



# CHIEF Executive Forum Site Visit

October 30<sup>th</sup>, 2024

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## AGENDA

#	Agenda Item	Time	Time Slot	Presenter
1	Arrival and Breakfast	30 minutes	8:30 – 9:00 am	
2	Introductions and Opening Remarks	10 minutes	9:00 – 9:10 am	Dr. David Gratzer
3	CAMH Overview			
4	CAMH's Journey Towards Digital Health Excellence	20 minutes	9:10 – 9:25 am	Dr. Tania Tajirian
5	Patient Engagement	10 minutes	9:25 – 9:40 am	Debra Orrell
6	What's Next?	10 minutes		
7	Digital Innovation Hub	5 minutes	9:40 – 9:45 am	Dr. Gillian Strudwick
8	Discussion	5 minutes	9:45 – 9:50 am	
	Travel	10 minutes	9:50 – 10:00 am	
9	Tour: Temerty Centre for Therapeutic Brain Intervention Networking Opportunity	30 minutes	10:00 – 10:30 am	Dr. Daniel Blumberger
	Travel	5 minutes	10:30 – 10:35 am	
10	Tour: CAMH Simulation Centre	35 minutes	10:35 – 11:10 am	Stephanie Sliemers Fabienne Hargreaves
11	Closing Remarks	5 minutes	11:10 – 11:15 am	Dr. Tania Tajirian
12	Lunch Pick Up and CHIEF Executives Depart CAMH	15 minutes	11:15 – 11:30 am	

# CAMH Overview

The image features a large, three-dimensional purple 'camh' logo mounted on a glass building facade. The letters are thick and have a slight shadow. In the background, there are abstract, semi-transparent graphics: a light blue arch on the left, a teal arch in the center, and a yellow arch on the right. The building's glass panels are visible, reflecting the sky and other buildings.

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# CAMH Land Acknowledgement

CAMH is situated on lands that have been occupied by First Nations for millennia; lands rich in civilizations with knowledge of medicine, architecture, technology, and extensive trade routes throughout the Americas. In 1860, the site of CAMH appeared in the Colonial Records Office of the British Crown as the council grounds of the Mississaugas of the New Credit, as they were known at the time.

Today, Toronto is covered by the Toronto Purchase, Treaty No. 13 of 1805 with the Mississaugas of the Credit.

Toronto is now home to a vast diversity of First Nations, Inuit and Métis who enrich this city.

CAMH is committed to reconciliation. We will honour the land through programs and places that reflect and respect its heritage. We will embrace the healing traditions of the Ancestors, and weave them into our caring practices. We will create new relationships and partnerships with First Nations, Inuit and Métis and share the land and protect it for future generations.

mental  
health  
is  
health

camh



Shkaabe Makwa

# Our History



1850

Provincial Lunatic Asylum opens with 250 beds.



1998

4 institutions merge to form CAMH.



Today

Largest mental health and addictions hospital in Canada with 550 beds.



2018

CAMH launches "Mental Health is Health".

**camh**  
mental health is health



2023

CAMH launches "No one left behind." Campaign



2024 Onwards

Redevelopment continues transforming CAMH. Mental Health is Health 2.0.





# CAMH Today





# Redevelopment: Recovery & Discovery

2024 kicks off the fourth, and final, stage of CAMH's historic redevelopment. Two new buildings will be constructed on the south east section of the Queen Street site:



