

Advancing Digital Health in Canada

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Canada Health Infoway

BCHIMPS March 2, 2018





Presentation Overview

- Provide overview of recent survey findings of Clinicians' and Canadians' use of technology
 - <https://www.infoway-inforoute.ca/en/our-partners/clinicians-and-the-health-care-community>
- Review Infoway's funding strategy for 2017 – 2022
- Describe the innovative, collaborative partnership among Infoway and the Academic Faculties of Medicine, Pharmacy and Nursing to develop and integrate informatics competencies into curriculum



Show of Hands...

- Regular (at least monthly) access to
 - www.infoway-inforoute.ca Corporate website
- Knowledge of InfoCentral ?
- Member of InfoCentral ?
 - www.ic.infoway-inforoute.ca InfoCentral Collaborative Community space
- Subscribe to eNewsletters ?
 - <https://www.infoway-inforoute.ca/en/what-we-do/news-events/newsletters>
 - Interchange – monthly news and events
 - Digital Health Infowatch – Canadian and international digital health research and leading practices
 - Dispatch – standards updates, releases, interoperability news and events



Canadians & Clinicians Use of Digital Health



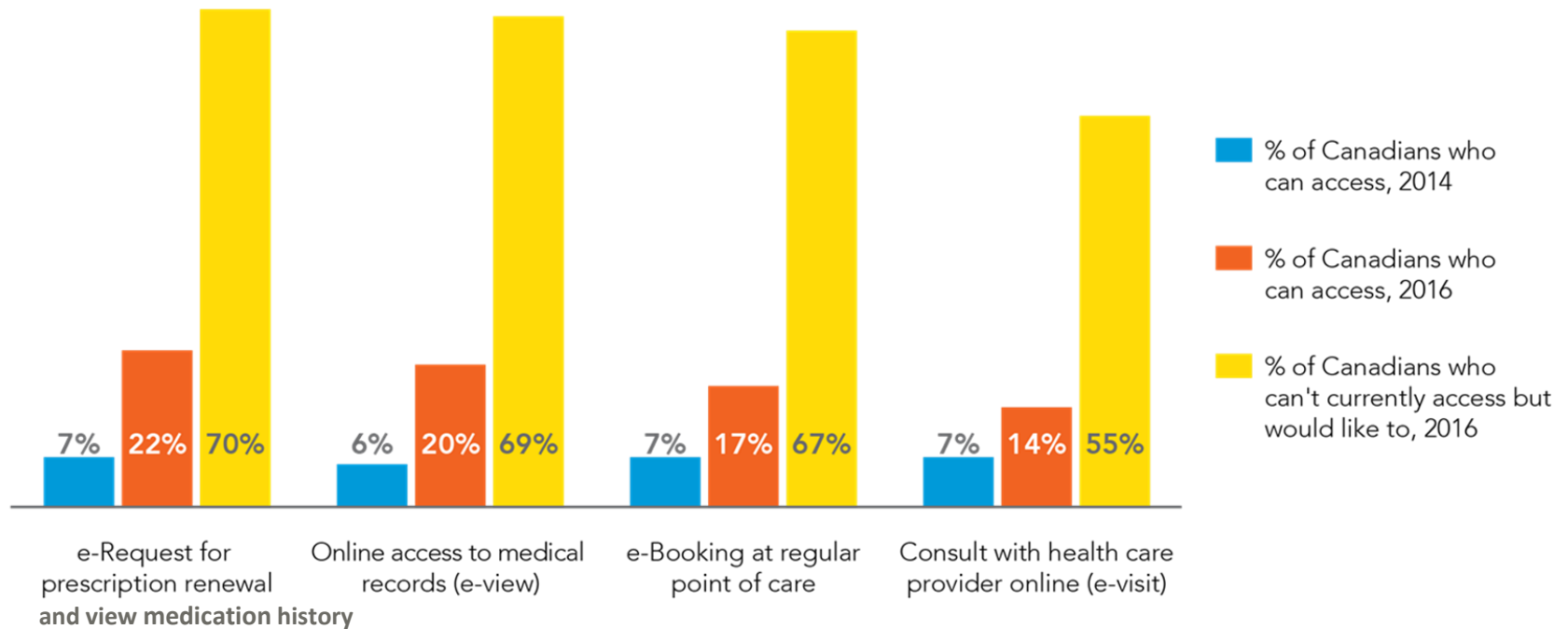
Recent Survey Reports

- Canadians use of Digital Health – Annual Tracking survey 2017
[Annual Tracking surveys](#)
- “What Canadians Think”: Canadian’s perspectives on privacy and personal health information in the context of digital health (Earnscliffe, 2017)
[What Canadians Think](#)
- Pharmacist Survey 2017
- Nursing Survey 2017
- Physician Workforce Survey 2017
- Databases available for free @ Dataverse
<http://dvn.library.ubc.ca/dvn/dv/CHI>
- Diffusion of Smart Devices for Health in Canada (Cefrio 2017)
see [full report and webinar](#)

<https://www.infoway-inforoute.ca/en/our-partners/clinicians-and-the-health-care-community>



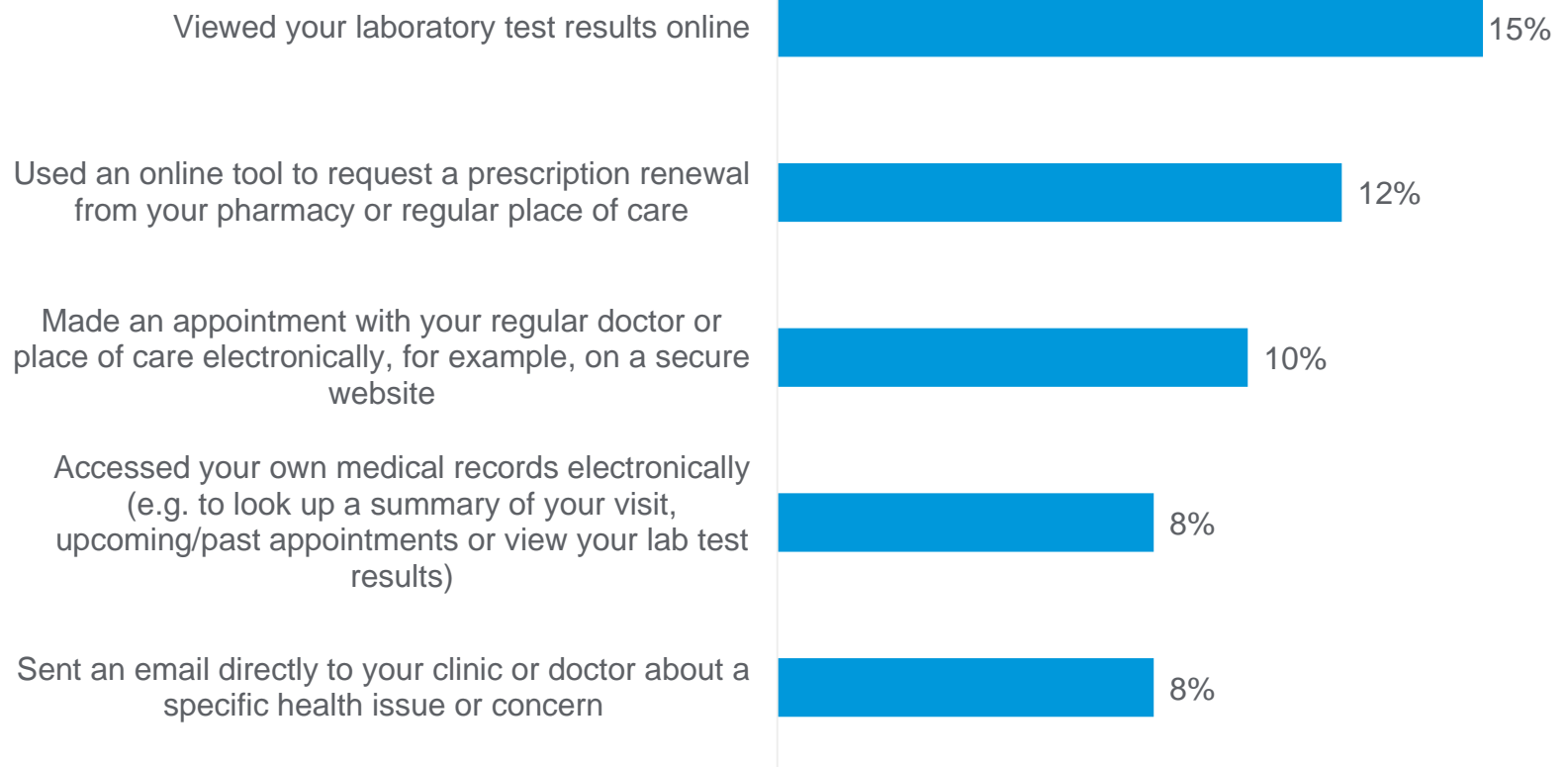
Canadians Access and Interest in Virtual Care Services



Recent Survey of Canadians access and interest in Virtual Care (2017)



Canadians current use of digital health e-services (2017)



Source: *What Canadian's Think (2017)*

Q68-83. For each of the following, please indicate if you have **done any of these things in the past year**:

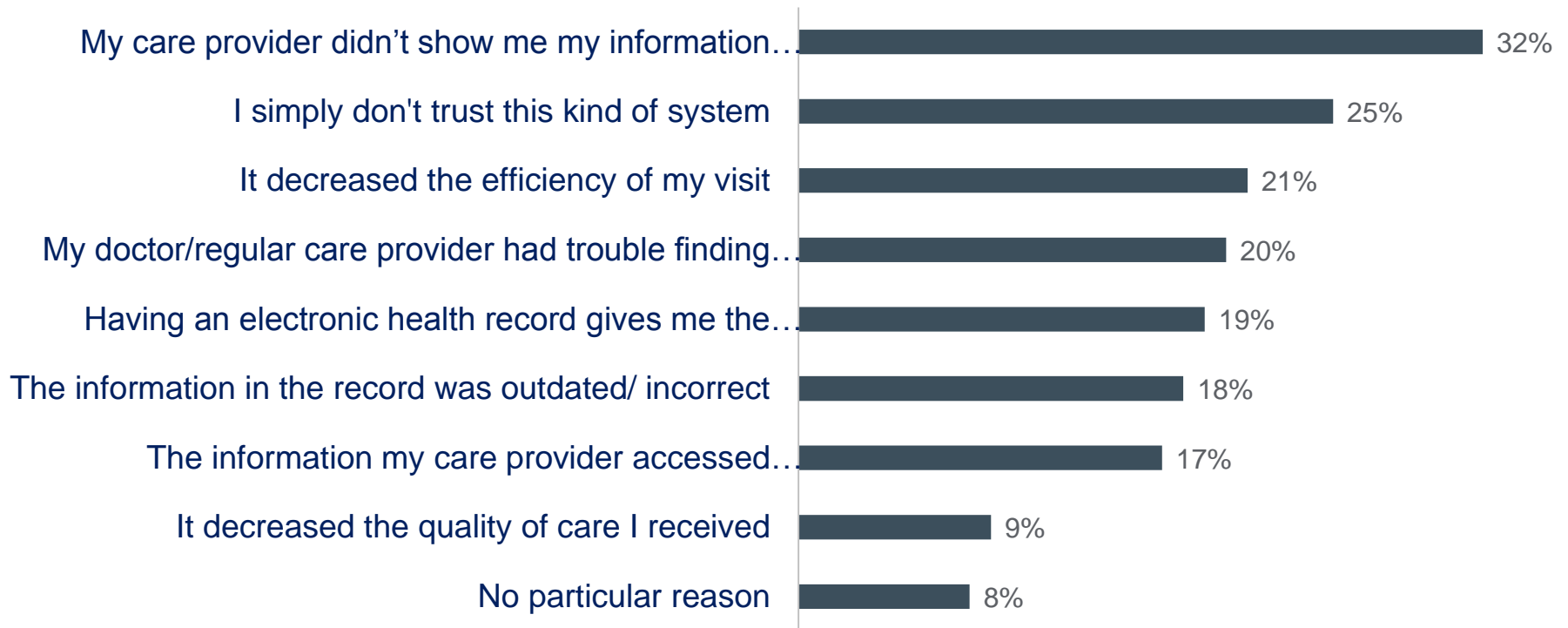


Drivers of citizen's *positive* perceptions of electronic records





Drivers of citizen's *negative* perceptions of electronic records



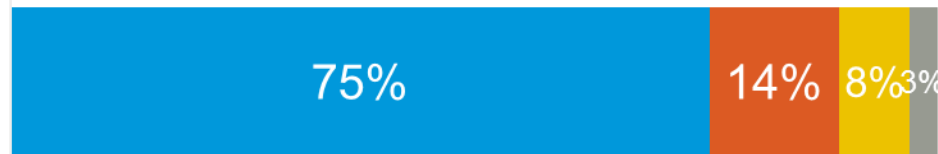
Base: ONLINE & TELEPHONE: Those who had a poor impression (n=126). Fieldwork January 26th-February 20th, 2017.



