessary political reform with regards to meeting the accessibility principle in the Canada Health Act (Kirby, 2002). Evaluating the barriers thus far, it is clear that timely access to healthcare is lacking significantly for rural residents. Regan and Wong (2009) discuss the impact of lack of timely access to appropriate services and diagnostics, providing several patient experiences where they had long travel times to obtain their needed service or choose to go without as the barriers to access were too significant. The lack of timely access displays one of the many health inequities rural residents face compared to their urban counterparts.

Continuity

The lack of services and providers available in rural areas results in poor continuity of care (Brundisini et al., 2013; Regan & Wong, 2009). High turnover of primary care providers in rural communities is a major factor contributing to this issue (Reddy et al., 2015; Regan & Wong, 2009). Some rural communities rely on locums to fill this gap, who are often short term and continuously revolving (Regan & Wong, 2009). This ultimately results in fragmentation of care, and creates challenges for these residents in building a therapeutic relationship with their primary care provider (Reddy et al., 2015; Regan & Wong, 2009). Brundisini et al. (2013) also

discusses the rural patient experience regarding continuous referrals between rural and urban providers, and the powerless feeling that patients often experience while navigating the healthcare system. Evidence supports increased continuity of care as having improved quality of care and lower mortality rates (Cabana & Jee, 2004; Gray et al., 2018). Therefore, lack thereof for rural residents displays another health inequity resulting in contributing to poorer health outcomes that this population faces.

Cultural

Resilience and Privacy

Living in a rural community is a different way of life, which is the reason most seek living in these areas. Hence, it is understandable that rural residents adapt their own set of rural cultural norms that can influence their ability to access healthcare. The quality of self-reliance is a commonality shared amongst most rural residents (Brundisini et al., 2013; Gessert et al., 2015; Page-Carruth et al., 2014; Thomlinson et al., 2004). Although very much a positive attribute that is understandably necessary to reside in a rural area, this trait can indirectly inhibit access to healthcare in several ways (Brundisini et al., 2013; Page-Carruth et al., 2014). Firstly, this leads many residents to be less likely to seek healthcare, especially when perceived as far away or many barriers to access (Brundisini et al., 2013; Gessert et al., 2015). There is an enhanced sense of community belonging within rural areas, which makes for residents to be more likely to take care of themselves and others (Brundisini et al., 2013). Additionally, the nature of rural communities being small and close-knit, creates challenges for patients with confidentiality and privacy (Brems et al., 2006; Douthit et al., 2015; Gessert et al., 2015; Page-Carruth et al., 2014). This serves as a barrier to accessing healthcare, as several studies noted that rural patients were reluctant to seek care due to fear that their confidentiality will be breached (Brems et al., 2006;

Douthit et al., 2015). In a review by Gessert et al. (2015), this was identified as particularly impacting utilization and attitudes about mental health care in rural areas. The intimacy of rural communities creates an environment that poses challenges in maintaining privacy, this coupled with enhanced stigmatization about mental health in rural areas, results in less access to these services (Gessert et al., 2015). Several studies cited rural residents as less likely to participate in preventative health measures and chronic care management compared to their urban counterparts, likely due to these differing health beliefs (Gessert et al., 2015; Page-Carruth et al., 2014; Thomlinson et al., 2004).

Potential Solutions

It is very evident that the root cause of many of these barriers requires significant systemic change through political reform and stakeholder involvement, which is timely and costly. The issues discussed have been well documented in literature, as well as at the provincial and federal levels of the Canadian government. With this in consideration, solutions outlined within this review were focused on those that are currently available and can be implemented for residents immediately or require minimal effort/government involvement to implement. All solutions may not be available in every rural community, but this discussion will create the foundation for future solutions for those communities that are lacking or ideas for solutions that can be adapted to a community's available resources.