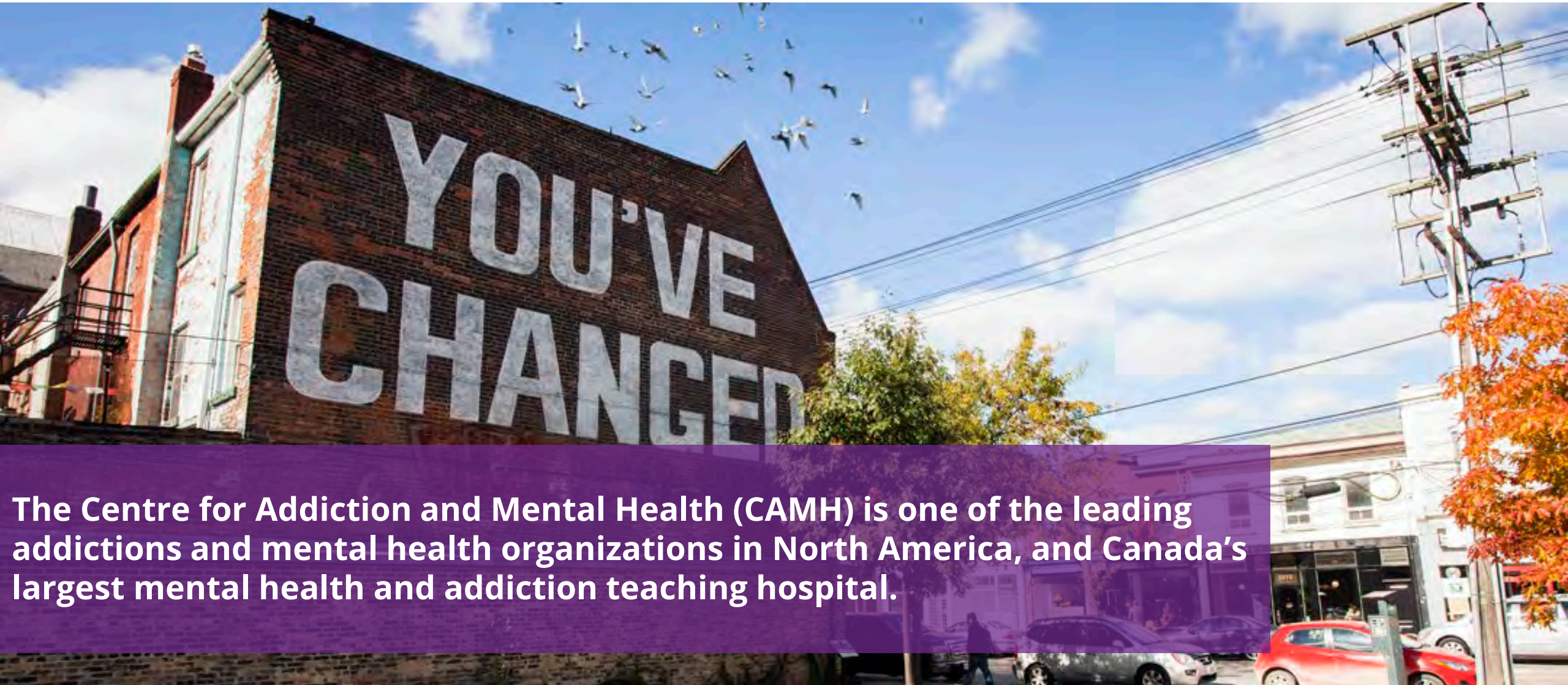
The **Secure Care and Recovery Building**: the forensic mental health service's new home.



The **Temerty Discovery Centre**: the new home of CAMH's world-leading research enterprise.



# About the Centre for Addiction & Mental Health



The Centre for Addiction and Mental Health (CAMH) is one of the leading addictions and mental health organizations in North America, and Canada's largest mental health and addiction teaching hospital.



