

# From Discharge to Doorstep:

How Gotcare Is Filling Gaps in Rural Ontario's

**Healthcare System** 

Joy Lai, Gladys Olisaekee, Amareena Saleh-Singh, Enid Montague, Gonzalo Romero









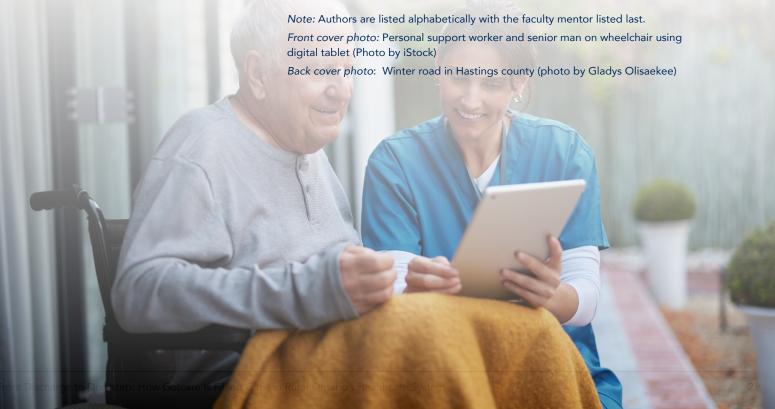
## The Reach Alliance

The Reach Alliance is a consortium of global universities — with partners in Ghana, South Africa, Mexico, Canada, United States, United Kingdom, Australia, and Singapore — developing the leaders we need to solve urgent local challenges of the hard to reach — those underserved for geographic, administrative, or social reasons. Working in interdisciplinary teams, Reach's globally minded students use rigorous research methods to identify innovative solutions to climate, public health, and economic challenges. The United Nations Sustainable Development Goals (SDGs) provide inspiration and a guiding framework. Research is conducted in collaboration with local communities and with guidance from university faculty members, building capacity and skills among Reach's student researchers.

The power of the Reach Alliance stems from engaging leading universities to unleash actionable research insights for impact. These insights have been published in numerous journals such as *The Lancet* and *BMJ Global Health* and are being used by policymakers and sector leaders, such as the Government of Canada and the *Stanford Social Innovation Review*, to catalyze impact around the world.

The Reach Alliance was created in 2015 by the University of Toronto's Munk School of Global Affairs & Public Policy, in partnership with the Mastercard Center for Inclusive Growth. It is guided by an advisory council of leaders in academia, and in the private, public, and nonprofit sectors who help to drive impact, influence and scale, and support fundraising efforts.







# Acknowledgements

We express our sincere gratitude to Gotcare and Quinte Health for their partnership and for facilitating access to field sites and participants across Hastings County. Their openness, coordination, and ongoing feedback were essential to understanding how the Rural Stop Gap Program operates on the ground.

We also thank the DIGITAL Innovation Cluster, funded by Innovation, Science and Economic Development Canada, for supporting this research as part of their investment in scalable digital health solutions for underserved communities.

Our deepest appreciation goes to the health ambassadors, Virtual Nurses, hospital clinicians, community partners, and caregivers who generously shared their experiences and insights.

Contribution	Contributor (initials)
Conception or design of the work	JL, AS, GO
Data collection	JL, AS, GO
Data coding	JL, AS, GO
Data analysis and interpretation	JL, AS, GO
Drafting of the case study report	JL, AS, GO
Critical revision of the case study report	JL, AS, GO
Final approval of the version to be submitted	JL, AS, GO



## Contents

Executive Summary	1
Hastings: Geographic Isolation, Digital Exclusion, Fragmented Care Systems	1
Our Approach	3
Virtual Nurse Perspectives: Bridging Gaps with Clinical Oversight	4
Health Ambassador Perspectives: Trust and Human-Centred Care	8
Clinicians' and Community Partners' Perspectives: Timely Patient-Centred Care	11
Gender	15
Gotcare's Impact and Barriers to Success	15
Lessons Learned	17
Appendix — Rural Healthcare's Readiness to Integrate Digital Health: A Self-Assessment Toolkit	21





FIGURE 1. North Hastings Hospital entrance (photo by Amareena Saleh-Singh)

### **Executive Summary**

This case study examines Gotcare's Rural Stop Gap Program, an Al-enabled, home-based healthcare initiative designed to address service gaps for patients in Hastings, Ontario (Canada). The project responds to long-standing delays in postdischarge care by integrating digital health tools with relationship-centred support. Drawing on interviews with Health Ambassadors, Virtual Nurses, clinicians, and community partners, we explore how Gotcare is building a new rural healthcare model that centres on accessibility, caregiver well-being, and system navigation. Key innovations include hybrid care delivery, culturally responsive tools, and community-based staffing. Barriers include digital literacy gaps, staffing capacity, and fragmented care transitions. Early findings suggest that the intervention improves patient outcomes, reduces readmissions, and offers a scalable model for rural healthcare reform.

# Hastings: Geographic Isolation, Digital Exclusion, Fragmented Care Systems

In rural Ontario, access to timely and coordinated home healthcare remains an ongoing challenge. In the Hastings region specifically, patients often wait five to seven days or longer to receive in-home care after they are discharged from the hospital. These delays increase their risk of readmission and place additional pressure on already overextended hospitals, particularly in areas where staff shortages and service deserts persist. Specifically, the senior dependency ratio (size of the age 65+ population relative to the age 18 to 65 population) in the Hastings region was 0.41 in 2019/2020, compared to the 0.17 to 0.24 ratio present in urban areas such as

Toronto and Mississauga. This ratio translates to a disproportionate number of seniors in the region without the young, working population present to support them quickly and effectively. Geographic isolation, digital exclusion, and fragmented care systems further complicate access to care for rural residents.

In this case study we focus on a pilot project implemented in partnership with Gotcare, a Canadian health technology company specializing in digitally enabled in-home care, and Quinte Health, the regional hospital corporation serving Hastings. Gotcare currently operates in Bancroft and Belleville, with efforts focused on alleviating service gaps across North Hastings and reducing hospital readmissions in Belleville General Hospital, Trenton Memorial Hospital, and North Hastings Hospital.

The project is backed by Canada's DIGITAL Supercluster, a federally funded innovation network that invests in digital solutions to pressing social and economic challenges. Designed to align with the Quintuple Aim framework for healthcare, which focuses on improving patient experience, population health, healthcare worker well-being, cost-efficiency, and equity, the project leverages artificial intelligence, digital monitoring tools, and community-based care coordination to fill some of the most critical gaps in rural Ontario's healthcare system.

#### **HARDEST TO REACH**

The project specifically targets patients in rural and remote communities within the Hastings region — areas characterized by aging populations, limited access to primary care, and geographic and infrastructural isolation. Many patients served by this initiative live far from the nearest hospital or face significant barriers to immediate postdischarge access to services such as occupational therapy, nursing care, or home support.

These populations are also disproportionately affected by broader determinants of health. Interviewees shared stories of patients living without reliable electricity, phone access, or safe housing — conditions that complicate both their health outcomes and the delivery of care.

The digital divide — referring to unequal access to internet connectivity, digital devices, and the skills needed to use them — remains a critical barrier to care. While digital health tools offer new opportunities, many rural patients lack reliable internet access or require hands-on support to navigate these technologies. For older adults in particular, tailored guidance and relationship-based care are needed to ensure that technology is accessible rather than exclusionary.

By focusing on those who are geographically isolated, medically underserved, and systemically overlooked, the project directly engages with the Reach Alliance's mission to understand how critical interventions can effectively reach those who are hardest to serve.

#### **ABOUT THIS INTERVENTION**

We examine Gotcare's Rural Stop Gap Program, an initiative that provides goal-oriented, short-term, personalized in-home care to patients recently discharged from the hospital. The program integrates digital health technologies, virtual clinical oversight, and front-line support from trained community-based care workers (Health Ambassadors) supervised by Gotcare clinicians (Virtual Nurses).