Engaged patients in Canada

- How confident are you in participating in their health care with their health care providers?
- How involved are you in managing their health in partnership with their health care providers?

Confidence in participating



Involved in partnership

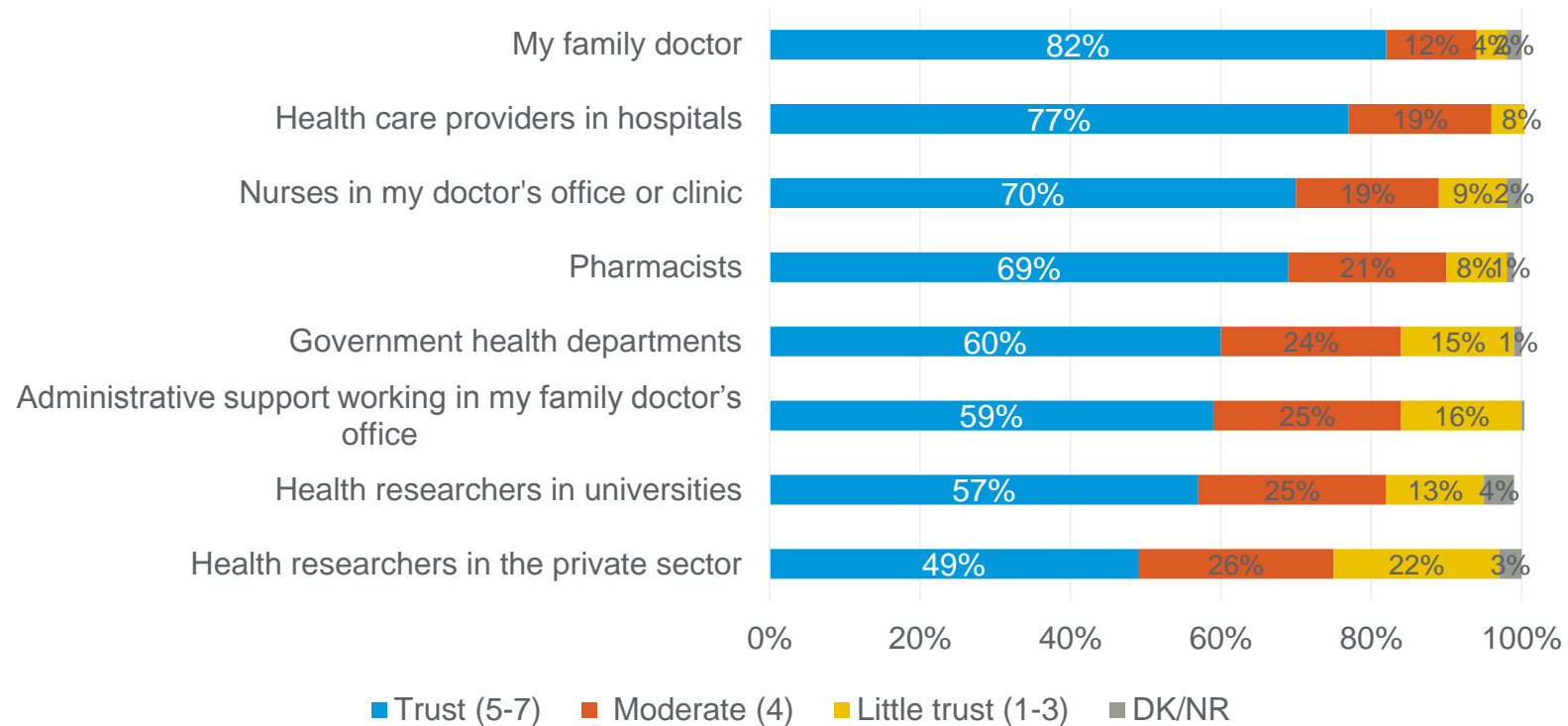


The Engaged Patient
responded in the range of 5-7

■ Somewhat/Extremely (5-7)



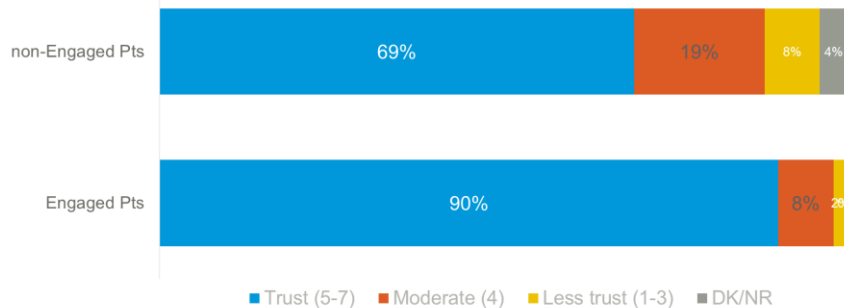
Citizens Trust in Health Care Professionals to Keep PHI Secure



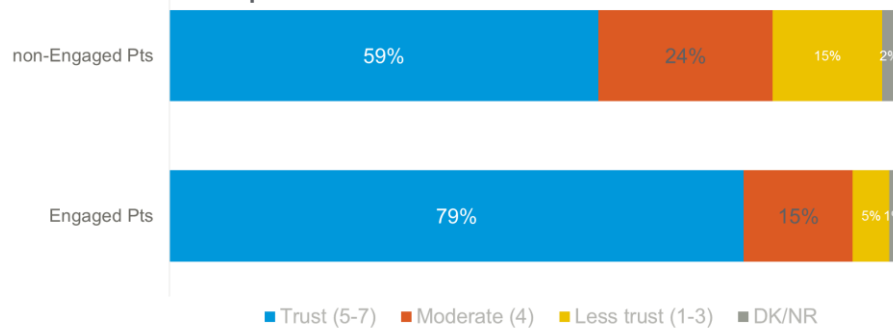


Citizen Engagement and Trust

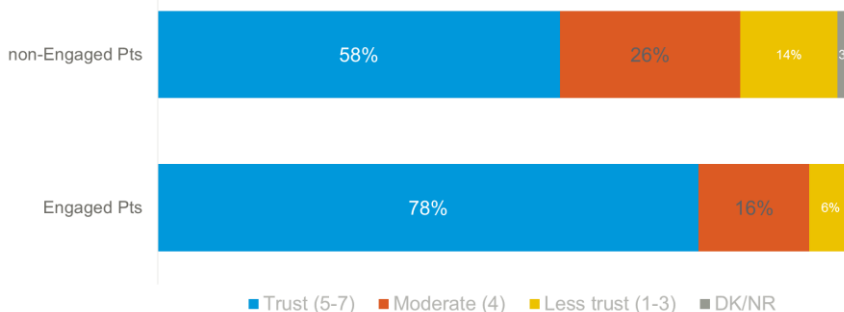
Family Dr



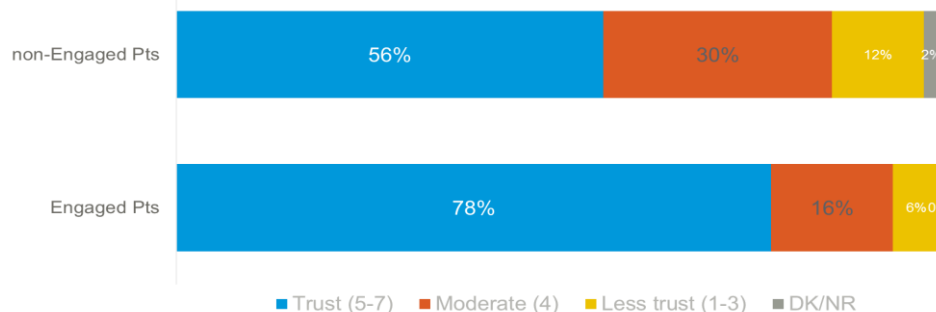
Hospital Staff

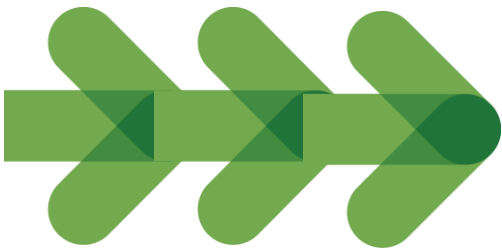


Nurses



Pharmacists





Now what about the clinicians....





Electronic Functionalities in use (2016) Canadian Community Pharmacists



Optimized Use



Warnings



Decision Support



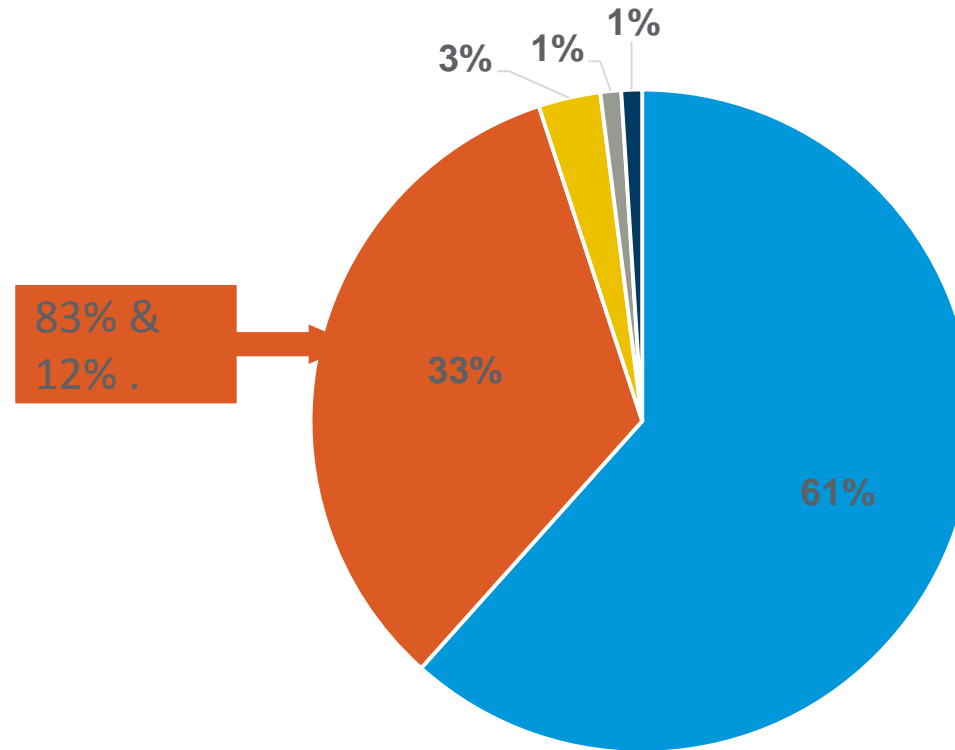
Medication Lists
↑ Patient Safety



Lab Results
↑ Quality



Access to Provincial Drug Information Systems



- When needed
- Every patient/prescription
- New prescriptions only
- New patients only
- Other



