# Addressing provider turnover to improve health outcomes in Nunavut

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unavut's health care system relies heavily on short-term locum physicians and nurses, many of whom come from outside the territory. Recruiting and retaining outside health care personnel is challenging in Nunavut, as in many remote regions in Canada. A recent analysis of data on physician contracts, conducted jointly for monitoring purposes by the Qaujigiartiit Health Research Centre and the Nunavut Department of Health, showed that in 2014-2016, more than half of the physicians working in Nunavut were on contracts for fewer than 20 days at a time.1 Evidence from other jurisdictions points to the negative impacts of high turnover of providers; however, studies of the impacts of a transient workforce on the quality of care in Nunavut are lacking. We discuss the drivers of poor retention of health workers in the territory, review the impacts of provider turnover on the quality of care and outline strategies to address it, including some of the initiatives currently underway in the territory.

### What are some drivers of poor retention of locum health workers in Nunavut?

Provision of health care in Nunavut (as in other circumpolar regions) poses unique challenges, as its 36 000 residents live in 25 communities spread across a vast landscape (2.2 million km<sup>2</sup>) with variable weather patterns. The Nunavut Department of Health is responsible for administering a range of hospital and primary care services defined as "insured services" under the Canada Health Act,<sup>2</sup> such as emergency care, public health, dental services and more, at no cost to all residents.3 Three of 25 communities in the territory — Iqaluit, Cambridge Bay and Rankin Inlet — have full-time physician positions, while smaller communities are serviced by physicians on a rotating clinic schedule. Twenty-two community-based clinics, staffed primarily by community health nurses (registered nurses working in an expanded scope of practice), offer primary care services. These are commonly known as community health centres and are built on the nursing station model established by the federal government in the 1950s. They deliver basic 24/7 emergency care, primary care and some public health services. 4,5 The role of family physicians is to support the community health nurses, either remotely by telephone, email and telehealth, or by visiting community clinic sites.

#### **KEY POINTS**

- Nunavut's health care system relies heavily on short-term locum providers, many of whom come from outside the territory.
- Accumulating data from other jurisdictions highlight the negative impacts of high turnover of providers on the quality of care, including the difficulty of ensuring culturally competent care.
- Strategies to develop a local or Indigenous workforce, train
  and hire Inuit or Northern nurses and physicians who would be
  more likely to stay long term in the territory, retain committed
  non-Inuit physicians who regularly return to or live in Nunavut,
  and offer adequate health system and cultural orientation to
  all health care professionals working in the territory would go
  a long way toward improving the situation.
- More research is needed on the impact of the turnover of health providers specifically in Nunavut, and on best practices and solutions to ensure quality care in high-transiency Northern communities.

A recent audit found that a broader scope of practice and an opportunity to discover the land and the culture of Nunavut motivate outside health care professionals to come to the territory, but the high cost of living, expensive travel, limited job opportunities for spouses, and working in isolated communities far from home are barriers to staying.<sup>6</sup> Further, the Nunavut Department of Health does not provide adequate orientation, training and support to personnel working in community health centres; recruitment of permanent non-physician staff was found to be ineffective and there was no up-to-date recruitment and retention strategy,<sup>6</sup> echoing other reports on human resource processes and recruitment.<sup>7</sup>The Department of Health continues to explore and pilot strategies to improve retention.

## What is the scale of the turnover of health care providers in Nunavut?

The Department of Health recently reviewed family physician service days at the Qikiqtani General Hospital in Iqaluit and in all the communities.<sup>8</sup> The smaller communities saw fewer different family physician service providers per year, which helped ensure

some continuity of care. For example, in Resolute (population 198), in 2017, 26 service days (planned according to the Nunavut model of care and based on a population of 200) were shared by 2 physicians, one of whom covered more than 80% of the service. In many of the larger communities, however, turnover of physicians was high. For example, in Pond Inlet (population 1617), 9 different physicians provided a total of 73 days of care. At the Qikiqtani General Hospital, 73 physicians (19 full-time and 54 locums) provided clinic service in 2017, with the total number of clinic days ranging from 0.5 to 47 per provider, which does not support continuity of care. The proportion of hospital service provided by full-time providers and locums varied between different departments: in obstetrics, locums provided only 1% of the service, compared with 51% in the emergency department and 62% in the hospitalist service. Analysis of the root cause of these disparities is ongoing.

Although there are no detailed data on nursing turnover in the territory, existing data on the nursing positions are sobering. In 2016, 43 (62%) of 69 community health nursing positions in Nunavut were vacant. In some regions, the vacancy rate was as high as 71%. The government relies on short-term contract agency nurses to fill these positions, which, in addition to affecting continuity of care, represents an important financial burden for the Government of Nunavut.<sup>7</sup>

# How does high turnover of health providers affect quality of care?

We could find no published studies detailing how high turnover of health care providers affects quality of care in Nunavut, but studies from other jurisdictions, including remote and Indigenous communities in Canada and Australia, have highlighted low patient satisfaction, poorer health outcomes, and effects on patient and community-provider relationships and communication within health care teams and organizations.

The need to repeat stories to each new provider is exhausting for patients and can become a deterrent to going to a health centre for follow-up. Illnesses may be exacerbated if patients disengage from treatment, which in turn adds to burden of care for family and community members. High turnover of nurses has been associated with increased rates of infection and hospital admission for infection, verlooked symptoms and prolonged length of patient stay, medical errors and compromised follow-up, such as failure to refill medication orders.