Health Ambassadors serve as the primary point of coordination for patients. As upskilled community care workers, they provide in-home visits, addressing appropriate medical (e.g., follow-up for a skin rash, biometric monitoring) or social needs (e.g., help coordinating access to community services). Activities of daily living support can also be provided on a temporary basis until homecare services are available. All Health Ambassadors are trained and supervised

by a Gotcare clinician. They provide wellness check-ins, monitor vitals through connected devices, and assist with both medical and nonmedical needs, such as coordinating community resources or setting up home safety tools. Using tablets (sometimes referred to as safety devices),

patients are matched with care workers based on their needs, location, language, and other preferences. Tablets are provided to support communication, selfmanagement, and remote monitoring.

Unlike existing digital health tools that may require high digital literacy or rely on one-time visits, Gotcare's approach is intentionally personal, goal-oriented, and responsive to context. It fills a gap where traditional models fall short, particularly in environments where discharge delays, service fragmentation, interviews at the and caregiver burnout are common.

The program's rollout is being piloted in partnership with Quinte Health and is currently active in select hospitals across North and Central Hastings. Feedback loops with hospital partners, patients, and caregivers are embedded into the design to allow continuous improvement. A fullscale implementation across four hospital sites was planned for mid-2025.

The intervention is unique both from its technological foundation, as well as its emphasis on relationship-building and adaptive care models. Unlike existing digital health tools that may require high digital literacy or rely on onetime visits, Gotcare's approach is intentionally personal, goal-oriented, and responsive to context. It fills a gap where traditional models fall short, particularly in environments where discharge delays, service fragmentation, and caregiver burnout are common.

### **Our Approach**

We began our fieldwork with visits to the Gotcare office and participated in ride-alongs

with some Health Ambassadors. This allowed us to gain a better understanding of their roles, daily challenges, and how they navigate these issues. These visits provided us with insights into the Hastings region, highlighting the geographic challenges faced by patients in the area, and

> helped us better appreciate Gotcare's interventions. These initial visits prepared us to commence our interviews.

> We conducted a combination of virtual and in-person Gotcare office and in the Belleville and

Bancroft regions of Ontario. Using purposive sampling, we interviewed individuals whose experiences can provide deep insights into the challenges and opportunities related to the transition from hospital to home in the Hastings region. A total of nine participants were engaged: five Gotcare employees, two clinicians, and two community partners.

We obtained consent from all participants, and all interviews were conducted in English. The interviews were semi-structured and covered a range of topics, including the barriers patients face when seeking healthcare services in the region, participants' experiences working with Gotcare, the impact of Gotcare's work on patient outcomes, daily responsibilities of the staff, suggestions for improving referrals, and recommendations for future interventions.

All interviews were recorded and transcribed with careful attention to preserving the nuances and authentic voices of each participant, while also identifying key themes and insights.

# Virtual Nurse Perspectives: Bridging Gaps with Clinical Oversight

## A GOAL-ORIENTED, SELF-MANAGEMENT MODEL

Gotcare's Virtual Nurses operate from a core philosophy to build capacity, not dependency. This "do with, not do for" approach fundamentally shapes how the program engages clients from initial contact through discharge.

Goal setting begins with what clinicians describe as "creative questioning" rather than directive

assessment. When clients express general aspirations like wanting "good mobility," Virtual Nurses probe for specificity: what does mobility mean in their daily context?

"We don't go in to do for; we go in to do with. It's like training wheels. We're trying to build habits. Eventually, the wheels come off and they're pedalling on their own."

Moving around the house independently? Walking to the store? These questions help translate abstract wishes into concrete, measurable objectives that clients themselves define. As one interviewee put it, "We don't go in to do for; we go in to do with. It's like training wheels. We're trying to build habits. Eventually, the wheels come off and they're pedalling on their own."

The program recognizes that many older adults have internalized passivity through decades of healthcare interactions that positioned them as passive recipients rather than active participants. Reversing this learned behaviour requires deliberately centring conversations on shared goals while positioning clients as ultimate decision makers. Virtual Nurses provide tools, knowledge, and clinical expertise, but the client determines

priorities and drives the process toward independence.

This philosophy manifests practically through how care plans unfold. Goals typically cluster around mobility improvement, home safety enhancement, community service connections, medical appointment facilitation, and wellness monitoring. But implementation matters as much as goal identification. Exercise programs uploaded to tablets come with hands-on coaching from Health Ambassadors who demonstrate techniques and watch clients perform movements to check their form. As patients become more comfortable, the ambassadors gradually reduce support.

#### **HYBRID CLINICAL OVERSIGHT**

Virtual Nurses provide clinical assessment and care planning through a model that strategically

pairs their professional expertise with Health Ambassadors' embedded community presence. This structure allows clinical involvement without nurses, occupational therapists, or patients

spending hours travelling to remote locations. During intake assessments, a Health Ambassador in the client's home facilitates connection with a Virtual Nurse or occupational therapist joining via tablet, allowing real-time clinical decision making.

Once Virtual Nurses establish care plans, Health Ambassadors visit independently based on goals developed collaboratively during daily team meetings. They function as clinical intelligence gatherers, making observations about people's energy levels, motivation, functional status, and emerging concerns. One health ambassador told us, "My role is basically to be the eyes, ears, and feet of the OTs and the nurses — and whatever else the client might need — to help them get through what they're going through."

These observations flow back through the program's app or daily meetings, creating a feedback loop. When Health Ambassadors notice a decline, increasing confusion, or other warning signs, Virtual Nurses can reassess and adjust care plans before situations deteriorate into crises — including a return to the hospital, if required.

Whether a Virtual Nurse needs to be present or a Health Ambassador can visit alone depends on the complexity of the client's needs. New medical concerns, chronic disease-management challenges, medication issues, or functional decline trigger Virtual Nurse involvement. Routine follow-ups, safety checks, and goal reinforcement fall to Health Ambassadors, with communication channels open for consultation when questions arise. This tiered approach maximizes clinical resources while maintaining safety and quality.

## RELATIONSHIP-BASED TECHNOLOGY ADOPTION

Gotcare treats technology as one component within relationship-based support rather than a replacement for human connection. While tablets facilitate communication, enable remote monitoring, and provide educational content, their effectiveness depends entirely on how they're introduced and sustained through ongoing support. For example, Virtual Nurses and Health Ambassadors will work to design and create laminated leave-behinds with step-by-step visual instructions showing which buttons to press and where to find key features. These analog guides bridge clients into digital tools by providing paper-based reference materials they can consult independently.

Clients might understand how to access exercise videos during initial demonstrations but forget the opening steps before the next visit. Without reference materials and repeated coaching reinforcement, tablets become unused novelties rather than functional tools. We were told that "You can't just give an 80-year-old person a tablet and expect them to know what to do with it ...

That's why we do multiple visits. We've made laminated leave-behinds ... But even with all that, it's hard. A lot of folks have issues just initializing things."

The educational approach demands multiple modalities and extensive repetition. Virtual Nurses emphasize that effective adoption requires encoding information through verbal explanation, guided demonstration, supervised practice, and written references for independent review. This repetition-heavy approach acknowledges cognitive and memory challenges common in elderly populations. As one Virtual Nurse explained, "Sometimes I'll say, 'Hey, why don't you show me how you're feeling today on the tablet?' When they get it right, we do a little kitchen dance."

Infrastructure limitations impose hard constraints on what technology can achieve, regardless of support quality. Virtual Nurses identified rural connectivity gaps as perhaps the most fundamental barrier, describing "dead zones" where tablets cannot maintain reliable connections or connect at all. While SIM cards address some coverage issues, certain geographic areas simply lack adequate infrastructure. Solving this requires governmental investment in rural broadband beyond what individual programs can control.

## CAREGIVER SUPPORT AS A CORE INTERVENTION

Virtual Nurses identified supporting informal caregivers as one of the program's most important yet initially unrecognized functions. The insight emerged from analyzing why some clients destabilized: when caregivers burned out, clients returned to the hospital regardless of other supports in place.

Over 80 per cent of all caregiving is provided informally by family members rather than paid professionals, making caregivers simultaneously the healthcare system's greatest asset and most vulnerable pressure point. When caregivers exhaust themselves, the entire support system collapses. According to one Gotcare staff, "If the caregiver fails, the patient goes back to the hospital. There's this inextricable interdependence that you have to be mindful of."