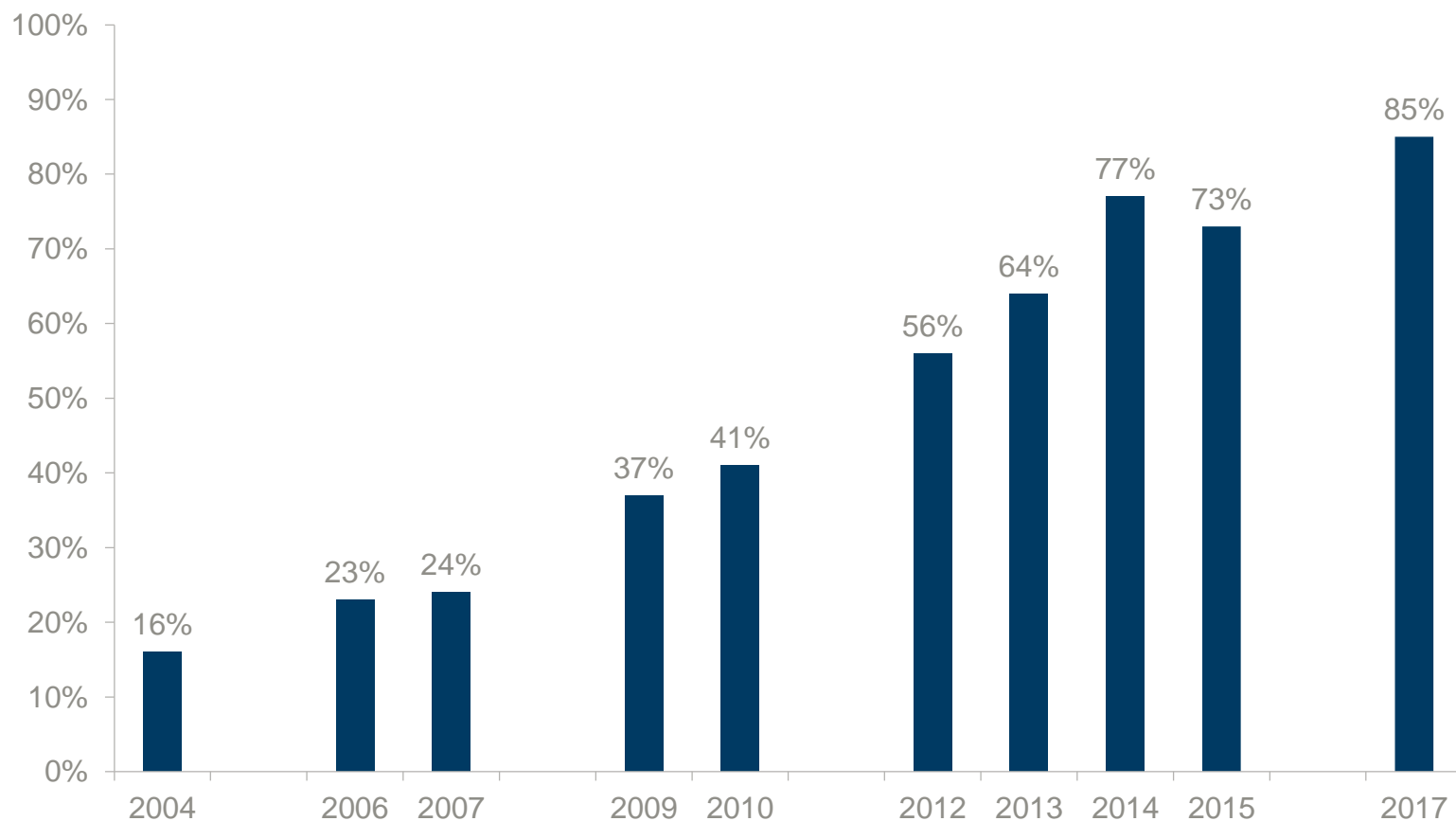
Value of ePrescribing

47.9%	Handwritten prescriptions
41.8%	Prescriptions electronically generated in the EMR, then printed or faxed
1.3% *	Prescriptions received electronically
61%	Dissatisfied with time required to communicate with prescribers
96%	Intent to enroll / advocate for eprescribing

* National eprescribing solutions are expected to increase this baseline and deliver the value proposition



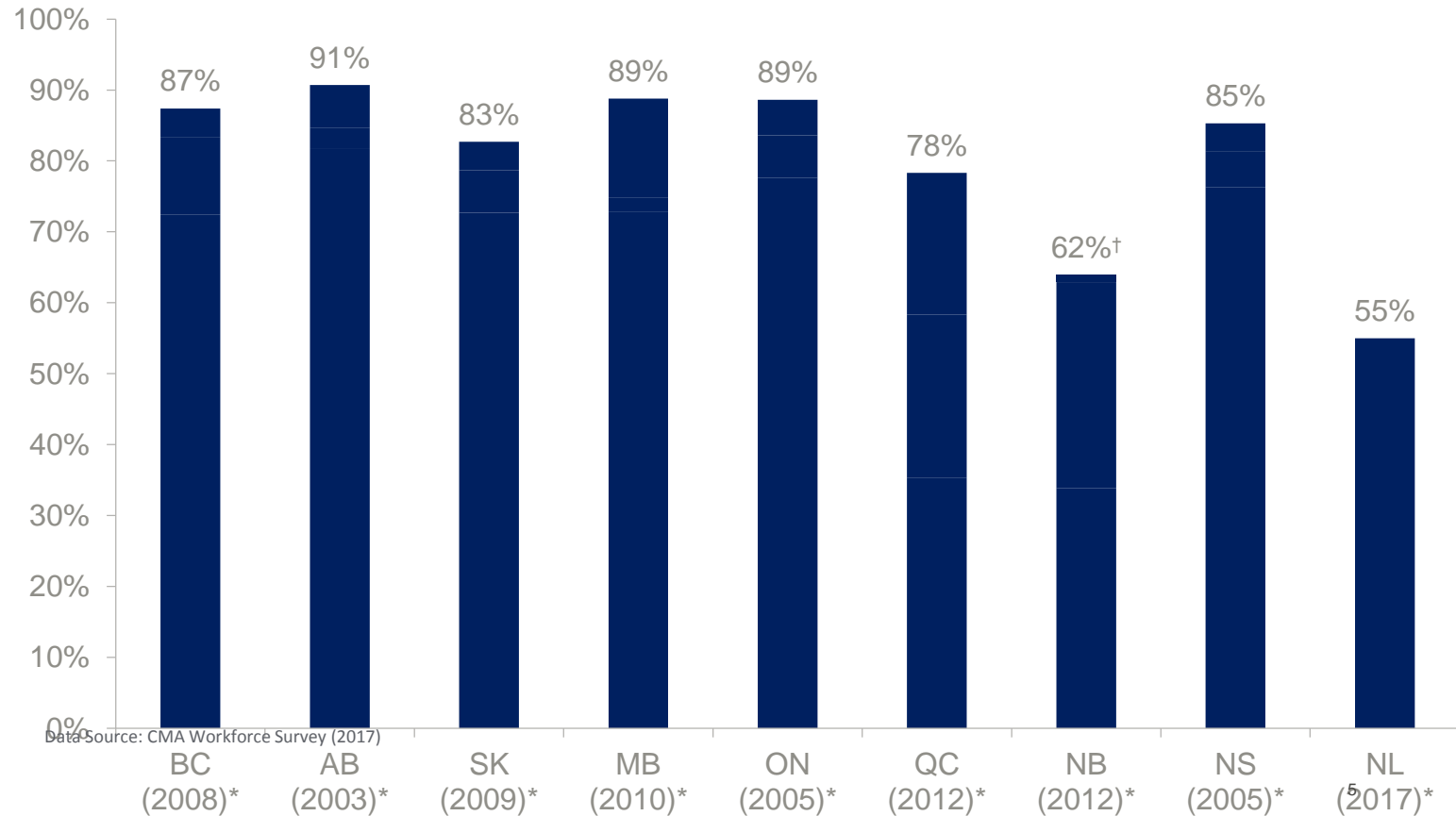
EMR Use - Primary Care Physicians (FP/GPs) Canada (2004 – 2017)



Data Sources: Commonwealth Fund (2006, 2009, 2012, 2015); National Physician Survey (2004, 2007, 2010, 2013 & 2014); CMA Workforce Survey (2017).



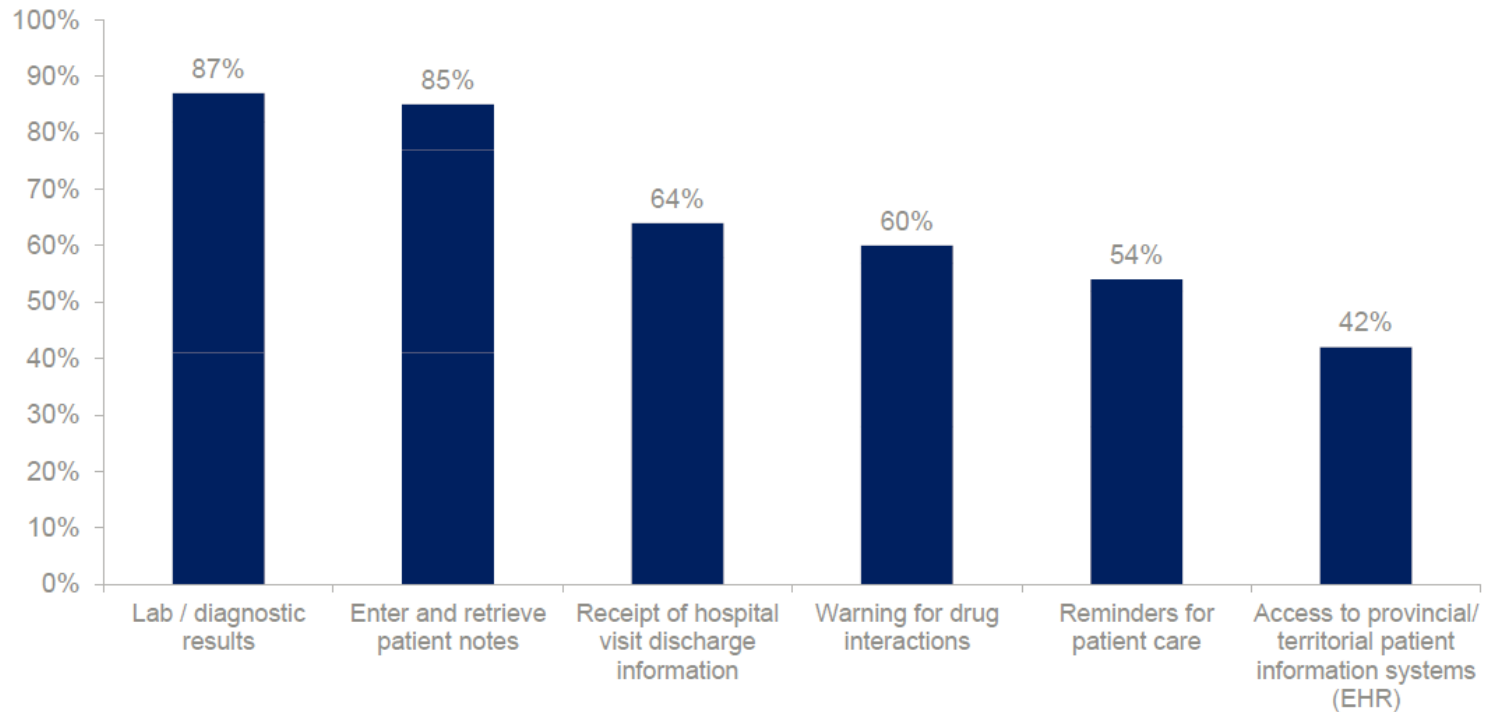
EMR Use - Primary Care Physicians (FP/GPs) Provincial Comparisons (2017)



* Year in which jurisdictional EMR Program began enrolling/implementing physicians; †NB experienced a 1% decline in reported EMR use between 2017 and 2012.
Sample sizes not sufficient for PEI or Territories



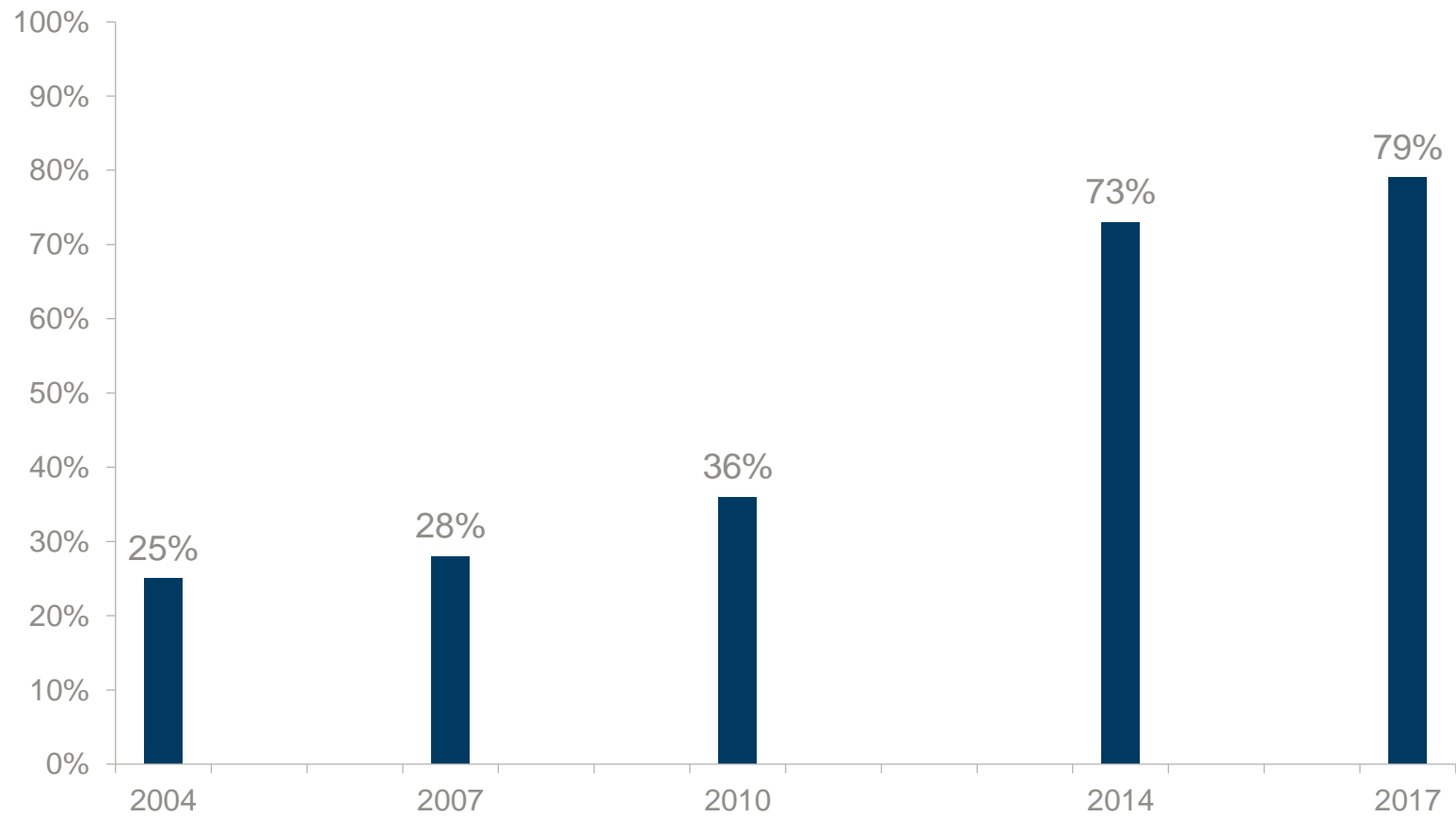
Clinical Value – Primary Care Physicians



Data Sources: National Physician Surveys 2010 & 2014; CMA Workforce study 2017



EMR Use - Specialist Physicians (all settings) Canada (2004 – 2017)



Data Sources: National Physician Survey (2004, 2007, 2010, 2013 & 2014); and CMA Workforce Survey (2017).

