



## Bridging the Rural-Urban Divide: The Role of Virtual Hallway in Improving Equitable Access to Specialist Care

### Introduction

Access to healthcare, particularly specialist care, continues to be a challenge for rural communities across the globe. In Canada and the United States, there are significantly fewer physicians and specialists per 100,000 people compared to urban areas<sup>1,2</sup>. This disparity often results in adverse health outcomes<sup>3</sup>, with rural patients experiencing higher rates of chronic diseases, preventable hospitalizations, and mortality. This paper discusses how Virtual Hallway (VH), a platform facilitating peer-to-peer phone consultations, can address this healthcare inequity, bridging the rural-urban divide and ensuring equitable access to specialist care.

### The Rural Healthcare Challenge

Providing patient care in rural areas is a crucial element of health service delivery, yet it is fraught with challenges. Rural patients are often required to choose between long waits for appointments at far-off clinics or forgoing specialty care altogether. Even when there are speciality providers in rural areas, there are often unpredictable gaps of coverage in internal medicine, surgical speciality services<sup>4</sup> and mental health services. This lack of system redundancy decreases the comprehensiveness of care and exacerbates service access gaps, often increasing the need for complex and costly patient transfers.

The rural-urban consultation process, a vital pathway for sharing information and determining clinical management, is also fraught with difficulties. Financial and social impacts of patient transfers, differences in communication style, unfamiliarity with resources in rural areas, and the existence of medical hierarchies can complicate the discourse. Furthermore, while some jurisdictions do not have billing codes that include telephone consultation<sup>4</sup>, jurisdictions with billing codes often have burdensome documentation requirements which disincentivize phone consultation.

**18% of Canadians live in rural communities, but are served by only 8% of Canadian physicians**

*I was struggling to get my patient in with a cardiologist in a timely manner. I used Virtual Hallway to talk to a specialist the next day. The advice I was given was very helpful and allowed me to optimize the patient's medication while she awaited the specialist consultation.*

-Family Physician

## The Virtual Hallway Solution

Virtual Hallway is a platform that facilitates phone consultations between primary care providers and specialists. By doing so, Virtual Hallway helps to mitigate geographical barriers in healthcare provision and democratizes access to specialty care. This phone consultation model not only offers flexibility, but also reduces the frequency of patient transfers, provides more timely care which in turn can lead to improved patient outcomes and total cost savings. Moreover, Virtual Hallway manages the documentation of calls and aligns with existing billing codes, which supports the compensation process for physicians. Collectively, these features contribute to an improved standard of patient care within the community and emphasize the significant role Virtual Hallway can play in addressing healthcare access disparities in rural areas.

## Evidence Supporting the Role of Virtual Hallway

### Referral Avoidance

Recent data collected from over 600 interactions on the Virtual Hallway platform provides compelling evidence supporting the transformative impact of VH on rural and urban healthcare. Respondents indicated that 84% of phone consultations through Virtual Hallway avoided the need for an in-person referral with the specialist<sup>5</sup>.

### Increasing Capacity in Rural Areas

A recent survey conducted by Nova Scotia Health of 89 primary care users of VH included approximately **43% of primary care providers from rural areas**. A large majority (95%) of primary care respondents either "strongly agreed" or "agreed" that Virtual Hallway increases access to specialist consultation. Similarly, 98% affirmed that access to VH boosts their capacity to manage care plans in their communities. An equally high percentage (98%) also reported that VH significantly enhances patient care and supports interprofessional communication, collaboration, and learning. These overwhelmingly positive responses demonstrate the platform's ability to address the key challenges faced by rural healthcare providers and highlight the potential to provide expert-driven insights to patients in their communities.

### Satisfaction

Moreover, the satisfaction rate among the users of the platform was notably high, with 99.4% reporting being "very satisfied" or "satisfied". This degree of satisfaction speaks volumes about the effectiveness of the platform in meeting the needs of its users, further corroborating the idea that VH is a viable solution to the rural healthcare conundrum.

**84%** of phone consults avoid the need for an in-person referral

**98%** of providers find that VH enhances patient care and boosts their capacity to manage care

## Conclusion

The disparities in healthcare between rural and urban areas have brought the need for equitable access to specialist healthcare to the forefront of discussions on health equity. With the introduction of innovative solutions like Virtual Hallway (VH), bridging this gap is one step closer. VH is not merely a platform for phone consultations between primary care providers and specialists; it's an essential tool that can effectively dismantle geographic barriers, allowing more streamlined and effective access to specialist care.

The importance of VH becomes more pronounced when considering that a remarkable 84% of phone consultations facilitated by VH negate the need for an in-person referral. This not only eliminates the waiting period for rural patients but also mitigates the need for potentially arduous travel to urban areas. Studies have shown that patients living in rural areas need to travel twice the distance of their urban counterparts.

Moreover, VH's utility is underscored by user feedback: the vast majority of VH users have reported an improved ability to manage care plans in their communities and attest to enhanced care provision as a direct result of using VH. Furthermore, the economic benefits of VH result from reducing time to and duration of the consultation process, reducing need for patient transfers and referrals, leading to more efficient healthcare delivery. Such efficiency reduces healthcare costs and contributes positively to patient outcomes by shortening wait times and expediting the commencement of treatment.

In conclusion, the incorporation of Virtual Hallway into rural healthcare represents a significant advancement in addressing healthcare disparities. Through its comprehensive services, Virtual Hallway redistributes the concentration of specialist resources typically seen in urban environments to rural areas, effectively smoothing the uneven healthcare landscape. By doing so, VH presents a viable solution to bridging the rural-urban divide and brings us closer to achieving equitable healthcare for all, irrespective of geographical location.

1. Johnston KJ, Wen H, Joynt Maddox KE. Lack Of Access To Specialists Associated With Mortality And Preventable Hospitalizations Of Rural Medicare Beneficiaries. *Health Aff (Millwood)*. 2019 Dec;38(12):1993-2002.
2. Pong RW, DesMeules M, Heng D, Lagacé C, Guernsey JR, Kazanjian A, Manuel D, Pitblado JR, Bollman R, Koren I, Dressler MP, Wang F, Luo W. Patterns of health services utilization in rural Canada. *Chronic Dis Inj Can*. 2011 Fall;31 Suppl 1:1-36.
3. Pong RW, Desmeules M, Lagacé C. Rural-urban disparities in health: how does Canada fare and how does Canada compare with Australia? *Aust J Rural Health*. 2009 Feb;17(1):58-64.
4. Wilson MM, Devasahayam AJ, Pollock NJ, Dubrowski A, Renouf T. Rural family physician perspectives on communication with urban specialists: a qualitative study. *BMJ Open*. 2021 May 13;11(5):e043470.
5. Nova Scotia Health. Over 84% of referrals facilitated by Virtual Hallway have allowed patients to avoid a wait list. 2022 Dec 13. <https://www.nshealth.ca/news/over-84-referrals-facilitated-virtual-hallway-have-allowed-patients-avoid-wait-list>
6. Karunanayake, C.P.; Rennie, D.C.; Hagel, L.; Lawson, J.; Janzen, B.; Pickett, W.; Dosman, J.A.; Pahwa, P.; The Saskatchewan Rural Health Study Group. Access to Specialist Care in Rural Saskatchewan: The Saskatchewan Rural Health Study. *Healthcare* 2015, 3, 84-99