Many cases involve significant caregiver engagement, with exceptions primarily limited to clients living completely alone. Interventions targeting caregivers include connecting them to respite services, arranging transportation support

so they're not solely responsible for medical appointments, setting up meal delivery or housekeeping to reduce daily burdens, and providing educational resources about

Over 80 per cent of all caregiving is provided informally by family members rather than paid professionals, making caregivers simultaneously the healthcare system's greatest asset and most vulnerable pressure point. When caregivers exhaust themselves, the entire support system collapses.

topics like managing depression in older adults.

Sometimes the formal client manages adequately while their spouse or adult child struggles under caregiving demands. Virtual Nurses described cases where referrals technically targeted one person but intervention focused primarily on the caregiver because supporting them represented the most effective path to household stability.

## SYSTEM NAVIGATION AND COORDINATION

Virtual Nurses dedicate substantial effort to navigating an array of agencies, programs, and services constituting rural community care. This landscape confuses even experienced healthcare professionals and proves effectively impossible for older adults to navigate independently.

Its complexity stems from overlapping organizational mandates, service territories that sometimes arbitrarily divide communities, opaque

eligibility criteria, and varying referral processes across agencies. Ontario Health at Home alone employs eight care coordinators for the region. As one nurse put it, "If you ask a random person, 'Who handles your long-term care application?' They won't know. The answer is Ontario Health at Home, but how would they figure that out? You'd have to Google it, and most of our clients don't know how to Google."

The program positions itself as a coordinating presence that oversees transitions and connects

disparate agencies. This addresses what Virtual Nurses identified as the biggest gap in hospital-to-home transitions: the lack of anyone owning the process end-to-end. Hospitals have discharge planners focused on

hospital-side logistics, Ontario Health has care coordinators managing their services, community support agencies run their own intake processes, but no single entity tracks whether all pieces actually come together for specific clients. Things fall through the cracks constantly because everyone assumes someone else is handling particular elements. We heard how "There are so many different stakeholders involved, and the more people there are, the more things can go wrong. Oftentimes, there are too many cooks in the kitchen, and no one is actually owning the process."

This coordination role initially surfaced territorial tensions. Some community support agencies viewed Gotcare as competition, threatening their funding and client base. Building trust required substantial stakeholder engagement: making hospital visits, repeatedly clarifying scope and complementary rather than competitive positioning, and demonstrating value through action. Virtual Nurses handled weekend

discharges when other agencies were unavailable, managed complex cases falling between service mandates, and actively made referrals to community support services rather than trying to internalize all functions.

## BARRIERS FROM THE VIRTUAL NURSE PERSPECTIVE

Virtual Nurses identified several critical barriers that constrain what even well-designed programs can achieve.

Infrastructure deficits remain the most fundamental constraint. Rural areas lack adequate cellular and internet coverage, creating zones where technology-based solutions cannot function. While SIM cards address some gaps, certain geographic areas remain inaccessible to digital health tools. This requires governmental infrastructure investment beyond what individual programs control.

Staffing shortages severely limit available support even when funding exists. Virtual Nurses described securing approval and funding for personal support worker hours but finding no providers available to deliver those services. Some areas function as service "black zones" where providers simply will not travel, leaving residents without access regardless of need or ability to pay.

Wait times create dangerous vulnerability windows. The region faces 25-day average waits for personal support worker (PSW) services and 35-day waits for occupational therapy. During these extended periods, recently discharged clients remain at high risk with no formal supports in place. Gotcare fills this gap temporarily, but the systemic failure that creates such lengthy delays persists.

**System complexity** itself acts as a barrier separate from individual agency limitations. Understanding what services exist, how to access them, which agencies provide them, and who qualifies requires navigation skills most clients lack. Even identifying

which phone number to call demands knowledge clients don't possess, particularly when conditions like dementia or limited technological literacy compound their challenges.

Communication failures create confusion throughout transitions. Patients describe feeling that "decisions were made to them rather than with them" during hospital discharge, sometimes using words like *tricked* to characterize inadequate information about next steps and expectations.

## OUTCOMES: VIRTUAL NURSE OBSERVATIONS

Stabilizing people during the vulnerable immediate postdischarge period prevents them from being readmitted to hospital. By ensuring clients have medications, food, safety equipment, and regular monitoring, the program addresses factors that would otherwise precipitate emergency department visits within days of returning home.

Beyond measurable metrics, Virtual Nurses noted the program shifted healthcare partners' perspectives about what constitutes necessary intervention. Traditionally, healthcare focused narrowly on medical management. Working with Gotcare expanded practitioners' understanding to recognize that addressing social services, housing conditions, food security, and environmental safety constitutes an essential health intervention rather than a peripheral concern. This conceptual shift may represent one of the program's most important contributions to how rural healthcare is understood and delivered.

# Health Ambassador Perspectives: Trust and Human-Centred Care

## FIRST FACE HOME: SUPPORT IN THE TRANSITION GAP

Health Ambassadors typically arrive at clients' homes within 24 hours of hospital discharge, often the same day. This rapid response provides both immediate practical support and emotional reassurance during what is often a frightening transition back to independent living. One told

us that "Our job is to make sure they have a soft landing, whether we pick them up, take them home, grab their favourite slippers, make them a cup of

"Our job is to make sure they have a soft landing, whether we pick them up, take them home, grab their favourite slippers, make them a cup of soup, or just drive them and meet their family."

soup, or just drive them and meet their family."

This "first face home" role carries significance on multiple levels. Practically, Health Ambassadors handle immediate logistics: retrieving medications from pharmacies, purchasing groceries, sourcing safety equipment like walkers or grab bars, and ensuring basic needs are met. Many clients return home to empty fridges, missing medications, or homes not yet adapted for their changed mobility or care needs. Health Ambassadors address these issues before such gaps create crises.

Early contact, often initiated during the discharge planning phase, provides reassurance to clients who are often scared, embarrassed about needing help for the first time, and uncertain about what comes next. Health Ambassadors deliberately adopt warm, approachable personalities rather than clinical professional demeanours. They explicitly position themselves as "friends," using relationship framing to normalize assistance and reduce resistance.

The role's defining characteristic is flexibility rather than rigid protocol adherence. Health Ambassadors address whatever needs arise to prevent small gaps from escalating into crises requiring emergency intervention. This manifests in addressing needs that fall outside traditional care boundaries: cleaning up the home space, bringing meals to clients with empty kitchens, responding to late-night calls from worried family members, even outside scheduled visit times. As one ambassador said, "If someone doesn't have food, I make sure they eat all week. That's the role. It's thinking outside the box."

Geographic proximity enables responsiveness that formal healthcare systems structurally

cannot match.
Health Ambassadors
living in the same
communities they
serve, sometimes
just streets from
clients, can respond
to urgent needs

within 30 minutes rather than the days or weeks typical of formal service provision. This embedded community presence transforms service delivery from scheduled interventions to responsive support available when people's needs actually arise.

#### **TECHNOLOGY AS "SAFETY BLANKET"**

Health Ambassadors approach technology introduction strategically, recognizing that framing determines adoption as much as functionality does. Rather than presenting tablets as monitoring devices or clinical tools, ambassadors consistently describe them as "safety blankets" that provide reassurance and connection: "One of the ways I get through to them is by calling the device a 'safety blanket.' If you're not feeling well, I'm always here in the background." This metaphor reframes the tablet from obligation or intrusion into something comforting and protective. It positions technology as a tool, ensuring help is always accessible if needed.

Responsiveness is critical for transforming initial acceptance into sustained use. When clients mark themselves as unwell in the wellness tracker and actually receive a call checking on them, the technology becomes experientially meaningful rather than abstract. This demonstrated follow-through creates trust in the system and reinforces the confidence that using the tablet will connect the person with care.

Variation in baseline technological comfort is substantial. Some clients demonstrate remarkable digital literacy, while others have never used devices more complex than television remotes. This range requires Health Ambassadors to assess individual starting points rather than assuming uniform capabilities based on age alone. The common thread is that lower digital literacy represents a widespread challenge requiring proactive patient support rather than an occasional exception.