# CAMH Coverage and Outreach



## GTA Region

- ★ GTA Campuses & Satellite Sites

## North West Region

1. Kenora
2. Thunder Bay

## North East Region

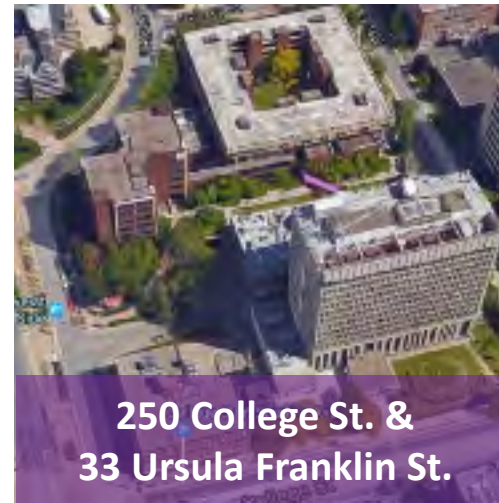
3. Sudbury
4. Penetanguishene

## West Region

5. London
6. Hamilton

## East Region

7. Ottawa
8. Kingston



# CAMH's National & Global Research Partnerships



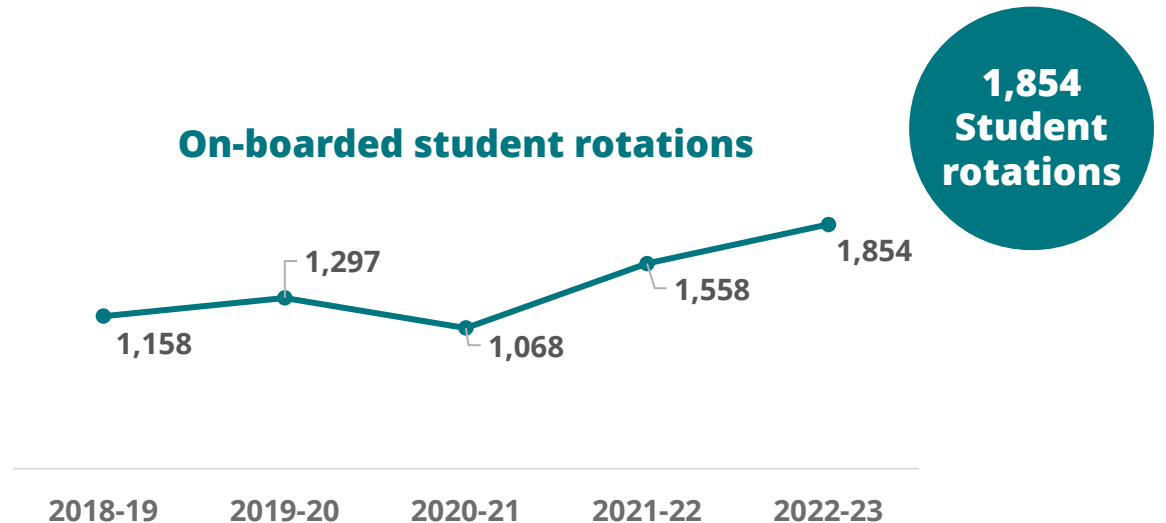
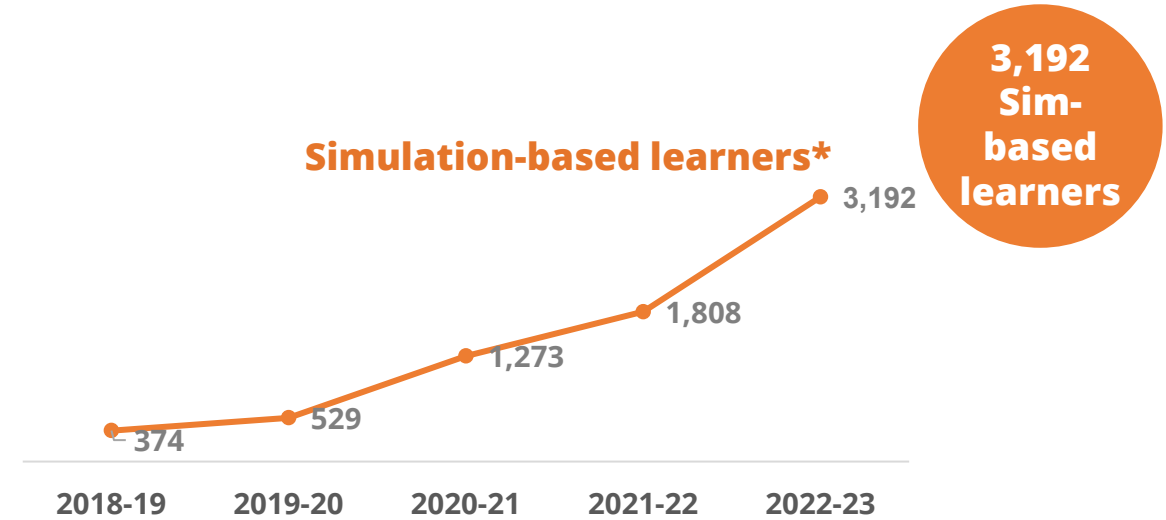
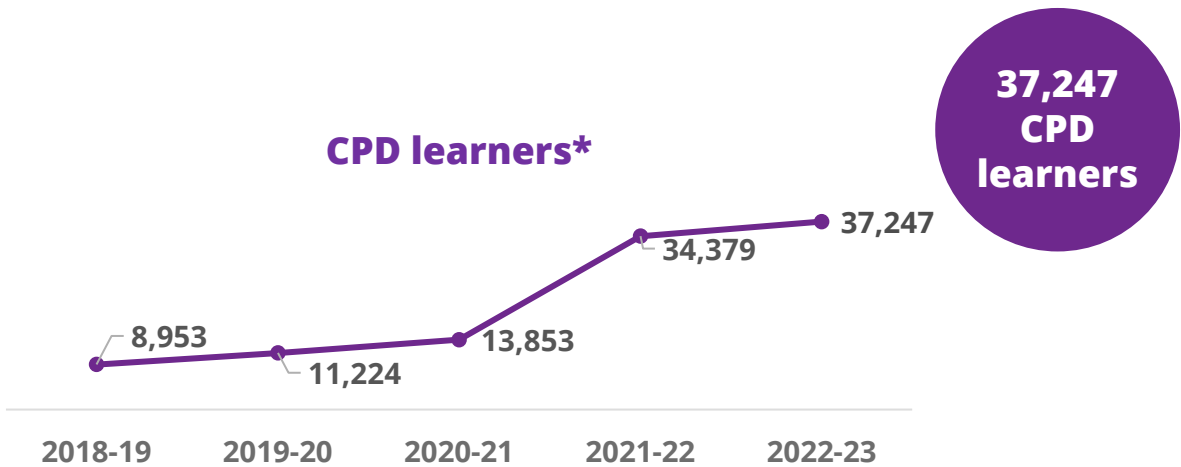