Transport

Improved public transportation for rural communities is the one of the hallmarks of addressing the geography barrier. Although public transportation options are limited in rural Canadian communities, there are some services that have been implemented that offer solution to some of these geography challenges. In British Columbia, BC Transit offers services in many

rural communities such as handyDART, shuttle services to larger centres as well as custom rural transit (BC Transit, 2020). By providing more transportation options, this will increase accessibility for those who cannot drive or do not have access to a vehicle, as well as improve safety of travel by providing an option for those who may struggle to drive themselves in unsafe conditions (Regan & Wong, 2009). Regan and Wong (2009) discuss another transportation option, identifying that the BC Northern Health Authority operates the North Health Connections, which is a low cost, handicap accessible bus service that northern British Columbia residents can utilize to access health services and medical appointments (Northern Health Connections, 2019). The Northern Health Connections website also outlines a list of travel alternatives varying based on region in British Columbia (Northern Health Connections, 2021).

Subsidies

Many provinces/territories across Canada offer some form of travel subsidy program for residents that are required to travel to access healthcare (Mathews & Ryan, 2017). Mathews and Ryan (2017) conducted a review comparing travel subsidy programs across each province and territory, concluding that the majority of these reimbursed patients after they had paid. They also found that application and approval for these programs was a timely process that requires extensive documentation and referrals (Mathews & Ryan, 2017). A suggestion to aid patients in this process is to utilize an interdisciplinary approach and utilize a social worker to provide assistance (Smith et al., 2014). In British Columbia, there are a variety of programs that provide both travel and accommodation assistance (BC Ministry of Health, 2020).

Financial assistance also extends to prescription coverage programs, typically offered through the provincial government (Government of Canada, 2017). For example, in British Columbia, the Fair Pharmacare program covers the cost of certain prescription drugs, medical

devices, dispensing fees and services offered through the pharmacy (BC Ministry of Health, 2021). The eligibility criteria differ based on the specific program, however it is important to educate patients on these resources available and encourage them to register if eligible.

Community Organizations

The involvement of charitable and community organizations in mitigating barriers for rural residents is an essential element of improving access (Mathews & Ryan, 2017). Although the availability of such services varies widely based on location, it is important for healthcare providers to know what services are available within the community. Examples of such include volunteer driving programs, delivery services (grocery, prescriptions), financial donation and accommodations. Integrating available community resources and providing education for rural residents on what is available to them is an essential component of reducing barriers to healthcare.

Telehealth

Rural areas across Canada have been using telemedicine as a staple to provide improved healthcare long before the recent uptake in telemedicine globally due to COVID-19 (Nasser & Chen, 2014). The use of telemedicine improves healthcare accessibility in rural communities by addressing several barriers. Firstly, it allows for these residents to obtain care without the burden of excessive travel (Mathews & Ryan, 2017). In addition, it improves quality of care by enhancing healthcare provider follow up especially for chronic disease management where patients may not have been seen as often otherwise (Wherton et al., 2020). Telemedicine also drastically improves access to specialty care that may not be available rurally or would require travel to obtain (Douthit et al., 2015).

Telemedicine also extends to providers, in the form of consultations for patient management. The RACE (Rapid Access to Consultation Expertise) line in British Columbia is an excellent example of this (Providence Health Care et al., 2021). The RACE line is a telephone specialist consultation service available to family physicians and nurse practitioners in British Columbia, where primary care providers can phone a specialist to obtain advice and guidance in a timely manner (Providence Health Care et al., 2021). This type of service can aid in supporting rural practitioners as well as potentially avoid unnecessary travel for patients to see specialists in person.

Integrating telemedicine in rural communities also improves the quality of care that these residents receive (Jong et al., 2019). Jong et al. (2019) discuss a variety of telemedicine uses in remote communities including the implementation of video conference support during advanced life saving measures, the use robotic ultrasound technology and video triaging. Ensuring access to reliable internet is a necessity of successful implementation of telehealth. This need has been identified by the Canadian government, and a variety of initiatives and committees have been put in place in order to address this (Standing Committee on Industry Science and Technology, 2018). In 2019, the Government of Canada allotted significant funding to support improved internet connection in rural and remote communities, which has been gradually distributed to communities in need to address their connectivity issues (Government of Canada, 2019).

Telehealth is an excellent tool to improve access to rural and remote communities; however, there are other implementation challenges aside from internet access that need to be considered by providers when incorporating this in their practice. The use of technology may require education to the patient, especially for older adults who may lack fine motor skills or are unfamiliar with the use of such technology (Foster & Sethares, 2014). In addition, the access to

video/internet capable devices needs to be assessed before integration as well. The use of telephone may be an effective alternative for such cases.