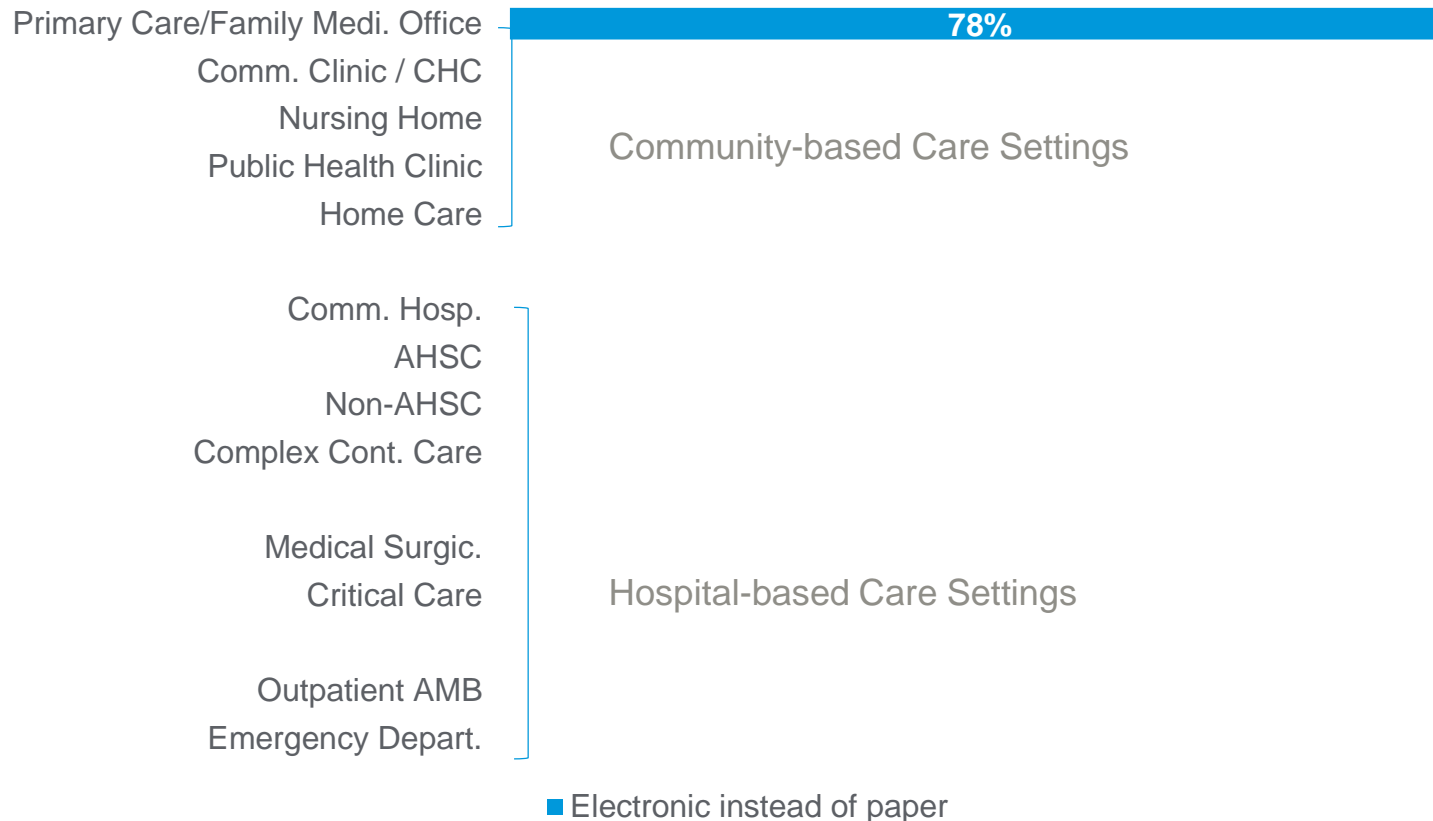


ENVIRONICS
RESEARCH

2017 National Survey of Canadian Nurses: Use of Digital Health Technology in Practice

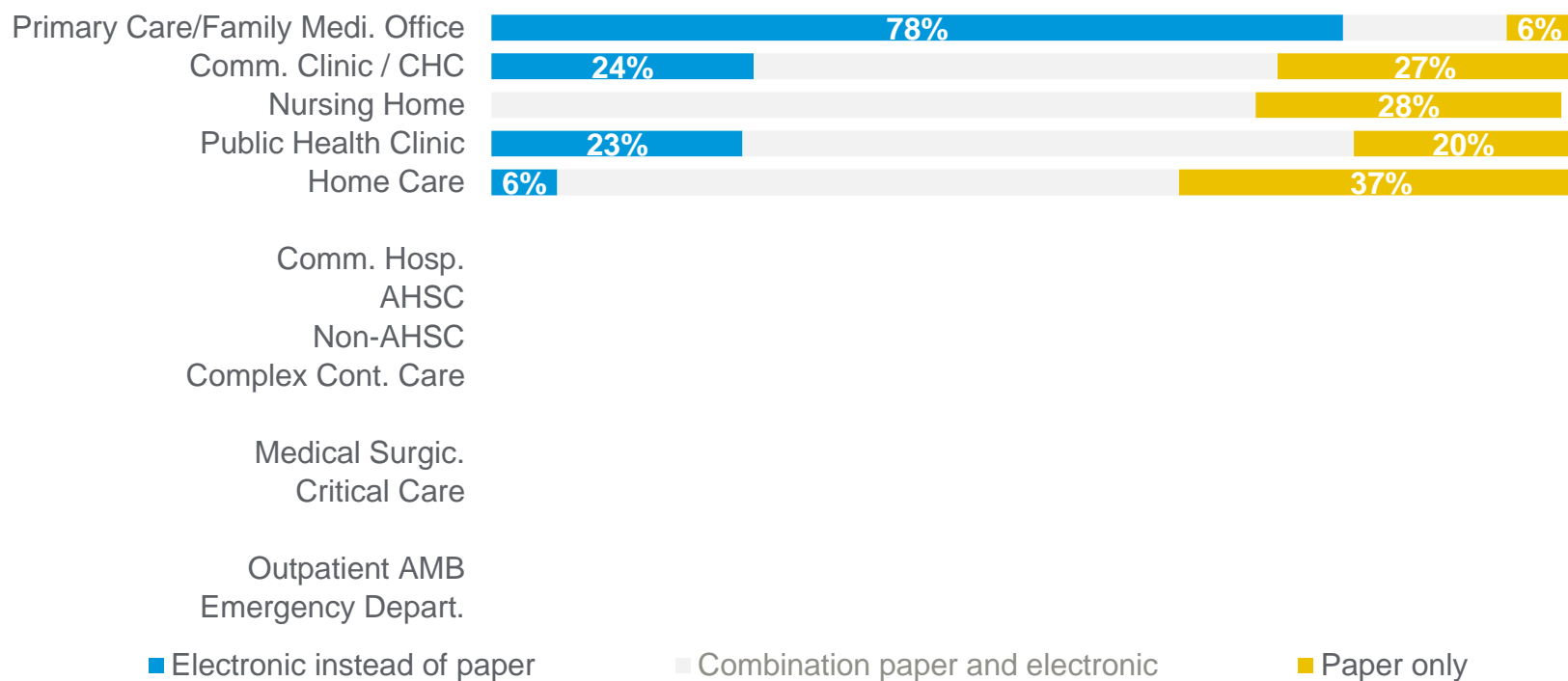


Nurse Use of Digital Health

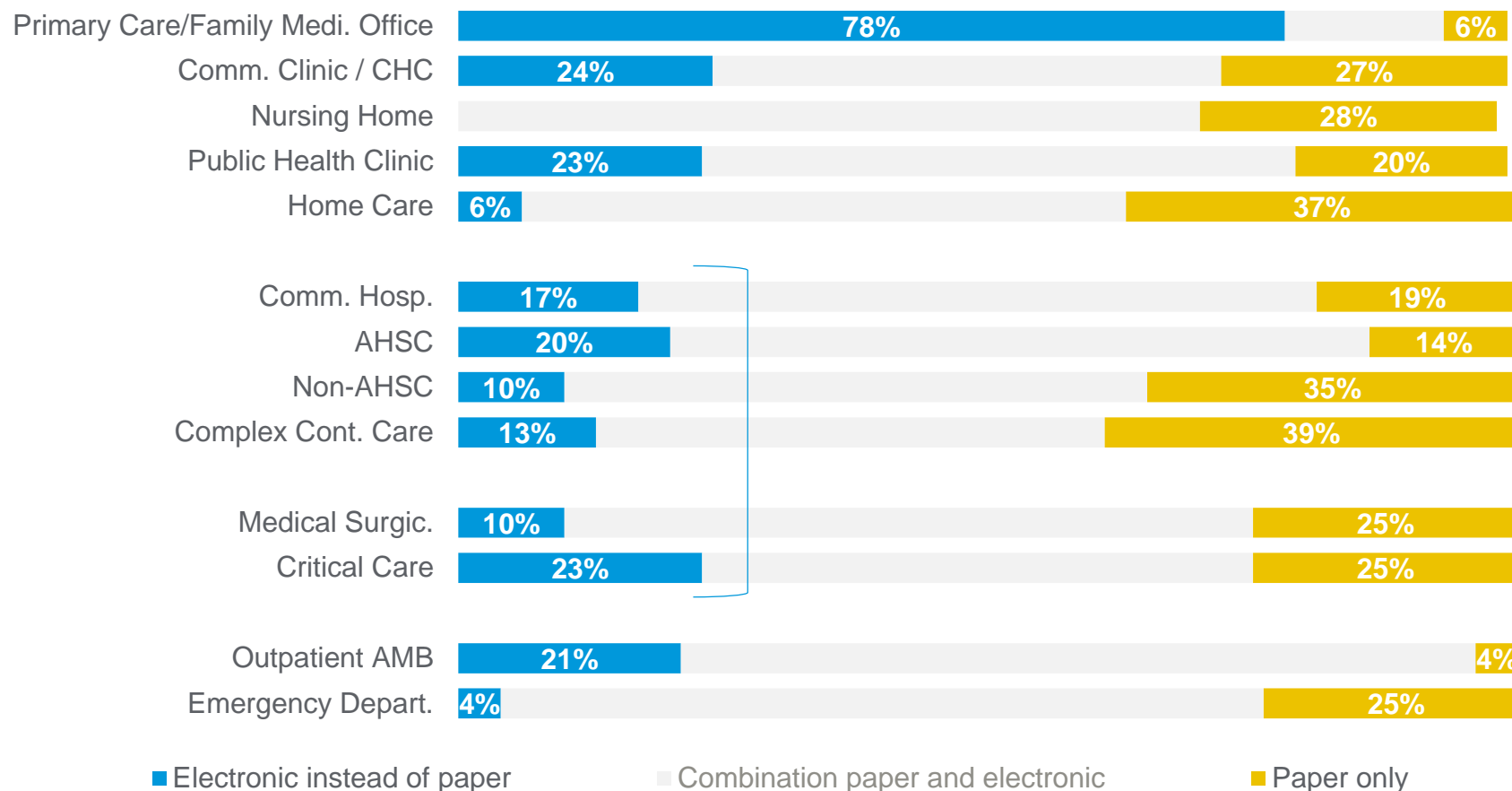




Nurses Use of Digital Health

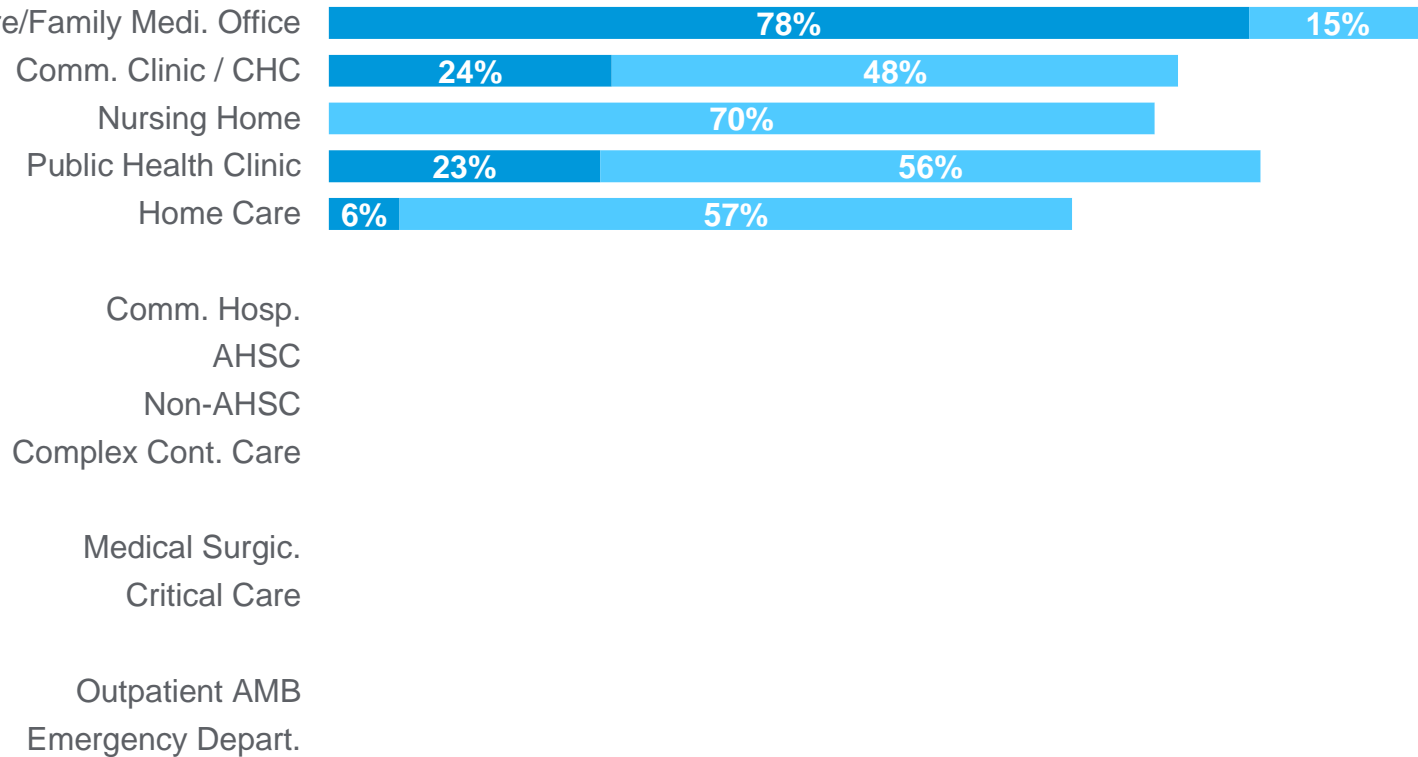