# CAMH is home to the first Royal College of Physicians and Surgeons of Canada accredited mental health Simulation Centre



# Continuing Professional Development (CPD) Learners - CAMH

Learners have increased significantly over the past 5 years



\* Learners are not unique and may have attended multiple courses





**9-8-8**

## **Suicide Crisis Helpline**

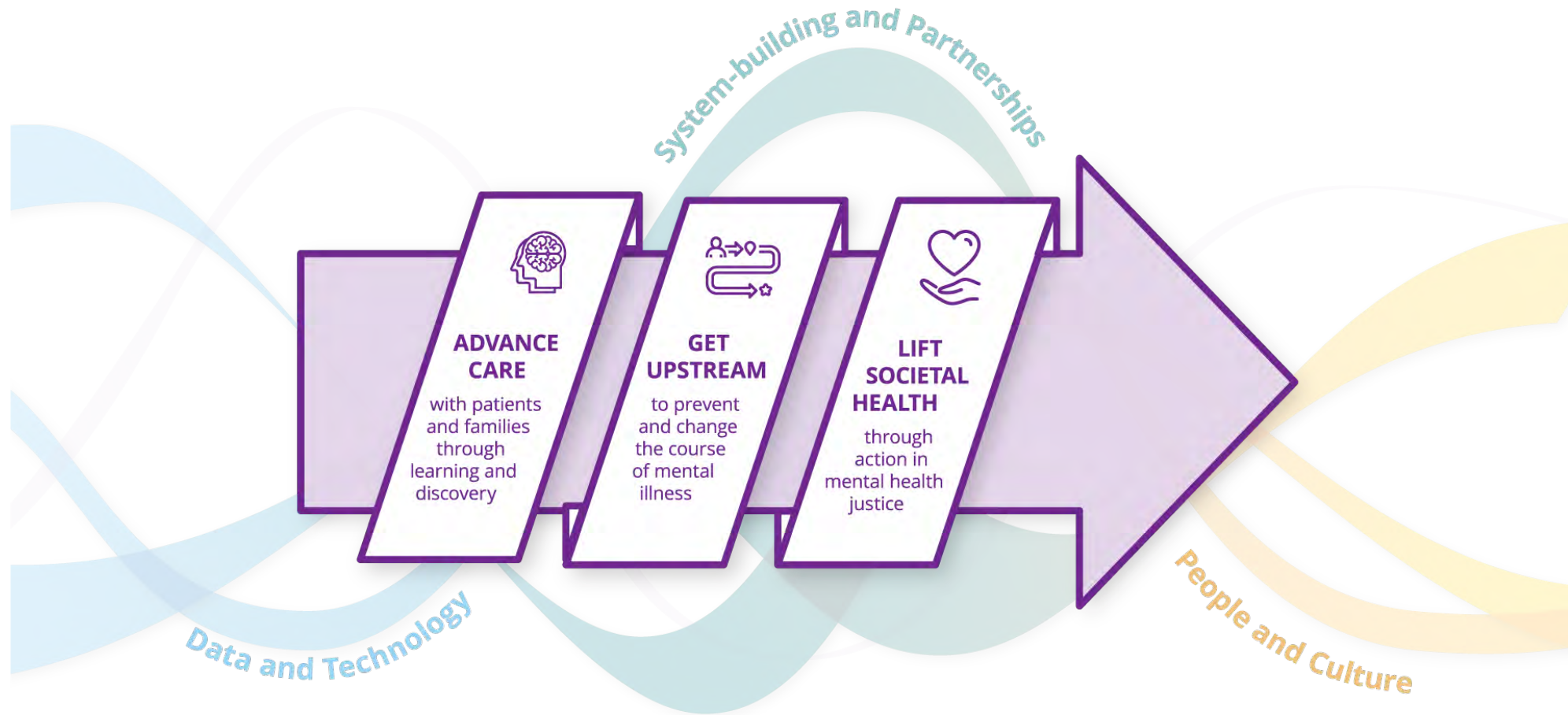
# About 9-8-8

- 9-8-8: Suicide Crisis Helpline, Canada's **new three-digit suicide prevention helpline**, launched November 30<sup>th</sup>, 2023.
- 9-8-8 is available in English and French by phone or text, 24/7/365
- The **Centre for Addiction and Mental Health (CAMH)** in Toronto, Ontario is leading and coordinating the delivery of 9-8-8 nationwide.
- Funded by the Government of Canada, through the **Public Health Agency of Canada** (\$158.4 million).