Mental health services and prevention programs are particularly affected by high turnover of providers. 10,15,16 As time is devoted to allowing new staff to familiarize themselves with the health care system and the community, health promotion programs may "get put on the shelf. 10 Lack of continuity in provision of mental health services may lead to critical symptoms being missed: "A relief nurse ... never has a total handle on the high-risk people ... who should be questioned further on their mental health status, [so] some things go out the door. 10

Respectful and trusting relationships constitute an important Inuit value and are essential for providing high-quality, community-centred care, <sup>17</sup> but these are difficult to maintain

when staff is constantly changing. Provider turnover can result in depersonalized services and lack of trust in the community. <sup>18</sup> Community members value having a stable provider whom they trust, <sup>19,20</sup> and establishing trusting relationships can improve patient engagement. <sup>21</sup>

Within health care teams and organizations, staff turnover represents additional training workload for professionals, inconsistencies in service provision<sup>18</sup> and lower levels of work group cohesion and coordination<sup>22</sup>; poor coordination of care and poor communication between multiple providers is one of the key risk factors for medication errors.<sup>14</sup> High turnover can also affect the morale and productivity of nurses who remain to provide care while new staff are hired and oriented.<sup>11,13,23</sup> Nurses and doctors may find it difficult to adapt to new social and work environments and many have poor work–life balance.<sup>24</sup> Culture shock and lack of cultural orientation impede productivity and communication with patients, and compromise provision of culturally competent care to the communities.<sup>10,25-27</sup>

### How can retention of the health care workforce in Nunavut be improved?

Use of contract personnel is beneficial in the short term to meet service goals to remote communities. However, this does not contribute to well-resourced local health care services. <sup>24</sup> Meeting nursing service requirements will require the use of short-term replacement or contract nurses in the immediate future. Given this situation, initiatives to improve quality of care in the current context of high turnover are important.

Adequate training and support, and especially orientation to the Nunavut health care system and cross-cultural training to provide culturally competent care, are much needed, as professionals who come from outside the territory have reported lack of such training and support.<sup>6,27</sup> Ongoing training of local translators (for instance, in medical terminology) is also necessary to ensure effective communication between patients and medical professionals from outside the territory who do not speak Inuktitut or Inuinnagtun.<sup>6</sup>

Poor patient follow-up resulting from constantly changing providers could be minimized with the use of electronic medical records, which can help coordinate care, referrals, diagnostic tests and prescription medications. The Department of Health is in the process of implementing such a system across Nunavut. It is an ongoing challenge to adapt systems designed for southern health care organizations that have excellent broadband connectivity to the High Arctic's small communities, which are dependent on low-bandwidth satellite connectivity.

In the middle to long term, training and hiring Inuit and Northern nurses who are interested in remaining to serve their communities would be the best strategy for strengthening community health services in Nunavut. In the Nunatsiavut region of Newfoundland and Labrador, 30 Inuit nurses have been registered over the past 30 years, as a result of several initiatives, including providing training close to students' home communities, designing culturally relevant programs and guaranteeing employment.<sup>28</sup>

Regarding physician retention, the short- to mid-term focus of physician leadership is reliant on committed non-Inuit physicians

who live in Nunavut, or who return regularly for shorter periods. This strategy has had some impact in Iqaluit and the other regional centres of Rankin Inlet and Cambridge Bay, where in 2017 there were 19 full-time family physicians, 3 pediatricians and a general surgeon on long-term contracts. While the analysis of data on physician turnover in Iqaluit is still ongoing, it appears that positions and scheduling that allow for work-life balance are more sustainable and attract physicians who are willing to sign longer-term contracts. Being mindful and respectful of Inuit and Indigenous values that connect family, loved ones and caring for others, it then becomes critical that scheduling and health service design celebrate and embody those values in practice to recruit and retain local and Indigenous health service providers.

The Truth and Reconciliation Commission called for training of more Indigenous doctors and nurses.<sup>29</sup> Initiatives currently underway include the engagement of role models and implementation of health science camps for high school students and partnerships with Indigenous organizations and universities. There is evidence that exposing students to rural and remote practice has a positive influence on recruiting and retaining family physicians in Canada.<sup>30,31</sup> The University of Manitoba, for instance, has been running a rural practice program for first-year medical students for more than 12 years, which has contributed to changing students' attitude to Northern medicine and increasing their interest in working in these communities.<sup>32</sup>

Along with student training, several other factors influencing health professionals' choice to practice in remote regions were described in recent reviews. 30,33-37 Research has also been conducted on the "design and development of products and services to address ways of improving recruitment and supporting retention." Based on the data presented in this paper, in Nunavut specifically, it is retaining medical personnel that has been challenging, rather than recruiting them. We know much about factors that contribute to provider turnover and have access to a number of ideas and strategies to address it, but we need more evaluative evidence on the initiatives as well as the effectiveness of specific strategies (examples can be found in the conclusions of some of these reviews 35,39). We hope to encourage researchers and professionals to report on various initiatives and their evaluation findings.

### Conclusion

Existing studies provide compelling data showing the negative impacts of provider turnover on community members, health care providers and organizations. To ensure quality care in the communities, both long-term strategies to establish stable local health services and strategies to improve cultural competency and knowledge of the health care system of the short-term personnel currently working in the territory are needed. We also need more data on the impact of turnover of health providers specifically in Nunavut, and on best practices and solutions to ensure quality care in high-transiency Northern communities. Nunavummiut, like all Canadians, want and deserve consistent care from well-trained, committed care providers who know their patients and have a good understanding of the cultural, social and geographical conditions of their patients' lives.

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