Unlocking Healthcare Efficiencies

How a digital front door can help constrained healthcare systems improve access, optimize resources, and enhance patient experiences.

Table of Contents

Introduction

Healthcare systems in Canada and around the world are under significant strain. Patients everywhere face systemic barriers to care, emergency departments are chronically overcrowded, and wait times are often hours long.

An ongoing shortage of healthcare workers is impeding the system and exhausting the workforce, while inefficient resource utilization means clinicians often spend more time with paperwork than with patients, further diminishing quality of care.

Change is needed now to ease the strain on the system, maximize clinicians' time, and ensure patients can access the healthcare services they need when they need them.

Digital tools and technology like a digital front door have the potential to address and alleviate many of these challenges.
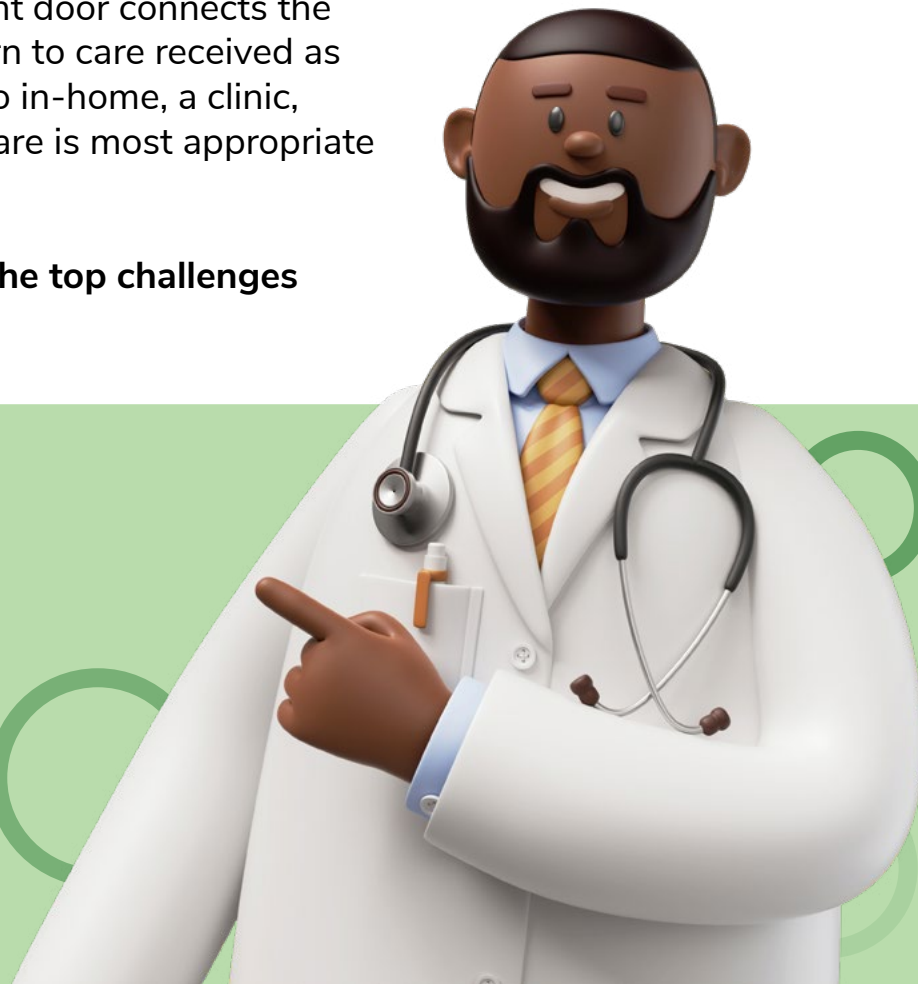
What is a Digital Front Door?

A digital front door leverages technology to transform how patients access and interact with healthcare services. It functions as a primary point of entrance – or front door – to healthcare, where patients can go to find resources and access the healthcare services they need in the moment. It enables patients to match their needs with available services in their area, optimizing supply and demand, while preventing overcrowding in the emergency department (ED). It enhances efficiencies, removes barriers to care, minimizes costs, and optimizes both health system capacity and clinician time by diverting patients to the best point of care, every time.