**9-8-8**

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# CAMH's Journey Towards Digital Health Excellence

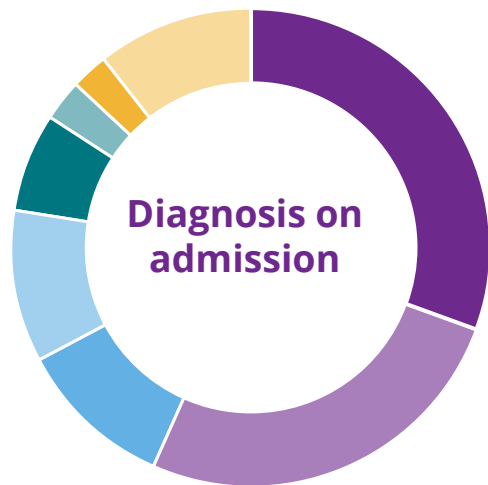


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# CAMH Key Statistics 2023 - 2024

- 40,405 patients treated in 2023-2024
- Greater than 83,000 virtual care visits
- Greater than 16,000 Emergency Department visits
- 13,500 Ontario Structured Psychotherapy sessions
- 8,000 rTMS appointments (non-invasive brain stimulation for treatment-resistant mental illness)



• 42.7%	Schizophrenia disorders	• 1.9%	Personality disorders
• 29.7%	Substance-related disorders	• 1.1%	Mood and Anxiety disorders
• 15.2%	Bipolar and related disorders	• 0.5%	Trauma and stressor-related disorders
• 7.4%	Depressive disorder	• 1.1%	Other



# CAMH's Journey Towards Digital Health Excellence



**2014**  
Big-bang go-live of Cerner (I-CARE)

**June 2017**  
HIMSS EMRAM Stage 7



**September 2017**  
Krembil Centre for Neuroinformatics (KCNI) established



**December 2017**  
PMO of the Year Award from the Project Management Institute



**March 2021**  
HIMSS EMRAM Stage 7 Revalidation



**November 2020**  
Brainhealth Databank established



**December 2018**  
HIMSS Davies Enterprise Award



**December 2018**  
HIMSS AMAM Stage 6



**December 2017**  
CAMH hosts first of its kind Innovation Expo



Scheduled

More to come...

**October 2022**

Canadian Youth Mental Health Insight Platform Launch



Fondation Brain Canada Foundation

**November 2023**

988 Suicide Helpline Platform Launch



Suicide Crisis Helpline

**October 2024**

HIMSS EMRAM Stage 7 Revalidation (Scheduled)



**May 2025**

HIMSS AMAM Stage 7 Validation (Scheduled)



