

How are OHTs Advancing in Digital Health?

HSPN Monthly Webinar

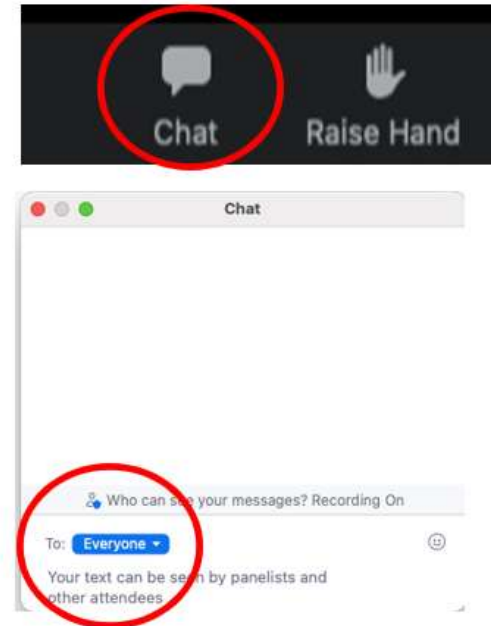
November 28, 2023

Welcome & thank you for joining us!

Please let us know who you are by introducing yourself (name & OHT or other org)

➤ Open Chat

➤ Set response to **everyone** in the chat box



Land Acknowledgement

We wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.

Poll 1

Poll | 1 question | 97 of 127 (76%) participated

1. Have you joined us for an HSPN webinar previously? (Single Choice)

*

97/97 (100%) answered

Yes (70/97) 72%



No, this is my first event. (27/97) 28%



Today's event Digital Innovations

Host



Dr. Walter Wodchis
Principal Investigator
HSPN



Dr. Andrew Sarta
Assistant Professor
York University



Kristina Eliashevsky
Director,
Cambridge North
Dumfries OHT



Victoria Aceti-Chlebus
Director, Integrated Care
Algoma OHT

Presenters

Poll 2

Poll | 1 question | 95 of 140 (67%) participated

1. How knowledgeable are you about digital implementations across OHTs? (Single Choice) *

95/95 (100%) answered



DIGITAL PRACTICE EVOLUTION:

Implementation and Deferral of OHT
Digital Practices

Andrew Sarta

Angela Aristidou

Walter Wodchis



UK Research
and Innovation



What Will We Cover Today

- ↪ Project team and digital practices in a broader context
- ↪ The evolution of digital practices from OHT approval to Feb 2023
 - ↪ Within OHTs and Across OHTs
- ↪ Engage in a dialogue
 - ↪ Where are areas of success and opportunity
- ↪ We want to hear more
 - ↪ Re-fielding of the survey to gain more information

The Researchers



Dr. Angela Aristidou
Digital Fellow,
Human-Centered AI (HAI),
Stanford University

Assistant Professor,
School of Management,
University College London



Dr. Andrew Sarta
Assistant Professor,
York University

Honorary Senior Research Fellow,
School of Management,
University College London



Prof. Walter Wodchis
Professor,
Institute of Health Policy,
Management and Evaluation,
University of Toronto

Project Overview

- ↪ International study of cross-sector healthcare collaborations across UK, US, and Canada
- ↪ Documenting and tracing the on-the-ground activities in OHTs
 - ↪ Activity-transfer between OHTs
 - ↪ Best Practices
 - ↪ Innovation in activities emanating from OHTs
- ↪ Curious consistency in digital activities across cohorts motivated us to dig a little further

The Role of Digital in Healthcare



Key Objective:
**Patient Centred
Care**

- Patient access to records
- Virtual care
- Online appointments



Key Objective:
**Connected
Frontline Providers**

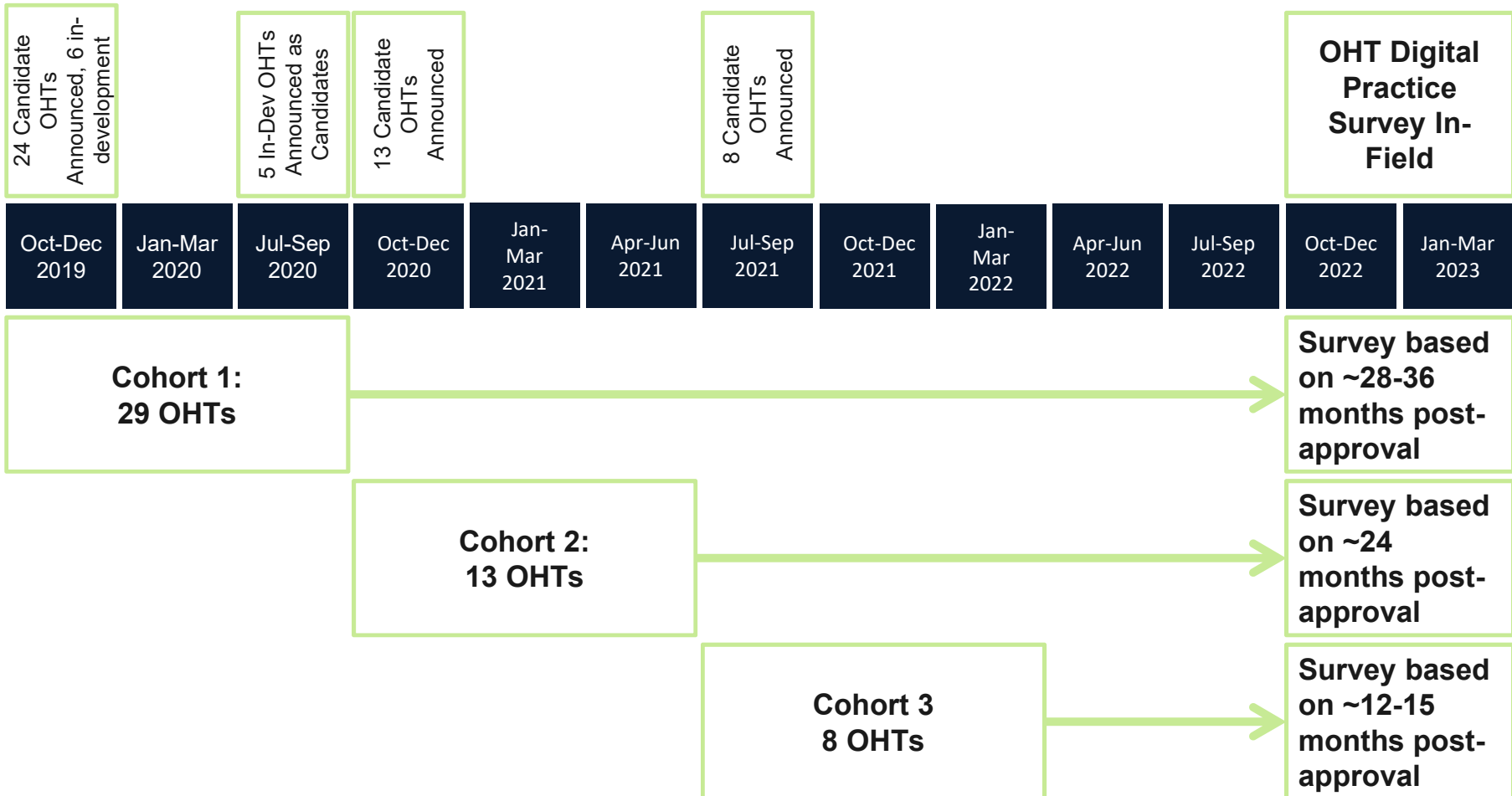
- Data sharing between providers
- Integrating care for real-time collaboration