By integrating services that span the patient journey, a digital front door connects the dots in healthcare, allowing patients to go from healthcare concern to care received as quickly as possible. Care can start digitally, stay digital, or move to in-home, a clinic, pharmacy, hospital or other setting, depending on what level of care is most appropriate – all facilitated by the digital front door.

Read on to discover how a digital front door can help address the top challenges impacting constrained healthcare systems.

A digital front door helps patients match their need with the available services in their area, optimizing supply and demand while preventing overcrowding in the ED.

Components of a Digital Front Door

A digital front door combines numerous technologies and services to centralize and streamline care, enhance communication, and serve patients at various touchpoints throughout their journey.

Web portal
Customizable launch page that serves as the point of entry into the healthcare system.

Chatbot
AI-powered to engage with patients, streamline inbound requests, determine urgency, and triage patients.

Omnichannel communication
Enables patients to connect how they want, through chat, SMS, audio, video, or web chat. Also integrates with social media.

Clinical pathways
Supports sound clinical decision-making with dynamic assessment forms and built-in clinical workflows.

Routing and referrals
Captures required patient information for seamless routing to specialized care as needed.

Virtual care
Integrated virtual care services allow patients to connect with doctors and receive care virtually.

Service & provider directory
Enables users to browse all healthcare services, resources, and healthcare providers in their area, with details on how to access services.

Data and analytics
Comprehensive reporting, analytics, and dashboards enable easy data review to maximize investment and improve patient engagement.

Optional features:

- **AI-enabled extensions:** Add-on components utilize natural language and cutting-edge AI technologies. For example, photo-identification extensions allow patients to self-serve by uploading photos for instant identification of many common skin, hair, nail, eye, and sexually transmitted diseases and ailments.

- **Integrations:** Technical integration capabilities ensure the digital front door fits into existing technical infrastructure. Leverages FHIR integration standards.

Emergency departments in Canada and around the world are chronically overcrowded, and recent evidence shows the problem is growing worse[1].

A lack of family doctors, rural healthcare closures, and limited community resources are pushing more and more patients to the ED, even for minor ailments, and this practice is straining the system and negatively impacting health outcomes. **Approximately 17 percent of ED visits in Canada are due to non-urgent complaints**[2] that would be more appropriately managed in an alternative setting. Similarly, ED wait times have gotten so excessive in some provinces, patients are leaving before receiving treatment.

Overcrowded EDs are also responsible for a significant economic burden and clinical burden. In British Columbia, **the cost of physicians treating minor ailments is an estimated $95 million annually**[3]; treating these ailments in pharmacies could save an estimated $32 million. In Ontario, an estimated **25-33 percent**[4] **of visits to family physicians could be handled by pharmacists**. The same study found that minor ailments occupied approximately 945,165 hours of physician time and, if shifted to pharmacies, could contribute to a net savings of roughly $12 million over five years.

By diverting patients with minor ailments from the ED to a more appropriate care setting, we can decrease wait times, save money, and allow clinicians to focus on more high acuity patients.

1. Canada's Drug and Health Technology Agency, 2. Low-acuity emergency department use among patients in different primary care models in Hamilton and Ontario, 3 & 4. Minor ailments across Canadian jurisdictions

How a Digital Front Door Can Help

A digital front door can help alleviate strain on emergency departments in several ways:

Diversion and Capacity Optimization

When patients have a health concern, they enter the healthcare system through the digital front door, where they're quickly connected to health information services and advice via a healthcare navigator or chatbot. The chatbot or live navigator will assess the patient's condition and guide them to the most appropriate point of care, which can include a pharmacy, walk-in clinic, virtual urgent care, or self-care at home.