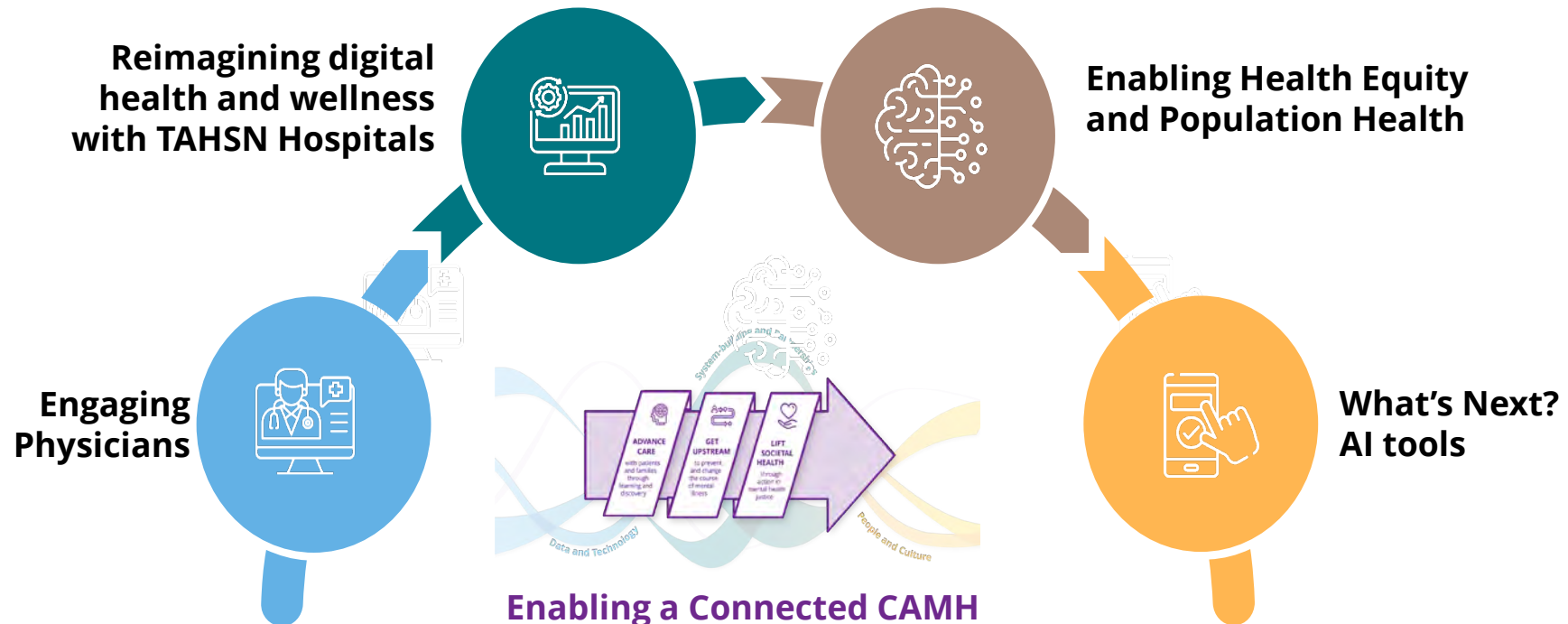
# CHIO Portfolio





# Enabling a Connected CAMH through Digital Health

The CHIO Office has been developing innovative approaches through unique collaboration, engagement and partnerships to realize the vision of Connected CAMH



# Documentation Burden



Documentation burden is defined as *“the stress imposed by the excessive work required to generate clinical records of healthcare-related interactions, occurring as a result of the **imbalance** between the **usability** [of] and **satisfaction** [with] **systems of health records keeping** with **clinical and regulatory demands** of entering and consuming health records data.”* <sup>1</sup>

Burden encompasses both **information retrieval** (to facilitate patient care as well as produce further documentation) and **the act of documenting**.

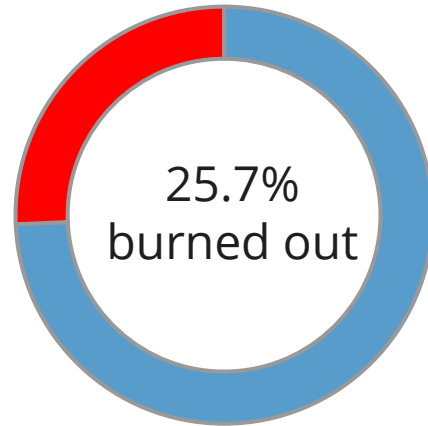
1. Rossetti, S.C., et al. 25x5 Symposium Drives Ongoing Efforts to Reduce Documentation Burden on U.S. Clinicians: Final Summary Report. 2021 Dec



# Bird's Eye View of Burnout at CAMH

## Benchmark Survey (2019)

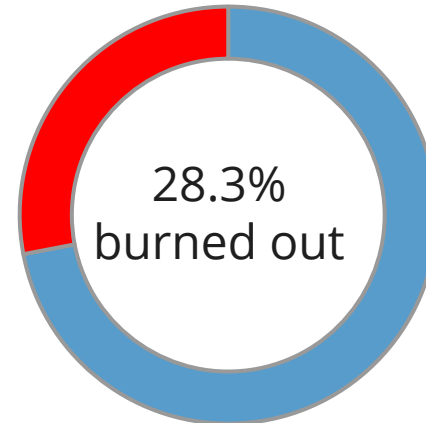
n = 208 physicians  
Response Rate: 75%



**Burnout** was measured by a single question from the Mini-Z instrument, which was validated against the MBI with 83% sensitivity (87% specificity)