## ADDRESSING RESISTANCE THROUGH ADAPTATION

Health Ambassadors describe resistance as routine work, manifesting as refusals to accept help, use technology, acknowledge limitations, or engage with suggested changes. Understanding the source of resistance allows them to craft strategic responses.

Generational attitudes about independence, particularly among older men, create one common resistance pattern. Cultural norms that equate accepting help with failure or weakness make some clients resistant, regardless of their obvious need. Cognitive barriers from memory impairment create a different challenge where clients may genuinely want help but cannot maintain engagement with processes requiring consistent follow-through. Fear and mistrust of unfamiliar services, sometimes heightened by concerns about privacy or autonomy loss, generate another resistance form. In the words of one interviewee, "a lot of older folks, they can develop a sense of concern. They're never really

sure — they don't trust things that are different. They don't trust change after doing things one way for so long."

The most effective response is adaptation rather than persistently pushing rejected approaches. When clients refuse tablets despite repeated demonstrations, Health Ambassadors may shift to temporary daily in-person visits instead, ensuring safety monitoring continues through alternative pathways. When phone contact proves impossible, ambassadors simply show up at the door, recognizing that some clients can be reached only through physical presence. "There was a patient who declined to use the technology. So [Gotcare staff] just reapproached the way he did things and went and made sure he checked on the person in-person daily."

Sometimes resistance signals despair rather than stubbornness. Clients expressing desire for change but unable to articulate what prevents it may have lost the belief that improvement is possible. In these cases, the intervention becomes about rebuilding hope and demonstrating through small wins that stability remains achievable before attempting larger practical changes.

#### **FAMILY LIAISON FUNCTION**

Health Ambassadors frequently serve as communication bridges between clients and distant family members, particularly adult children living in urban centres hours away. They provide regular updates and immediate responsiveness that support family members in feeling secure, backed by reliable information. We were told how "Families can't just drive hours to check in. Knowing someone nearby can pop in fast makes a huge difference."

This liaison function addresses a common rural dynamic: aging parents living independently while adult children live in cities too far away to provide daily support or monitoring. Family members worry constantly but cannot easily check in, creating sustained anxiety about parents' well-

being. Health Ambassadors embedded in the same communities can verify conditions, notice changes, and respond quickly if concerns arise. As one said, "I deal with families a lot. Especially those who live far away — they'll ask, 'Can you check in on my mom?' or 'Can you let us know if something seems off?' I become their eyes and ears ... their peace of mind."

The peace of mind this provides appears consistently in family feedback. Their expressions of gratitude emphasize not just practical assistance but the emotional relief of knowing that someone trustworthy and responsive is watching over their loved one and will alert them if intervention becomes necessary.

## BARRIERS FROM THE HEALTH AMBASSADOR PERSPECTIVE

Health Ambassadors identified recurring barriers that constrain effective care.

For socially isolated clients whose

declining health limits interaction,

regular Health Ambassador visits

and tablet-enabled communication

families report as transformative for

mood and outlook.

provide meaningful social contact that

#### Cognitive and memory impairments prevent

some clients from engaging with processes requiring initiative or follow-through. Clients with dementia may genuinely want help but cannot remember appointments, respond to calls, or engage with referral

processes that other organizations require. Health Ambassadors can arrange doctor appointments, but if clients don't show up and don't answer reminder calls, the system breaks down.

Environmental factors within homes create safety challenges. For example, hoarding behaviours are extremely common and create fall risks and block access for mobility devices. When clients face mobility limitations, a lack of navigable space becomes a major barrier to safe home management, regardless of other supports.

Cultural resistance, particularly among older men and those who have always been independent, can prevent engagement even when their needs are obvious and services are available. Fear and mistrust also drive resistance, with clients questioning whether there are "tricks" in consent forms or whether services will somehow trap them into unwanted care arrangements.

## OUTCOMES: HEALTH AMBASSADOR OBSERVATIONS

Health Ambassadors described substantial reductions in the use of emergency medical care across multiple clients. Environmental modifications, coaching on safer techniques, regular monitoring, and providing alternative contacts when clients need help all contribute to decreased 911 calls. Many emergency calls stem not from acute medical crises but from clients feeling they have no other options for assistance.

Quality-of-life improvements emerged as a major theme, particularly around social connection and

mental health. For socially isolated clients whose declining health limits interaction, regular Health Ambassador visits and tablet-enabled communication provide meaningful social contact that families report as

transformative for mood and outlook.

The program also facilitates unexpected technology adoption among clients who initially seemed unlikely users. Clients who had never engaged with devices beyond television remotes became genuinely engaged with tablets that enhanced their daily routines, suggesting that with adequate support, technological barriers are more surmountable than often assumed.



FIGURE 2. Belleville Hospital (photo by Amareena Saleh-Singh)

# Clinicians' and Community Partners' Perspectives: Timely Patient-Centred Care

#### **PATIENT CHARACTERISTICS AND NEEDS**

Patients served by Gotcare and related rural programs are primarily older adults, many over 65 years old, with varying long-term and transitional care needs. Most of these patients require ongoing support for up to six months, though some may need assistance indefinitely. Approximately 30 per cent have family or informal caregivers involved, while others live alone or have minimal support.

These patients' key characteristics include resistance to receiving care, particularly among older men or those with reclusive personalities, as well as cognitive challenges like dementia. Additionally, physical or visual impairments often complicate their ability to use technology. There are significant generational differences; younger baby boomers (in their 60s to 70s) generally have a greater comfort level with technology and higher expectations for care, whereas older baby boomers (in their 70s to 80s) may exhibit more hesitation or vulnerability. According to one clinician,

Occasionally, challenges with the patient would be things like resistance to care. It could be something as simple as they don't want someone in their house. You'll find that with some of the older men. They'll say, no, I don't want anybody else coming to my home. It's just me and my wife.

Common needs among these individuals include assistance with daily activities, safety checks, medication and grocery pickup, and support during transitions to long-term care. Social isolation, anxiety, and hoarding behaviours are also prevalent, making consistent, relationship-

based home care particularly effective for these groups. Patients who find it difficult to cope at home or who are waiting for long-term care benefit more from Gotcare's stop-gap services, which help bridge gaps in the support system and promote community living.

The most common referral that we do to Gotcare is probably something along the lines of this patient's not coping well at home. They need to get into long-term care, but there's a gap there, and getting them into long-term care is gonna take a little bit of time.

Overall, patient engagement with services is influenced by various factors, including personality, social support, cognitive and physical abilities, and comfort with technology.

## CARE COORDINATION AND REFERRAL PROCESSES

Partners described Gotcare as grounded in the community and rural hospitals it serves along the hospital-to-home continuum of care. By participating in clinical rounds and collaborating with other stakeholders in discharge planning, they help connect patients to the community services they require. This makes them a safe, reliable support system for clients, guiding them through the complex process of transitioning from

Interdisciplinary team rounds,

nurses, discharge planners, and

other allied health professionals,

collaborative problem solving to

discharge and ongoing care.

facilitate regular communication and

identify and resolve barriers to safe

which include Gotcare staff.

hospital discharge to home, while ensuring access to community resources. An interviewee described guidance like this: "Something as simple as making sure that it's not simply a taxi service that moves you from one location to the other, but actually

a more humanistic provider — who makes sure that when you're discharged, your medications, food, and home environment are safe and welcoming to you." Gotcare fills a unique gap by providing support to both staff who are overwhelmed by an increasing number of community resources and clients struggling with health challenges and the complicated discharge process. The current referral system uses various methods — paper, electronic, and digital — to ensure that operational workflows do not limit the system's ability to meet clients' needs. Referrals to Gotcare are efficiently managed, with prompt confirmation and follow-up communication from Gotcare's team. In effect, Gotcare's timely, flexible, and patient-centred approach fosters greater trust among its partners.

It [Gotcare services] has made [my work] easier, right? Like it's just easier because I know I can call. I know, you know, when homecare's like, oh, I can't be in there for five days. I know I can call [Gotcare staff], and I know I'm going to have somebody tomorrow.

The referral process is very smooth. Like, I could call [Gotcare staff] at 9:00 and be comfortable sending a patient home at 1:00.