Nurses Use of Digital Health





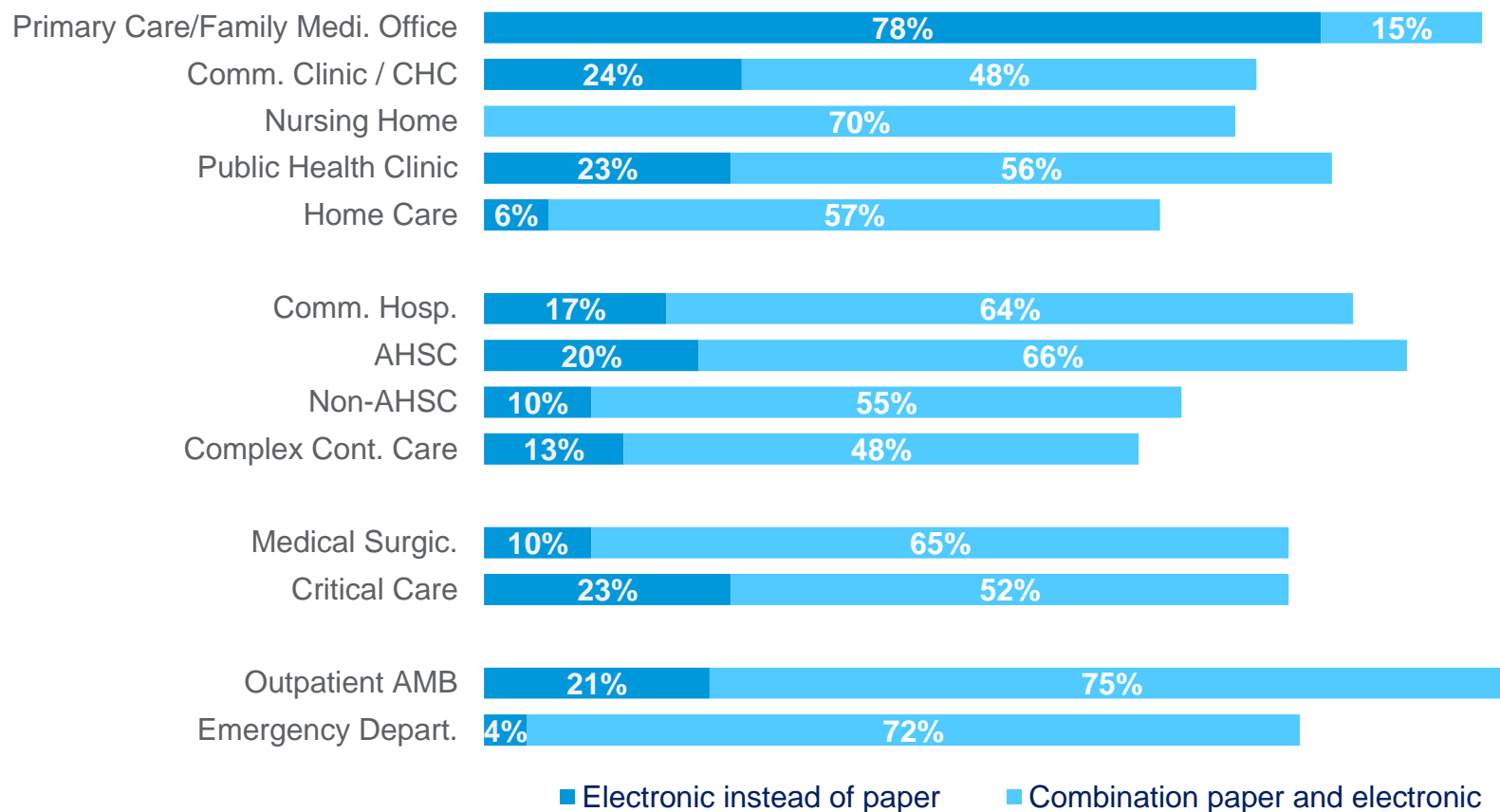
Nurses Use of Digital Health



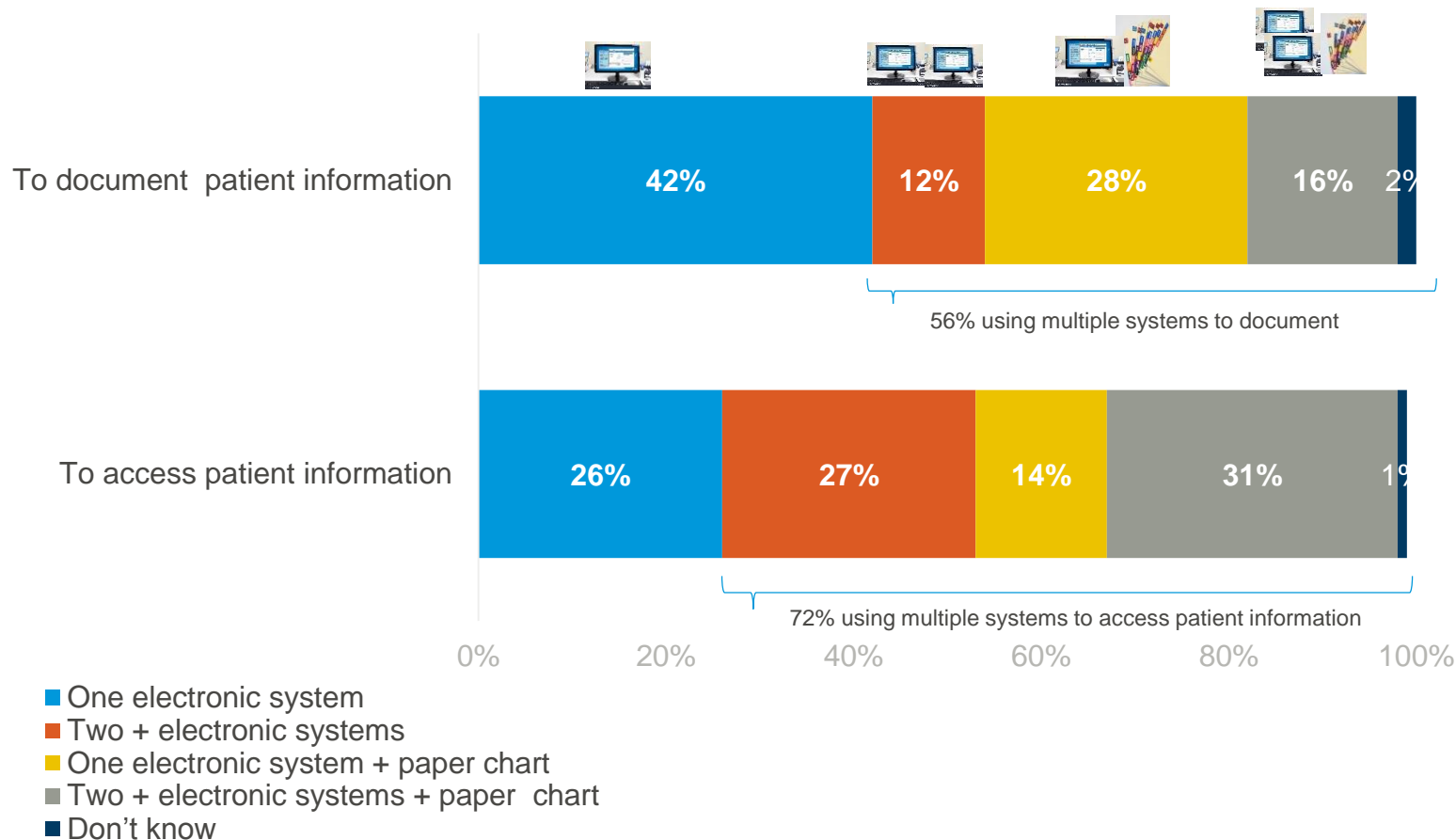
■ Electronic instead of paper ■ Combination paper and electronic



Nurses Use of Digital Health



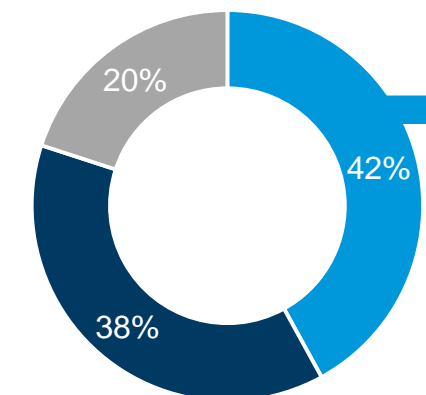
Variation in use of single vs. multiple systems