## I-CARE Follow-up Survey (2023)

n = 239 physicians  
Response Rate: 50%

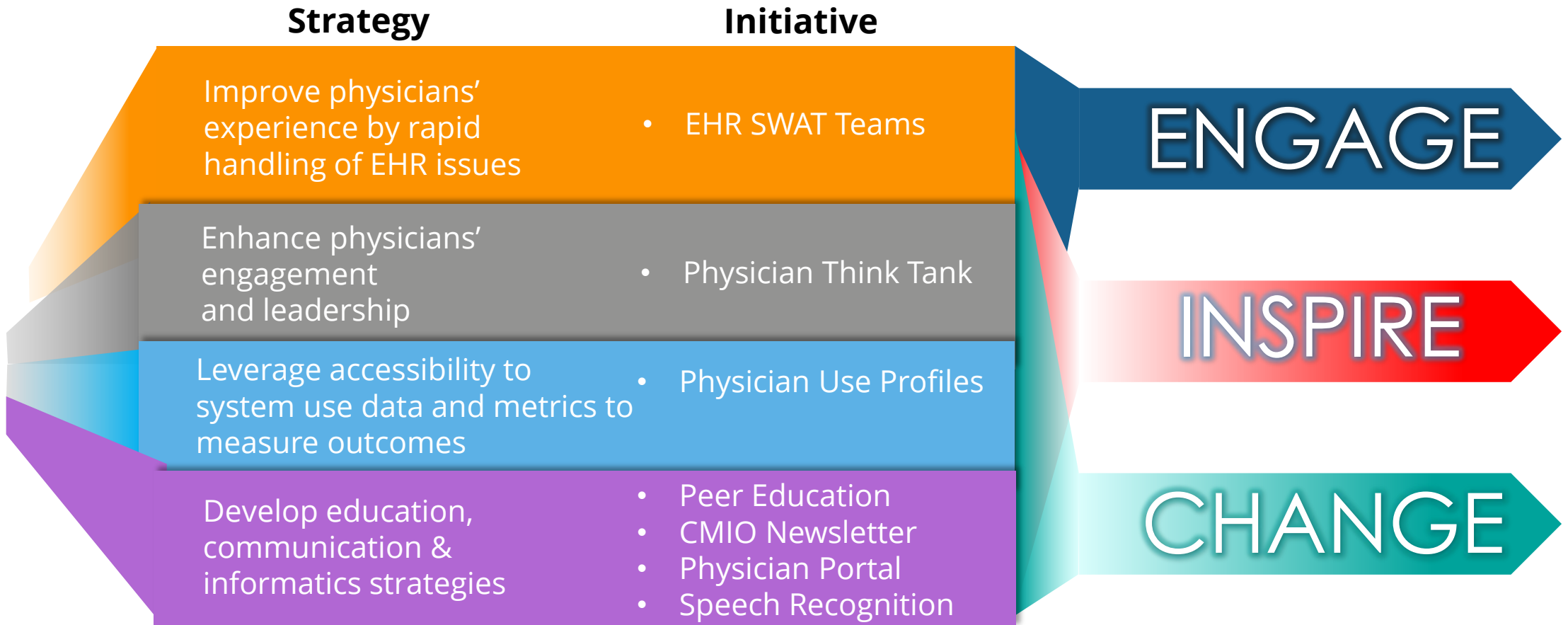


### Identify your symptoms of burnout.

<b>NOT BURNED OUT</b>
I enjoy my work I am under stress
<b>BURNED OUT</b>
I am definitely burning out Symptoms of burnout wont go away I feel completely burned out

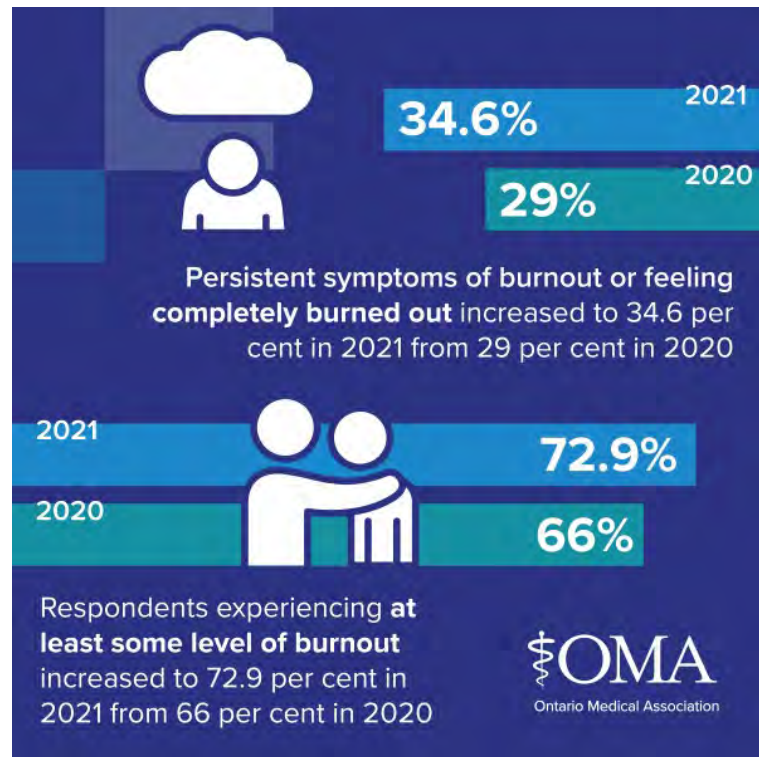
*\*Active Primary and Active Provisional Primary only*