Key Objective:
**System Self-
Management**

- Advanced Analytics
- Improved measurement of population health outcomes

OHT Timeline – Elapsed Time to Survey Results



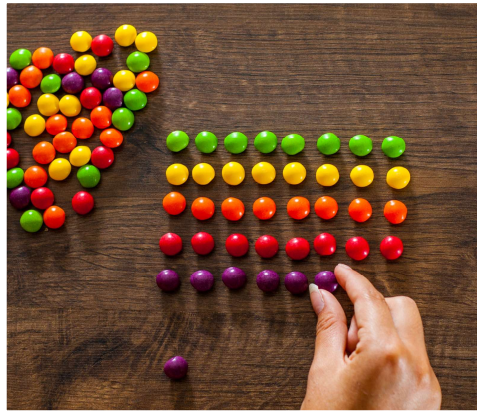
**How did digital practices
evolve from approval to
implementation?**

Research Question

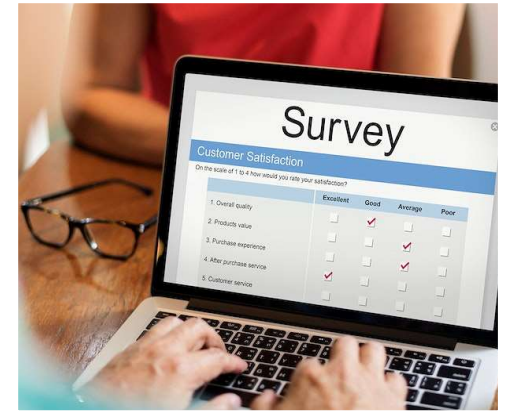
Research Design



**Proposed Activity
Coding &
Extraction**



**Computational
Coding Validation**



**OHT Digital
Practice Survey**

Research Design

Digital activity: a set of actions (what an OHT proposes to do) to implement a digital technology

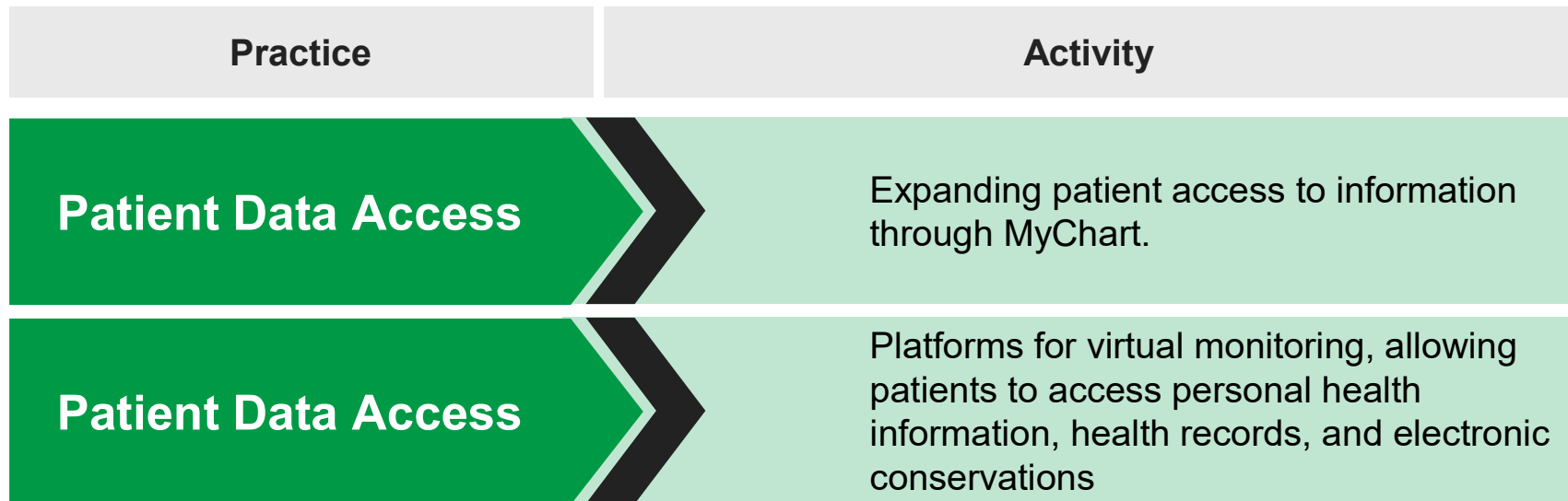
- ▭ Proposed Activity Extraction & Coding
 - ▭ Targeted questions in approved applications that focused on digital
 - ▭ Qualitatively extracted verbatim paragraphs from targeted questions
 - ▭ Different activities coded based on paragraphs and/or sentences
 - ▭ Coded for common activity bundles based on relatedness
- ▭ OHTs proposed 13.8 digital activities on average
 - ▭ 14.9 activities in Cohort 1 OHTs and 9.2 activities in Cohorts 2/3 OHTs
- ▭ Computationally assessed commonality to validate bundles of activities (referred to as practices)