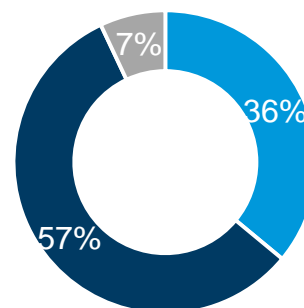
Nurses Access to EHR assets

Access to provincial/territorial patient information systems



■ Yes ■ No ■ Not sure

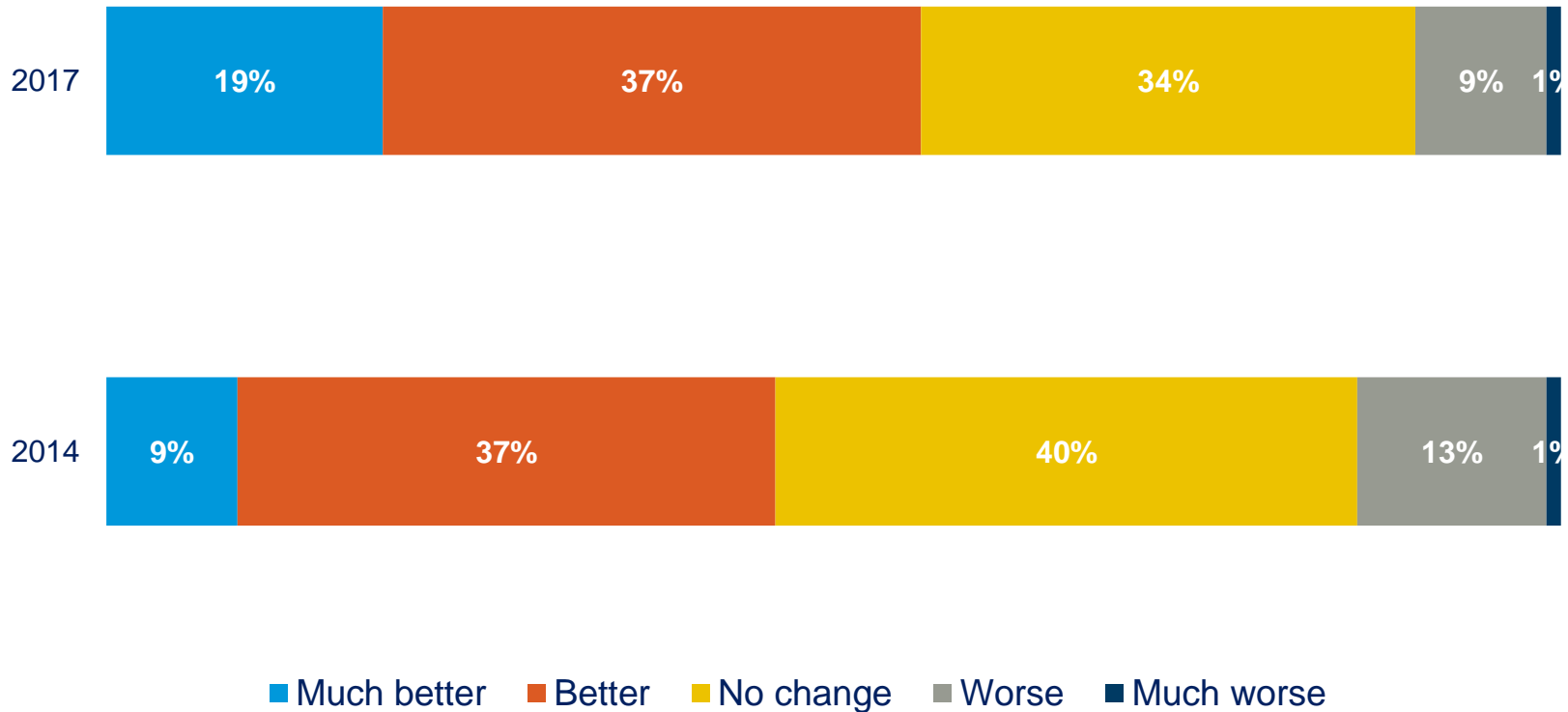
Logins required



■ One login for all systems
■ Multiple logins needed
■ Not sure

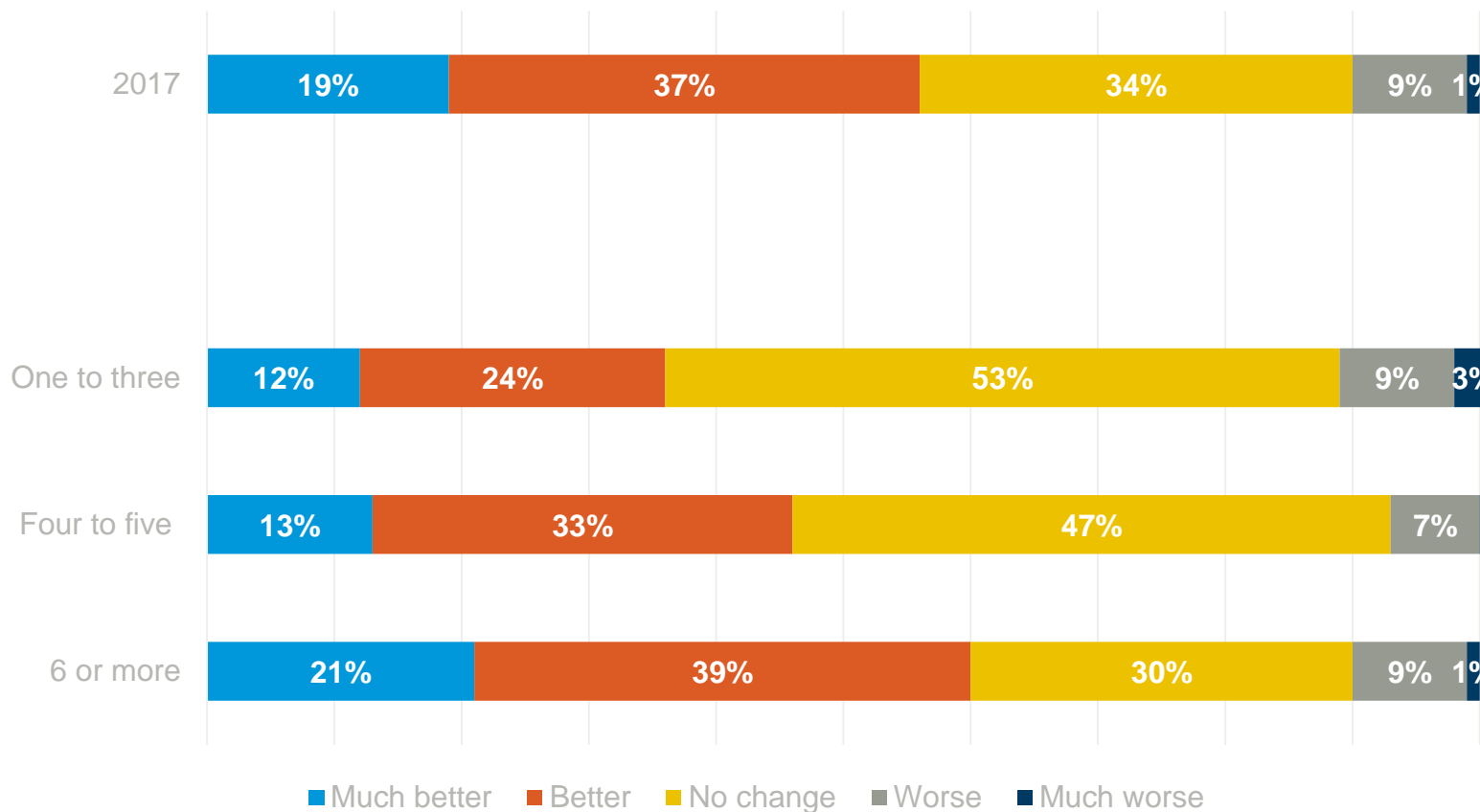


Impact of electronic record use on the **quality of patient care** has increased since 2014



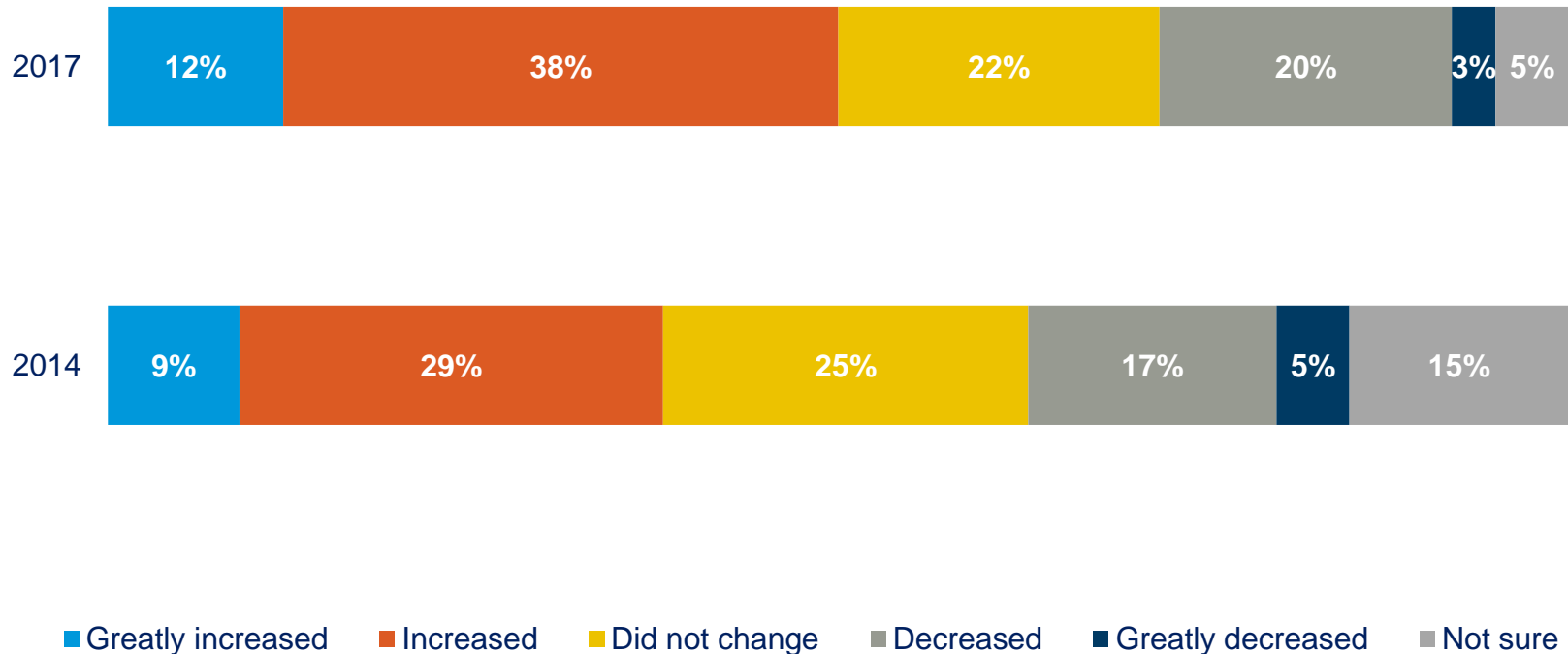
Change in **quality of patient care** since implementation of electronic record keeping by number of functionalities used

Positive change in quality of patient care with more functionalities of electronic systems used



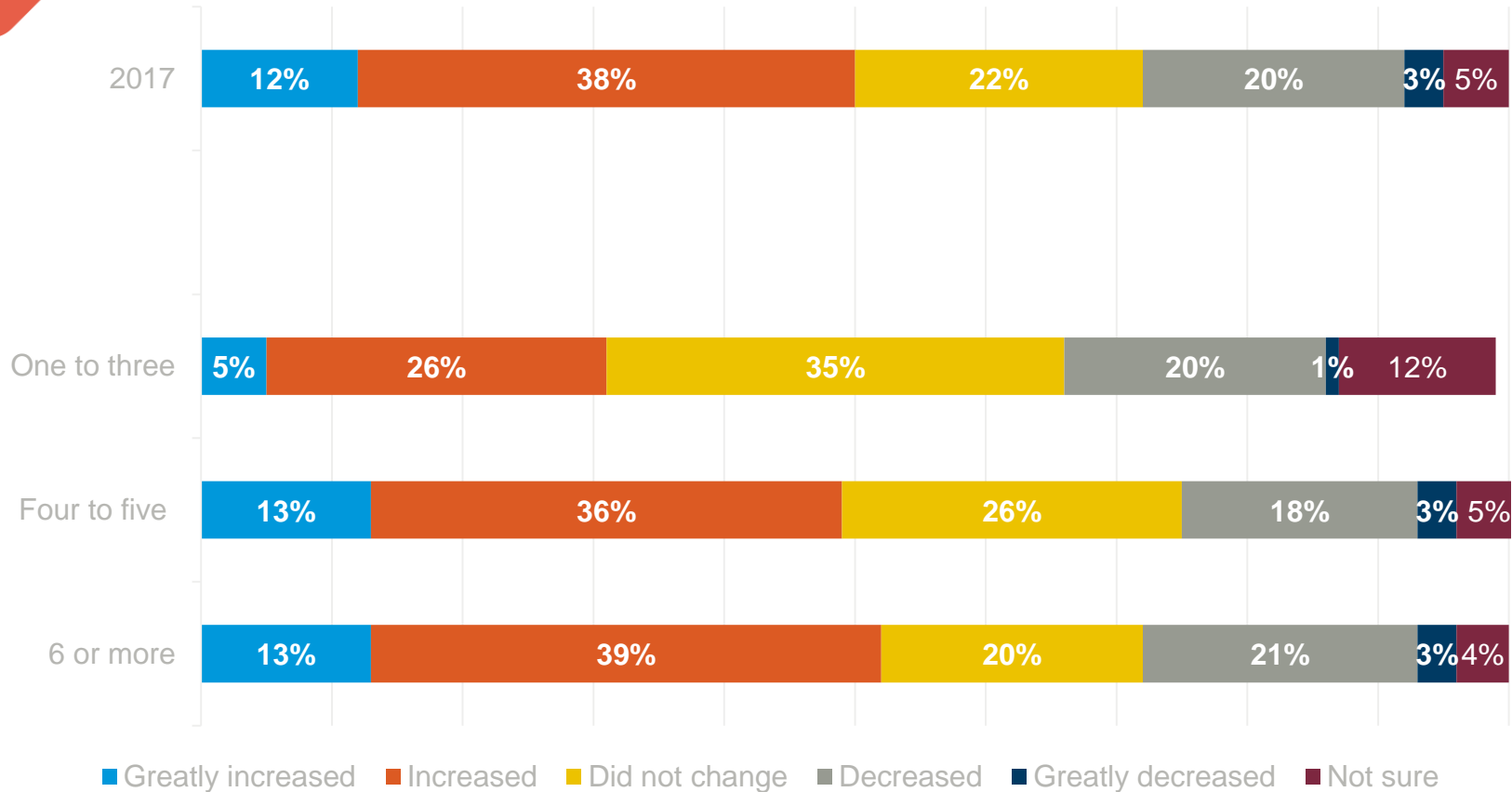


Impact of electronic record use on practice productivity has increased from 2014.



