## Disparity by Distance: Cancer Care Challenges in Rural Canada

Joe is a 56-year-old shop foreman living in Atikokan, Ontario. He leaves work where he has been employed since he graduated high school at 18 to stop at the grocery store, where he gets a few frozen meals that are on sale for him and his family to have for dinner. He looks at the produce aisle and notices the browning fruit at sky high prices, he decides it's not worth it for the week. He gets in his car to drive home and lights a cigarette, worrying about the blood he has noticed in his stool lately, but decides it must be nothing. He avoids going to the doctor, as he often does not understand what he is being told. Joe is a very typical depiction of an individual living in a rural Canadian community.

The social determinants of health have always disproportionately affected Canadians living in northern and rural environments and cancer care is no exception. Rural Canadians in general have lower educational attainment and literacy, as well as lower income than their urban counterparts (Rahimipour Anaraki et al., 2022). Rural Canadians, especially those living in remote Indigenous communities lack the same access to affordable, healthy food options, often leaving no choice but to consume processed, calorie-dense, non-nutritive foods (Batal et al., 2021). Often for rural Canadians, the only physician they have access to is a family physician, who is well versed in many different areas, but lacks the specialized training and diagnostic resources to provide comprehensive cancer care, leaving communities of people forced to travel hours to the nearest tertiary care centre for access to an oncologist. Canadians living in northern, rural, and Indigenous communities face higher cancer rates than their urban counterparts (Beckett et al., 2021; Febbraro et al., 2020). Rural Canadians are resilient; however, the social determinants of health are at play when it comes to all stages of cancer care.

It is a few weeks later, and Joe decides to go see his doctor, as the blood has persisted in his stool, and he has been experiencing constipation. He does not go to the doctor often, as it is often a locum physician that he sees, and he doesn't like having to re-introduce himself. Joe has never had FIT screening done. The locum physician worries that Joe might have colon cancer and refers him to get a colonoscopy in Thunder Bay. Joe works full-time to support his family and cannot afford to take a day off to travel to Thunder Bay. He is not only stressed about his possible cancer diagnosis, but also about the financial burden of missing work, and wondering if his unreliable car will make it to Thunder Bay in the treacherous winter conditions.

Rural and remote communities face massive healthcare disparities in many ways. These communities are often short-staffed, leaving locum physicians to be invaluable members of the healthcare team. With continual, short-term locum contracts, patients often lack continuity of care, and essential screening measures, such as mammograms, HPV testing or FIT tests may be missed (Marjorie & Dirom, 2025; Thomas et al., 2025). In these communities, cancer is often detected at a later stage, making treatment and survivorship more difficult (Febbraro et al., 2020). Reasons for delayed diagnosis are multifactorial, and in addition to lower continuity of care includes lower levels of health literacy, leaving patients unaware of concerning symptoms that require prompt medical attention (Rahimipour Anaraki et al., 2022). There is often distrust of the healthcare system, especially amongst the Indigenous populations that have a longstanding history of facing mistreatment and racism from healthcare providers (Pilarinos et al., 2023). If a physician in their community suspects their patient may have cancer, the patient must then travel, often hundreds of kilometres away to simply receive a biopsy or scan for diagnostic purposes, creating delays in the diagnostic process. This creates a much greater mental, physical and financial burden on these patients.

Joe returns to his physician's office in Atikokan, where his physician tells him that he has been diagnosed with stage II colon cancer. Joe is given many handouts but is afraid to admit that he doesn't understand what the handouts say. He is confused and only knows that he must travel to Thunder Bay again, this time for surgery, and must stay in Thunder Bay overnight. He is grateful that his wife can join him in Thunder Bay but worries about who will care for their children while they are gone.

Similar barriers exist in cancer treatment as they do in the diagnosis of cancer for rural Canadians, however, a cancer diagnosis means that rural Canadians will be travelling for care more frequently, and the prevalent social determinants of health become exasperated. Greater social satisfaction has been shown to create favourable cancer treatment outcomes (Boen et al., 2018). For Canadians travelling far distances to receive care, being surrounded by their community of friends and family is not feasible and likely plays a role in decreased survivorship.

Many of the social determinants of health that affect rural Canadians do not have sustainable solutions, as travel to larger centres is often required. However, earlier diagnosis of cancer among rural Canadians could improve survivorship and allow for less invasive treatment options. One way in which late-stage diagnoses can be avoided is through early detection. Increasing health literacy among rural Canadians is imperative for early cancer detection. This can be done by targeting populations where health literacy may be lower and increasing awareness of concerning symptoms and screening guidelines in easy to understand and accessible ways. While on a rural placement, I had the opportunity to discuss the changes to cervical cancer screening guidelines on the morning radio show streamed across the region to over 40,000 people. Because most of the community listens to this radio station, many individuals were increasing their health literacy without having to take time out of their days to attend classes or do their own research. We had patient's follow-up in clinic regarding the information they had learned on the radio. To increase health literacy in rural Canada, I propose targeted education implemented in various forms of local media (ie. local radio, short commercial videos on the local news, or newspaper articles) that are easily accessible for individuals within a community to learn about relevant concepts in healthcare and cancer prevention. Giving patients knowledge of when to seek care is the first step in diagnosing cancer at an earlier stage. Ensuring patients receive timely cancer screening at the recommended frequency, despite being understaffed is essential. This can be supported through mobile screening units not only visiting communities, but through outreach notifying the public that they are visiting. Finally, increasing local oncology capacity in currently practicing physicians and nurses can allow for enhanced cancer care with less travel for patients.

Rural Canadians are at a disadvantage when it comes to cancer diagnosis and treatment. These communities are disproportionately affected by the social determinants of health and given the reality of the current healthcare climate; many issues faced by these communities do not have sustainable solutions. Increasing the health literacy of rural Canadians to promote increased participation in screening tests and increased awareness of concerning symptoms through use of local media is an accessible and feasible way to target many vulnerable Canadians and decrease the cancer burden felt in these communities.

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