Survey Design

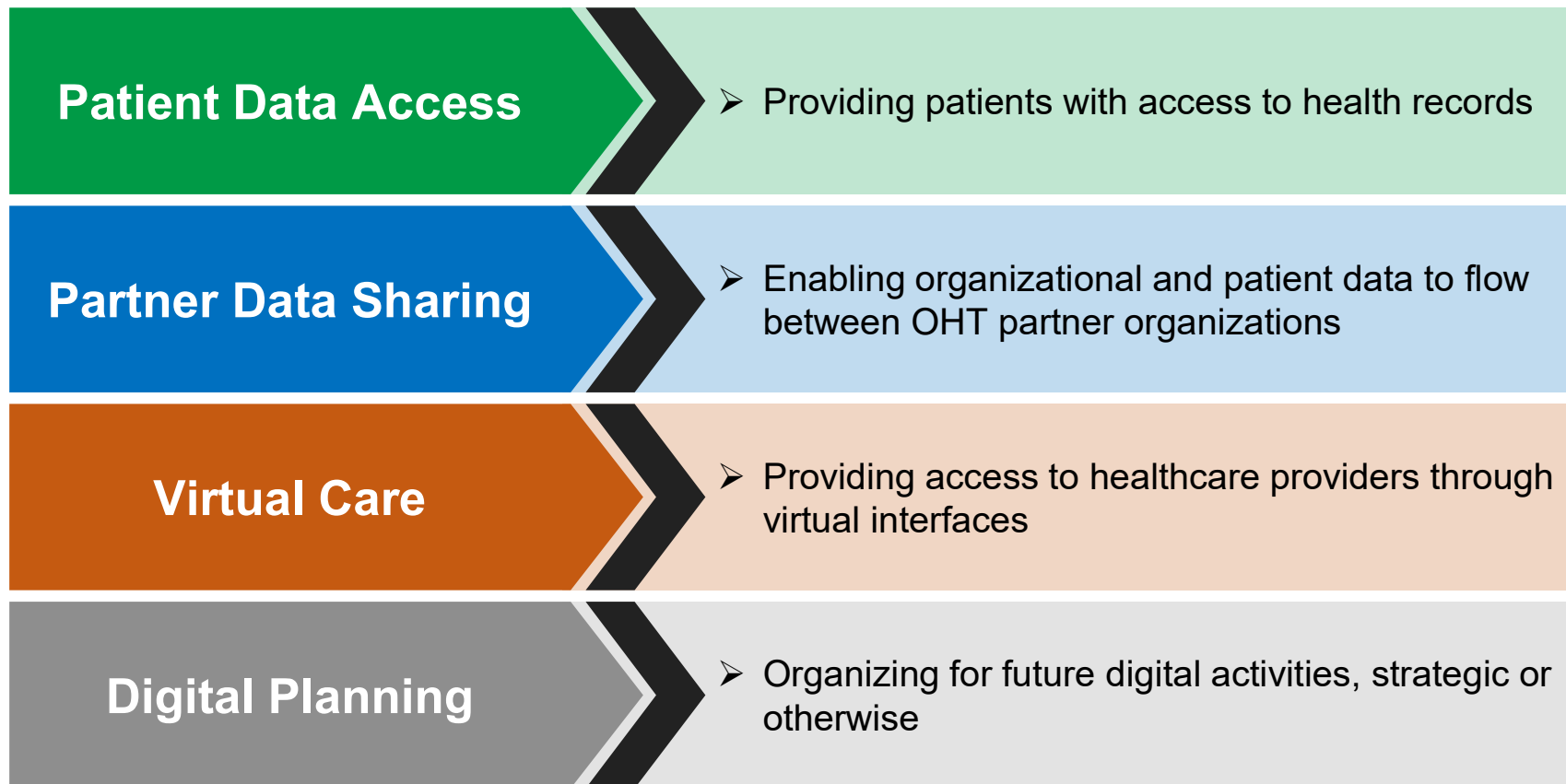
- ↪ Customized surveys for each OHT identifying all approved digital activities
- ↪ Inquired about digital activity evolution
 - ↪ Implemented as planned
 - ↪ Changed (and why)
 - ↪ Never implemented (and why)
- ↪ Survey results collected from October 2022 to February 2023
 - ↪ Cohort 1 OHT responses: 21 of 29 (72%)
 - ↪ Cohort 2 OHT responses: 3 of 13 (23%)
 - ↪ Cohort 3 OHT responses: 2 of 8 (25%)

From Activities to Practices

- Practices are sets or collections of activities that are bound in common systems with common purposes