## COLLABORATION AND INFORMATION SHARING

Interprofessional coordination among Gotcare, hospital teams, community paramedics, and other

healthcare partners has significantly improved patient care transitions and addressed both social and medical needs in rural areas. Interdisciplinary team rounds, which include Gotcare staff, nurses, discharge planners, and other allied health professionals,

facilitate regular communication and collaborative problem solving to identify and resolve barriers to safe discharge and ongoing care. The use of electronic medical records (EMRs) ensures that patient information is readily accessible to hospital doctors, supporting continuity of care.

They're in rounds with us. Gotcare staff and I are in constant contact back and forth with cell phone numbers and checking back and forth. There's a really great open communication there.

I find those meetings both fun, educational, and a great way to sort of problem solve. Gotcare is the only real home-care-based solution that ends these meetings, which has been very useful.<sup>1</sup>

Responsibilities are clearly divided. Gotcare primarily addresses falls, social needs, and some chronic conditions, while community paramedics focus on more complex medical cases. Although this clear delineation allows patients to receive appropriate services, there have been occasional gaps in service areas, such as in the management of complex diabetes cases. The personal relationships and community ties of Gotcare staff further enhance collaboration and patient engagement.

This guy was falling all the time. They were able to get into the home and set up different bars or different grab things just to make things better. And his calls for 911 ambulances dramatically decreased in the time that Gotcare was in there. So that was amazing because we tried everything. We could not think of things like any more to do. Gotcare comes in there, and there's — you know — connecting with the neighbours, connecting with the family, and — yeah, his calls really went down.

While collaboration between community paramedics and Gotcare Virtual Nurses is still developing, a more comprehensive definition of roles, specializations, and geographic coverage of community partners is needed. Overall, these

collaborative practices have led to reduced emergency calls, improved patient safety at home, and positive patient experiences. Continued efforts to expand and formalize interagency collaboration could further strengthen care coordination and outcomes.

#### BARRIERS AND FACILITATORS TO CARE: CLINICIANS' AND COMMUNITY PARTNERS' PERSPECTIVES

Barriers to care in rural communities are multifaceted. Technological challenges are prominent, including unstable phone service, lack of Wi-Fi or cellular coverage, and patient hesitancy or discomfort with technology, sometimes due to low digital literacy, visual or physical impairments, or mistrust (e.g., concerns about privacy or tracking). Economic barriers are also significant; many patients are unwilling or unable to pay for services such as foot care, which leads to unmet needs. Staffing shortages, particularly for personal support workers (PSWs), further limit service availability even when funding exists. There is also a lack of public knowledge about long-term care planning, and the expectation that hospitals will initiate such processes can delay appropriate care transitions. When asked about the barrier, one interviewee identified "Lack of availability of the staff — of the appropriate staff. Like we'll have funding for them to get like 13 hours of PSW work but we don't have the PSW to be able to put in there. So ... that's a challenge."

Facilitators to care include the adaptability and resourcefulness of care providers, who often tailor their approach to individual patient needs, such as shifting from technology-based monitoring to in-person check-ins when necessary. "There was a patient who declined to use the technology. So instead of trying to use the technology, he [Gotcare staff] just, like, rearranged the way he did stuff. Yeah. So yeah, it's more patient specific."

<sup>1</sup> This clinician is referring to how, in these discharge planning meetings where they identify challenges around the patients' homes, Gotcare is the only organization that offers real solutions. So when Gotcare takes up those challenges, the meeting naturally ends because they have nothing else to trouble shoot.

Flexible rostering and follow-up by community paramedics or other partners help address changing patient needs over time. The presence of dedicated staff or "ambassadors" with strong community ties enables creative solutions, such as mobilizing informal networks when formal services are delayed. Interdisciplinary collaboration and information sharing, including regular team meetings, further support coordinated care. These facilitators help bridge gaps created by systemic and contextual barriers, improving access and outcomes for rural patients.

## PROGRAM IMPLEMENTATION AND OUTCOMES

The Gotcare program was created to provide proactive, non-emergency support to patients in the community. Its goal is to reduce ambulance trips and emergency room visits and prevent crises before they occur. Stakeholders report that Gotcare effectively addresses critical service gaps, especially for patients waiting for long-term care or requiring transitional support after being discharged from the hospital. "I can think of a few patients who are doing better in the community or are having someone advocate for them through the Gotcare program, and that might not have happened otherwise. And so it's heartwarming to see that."

Gotcare's unique services, such as medication and grocery pickup, are not available through other providers. These services are particularly valuable for patients who do not have family or other support systems. The program's flexible, patient-centred approach often extends beyond the initially promised duration of support to ensure patient stability. "Gotcare will sit there and make a promise of, oh, I can be there for six weeks and stay for twelve. Like, I mean they are very patient-focused in that sense."

The hands-on assistance provided by Gotcare helps facilitate safe transitions home, addresses immediate needs, and offers ongoing support. This allows patients to remain safely at home, enhancing their independence and quality of life.

I've seen one of their employees pick up a patient who had no family to rely on whatsoever. They picked her up, took her to the drug store, made sure she got her medications filled. Took her to the grocery store because she had been in hospital for a week. Made sure she had a bunch of new groceries. Made arrangements for Meals on Wheels to provide freezer meals for her, got her into the house, cleaned the fridge out, got her settled before leaving. They had her set up with a meal to eat, and then they are coming back the next day ... this individual would not have gotten home and certainly would not have landed as safely and as softly as she did without having Gotcare there, right?

Clinicians and community partners highlight that Gotcare's reliable and responsive service alleviates their workload, with straightforward referral and documentation processes and effective interprofessional communication. The program has demonstrated positive outcomes, including a reduction in emergency calls, fewer hospitalizations, and decreased admissions to alternative level of care (ALC). Patients experience improved health and report high satisfaction, as do healthcare providers. The humanistic, relationship-based care offered by Gotcare is a key factor in fostering patient engagement and satisfaction.

There's definitely been an improvement in the health outcomes from patients, and that doesn't necessarily mean an avoidance of an ER visit. There's times where they've gone in and done the assessment and they're like, hey, this guy needs to come back and they were right.

My aunt ... had one pretty good fall, and she went home with Gotcare. And, you know, [Gotcare staff] had her set up so quickly and she absolutely admired [Gotcare staff]. And he was just so approachable for her, and

he set her up, got her using an iPad. She's 92. And you know, my aunt was really, really appreciative."

Furthermore, Gotcare has expanded the perspective of community care by encouraging the integration of social and health services beyond traditional homecare methods. This approach highlights the importance of diverse and collaborative strategies in meeting patient needs.

So my perspective of what's out there is way broader now that it's not just homecare services. We need to think about those social services. We need to diversify our community services in general so that we can provide that quality care. Yeah. So that's what I see. That's what Gotcare — maybe not them themselves, but what this project has done is really kind of opened up that view that it's not just one entity anymore — that there's a lot of other things we can do out there and a lot of great work we can do.

Overall, Gotcare is seen as a valuable, costeffective solution that positively impacts both patient outcomes and provider workloads.

### **Gender**

While the project does not explicitly target women and girls, early findings suggest that gendered dynamics shape both the delivery and experience of care in rural communities. Interviewees consistently emphasized the critical — but often invisible — role of informal caregivers, the majority of whom are women. Spouses, daughters, and other female family members frequently take on the responsibility of coordinating appointments, managing medications, and providing round-the-clock support. In some cases, interventions designed for a patient were, in practice, directed toward supporting the caregiver.

Respondents described caregiver burnout as a major risk to patient well-being. When informal caregivers are overburdened or unsupported, patients are more likely to be readmitted to the hospital or experience health setbacks. Several interviewees noted that acknowledging and supporting the caregiver's needs, through tools, check-ins, or coordinated resources, was central to the stability and sustainability of the care plan itself.

By actively involving caregivers in care planning, offering tools to reduce their burden, and emphasizing trust-based relationships, Gotcare's model indirectly advances gender-responsive care.

As the research progresses, our team will continue to explore how the intervention may support gender equity more explicitly, particularly by recognizing the labour of caregivers and integrating their needs into program design.