By becoming the first point of contact for patients, a digital front door diverts unnecessary ED visits, instead directing patients to a more appropriate setting where they will likely receive care much quicker. This helps maximize use of healthcare resources, and ensures all healthcare providers - from physicians to pharmacists - are used to their fullest potential.

Integrated Care Pathways

Care pathways can address clinical bottlenecks and help clinicians confidently deliver the latest evidence-based care for a vast range of health conditions. **By bringing the most up-to-date medical knowledge to clinicians' fingertips, healthcare providers are empowered to make optimal decisions on the go**, reducing errors and redundancies in care.

Care pathways can be customized to address common conditions impacting specific populations, including diabetes, chronic pain, and heart failure, ensuring care is seamless and consistent and patient outcomes are improved.

Virtual Care Supports Through a Network of Clinicians

Triage and assessment capabilities enable the digital front door to determine which patients are ideal candidates for treatment in a virtual setting and can **automatically reroute patients to virtual care options within the digital front door.**

Virtual care capabilities can be supported by a network of clinicians from across Canada, ensuring that even remote and under served communities have access to a reliable network of healthcare professionals.

thinkresearch

2. Maximize Healthcare Resources

Doctors across Canada spend too much time on paperwork and other unnecessary administrative tasks that prevent them from focusing on patient care. A recent report, Patients Before Paperwork, found that clinicians in Nova Scotia were spending the equivalent of one full day each week on administrative tasks, which equates to approximately 1.73 million patients annually. Nationally, the numbers are even more staggering.

According to the report, doctors across Canada spend an estimated 18.5 million hours annually on needless administrative activity – the equivalent of 55.6 million patient visits. **If governments could reduce that burden by 10 percent, it could translate to the equivalent of 5.5 million more patient visits per year** – that's proportionate to the population of British Columbia!

By digitizing and streamlining admissions and referrals, we can reduce paperwork and time-consuming administrative tasks and enable clinicians to spend more time treating patients.

Patients > Paperwork

Doctors across Canada spend an estimated 18.5 million hours annually on needless administrative activity that could be spent with patients.

How a Digital Front Door Can Help

When patients engage with the digital front door, the solution collects relevant, pathway-specific information and automatically routes it to the appropriate care location. This streamlines the intake and admission process, eliminates the need for manual data entry, prevents lost paperwork, and ensures relevant patient information is readily available for clinicians, specialists, and other healthcare professionals who may interact with the patient.

When everyone has access to the same information, making well-informed care decisions is easier, and patient experiences are improved.

Digitizing forms simplifies patient processing, improves accuracy, cuts costs, and minimizes stressors resulting from inefficient processes and repetitive tasks.

29%
of Canadians have experienced chronic difficulty accessing healthcare.

2nd last
Canada ranks ninth out of 10 peer countries in percentage of patients ability to make same-day appointments.

~17%
of emergency department visits in Canada are due to non-urgent complaints.

thinkresearch

3. Improve Patient Experiences

Virtually all industries have been impacted by digital transformation, and healthcare is no exception. Though the shift to digital was accelerated by the pandemic, it's permanently changed the expectations of healthcare consumers.

The vast majority of Canadians want digital healthcare options like telemedicine, virtual care, remote monitoring, etc., to remain the norm in healthcare delivery, both for the convenience and the empowerment it offers.

According to Canada Health Infoway:

92%
of Canadians **want technology that makes healthcare as convenient** as other aspects of their lives.

90%
want technology that puts them in **greater control of their health.** They also want to learn how technology can help them work towards better health outcomes.

80%
believe **investing in healthcare technology** should be a top government priority.

How a Digital Front Door Can Help

A digital front door provides the digital health experiences today's patients want. It brings the healthcare system to their fingertips, allowing them to access health advice via chatbot or navigator, browse healthcare providers in their area, find and book the soonest available appointments, connect virtually with healthcare providers for many health issues (sometimes instantly!), which often results in patients receiving care in the comfort of home.

Empowering patients helps them better navigate the healthcare system, make more informed decisions, improves compliance, reduces anxiety levels, and encourages them to participate actively in preventative measures or treatment of their diseases.