4 Digital Practices Emerged



Poll 3

Poll | 2 questions | 83 of 152 (54%) participated

1. Rank the success of implementing these 4 digital practices (Rank Order) (Rank Order)

83/83 (100%) answered

A. Patient Data Access 82/83 99%



B. Partner Data Sharing 82/83 99%



C. Virtual Care 83/83 100%



D. Digital Planning 82/83 99%

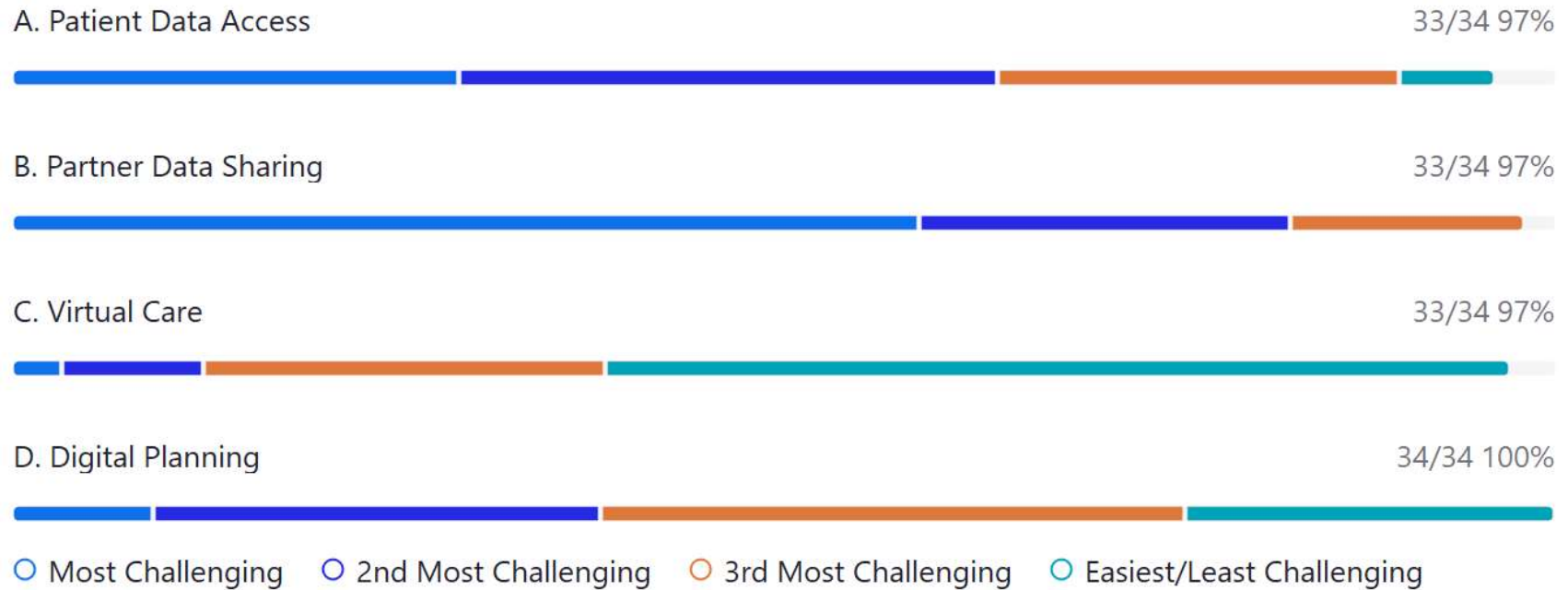


○ Most Successful ○ 2nd most successful ○ 3rd most successful ○ Least Successful

Poll 4

2. Which of these 4 digital practices has been most challenging to implement (Rank Order) (Rank Order)

34/83 (40%) answered



Core Findings

- ↪ Cohort 1 OHTs largely implemented as planned compared to later Cohorts
 - ↪ Later Cohorts tackled broader challenges relating digital to health equity
- ↪ Partner Data Sharing presents the largest, ongoing implementation challenge for OHTs
- ↪ Examples across OHTs on Partner Data Sharing can foster learning
 - ↪ Those OHTs that do implement Partner Data Sharing see broader benefits

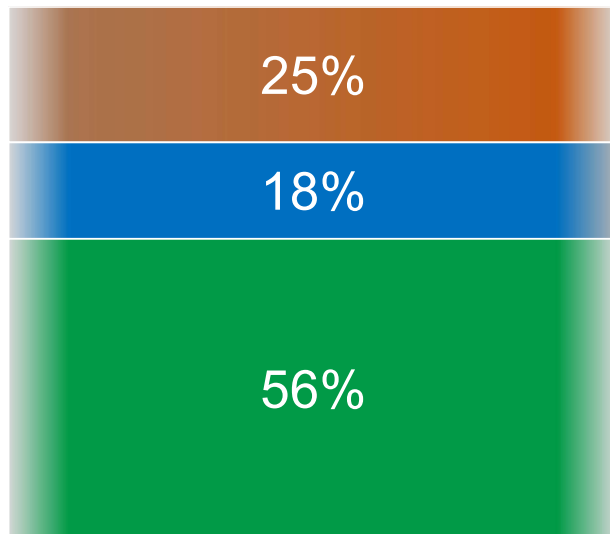
Comparisons Between Cohorts

Initial Results

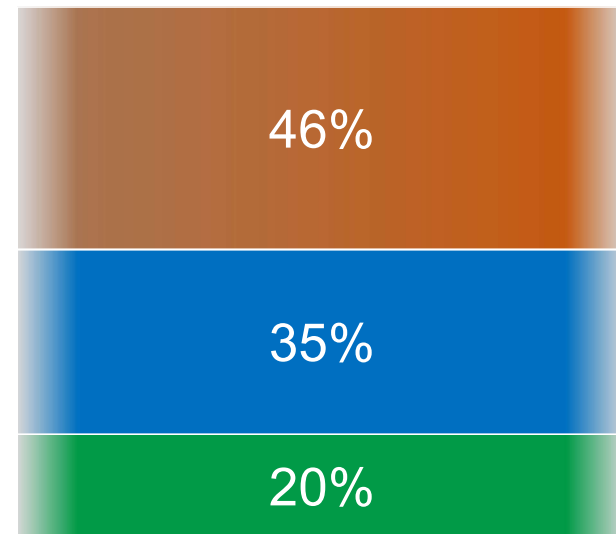
Cohort 1 OHTs Were More Likely to Implement as Planned

COMPARISON ACROSS COHORTS

■ Implemented as planned ■ Changed ■ Never Implemented



COHORT 1



COHORTS 2/3

Implementation Rationale: Cohort 2 and 3

- ↪ All Cohorts stated similar issues as reasons for changing activities
 - ↪ Proposed digital activities are modified based on feasibility
 - ↪ Higher implementation rate in Cohort 1 suggests a knowledge transfer opportunity

- ↪ Equity and partner knowledge are stated as reasons for non-implementation in Cohorts 2 and 3