Group Medical Visits

Group medical visits are a health delivery model where multiple patients with the same disease meet with one provider at a single time (Housden et al., 2013; Regan & Wong, 2009; Wong et al., 2015). They have been implemented in the last decade as a means to improve access to care in a timely manner (Thompson-Lastad, 2018; Wong et al., 2015). These are especially effective for those requiring chronic disease management, where the group format enhances patient education while also allowing for peer support (Regan & Wong, 2009; Thompson-Lastad, 2018; Wong et al., 2015). Initiating such programs in rural communities can not only improve access to care, but also help foster a network of connectedness amongst patients with common health issues. This could help address other barriers as patients may share resources they are utilizing to access care, or help each other overcome challenges such as transportation through carpooling.

Description of the Screening Tool

The screening tool (see Appendix A) was developed based on the five identified categories of barriers to accessing healthcare in rural communities, and the challenges within each of these barriers. Questions were developed to reflect key challenges identified within each of these categories, with the premise of generating conversation with the health care provider about issues the patient is experiencing obtaining healthcare in rural communities.

The Health Belief Model was used to guide the development of this tool, focusing on the barriers to action construct of the model (Jones et al., 2015). This model identifies perceived barriers as a predictor of health behavior, which consequently can have a negative impact on

health outcomes if such barriers are present (Jones et al., 2015). This created the foundation for this screening tool, whereby evaluating barriers rural residents are experiencing, potential solutions can be offered, improving access to care and ultimately health outcomes.

Suggested solutions were also included in the screening tool (see Appendix B), in order to aid providers in offering some potential readily available resources that can be used to mitigate their patient's barriers. As mentioned in the literature review, it is recognized that many of the challenges identified in this review require systemic political reform; however, I wanted to provide solutions that were potentially already available and could be implemented more immediately.

This tool was developed to provide a guide to primary care providers in rural communities in order to screen for barriers their patients may be experiencing accessing healthcare and offer potential solutions to such challenges. Although it is not an exhaustive screen, it focuses on the common issues identified in literature that rural residents face when accessing healthcare.

Implications for the Nurse Practitioner Role

Nurse practitioners are an integral component of healthcare, and improve access as primary care providers. Historically, the first nurse practitioners in Canada were primarily utilized to mitigate the family physician shortage in rural areas (Kaasalainen et al., 2010). Since these pioneer nurse practitioners, the role has grown immensely, expanding into more urban and acute positions across Canada. Despite this excellent and necessary growth of the role, the use of nurse practitioners in bridging the primary care gap in rural areas is still an essential element of improving rural healthcare access. In evaluating the findings of the literature review, the lack of providers in rural communities can be addressed with the continued utilization of nurse

practitioners in rural and remote communities. However, as the nurse practitioner role continues to grow, the need and availability of jobs in metropolitan centres has correspondingly risen. This increased demand spreading to urban areas contributes to the initial problem that ignited the nurse practitioner role, lack of primary care providers in rural communities.

The importance and impact of nurse practitioners on healthcare access has been demonstrated through the growing demand of the role across both acute and primary healthcare. Nurse practitioners serve an essential part in increasing the availability of primary care providers in rural communities and hence are an instrumental component of improving rural accessibility. As this growth in nurse practitioner demand continues, strategies to recruit and retain nurse practitioners into rural communities are necessary in order to continue to reduce access barriers for rural communities.

Limitations

It is important to acknowledge the limitations of this discussion and project. The literature utilized was mainly Canadian sources, which may influence the transferability of the tool in other countries. One main impact of this may be within the financial barriers assessment, which the tool assumes universal healthcare coverage as there is in Canada. However, the financial barriers may be more significant where this is not the model and individuals are more reliant on insurance coverage to afford healthcare. In addition, examples for the resources were based in British Columbia, and as mentioned in the discussion, may vary significantly based on geographic region.

Conclusion

The rural context serves as a population that experiences unique challenges that impede the ability to obtain and access healthcare. Although these challenges are well documented in

literature, there is still much reform required at the political and systemic levels of healthcare in order to ensure these health disparities are resolved.

The barriers that impede access to healthcare for rural residents were identified in an exhaustive literature review. These were categorized into five main themes including geography, financial, availability, accessibility and cultural. Significant issues within each of these categories were further identified, outlining the numerous challenges that rural communities face.