# Gotcare's Impact and Barriers to Success

Findings from the field suggest that Gotcare's Rural Stop Gap Program is helping to fill a critical service gap in postdischarge care for rural patients in the Hastings region. The program's hybrid model, combining digital tools, virtual clinical support, and community-based Health Ambassadors, has shown promise in reducing hospital readmissions, shortening delays in care transitions, and improving patient independence through goal-oriented support.

Interviewees shared examples where proactive interventions, such as early wellness visits, installation of home safety equipment, or digital health coaching, helped patients remain stable and avoid preventable deterioration. Clients who lacked traditional supports, such as connected caregivers or close-proximity familial support,

were still able to receive personalized care through the program's navigation and follow-up systems. These early outcomes suggest that the intervention is particularly impactful for patients at the margins of the health system, especially clients who live alone in remote areas with few or no neighbours within walking distance from their homes.

However, Gotcare continues to navigate significant barriers to success. One of the most commonly raised challenges was system fragmentation, particularly during transitions from hospital to home. Interviewees described these moments as high risk because of poor coordination, unclear discharge plans, and confusion among patients. Miscommunication between hospitals, Ontario Health, physicians, and other agencies often left no single stakeholder taking clear responsibility for managing the transition. Operational constraints also continue to affect delivery. Although the program has expanded from one to seven Health Ambassadors in the region, staffing remains tight relative to demand, and scheduling continues to be a logistical challenge. In some cases, care workers must balance intake for new clients with continued follow-up for existing ones, which has an impact on consistency in service delivery.

Finally, the digital divide remains a barrier to full program integration. While Gotcare provides tablets and digital tools, their adoption often depends on repeated, hands-on training and relationship-based support. Without this work, patients may disengage or underuse the tools, limiting the potential impact of the tablets and program as a whole.

Despite these barriers, the program has earned growing trust among patients, caregivers, and referral partners. Its emphasis on relationship building, adaptability, and evidence-informed care delivery positions the intervention as a promising model for future scale-up. The Rural Stop Gap Project balances innovation with grounded responsiveness to the realities of rural care.

# RECOMMENDATIONS FOR RURAL COMMUNITIES IMPLEMENTING COLLABORATIVE HEALTHCARE INITIATIVES

- Engage existing providers early. Consult
  with current home care and health service
  providers to understand their challenges
  and ensure new initiatives are seen as
  collaborative, not competitive. Early
  engagement helps build trust and smooth
  integration.
- Foster collaboration, not competition.
   Emphasize partnership and shared goals among all stakeholders, including hospitals, community groups, and home care agencies, to provide the best care for patients.
- Identify and address local gaps. Tailor services to fill specific gaps in each community, such as supporting patients during discharge when family is unavailable, or providing services outside regular hours.
- Build a close-knit, flexible team. Success depends on a team willing to adapt, communicate openly, and creatively solve problems for individual patients — even if solutions are needed only occasionally.
- Secure organizational buy-in. Align the initiative with broader health system goals (e.g., Ontario Health Team endorsement) and quality improvement priorities to facilitate support and integration.
- Plan for privacy and legal considerations.
   Develop clear agreements and protocols for information sharing, privacy, and custodianship before launching to avoid delays and ensure compliance.
- Prioritize timely, patient-centred service.
   Quick turnaround times for patient transitions and service delivery are crucial to prevent bottlenecks and ensure positive outcomes.

- Ensure willingness to learn and adapt. Be open to feedback, continuous improvement, and adapting the model to local needs and resources.
- Leverage financial and business expertise. Having someone with a background in project management and business operations can help navigate funding, reporting, and scaling challenges.

These recommendations highlight the importance of collaboration, flexibility, and planning in successfully launching and sustaining rural healthcare initiatives. With these issues in mind, we provide a self-assessment toolkit that rural health networks can use to evaluate their readiness to incorporate and launch digital initiatives. (See the appendix.)

#### **Lessons Learned**

Based on the experiences and insights gathered during this study, several key considerations emerge for

The program's effectiveness relies

internet connectivity, which remains

Expansion planning must account for

infrastructure realities and develop

contingency approaches for areas

where technology-based solutions

cannot function reliably.

heavily on adequate cellular and

inconsistent across rural regions.

communities or organizations looking to expand similar models or implement comparable rural healthcare initiatives.

Patient and family engagement. Future program development would benefit from systematically

incorporating patient and family caregiver perspectives into design, evaluation, and continuous improvement processes. Understanding how the model is experienced by care recipients themselves, how digital tools are perceived and used in daily life, and what barriers exist that providers may not observe

would strengthen program responsiveness and effectiveness.

Equity and access mapping. As programs scale, intentional analysis of who is being reached and who may be underserved becomes increasingly important. This includes examining whether certain patient populations (by age, language, geographic location, socioeconomic status, or health complexity) are underrepresented in referrals or face differential barriers to program access and engagement.

Infrastructure dependencies. The program's effectiveness relies heavily on adequate cellular and internet connectivity, which remains inconsistent across rural regions. Expansion planning must account for infrastructure realities and develop contingency approaches for areas where technology-based solutions cannot function reliably. Advocacy for rural broadband investment should be considered alongside programmatic expansion.

Workforce sustainability. The Health Ambassador model depends on recruiting and retaining community-embedded workers with flexibility,

> adaptability, and strong interpersonal skills. As programs scale, maintaining the relationship-based care quality that drives effectiveness while managing reasonable caseloads and preventing burnout will require careful workforce planning and support.

System integration complexity. Successful integration with existing healthcare services development. Communities implementing similar establishing trust, resolving territorial tensions, and building the collaborative infrastructure necessary for seamless care transitions.

Caregiver support mechanisms. The recognition that informal caregiver well-being directly impacts patient outcomes suggests that future program iterations should more explicitly incorporate caregiver assessment, support, and respite coordination into core program design rather than treating it as an ancillary function.

**Technology adoption support.** Digital health tool effectiveness depends less on the technology itself than on the relationship-based support structure surrounding it. Programs should budget adequate time and resources for hands-on coaching, repeated reinforcement, and analog scaffolding materials, recognizing that technology adoption is a process rather than an event.

Outcome measurement. While this study captured qualitative experiences and observed impacts, systematic outcome tracking (readmission rates, emergency use, care transition timeliness, patient and caregiver satisfaction, and Health Ambassador retention) would strengthen evidence for program effectiveness and guide continuous improvement.

These considerations reflect both the successes observed in Gotcare's implementation and the challenges and limitations that surfaced during this research. They are offered not as definitive prescriptions but as domains warranting attention as rural healthcare innovations move from pilot to scale.

#### STUDY CONTEXT AND LIMITATIONS

This case study draws on qualitative interviews conducted with Gotcare's Virtual Nurses, Health Ambassadors, hospital clinicians, and community partners during the pilot phase of the Rural Stop Gap Program in Hastings, Ontario. The findings reflect the perspectives and experiences of healthcare providers and staff directly involved

in program delivery and coordination. Several contextual factors shape how these findings should be interpreted.

Stakeholder representation. The primary data sources for this study were front-line staff, clinical supervisors, and referral partners. While these perspectives provide valuable insight into program operations, care delivery models, and system-level coordination, they represent the provider side of the healthcare relationship. Patient and family caregiver perspectives, while referred to by staff, were not captured through direct interviews in this phase of research.

Temporal and geographic scope. Observations reflect the program's implementation during its pilot phase across select hospital sites in North and Central Hastings. The dynamics of program delivery, stakeholder relationships, and operational challenges may evolve as the program scales or extends to different rural contexts with varying infrastructure, demographics, or existing service landscapes.

Emergent program model. The Rural Stop Gap Program employs an adaptive, iterative design that responds to ongoing feedback and operational learning. The practices, processes, and relationships described here represent a specific moment in the program's development rather than a fixed or final model.

Generalizability considerations. While the barriers and facilitators we identified resonate with broader challenges documented in rural healthcare literature, the specific solutions and approaches developed by Gotcare reflect the unique context of Hastings' healthcare ecosystem, community partnerships, and regulatory environment. Transfer to other rural settings would require adaptation to local conditions.

These contextual parameters do not diminish the value of the insights gathered but situate them within the specific conditions under which data was collected and analyzed.