Digital Activity Type	Reasons Changed	Reasons Not Implemented
Majority of activities were focused on Virtual Care	<p>Economizing strategies Initial plans were either too expensive or feature-rich (and underutilized). Portions of virtual care were retained</p> <p>Digital strategy refresh Committees being reassembled to resume work</p>	<p>Complex social equity challenges (socioeconomic challenges of limited internet, cellular access)</p> <p>Challenges in knowledge across partner organizations (Francophone services, PHIPPA expertise isolated)</p>

Early Learnings

- ↪ Consistency in activity evolution between early and late cohorts
 - ↪ Similar issues encountered in Cohort 1 can potentially accelerate learning in Cohorts 2 and 3
 - ↪ Virtual care platforms and important features present a primary opportunity for sharing
- ↪ Larger equity focus in Cohorts 2/3 present broader implementation challenges
 - ↪ Issue breadth across later Cohorts needs investigation (based on 5 OHTs)

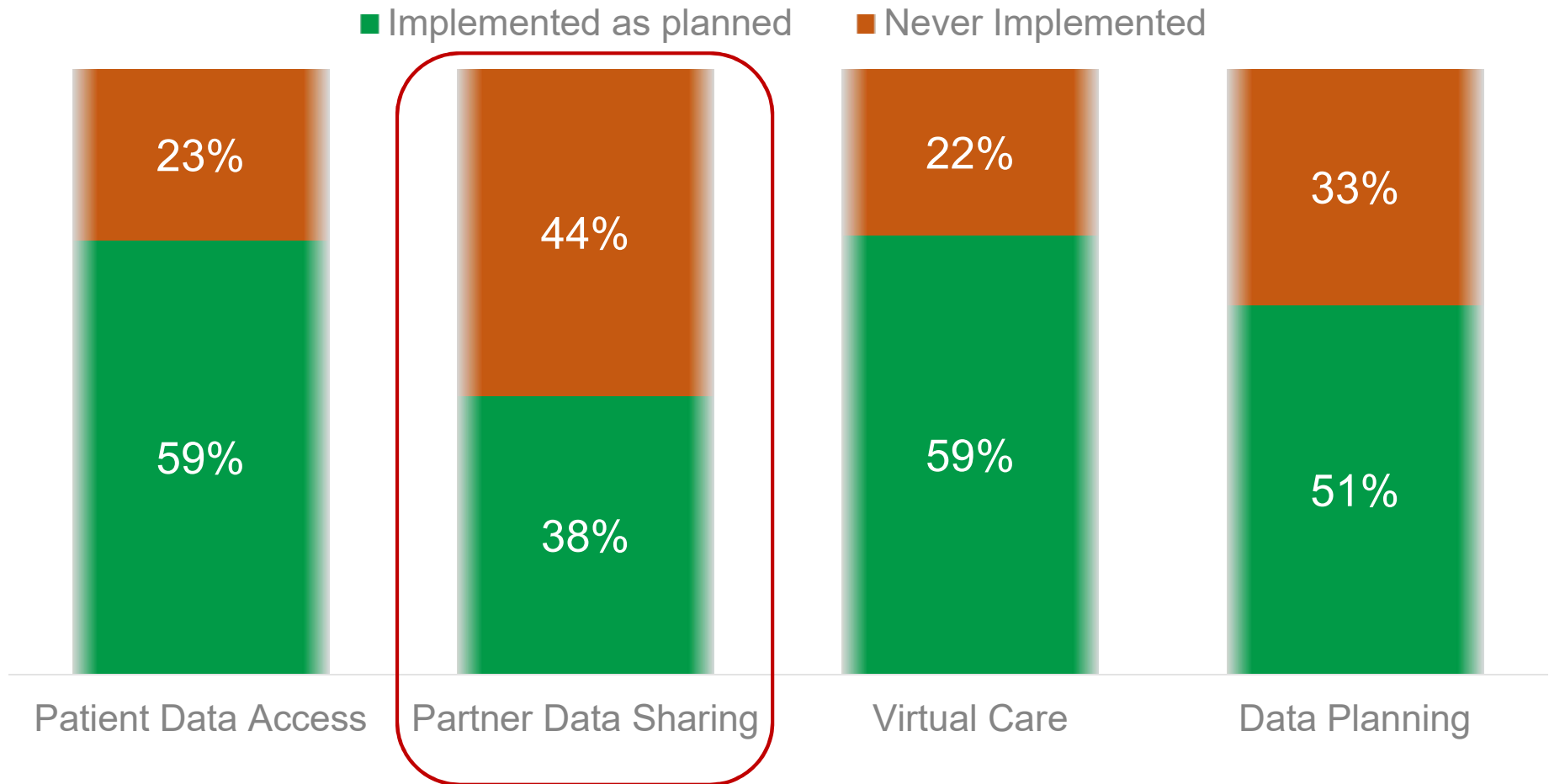
Practice Evolution

Within OHT Cohort 1

How did implementation evolve within the Practices

- ↪ Focus was on Cohort 1 OHTs where more data are reported
- ↪ Across the 4 practices (patient data access, partner data sharing, virtual care, and data planning):
 - ↪ Minimal differences in the proportion of practices **changed**
 - ↪ Statistical differences emerge in practices **implemented as planned** versus not implemented
- ↪ Particularly true for the partner data sharing practice

Cohort 1 OHTs Were More Likely to Implement as Planned



What Activities Were Not Implemented

Implementation	Patient Data Access	Partner Data Sharing	Virtual Care
Activities Implemented	Self-Management tools MyChart, ClinicalConnect 1.1 Activities Implemented (avg)	Common Platforms Clinical information systems 0.6 Activities Implemented (avg)	Virtual visit access Online booking 3.0 Activities Implemented (avg)
Activities Not Implemented	Web portals and apps Leveraging existing digital assets across the province	Common Platforms Clinical information systems Standard virtual care platforms Shared Data Infrastructure Shared databases APIs	Expanding home care Care providers and self care Expanding providers Mental health support
Why?	Deferred to Ontario Health	Scale and complexity Lack of guidance	Managerial capacity

Key Learnings

- Implementation struggles are largely related to **Partner Data Sharing** compared to alternative practices
- There are some OHTs showing signs of success with implementation
 - Using the very same approaches that alternative OHTs struggle with
- Opportunity for learning between Cohort 1 OHTs and potentially to later Cohort OHTs

Impact on Effectiveness

Discussion

- What is most important to measure when you think about the effectiveness of digital activity implementation?
- What does success look like (in any dimension or ideally in aggregate)?