The development of this screening tool allows for healthcare providers to assess these barriers in their patients, and provide essential knowledge that will allow them to better understand the needs of their patients. By identifying their patient's unique challenges, resources and solutions can be implemented to mitigate these barriers and improve access. The inclusion of some readily available resources and solutions in the tool begins the thought process for providers on strategies that can be used to address some of these barriers for their patients.

In conclusion, the identification of barriers and issues within them is the first step in solving the problem of reduced access for rural areas. This project highlights the necessity of further research into solutions to these barriers, and strategies to improve rural healthcare access. As research, awareness and education continue on this critical issue, interventions and strategies can be implemented with the goal of reducing access inequities in rural populations.

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Appendix A

SCREENING TOOL FOR ACCESS TO HEALTHCARE IN RURAL COMMUNITIES
GEOGRAPHY _____
Has the distance to your healthcare provider or services ever kept you from attending an appointment?
What modes of transportation are required for you to access healthcare services? i.e. boat, ferry, plane, car, snow machine
Are there times of the year where the season does not allow you to safely travel? i.e. ice roads, seasonal airport/road
Do you have access to a vehicle? If yes, are you able to drive? If required, do you have a reliable person who can drive you?
What is the reliability of your road conditions if there is bad weather?

FINANCIAL

Do you have any financial barriers to attending healthcare services in your local community? (i.e. cost of gas, taxi, bus fare)

Do you have any financial barriers to attending healthcare services if required to travel to an appointment at an urban centre (i.e. Vancouver)? For example, cost of transportation and accommodation.

Are you able to take time away from work if required to attend healthcare services?

If you are a primary caregiver for dependants (i.e. children, spouse), are you able afford/arrange alternative support if you are required to travel far to attend healthcare services?

Do you have extended benefits that cover prescription medications?

AVAILABILITY

Do you have a primary care provider?

Do you require a healthcare service that is not available in your community? i.e. cancer care, specialists, physiotherapy, mental health services

QUALITY

Are you able to see your primary care provider in a timely manner?

Do you see the same primary care provider at each visit?

Have you ever had a negative health outcome because you had to wait too long to access a healthcare service?

If you are receiving healthcare services outside your local community, do you feel there is clear communication between yourself, your local primary care provider and these outside services?

CULTURAL

Have you ever not obtained a healthcare service because you are worried that your privacy will be compromised? i.e. attending an AA meeting, mental health treatment, family planning

How often do you see your primary care provider? Do you follow their recommendations for follow up visits?

Are you up to date with your age appropriate health maintenance screening? i.e. pap smear, mammograms, FIT testing, prostate exam, annual bloodwork

ADDITIONAL COMMENTS

If applicable, please include any additional comments about barriers or challenges you have or currently are experiencing obtaining healthcare.

Appendix B

Suggested Resources and Strategies

- Transport:
 - Local bus service i.e. Translink, handyDART
 - Northern Health Connections bus
 - Other transport services in BC:
 - <https://nhconnections.ca/travel-alternatives>
- Subsidy Programs:
 - BC Fair Pharmacare – prescription drug coverage
 - BC Travel and Accommodation Assistance programs:
 - <https://www2.gov.bc.ca/gov/content/health/accessing-health-care/tap-bc>
- Community Organizations:
 - Volunteer driving programs
 - Grocery/prescription delivery programs
 - Senior care programs
- Telehealth:
 - Consider for all patients with access to internet and/or telephone, screen for patient education needs
 - BC RACE line – specialist consultation for providers
- Group Medical Visits:
 - Multiple patients with same chronic disease meeting with one provider at a single time
 - Enhances access to care as well as allows for peer support
 - Discuss with practice group if implementation of group medical visits is an option
- Add resources specific to your community/practice region*

Appendix C

SCREENING TOOL FOR ACCESS TO HEALTHCARE IN RURAL COMMUNITIES

MN-NP Culminating Project
 Emily Warren BSc(Kin), BSN, ENC(C)
 UBC School of Nursing



Introduction

Residents of rural communities experience unique barriers to accessing healthcare. By assessing patients for these barriers, it can inform providers in ways they can mitigate these challenges and improve healthcare access. A literature review was conducted examining these barriers, and the findings were categorized into five main themes including geography, financial, availability, quality and cultural. The challenges within each of these were used to inform the development of a screening tool in the form of a questionnaire that can be implemented by healthcare providers to assess a patient's barriers they may be experiencing accessing healthcare in the rural context. Readily available resources and solutions were also incorporated into the tool to provide ideas for potential strategies to address some of these barriers.