#### Research Team



Joy Lai is an MASc student in biomedical engineering with the Intelligent Assistive Technology and Systems Lab, under the supervision of Professor Alex Mihailidis. Her research focuses on developing anomaly detection technology for people living with dementia and their caregivers, using machine learning methods and human-Al interaction practices.



**Gladys Olisaekee** is a doctor of public health candidate at the Dalla Lana School of Public Health, with full funding from Mastercard Foundation Scholarship. She has experience in research and project management focused on reproductive, maternal, newborn, and child health, as well as health systems strengthening. Driven by a commitment to evidence-based approaches, she is passionate about translating research into policy and practice to improve health outcomes in resource-limited settings. Her doctoral research explores the healthcare experiences of adolescent mothers during pregnancy in rural Nigeria.



Amareena Saleh-Singh is a master of public policy candidate at the Munk School of Global Affairs & Public Policy. She previously studied public policy, political science, and women and gender studies. She is actively involved in mutual aid research with Professor Neil Price of the Urban Studies Program. Her research mostly focuses on food security and health inequality during the pandemic in Toronto, Canada.



**Enid Montague** is a human factors engineer with expertise in humanautomation interaction in health care. Dr. Montague researches appropriate automation between physicians, patients, and technologies, and designing systems for health equity and patient safety. She uses mixed methods in naturalistic settings to model human technology interaction and develop guidelines for human-automation that is efficient, effective, and safe for patients and healthcare providers.



**Gonzalo Romero** is an associate professor of operations management and statistics at the Rotman School of Management. His main research interests include operations management in low- and middle-income countries, sustainable operations, operations and analytics in healthcare, supply chain management, and revenue management. His recent work uses mathematical modelling and analytics to address sustainability and efficiency issues in supply chains in emerging markets.



Digital is Canada's Global Innovation Cluster for digital technologies, driving collaborative projects that accelerate innovation in health, natural resources, and other sectors. Since 2018, Digital has mobilized over \$786 million in co-investment, supported 34,000 jobs, and delivered 190+ commercial products, generating more than \$4 billion in GDP impact. With over \$200 million committed to Al-powered initiatives, Digital is advancing the creation and adoption of Canadian-made Al solutions across healthcare, natural resources, and agriculture. Its model is built on multi-sector collaboration, co-investment, and commercialization, delivering real-world impact — from rural Ontario to genomics, drug discovery, and chronic condition management — through Canadian-made digital innovation. www.digitalsupercluster.ca

### Gotcare

**Gotcare** is a Canadian leader in technology-enabled home health care, delivering personalized, cost-effective care that keeps people at home. Its Al-driven model reduces costs by up to 67% compared to institutional care, while achieving a 94% in-home satisfaction rate. With a national network of 40,000+ community care workers, Gotcare serves rural and urban communities, providing faster access to care — cutting wait times from two months to one day. Through predictive analytics, biometric monitoring, and virtual care enablement, Gotcare improves patient outcomes, supports clinicians, and helps care funders contain costs while enhancing equity in health care delivery.

https://gotcare.ca/



Founded in 1827, the **University of Toronto (U of T)** is Canada's leading institution of learning, discovery, and knowledge creation. One of the world's top research-intensive universities, its students learn from and work with preeminent thought leaders through a multidisciplinary network of teaching and research faculty, alumni, and partners. Consistently ranked among the top 10 public universities worldwide, U of T has remarkable strengths in disciplines that span the humanities, social sciences, sciences, and the professions. U of T's three campuses host 93,000 undergraduate and graduate students from 159 countries, who are taught by 15,000 faculty. **www.utoronto.ca** 



The Center for Inclusive Growth advances equitable and sustainable economic growth and financial inclusion around the world. The Center leverages the company's core assets and competencies, including data insights, expertise, and technology, while administering the philanthropic Mastercard Impact Fund, to produce independent research, scale global programs, and empower a community of thinkers, leaders, and doers on the front lines of inclusive growth.

mastercardcenter.org

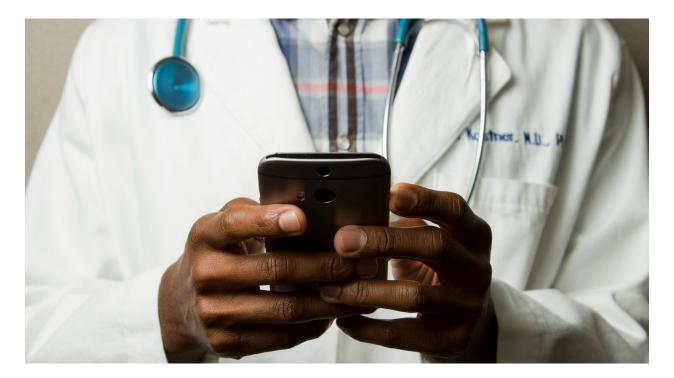


Photo by National Cancer Institute on Unsplash

# Appendix — Rural Healthcare's Readiness to Integrate Digital Health: A Self-Assessment Toolkit

Rural healthcare faces persistent challenges: staff shortages, fragmented referral systems, caregiver strain, and patients who are often excluded from standard models of care. Alternative care pathways, including digital health, hybrid programs, and community-embedded roles, offer new ways to extend reach and equity.

These innovations are not a replacement for traditional care, but a complement. Done well, they can strengthen relational care, improve continuity, and give providers new tools to manage risk.

The central question is not "Should we adopt digital health?" but "How ready are we to integrate these pathways into our organization?" This toolkit helps answer that readiness question through core themes, front-line evidence, reflection prompts, and practical steps.

1 Relational Care As Infrastructure
2 Caregiver Well-Being and Hidden Labour
3 Digital Health: Promise and Exclusion
4 Referral Pathways and System Navigation
5 Workforce: Community-Embedded and Flexible
6 Cultural Safety and Community Ownership
7 Sustainability and System Integration
8 Outcomes and Risk Management
9 Economic Accessibility

## 1. Relational Care As Infrastructure

#### **CORE THEME**

In rural healthcare, trust and human connection are as critical as medical interventions.

Programs succeed when patients feel seen, not surveilled.

#### **FIELD EVIDENCE**

- Clinician's note: "I don't hear about the program. I hear about the people."
- Health Ambassadors are remembered for small gestures (food, slippers, companionship) that create safety, comfort, and trust.
- Patients often resist outsiders, especially older men: "No, I don't want anybody else coming to my home."

#### **ORGANIZATIONAL REFLECTION**

- How embedded are we in community networks where trust precedes care?
- Do our staffing models allow for timeintensive, trust-building activities (check-ins, informal help), not just transactional care?
- How do we measure relational outcomes (comfort, confidence, willingness to engage) alongside clinical outcomes?

#### **PRACTICAL NEXT STEPS**

- Schedule time for informal checkins, not just clinical tasks.
- Encourage staff to document small relational gestures (comfort, reassurance, companionship).
- Explore simple ways to measure relational outcomes (e.g., patient comfort surveys).

## 2. Caregiver Well-Being and Hidden Labour

#### **CORE THEME**

Caregivers — often women — carry invisible burdens that shape whether interventions succeed or fail. Ignoring caregiver strain undermines patient outcomes.

#### **FIELD EVIDENCE**

- Literature and interviews highlight burnout as a driver of readmissions.
- Interventions ostensibly "for the patient" are sometimes effectively sustaining the caregiver.
- A paramedic noted that 30% of clients had family support, but many relied entirely on outsiders.

#### **ORGANIZATIONAL REFLECTION**

- Are caregivers formally recognized as part of the care unit in planning?
- What structures exist to monitor and address caregiver fatigue?
- Can our organization advocate for genderresponsive policies (respite, stipends, peer groups)?

- Ask caregivers during visits how they are coping.
- Keep a list of local respite, peer groups, or community supports to share.
- Consider including caregivers in care planning conversations.

## 3. Digital Health: Promise and Exclusion

#### **CORE THEME**

Technology extends care reach but risks deepening inequities when digital divides persist. Rural readiness depends on infrastructure, skills, and cultural acceptance.

#### **FIELD EVIDENCE**

- Barriers: poor infrastructure such as unreliable
   Wi-Fi and no cell service; patients with dementia or visual/physical impairments.
- Hesitancy: older adults fearing surveillance.
- Success requires hands-on coaching: "You can't just give an 80-year-old person a tablet."

