



DIACC Industry Insights: Digital ID in Health Care



What is Digital ID and How Does It Impact Key Industries and Their Customers?

This paper is the second in a series prepared by the Digital ID and Authentication Council of Canada (DIACC) highlighting the potential impact that digital ID could have on key sectors of the Canadian (and global) economy.

In this second paper, we focus on the health care industry.

What is Digital ID?

Identity is a type of information about an entity (for the sake of simplicity, a person) that uniquely describes the entity within a given context. In other words, identity is a collection of indicators (or attributes) about a person (entity) that make that person unique. Digital identity (ID) is a set of attributes that links a personal

entity with their online interactions by using trusted sources. Digital ID refers to one's online persona - an online footprint. It touches important aspects of one's everyday life, from financial services to health care and beyond.

What You Need To Know

- Health care data breaches increased in the past year – affecting 15 million patient records – triple the amount in 2017. In 2018, each day saw at least one health data breach.
- Each year, billions of dollars are wasted on the time and effort taken by health care professionals to access patient records.
- There is a false sense of security that an individual's health ID stands as a unique ID that allows for the connection of and sharing of data across health services institutions.
- Today, health care is more multi-disciplinary and complex than ever. One in five Canadian adults take four or more medications on a regular basis, and nearly one-third (32 per cent) of Canadians report having two or more chronic conditions. Having a digital ID to deal with multiple providers would be beneficial.
- The health care system is in need of innovation. As it stands, the approach to health care is often reactive, where patients are passive recipients of care. It is imperative that patients play an active role in managing their conditions, and digital ID can further this.
- In health care, digital ID presents the potential to unlock new efficiencies and a more integrated management system, while maintaining patient privacy and autonomy.
- Trust is critical in strengthening and maintaining the relationship between patients and care providers. Having confidence and trust at both ends of the interaction enables growth in the digital economy.
- In terms of data and interoperability, the number of challenges facing health care are immense. While in no means is it the 'be all and end all', digital ID is a key element to removing the friction that allows us to reach that interoperability, and the cornerstone to achieving this.



What This Means For Stakeholders

Digital ID has far-reaching impacts for a variety of stakeholders, all of whom benefit from improved efficiencies in the system.

Patients

For patients, the advent of new technologies enables health care that is more personalized.

- Digital ID would result in improved efficiencies in regards to the prescriptions and payment process.
- It would eliminate dependence on physical documents, as patients would no longer need to rely on health cards, vaccine records, and other physical documents to access services. It would allow patients to tell their story more quickly to medical professionals, without having to go through paperwork each time. Today, if a patient forgets their health card when visiting a new practitioner, they may get turned away.
 - Upon moving to a new city, a patient must visit a ministry office in person to present their identification documents (such as a birth certificate or driver's licence) and their various proofs of residency (such as utility bills). With digital ID, the patient would be able to simply use a government website, to easily prove both who they are and where they live.
- Digital ID allows patients to view their test results, inquire about them, and get second opinions.
 - A study found that 93 per cent of patients who accessed their lab results online reported they had more informed discussions with their doctor.
- It would give patients control over their personal records, increasing their ability to advocate for their own care.
- Patients benefit from a unified approach to health care records, as various providers would be able to gain a comprehensive view of their patients' profile. It is during the referral process that cracks in the system become evident. Digital ID would facilitate information being readily available at the point of care, so that the responsibility to assemble that information does not fall into the hands of the patient.
- A poll of 1,551 Canadians by the Orion Health Chronic Care Index discovered that health care delivery is fragmented into silos that do not communicate well with one another. Nearly one-in-five Ontarians with chronic conditions have experienced medication errors or duplications, and more than one in 10 often go through unnecessary duplicate procedures. Additionally, many Canadians have found that their complete health care record is not available each time they visit a clinician.
- Connections and interoperability with other relevant industries would lead to greater accuracy for other undertakings that require health information. For example, primary and secondary school education systems require proof of immunization. This proof, however, is documented on paper, and presents a major inconvenience to parents. While there have been various pilot projects, efforts to make vaccination records available electronically have not yet reached scale, which is partly due to challenges related to secure and appropriate identification of children and their parents.



What This Means For Stakeholders (Continued)

- Increasingly, Canadians want to leverage innovative mobile applications and other tools to manage their health information. Enabling access to personal health information relies on secure identity, and a Pan-Canadian Trust Framework for identity will bridge the public health systems and private sector to deliver these services to the secure standard Canadians expect.

Practitioners and Organizations (clinics, hospitals, paramedical, medical research groups)

- When it comes to these groups, benefits fall into two separate streams: improving usability and access to systems, and improving the quality and completeness of the data available once they get to those systems
- A secure digital ID would enhance efficiencies, including those related to records management and reporting, and care management.
- With enhanced digital association between identity, prescription, and pharmacy fulfillment, chances of prescription fraud are drastically reduced. It could also allow for varying intensity of security measures by drug type. For instance, ordering opioids or other controlled narcotics would require heightened validation and verification.