Are Implemented Activities Effective?

- ↪ For activities implemented/changed, we asked about effectiveness in improving patient handoffs:
 - ↪ 5-point scale from Very Ineffective (1) to Very Effective (5)
- ↪ The strongest perceived effectiveness in patient hand-offs are in OHTs that implement **Partner Data Sharing**
 - ↪ These OHTs improve in the effectiveness of **Virtual Care** as well
- ↪ Spillover effects from **Partner Data Sharing** implementation to other digital practices

Effectiveness of Practice Implementation

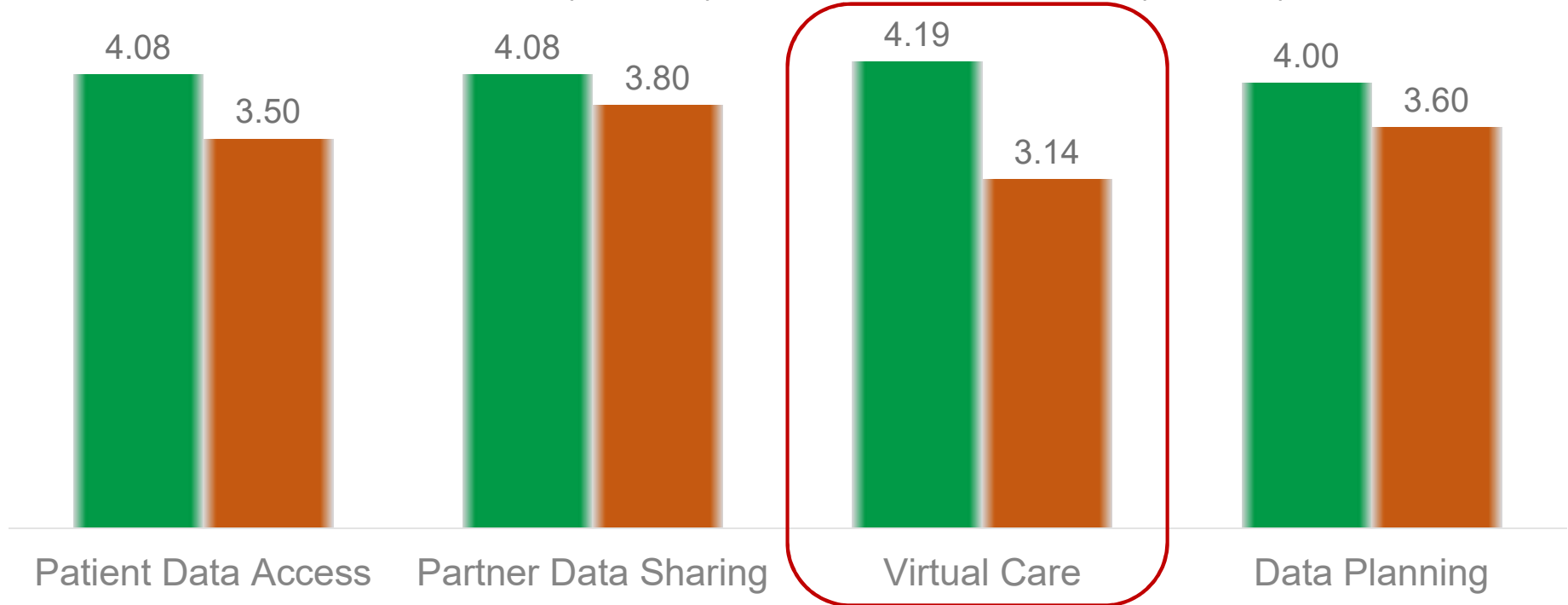
Digital Practice	Average Perceived Effectiveness
All Practices	3.59
Patient Data Access	3.77
Partner Data Sharing	4.00
Virtual Care	3.41
Data Planning	3.74

** The effectiveness in Virtual Care is statistically different than the other 3 practices*

Partner Data Sharing Spillover Effects

Average Perceived Effectiveness
Improving Patient Hand-Offs

■ Implementers (6 OHTs) ■ Non-Implementers (5 OHTs)