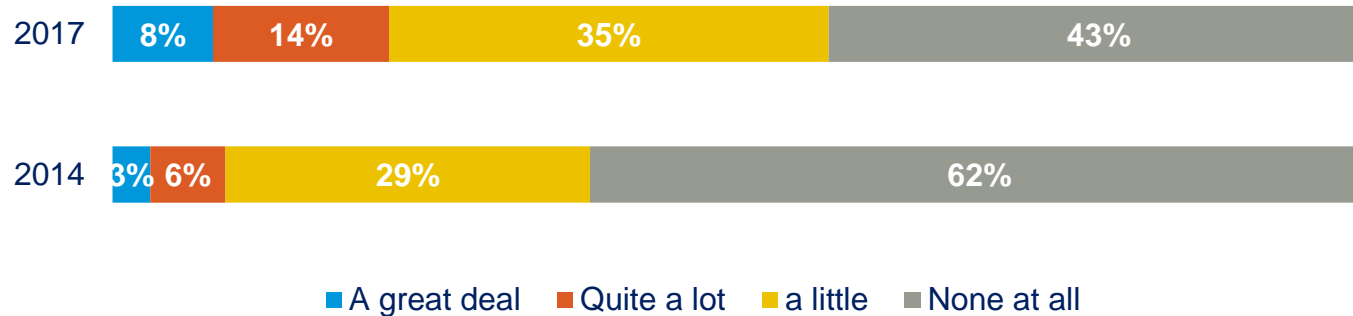


Increased productivity with more functionalities used





Nursing input into system selection, design and use

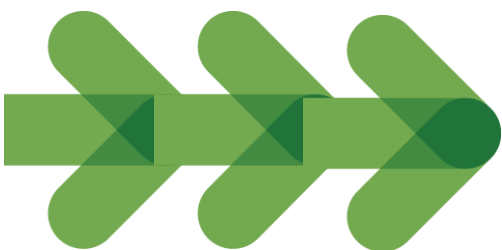


- Has increased since 2014 but remains very low



Key Takeaways

- Biggest barriers to achieving the benefits include hybrid environment and Multiple log ins
- More functions are available
- The more functions nurses used in direct care settings
 - Increase in quality of patient care
 - Increase in productivity
 - Increase in confidence
 - Increase in satisfaction
- Increased confidence and satisfaction ~ increased input
- Learning curve is steep
- New learners (<1yr) decreased productivity and quality
-

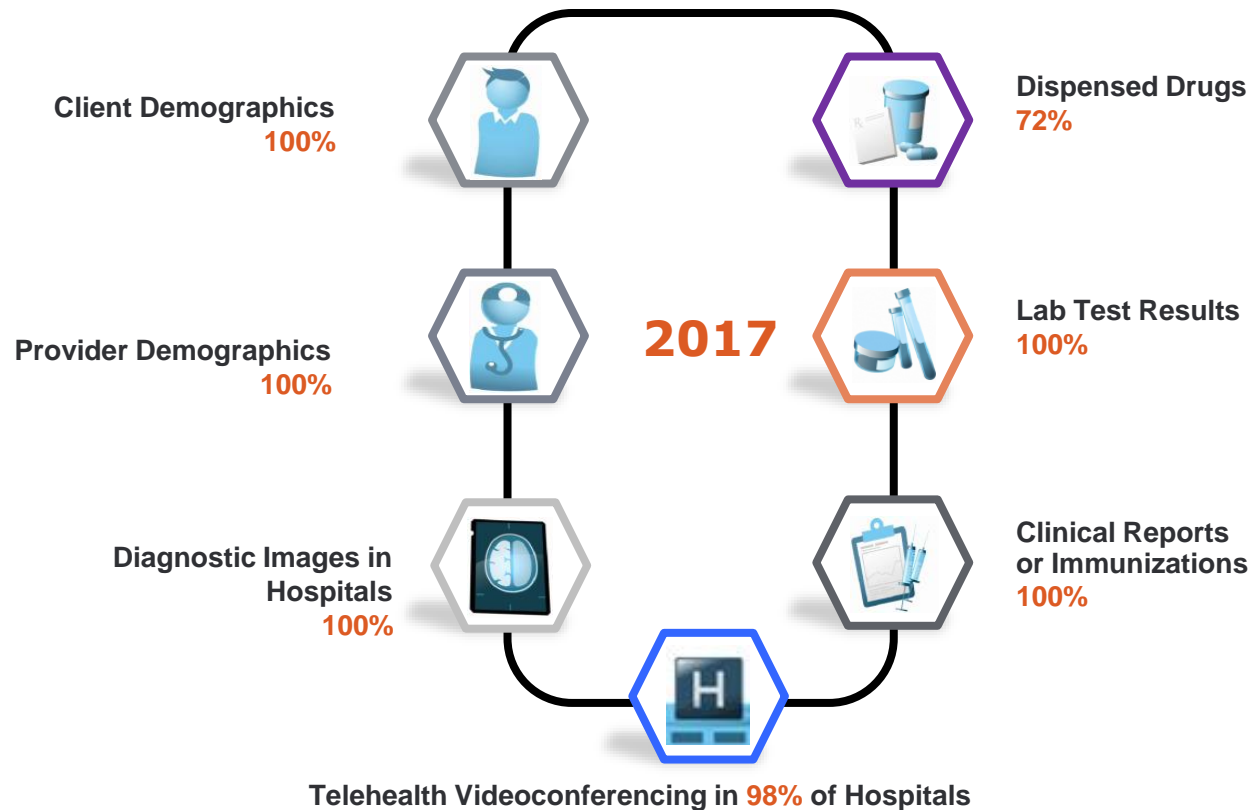


Driving Access for Canadians

Overview of Infoway's 2017 – 2022 Funding Strategy
and Immediate Key Priorities



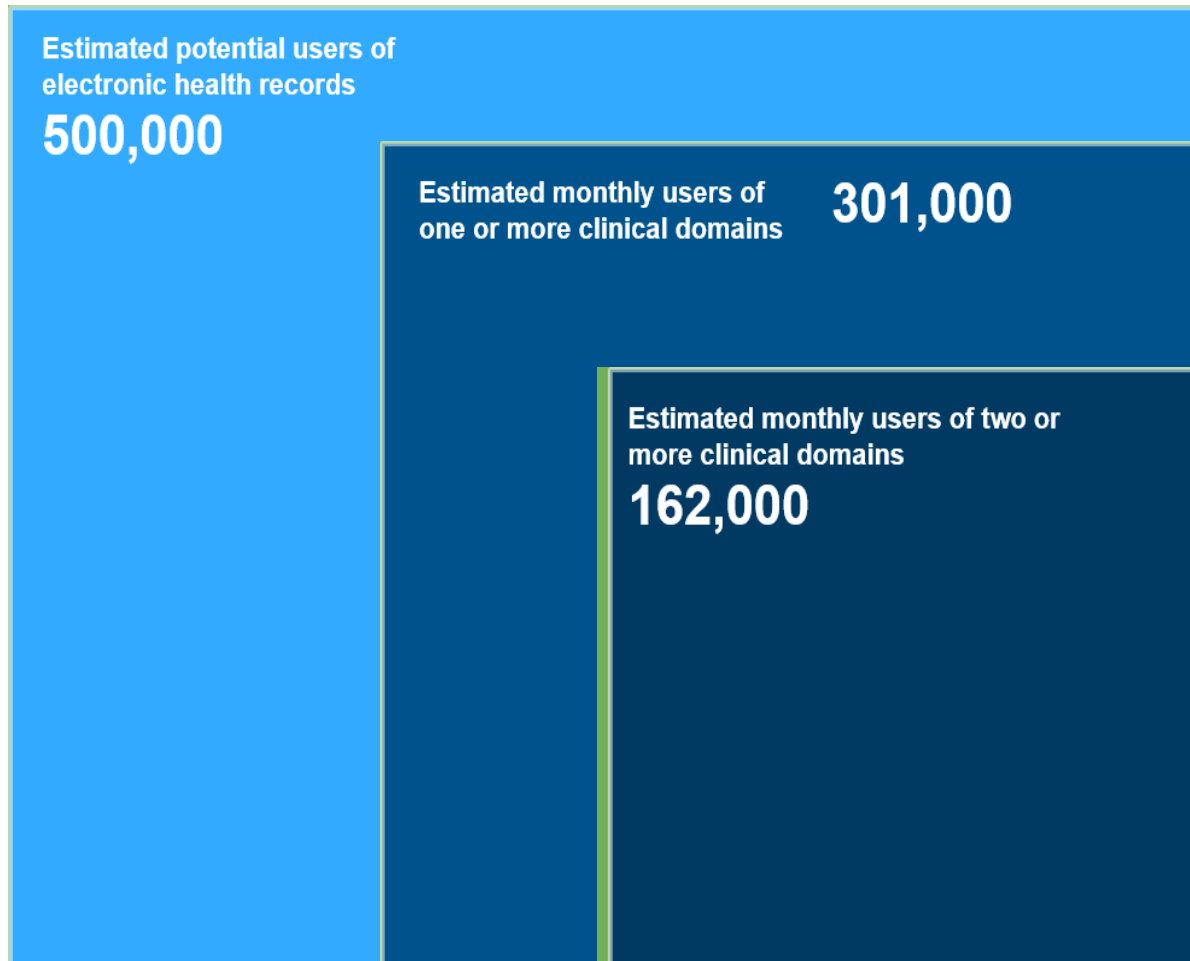
Availability of Digitized Information in Canada (December 31, 2017)



Digitization does not measure the extent of use by providers, but rather the information and systems that are in place.