Digital health solutions also result in big savings for both healthcare systems and patients. One report found that **telemedicine could save governments up to $1 billion annually**[5]. Similarly, in 2019 alone, **Canadians collectively saved 11.5 million hours and $595 million**[6] **by not having to take time off work** to attend in-person appointments.

5. The Economic Impact of Telemedicine in Canada, 6. Canada Health Infoway

Let's Get Digital: It's What Canadians Want

Canadians who recently accessed digital health services had overwhelmingly positive responses:

8 in 10 Canadians who used health technology report they were better able to manage their health and had a better quality of life

9 in 10 Canadians who used health technology report it saved them time

89% of Canadians who accessed health records electronically felt that they were more informed about their health

84% feel they can better manage their health and **41%** said they were able to avoid a trip to the ED

Canada Health Infoway

4. Enhance Access to Healthcare Services

Canadians are struggling to access the healthcare services they need. A poll by the Angus Reid Institute found that **29 percent of adults – or roughly nine million Canadians - have experienced chronic difficulty in accessing healthcare.** A further 31 percent – or 9.7 million Canadians – said they've experienced some challenges, although nearly all (98 percent) of this group reported having a family doctor.

Those living in remote or rural areas are especially impacted. They're faced with far fewer services and a limited number of practitioners available to provide care, which typically results in poorer health outcomes.

When compared to peer countries, Canadians also experience the longest wait times when attempting to access care. **Canada ranked ninth out of 10 countries in percentage of patients able to make a same-day appointment when sick**[7], and in last place for percentage of patients who waited four or more weeks for a specialist appointment.

How a Digital Front Door Can Help

A digital front door removes barriers to access by making it easier for patients to access healthcare services from anywhere. Patients without a family doctor can find services and providers in their community, book appointments, discuss their symptoms and be guided to the best point of care in their community, which might include a walk-in clinic, pharmacy, or self-care at home.

7. The Fraser Institute, 8. Science Table, 9. CIHI, 10. Angus Reid, 11. Fraser Institute

The State of Healthcare in Canada

A 2021 study found that more than **60%** of Canadian healthcare professionals are experiencing severe burnout. [8]

Approximately **1 in 5** patients who visit the emergency department would be better treated by a family physician, clinic or pharmacist.[9]

Roughly **9 million** Canadians have 'chronic difficulty' accessing healthcare.[10]

Wait times to see a specialist in 2022 averaged **27.4 weeks** from referral to treatment.[11]

Meet Jane. Jane is one of the millions of Canadians without a family doctor.

Jane wakes up and notices her left eye is swollen, burning and pink in colour. She is worried and wants to receive care as soon as possible.
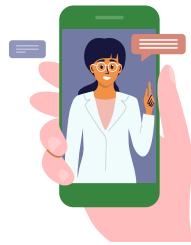
🔍 Scenario 1

Jane prepares to head to the closest emergency department before remembering she can seek care through a digital front door.

She launches the digital front door from her phone.

In a few clicks, she's connected to a healthcare navigator and discusses her symptoms.

The healthcare navigator directs Jane to the nearest walk-in clinic to receive treatment.

Jane is seen by a pharmacist and given a prescription to treat conjunctivitis.

🔍 Scenario 2

Rather than heading to the nearest emergency department or walk-in clinic, Jane remembers she can seek virtual care options via the digital front door.

The digital front door clinical algorithm assesses Jane's condition and determines she is a fit for a provincial virtual care program - virtual urgent care.

The digital front door platform automatically directs and connects Jane with the virtual urgent care platform. Jane is seen virtually by a clinician and provided with a prescription to treat conjunctivitis.

Both scenarios enabled Jane to access the treatment she needed quickly and easily, using available healthcare resources as efficiently as possible.

🔍 Getting Started

It's clear that a digital front door has the power to transform healthcare. By empowering patients and making it easy for them to access the right level of care at the appropriate time and place, healthcare becomes preventative, rather than reactive.