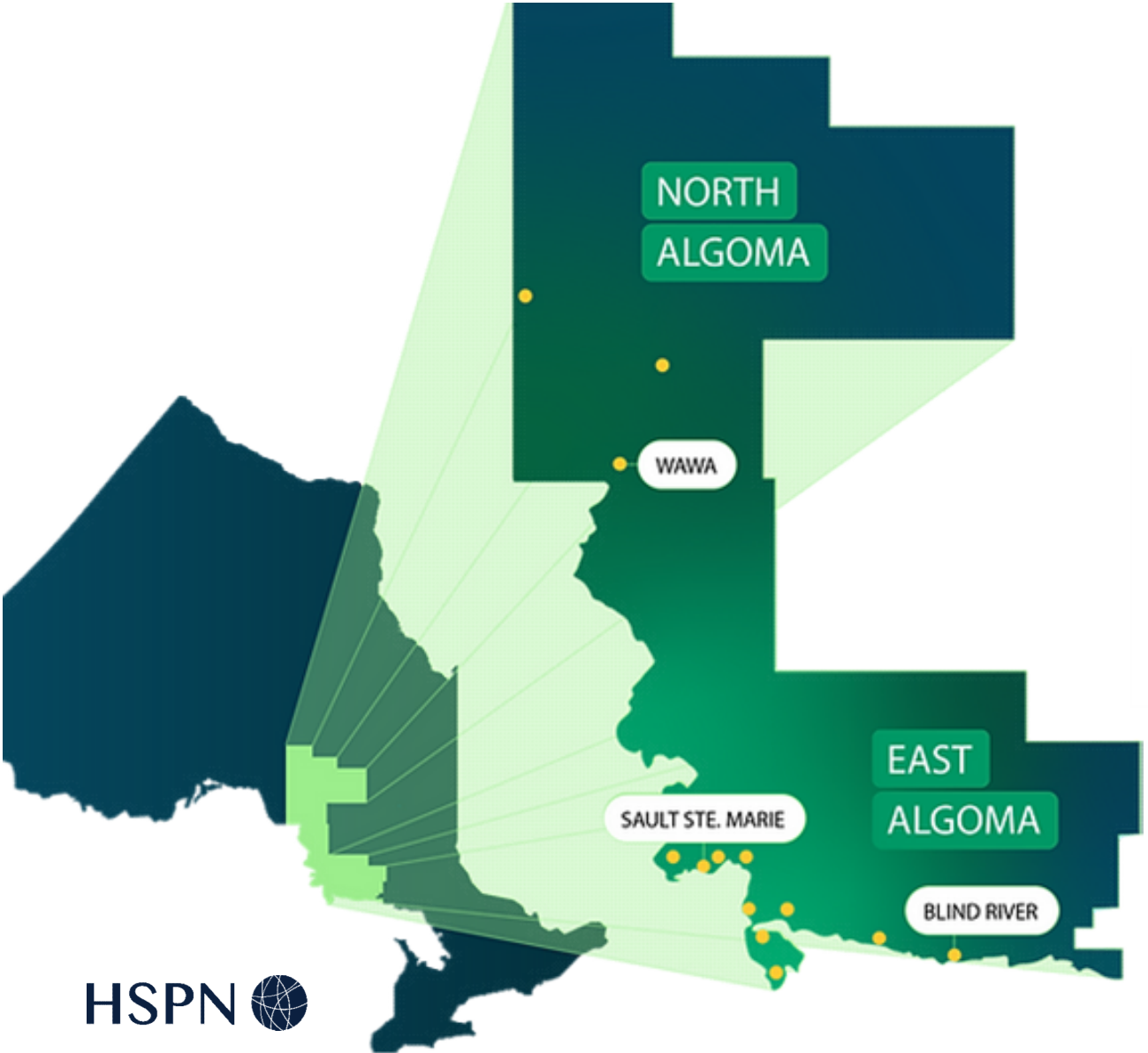


Key Learnings

- Those OHTs that do implement Partner Data Sharing report significantly higher effectiveness ratings across the board
 - Virtual Care increases by the largest margin
 - Higher overall effectiveness is also reported patient data access and data planning
- Given a likely clinical focus, the quality of virtual care appears linked to information sharing across partners

Summary

- Learning from Cohort 1 OHTs to later Cohorts can potentially streamline the implementation of digital activities
- Heightened focus on health equity poses broader challenges for digital implementation
- The most challenging practices to implement (Partner Data Sharing) potentially have the highest pay-off
 - Successful implementations of Partner Data Sharing exist in OHTs and present a large opportunity for knowledge transfer



ÉQUIPE SANTÉ
ALGOMA ONTARIO
HEALTH TEAM

Victoria Aceti Chlebus
Director, Integrated Care
Algoma OHT

**CAMBRIDGE
NORTH DUMFRIES**

OHT

A Cohort 1 OHT's Experience Advancing Digital Health

Kristina Eliashevsky
Director, Cambridge North Dumfries OHT

Photo Credit: [Pjrsoap](#)

ABOUT THE CND OHT



148,792

Total Attributed Population
(2021/2022)

10,263

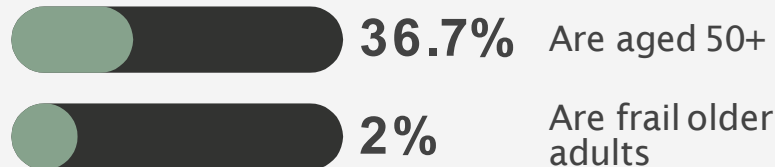
patients do not have access
to primary care in CND

1,053

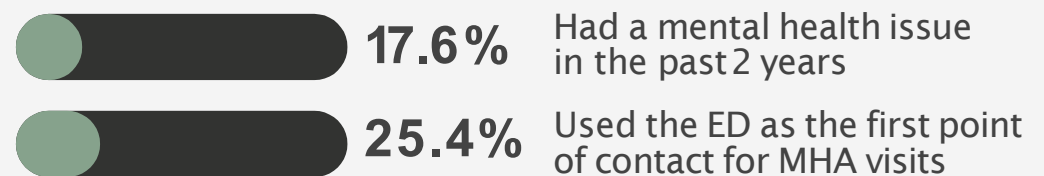
Individuals without primary
care who sought those
services 5+ times the past 2
years

Priority Populations

Medical Complexity and Older Adults

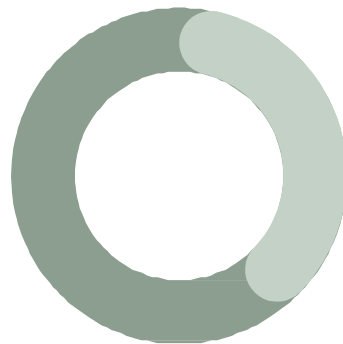


Mental Health & Addictions



DIGITAL HEALTH PLAN VS. REALITY

59% of initiatives were changed or never implemented



41% of initiatives were implemented and remain in use

Themes:

Leverages sunsetted/sunsetting platforms (i.e. MyChart)
Requires sharing of PHI between organizations (i.e. access to CHRIS)
Reallocation of resources and/or licenses.

Themes:

Leverages provincially procured solutions
Aligns with our priority populations
Built on existing partnerships (i.e. not requiring new data sharing agreements)

Digital Health as an Enabler to Population Health Management

COMMUNITY MENTAL HEALTH AND ADDICTIONS CLINIC

At this clinic, you may receive care from several
CND OHT member organizations including



Online Appointment Booking

73 primary care providers onboarded to OAB in 2022-2023.



Virtual Care

Virtual care experience survey launched in 2021. 1,183 responses have been collected showing 90.28% satisfied or very satisfied with their virtual care experience along with a wealth of other insights.