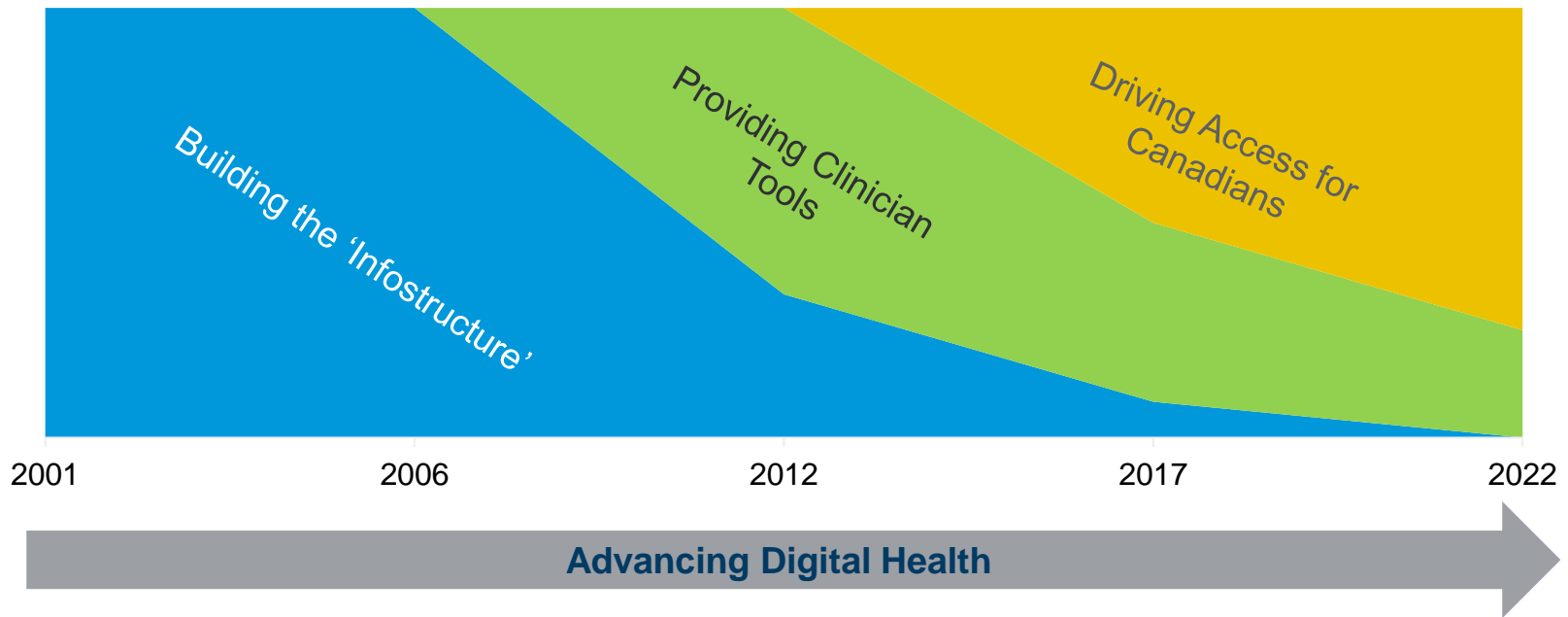


EHR Adoption Progress



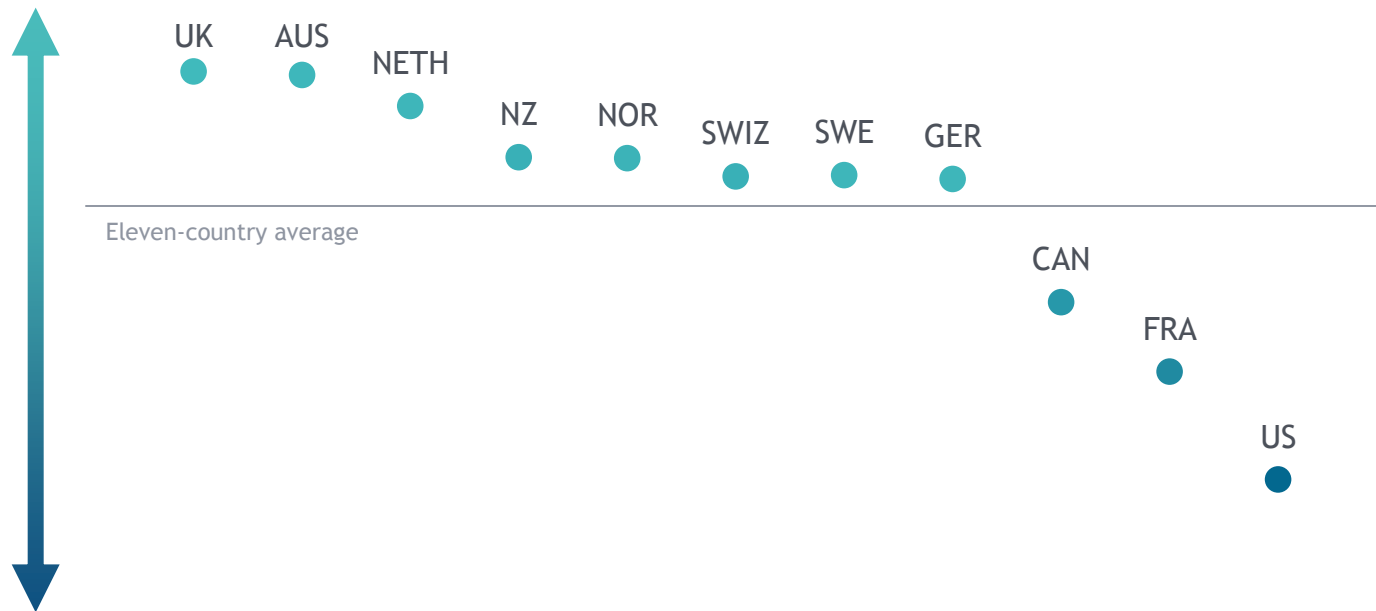


The Evolution of Infoway's Role





Health Care System Performance Rankings

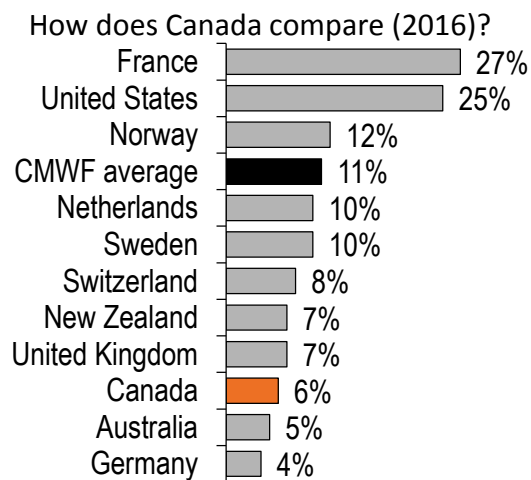


Source: *Mirror, Mirror: How the U.S. Health Care System Compares Internationally at a Time of Radical Change*, The Commonwealth Fund, July 2017.

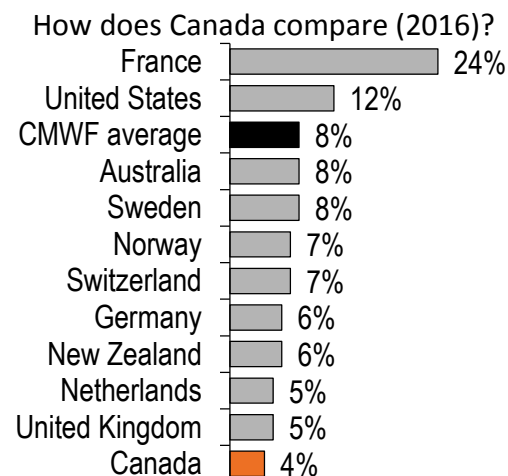


Fewer Canadians Have Online Access to Health Information

Viewed online or downloaded your health information, such as your tests or laboratory results, in last 2 years



Emailed your regular practice with a medical question in last 2 years



Source: *How Canada Compares: Results From The Commonwealth Fund's 2016 Health Policy Survey of Adults in 11 Countries*, Canadian Institute for Health Information.



Timely Access to Primary Care Varies Across the Country

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Can.	CMWF avg.
Able to get same- or next-day appointment to see a doctor or a nurse	34%	30%	34%	33%	39%	44%	47%	49%	48%	44%	43%	57%
Very/somewhat easy to get medical care in the evenings, on weekends or on holidays without going to the hospital emergency department	16%	25%	26%	35%	27%	40%	34%	32%	42%	27%	34%	43%
Always/often receive an answer the same day when they contact their regular doctor's office with a medical concern	61%	70%	64%	50%	54%	62%	57%	51%	58%	64%	59%	72%

● Above average
 ● Same as average
 ● Below average

Source: *How Canada Compares: Results From The Commonwealth Fund's 2016 Health Policy Survey of Adults in 11 Countries*, Canadian Institute for Health Information.



Driving Access to Care

Infoway's Funding Strategy: 2017-2022

Vision

Healthier Canadians through innovative digital health solutions

Mission

Bring pan-Canadian focus to the Triple Aim objectives of:

- Improving the patient experience (including quality and satisfaction)
- Improving the health of populations
- Unlocking value for the health care system

Strategic Goals



Provide safer access to medications starting with a multi-jurisdiction e-Prescribing solution

ACCESS DIGITAL HEALTH*

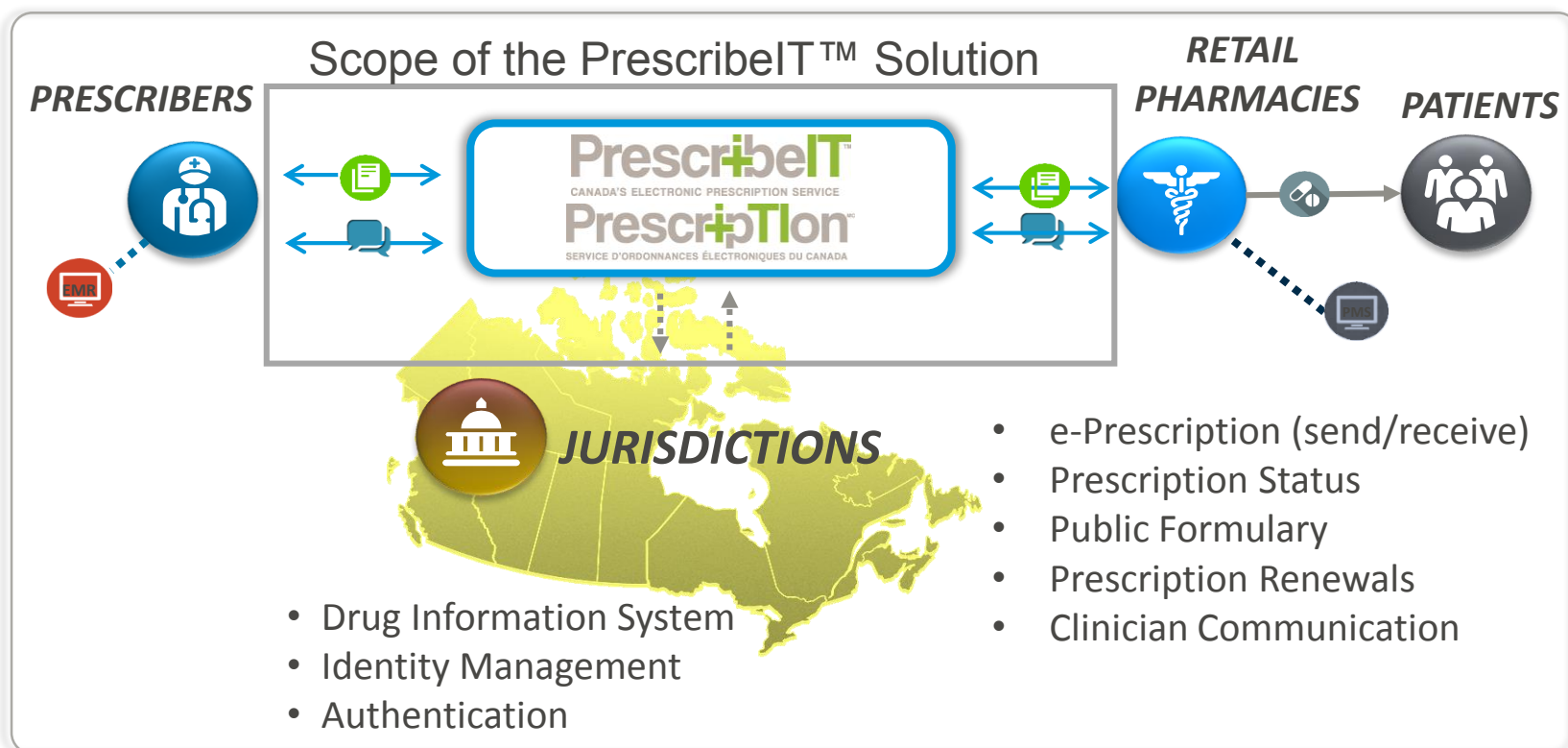
Provide access to personal health information and digital health services for Canadians and their providers through myHealth Gateway*

*working titles



PrescribeIT™ Overview

CANADA'S ELECTRONIC PRESCRIPTION SERVICE





ACCESS DIGITAL HEALTH*

- Connecting Canadians and their providers to personal health information and services
- Providing interoperable, multi-jurisdiction access services
- Accelerating and broadening access to digital health services, for all Canadians
- Work towards digital communications (for all providers with other providers and with patients) to co-ordinate care
 - End the reliance on paper- and fax-based systems
- Innovate through partnerships with the public and private sector
 - Leverage infrastructure built by prior Infoway FTP investments

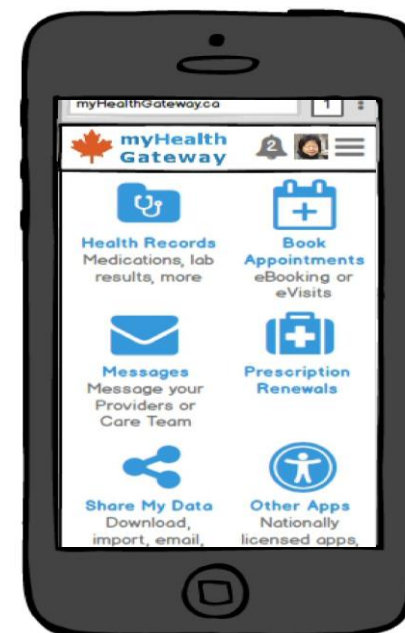
*working titles



What is myHealth Gateway*?

- myHealth Gateway is the working name for the multi-jurisdiction platform to support the **ACCESS DIGITAL HEALTH*** ecosystem
 - For Patients / Citizens
 - For Providers

The myHealth Gateway app is a consumer facing mobile app that federates and provides a single access point for participating public and private sector services



*working titles



How Will We Invest?

1. Direct Provision of Services / Solutions
 - Where there is a compelling case to be made for Infoway to directly provide the solution / service (i.e.: PrescribeIT™)
2. Co-Investments with Public or Private Sector Partners
 - Could be in specific geographies, populations, or disease areas
3. Establishment of National Licenses / VoRs
 - For enabling technologies, or to drive standardization to smaller set of proven, vendor-provided solutions
4. Leverage Social Financing Models
 - In addition to pay-for-results, explore social impact bonds
5. Strategic Investments in Projects
 - Will wind down and will be a far smaller proportion of our investments



Key Activities – 2018

- Conducting a series of investigations targeting Access
- Continuing to roll out PrescribeIT™ nationally
- Developing the plan for Access Digital Health
- Seeking opportunities to work with provincial and territory initiatives through:
 - Direct provision of services
 - Co-investment with public and private entities
 - National Vendors of Records (VORs)



Canada Inforoute
Health Santé
Infoway du Canada

Thank You!