Preventative care improves health outcomes, reduces costs, and decreases the burden on healthcare systems. ==A digital front door can be implemented in phases and is fully customizable to meet the unique needs of your healthcare organization and patient population.== By deploying a digital front door, you can:

- Improve access to care, streamline the patient journey, and maximize available healthcare resources
- Personalize patient journeys across touchpoints, while addressing existing gaps in healthcare delivery
- Enhance digital presence and experiences to meet today's expectations
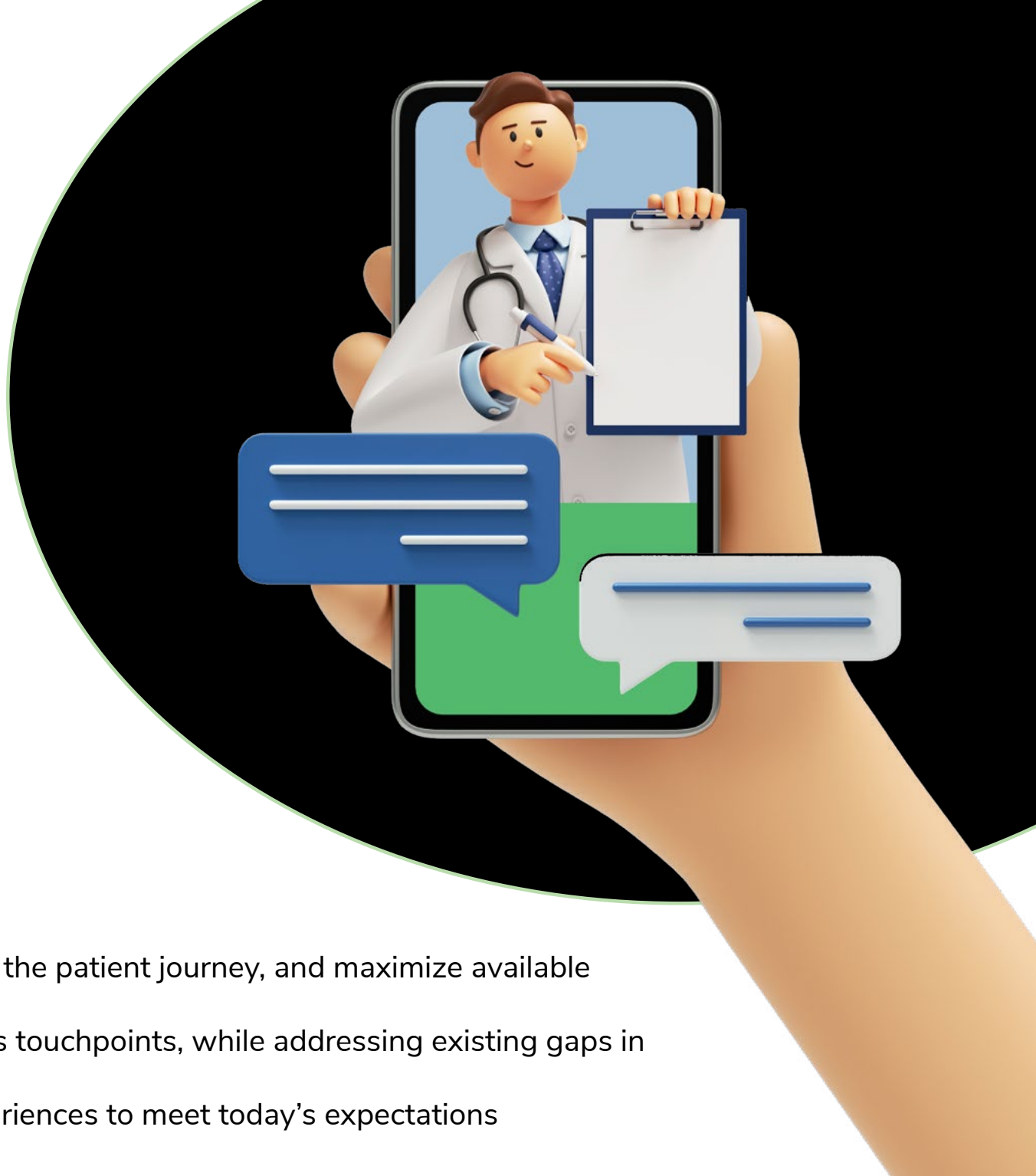
Start transforming your patient experiences today - learn more about the benefits of a digital front door:

- Remove barriers to healthcare access with multi-channel patient engagement and digital-first triage

- Reduce strain on staff and traditional in-person healthcare sites

- Provide user-friendly journey with fully digital patient experience

- Go from initial contact to triage in minutes with chat and teleconferencing functionality

- Fully configurable for the needs of your organization

- Single hub for initial interactions with healthcare systems

Contact us today to [book a demo](#).

For more information, visit [thinkresearch.com](#)
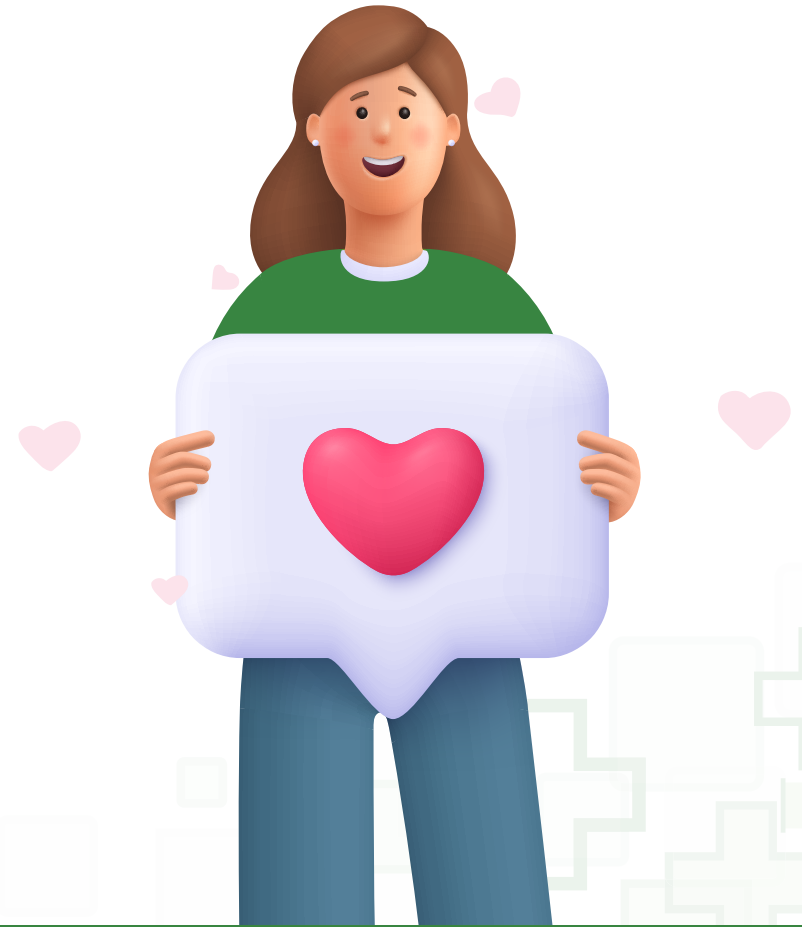
About Think Research

We're organizing the world's health knowledge so everyone gets the best care.

Think Research Corporation is an industry leader in delivering knowledge-based digital health software and data solutions. Our evidence-based healthcare solutions support clinical decision-making, improve access to services, enable practitioners to gain better capabilities and knowledge, and help to standardize care to facilitate better healthcare outcomes. Think Research has gathered a significant amount of data by building its repository of knowledge through its digital solutions platform and group of companies. Our focused mission is to become an essential platform that helps healthcare clinicians, institutions and networks to provide the best care and information.

thinkresearch