#### ORGANIZATIONAL REFLECTION

- Do we map infrastructure blind spots (no-service zones, power outages) before rollout?
- What parallel offline or low-tech options exist for excluded patients?
- How do we frame technology to reduce fear
   — for example, as a "safety blanket" and not
   surveillance?
- Can we track differential adoption (who engages vs. disengages)?

#### PRACTICAL NEXT STEPS

- Map areas with poor connectivity before starting digital programs.
- Pair digital tools with an offline or phone option.
- Provide basic coaching or printed instructions for patients new to technology.

# 4. Referral Pathways and System Navigation

#### **CORE THEME**

Fragmented referral systems burden providers and confuse patients. Without coordination, no single group "owns" the discharge-to-home transition.

#### **FIELD EVIDENCE**

- Clinicians: "It doesn't make sense. If you don't send it to the right fax number, they don't always forward it on."
- Weekly hospital-paramedic-Gotcare meetings reduced silos and allowed problem solving.
- Patients often rely on Health Ambassadors to navigate multiple agencies.

#### ORGANIZATIONAL REFLECTION

- Do we have access to centralized intake processes, or are we reinforcing silos?
- Can we embed staff in interdisciplinary discharge rounds?
- How do we prevent providers from carrying unrealistic knowledge burdens (e.g., knowing which agency serves which clients based on arbitrary geographic boundaries)?

- Review current referral processes with front-line staff to spot bottlenecks.
- Share a single contact list or directory of local services with the care team.
- Encourage regular cross-team meetings to address gaps.

#### 5. Workforce: Community-Embedded and Flexible

#### **CORE THEME**

Rural programs require staff who are local, adaptable, and empowered to act beyond strict role definitions.

#### **FIELD EVIDENCE**

- Gotcare fills nonmedical gaps (groceries, grab bars, companionship) that paramedics aren't trained for.
- Staffing shortages remain a constraint a few Health Ambassadors balancing many clients.
- Patients consistently recall individual staff names rather than "the system."

#### **ORGANIZATIONAL REFLECTION**

- Do we hire staff from within the communities we serve?
- How do we support staff to handle nontraditional tasks without burnout or role creep?
- Is there a plan to balance workload distribution when caseloads grow?

#### PRACTICAL NEXT STEPS

- Prioritize hiring staff from within the community where possible.
- Offer clear guidance on when staff can help with nonmedical tasks.
- Monitor workloads and redistribute if some staff have too many clients.

# 6. Cultural Safety and Community Ownership

#### **CORE THEME**

Rural residents may distrust external interventions. Programs succeed when they are co-designed and culturally aligned.

#### **FIELD EVIDENCE**

- Some patients reject services outright ("no one else in my home").
- Distrust linked to political/cultural context (COVID-19, government skepticism).
- Embedding staff locally reduces resistance: "I can just run down the street and check on his dad."

#### ORGANIZATIONAL REFLECTION

- How do we co-design with community members before implementation?
- Are we addressing cultural mistrust directly, not assuming neutrality?
- Do we measure program legitimacy by community acceptance as well as outcomes?

- Ask community members for feedback before introducing a new program.
- Recruit staff who already live in or have ties to the community.
- Acknowledge and address concerns about trust or privacy directly.

# 7. Sustainability and System Integration

#### **CORE THEME**

Pilots often thrive but stall when perceived as competition or when funding ends. Sustainability depends on collaboration, transparency, and stable financing.

#### **FIELD EVIDENCE**

- Clinician advice: "Speak with your current home care providers so it doesn't feel like you're stepping on toes."
- Desire for data portals so physicians can track patients post-referral.
- Economic barriers: many patients refuse paid services (e.g., foot care).

#### **ORGANIZATIONAL REFLECTION**

- Are we positioning new programs as collaborative complements or competitive threats?
- Do we have data-sharing systems for transparency with providers?
- How do we sustain services if patients cannot or will not pay?
- Have we co-designed sustainability strategies with community members and front-line staff, not just funders or policymakers?

#### **PRACTICAL NEXT STEPS**

- Meet with existing home care providers to coordinate early.
- Explore simple ways to share updates with providers (secure email, shared notes).
- Discuss long-term funding options with partners before launching.

# 8. Outcomes and Risk Management

#### **CORE THEME**

Hybrid programs prevent falls, reduce ambulance calls, and delay institutionalization — but they also face scope limitations and risks during transitions.

#### **FIELD EVIDENCE**

- Positive case: falls prevention (rails, grab bars) reduced 911 calls dramatically.
- Negative case: unstable diabetes not manageable within program scope.
- Risks: unsafe discharges (e.g., patients dying en route without oxygen or on icy steps).

#### **ORGANIZATIONAL REFLECTION**

- How do we track flagship success stories while also acknowledging limits?
- Do we have protocols for risks beyond medical care (home safety, transport)?
- How do we set boundaries on program scope while keeping patients safe?

- Collect short success stories and challenges to share internally.
- Track common risks (falls, unsafe discharges) and flag them early.
- Clarify what types of care the program can and cannot provide.

#### 9. Economic Accessibility

#### **CORE THEME**

Rural patients often resist or cannot afford paid services, making free-at-point-of-care delivery crucial for equity.

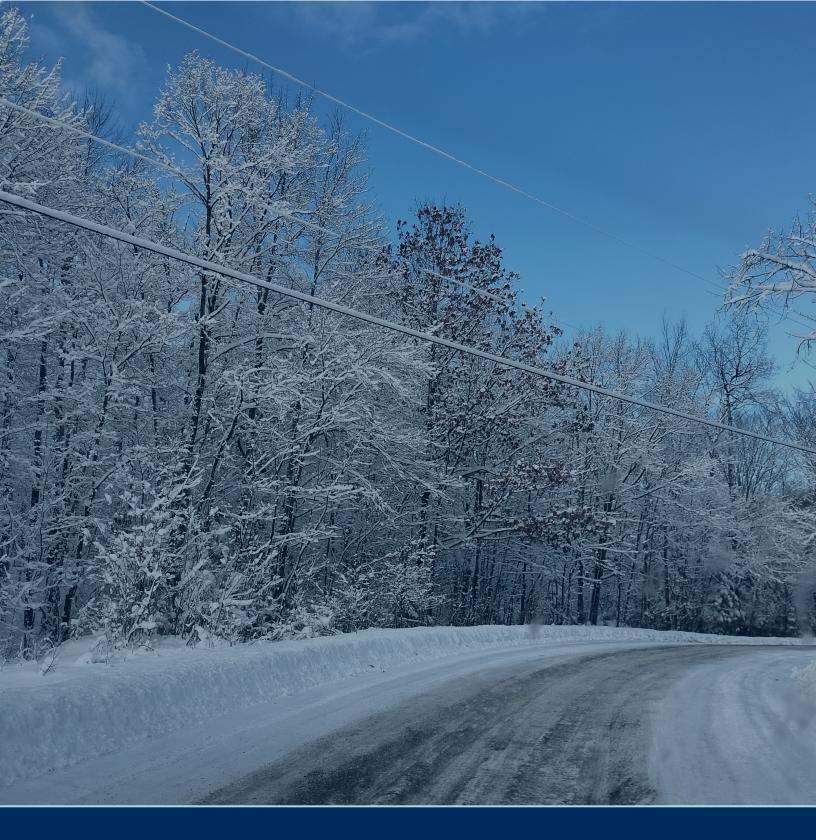
#### **FIELD EVIDENCE**

- Community paramedics noted: "If we would offer something they have to pay for, they would have nothing to do with it."
- Foot care is cited as a gap available, but inaccessible due to cost.

#### **ORGANIZATIONAL REFLECTION**

- Are programs structured to be affordable or subsidized?
- How do we integrate with public systems (e.g., OHIP) to maintain accessibility?
- What advocacy role can we play around policy-level funding gaps?

- Identify which local services are free vs. out-of-pocket.
- Where possible, connect patients to subsidized or public options.
- Raise awareness of affordability issues with funders and policymakers.





Published by the Reach Alliance, December 2025 Munk School of Global Affairs & Public Policy | University of Toronto