Barriers

- Geography**
 - Long distances to services
 - Poor weather
 - Lack of transportation
- Financial**
 - Cost of travel and prescriptions
- Availability**
 - Limited providers, services and specialists
- Quality**
 - Lack of timely access to care
 - Poor continuity of care
- Cultural**
 - Quality of self-resilience
 - Challenges maintaining privacy

Nurse Practitioner Implications

Nurse practitioners play an essential role in bridging the primary care gap in rural areas and improving rural healthcare access. The lack of providers in rural communities can be addressed with the continued utilization of nurse practitioners in rural and remote communities. However, as the nurse practitioner role continues to grow, the need and availability of jobs in metropolitan centers has correspondingly risen. This increased demand spreading to urban areas contributes to the lack of primary care providers in rural communities. As this growth in nurse practitioner demand continues, strategies to recruit and retain nurse practitioners into rural communities are necessary in order to continue to reduce access barriers for rural communities.

Solutions

- Solutions were focused on those that are currently available and can be implemented for residents immediately.
- Transport**
 - Public transportation, handyDART and BC Northern Connections bus
 - Subsidies**
 - Government travel subsidies, Fair Pharmicare
 - Community Organizations**
 - Volunteer driving, delivery services, financial donation, accommodations
 - Telehealth**
 - Video and phone consultations, RACE line
 - Group Medical Visits**
 - Multiple patients with the same disease meet with one provider at a single time

Screening Tool

First Page of Screening Tool – Geography

SCREENING TOOL FOR ACCESS TO HEALTHCARE IN RURAL COMMUNITIES

GEOGRAPHY

Are the distances to your healthcare provider or services one that you find stressful or a barrier?

What modes of transportation are required for you to access healthcare services (i.e. bank, bank, store, etc. on your route)?

Are there times of the year where the access does not allow you to safely travel (i.e. no roads, seasonal weather)?

Do you have access to a vehicle? If yes, are you able to drive? If required, do you have a valid license which allows you to?

What is the availability of your transportation if there is bad weather?

Resources and Strategies Page

- Suggested Resources and Strategies**
- Transport
 - Local bus services (i.e. Transit, handyDART)
 - Northern Health Connections bus
 - Other transport services in BC
 - <https://www2.gov.bc.ca/gov/content/health/health-care/transportation>
 - Subsidy Programs
 - BC Fair Pharmicare – prescription drug coverage
 - BC Travel and Accommodation Expenses program
 - <https://www2.gov.bc.ca/gov/content/health/health-care/transportation>
 - Community Organizations
 - Volunteer driving programs
 - Shared vehicle services programs
 - Senior care programs
 - Available
 - Consider for all patients with access to internet and/or telephone, access for patient education needs
 - ACMEC has – assisted consultation for providers
 - Service Provider Visits
 - Invite patients with same chronic disease meeting with one provider at a single time
 - Patients access to visit in office for group support
 - Discuss with practice group/implementation of group medical visits as a solution
 - Add resources specific to your community/practice region?

Limitations

The literature utilized was mainly Canadian sources, which may influence the transferability of the tool in other countries. One main impact of this may be within the financial barriers assessment, which the tool assumes universal healthcare coverage as there is in Canada. However, the financial barriers may be more significant where this is not the model and individuals are more reliant on insurance coverage to afford healthcare. In addition, examples for the resources were based in British Columbia, and as mentioned in the discussion, may vary significantly based on geographic region.

Conclusion

The development of this tool allows for the healthcare provider to identify their patient's unique challenges to accessing healthcare and implement solutions to mitigate these barriers and improve access. The identification of barriers and issues within them is the first step in solving the problem of reduced access for rural areas. This project highlights the necessity of further research into solutions to these barriers, and strategies to improve rural healthcare access. As research, awareness and education continue on this critical issue, interventions and strategies can be implemented with the goal of reducing access inequities in rural populations.

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