Secure Messaging

Consolidating multiple user groups in Hypercare to allow for cross-OHT provider to provider messaging. Phase 1 in progress, linking CMH to primary care and community palliative teams.

ADVANCING DIGITAL HEALTH IN A DYNAMIC SYSTEM



Digital First for Health Strategy

To drive convergence, Ontario Health is leading the creation of a comprehensive blueprint and standards program for an interoperable and scalable plan to exchange health care data across the province.

1. Patients before Paperwork
2. Clinical viewer consolidation
3. Cyber security
4. Health Information System Integration Framework
5. Health811



West Region Digital Health Advisory Council

The Ontario Health West Digital Health Advisory Committee (DHAC) provides leadership, strategic advice, and advocacy to enable integrated patient-centred care by leveraging digital health where appropriate.

The Committee will support a regional view of the needs of residents, clinicians, and Ontario Health Teams (OHTs) within the West region to allow for the scale and spread of technologies to enable integrated models of care and population health management.

Where necessary, the Committee can provide feedback and endorsement for items that broadly impact digital work across the region through a consensus decision-making process.

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OHT

Implement digital health tools to increase access to care, improve care coordination and collaboration and to enable evidence-informed planning and decision-making.



At what level should foundational Digital Health practices be planned and implemented?

HURDLES THAT WE ARE WORKING TO OVERCOME

Maturing in a
Dynamic
Environment

Working Within
Privacy
Legislation

Awareness of
and Access to
Data

Equity Considerations

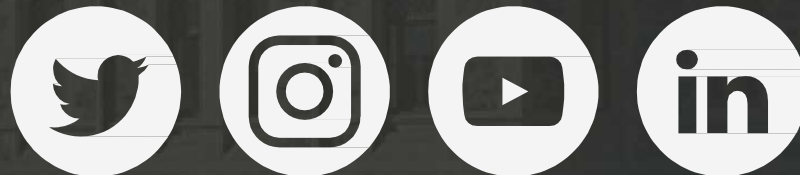
- **Patient Data & Access**
- **Partner Data Sharing**
- **Virtual Care**
- **Digital Planning**



What is your expectation of the health care system?

CAMBRIDGE | OHT
NORTH DUMFRIES

LET'S CONNECT



@CNDOHT



cndoht.com



cndoht@langs.org

Our Request – Understanding Your Experiences with Digital



**SHARING MEANINGFUL
INSIGHTS ACROSS
COHORTS**



**SURVEY WAVE 2:
WINTER 2024**

Thank You

Key questions for our discussion

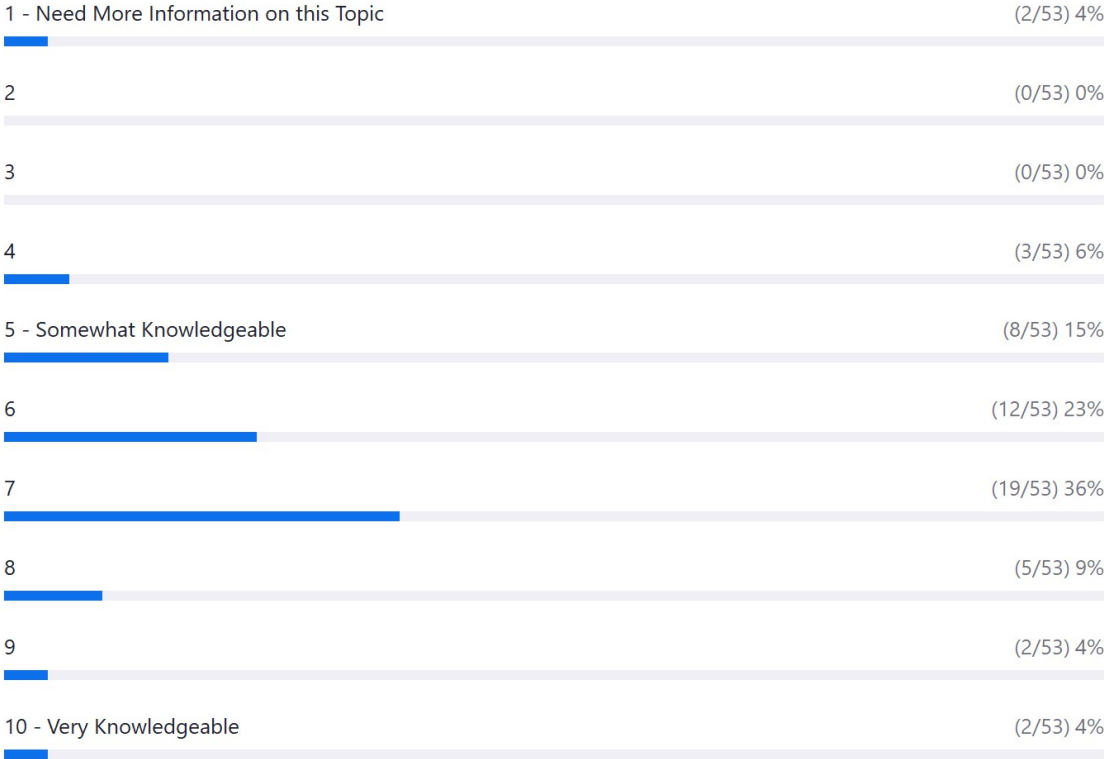
- What are the biggest priorities for OHTs as it relates to digital?

Poll 5

Poll | 1 question | 53 of 81 (65%) participated

1. After today's webinar, how knowledgeable are you about digital implementations across OHTs? (Single Choice) *

53/53 (100%) answered



Up Next

- HSPN webinar series
 - 4th Tuesday of the Month: 12:00 – 1:30 pm

Upcoming for 2024

- January 23 – A Series of Projects Focused on Equity

In collaboration with IFIC Canada

- February 27 – Policy Supports for Integrated Care

Can you share some feedback? Scan here! (or click link in chat)



THANK YOU!



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The Health System Performance Network



hspn.ca