- The shift towards more efficient channels would minimize manual labour costs – letting medical technicians focus on providing their services instead of milling through paperwork.
- The interconnection of data services across providers would improve, reducing communication errors.
- A secure digital ID would allow practitioners to access better quality information about patients, and interoperability across systems will improve the ease of data collection for planning and research. With consent to share data from digital ID, doctors could search medical history and correlate it to other factors. Treatment and research for diseases such as cancer rely on obtaining patient histories from multiple sources (such as lab or pathology results and broader medical history data). With a digital ID system, the information would be accessible and more easily connected but not inherently centralized.
- Not only must patients be verified, but other parties in the system, as well. Doctors and clinical researchers spend great amounts of time logging in and out of applications that could be better spent elsewhere.

- A report commissioned by the Canadian Nurses Association and Canada Health Infoway found that 54 per cent of nurses required two or more digital credentials and passwords to access clinical information systems to manage patient care.

Policymakers (Government)

- Through digital ID, policymakers are better informed to make policy decisions based on relevant data, ensuring all actions taken are putting the patient perspective first.
- The higher quality data available through the implementation of digital ID will lead to improved accuracy of future health care research.

Health System Innovators

- Application developers and other providers of health system innovations in digital health would benefit from having access to health information facilitated through secure identity protocols and federations. For instance, bant and Ned are two apps that have existing integrations with health data repositories and are connected to established health care organizations.





Real-Life Applications

For an example of digital ID in action in the health care industry, one can look to [PrescribeIT](#), a national e-prescribing service from [Canada Health Infoway](#) that is currently live in Ontario, Alberta and New Brunswick. Launched in 2017, the service facilitates communications between a pharmacy and a prescriber. Secure communications between clinicians are enabled to ensure that the information needed to safely dispense a medication can be received quickly and conveniently. Improved patient safety as well as greater accuracy in filling prescriptions are among the [benefits](#) of the system.

Outside of Canada, a strong example is [Truu](#), a trusted digital ID for doctors based in London, England. Truu works in close collaboration with UK governmental and regulatory bodies such as the National Health System to enable employees to prove who they are instantly and securely. The [platform](#) modernizes the way medical services can verify staff identities, qualifications and certifications, which in turn reduces costs and enables health care professionals to spend more time caring for patients.

Reinforcing Key Values

Providing Canadians with control, consent and convenience are the core components of a digital ID system, as well as inclusivity, openness, and meeting broad stakeholder needs - these same values are set out in the DIACC's Digital Identity Ecosystem Principles



When it comes to health care, digital ID increases privacy and empowers patients.

In health care, digital ID is also a safety issue. Limiting access to information to the right care providers at the right time enables Canadians to know that their information is secure and protected. Accurate patient identification also ensures that the right information is available to care providers who need a complete picture of their patients' health history to deliver optimal care.

Where do we go from here?

The health care system is in need of innovation, and there are many elements of the system that digitization would improve. This includes doctors' primary method of communication: the fax. In modern health care, fax machines are still the norm, with Canadian medical clinics sending and receiving an average of 24,000 pages of faxed information each year, on average.

Patients' access to their own information, facilitated by strong identity, adds value for Canadians and our health system by increasing health system productivity, and improving access to and quality of health care provided. A recent study found that if Personal Health Records were to be implemented with more integrated virtual care services, the value generated from populations with chronic illnesses such as severe and persistent mental illness and diabetes could amount to between CAD \$800 million - \$1 billion per year across Canadian health systems.

So now the question becomes: how can you take action to progress digital ID?

- Embrace and encourage innovation and technological change in health care.
- Policymakers need to ensure that their policies comply with digital ID, as policies open the door to digital change. If there is a policy that prevents the ability to use digital ID, see if that policy can be changed to enable access to it.

- Engage with other provincial policymakers and the federal government, and recognize the need for collaboration (especially around digital health)
- Make smart policy decisions based on data. Educated funding decisions can be made, decisions that are also patient-driven.
- Users can choose health care providers that have adopted digital ID for verification and access management.
- With the wealth in health care data (from wearable devices to genetic data), an integrated approach is needed. Communication and care coordination between providers is necessary to ensure consistency in treatment, and digital health technologies present the opportunity to considerably advance patient care.

Finally, [join DIACC](#) to have a seat at the table where frameworks and strategies are being developed so that they work for your organization. With members from both the public and private sector, strong collaboration is intrinsic to the work that we do.

Contact

The Digital ID and Authentication Council of Canada

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