# Physician Engagement Strategy



Source: Tajirian, T., Jankowicz, D., Lo, B., Sequeira, L., Strudwick, G., Almilaji, K., & Stergiopoulos, V. (2022). Tackling the burden of Electronic Health Record use among physicians in a mental health setting: Physician Engagement Strategy. *Journal of medical Internet research, In Press*

# Ontario Medical Association – Burnout Task Force



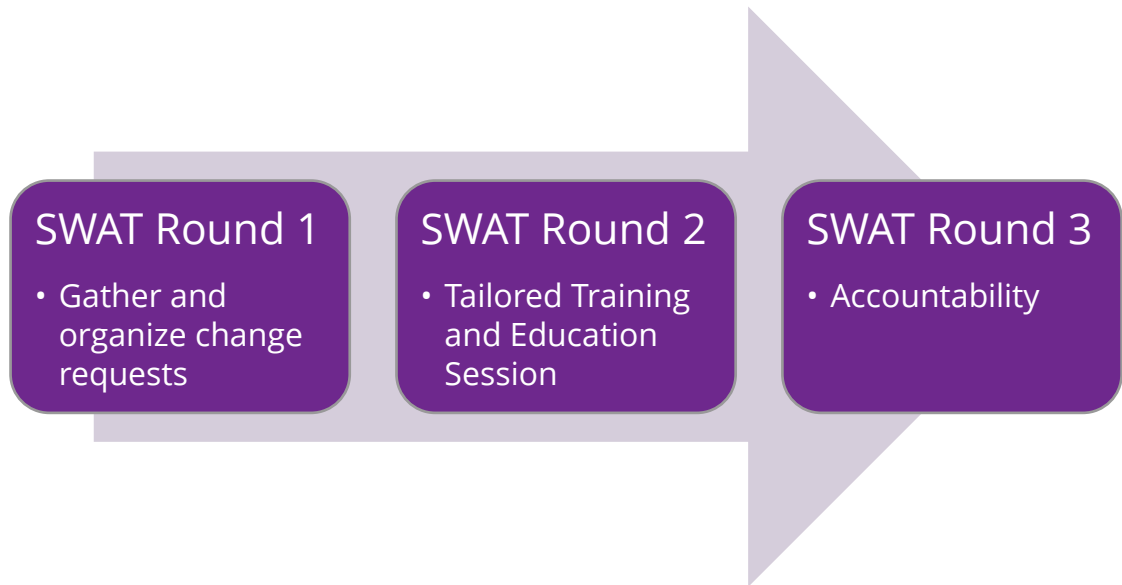
1. **Streamline and reduce required documentation and administrative work**
2. Ensure fair and equitable compensation for all work done
3. Increase work-life balance by making organizational policy changes
4. Promote the **seamless integration of digital health tools into physicians' workflows**
5. Provide institutional supports for physician wellness



# SWAT Initiative

Multidisciplinary team (physicians, nurses, pharmacy, laboratory) that meets clinicians to collect pain point, and address them in an agile manner.

Over 131 issues have been resolved, resulting in a more optimized EHR for mental health care.



JAMIA Open, 4(2), 2021, 1–7  
doi: 10.1093/jamiaopen/ooab018  
Case Report



## Case Report

### **EHR “SWAT” teams: a physician engagement initiative to improve Electronic Health Record (EHR) experiences and mitigate possible causes of EHR-related burnout**

Lydia Sequeira,<sup>1,2</sup> Khaled Almilaji,<sup>1</sup> Gillian Strudwick,<sup>1,2</sup> Damian Jankowicz,<sup>1</sup> and Tania Tajirian<sup>1,2</sup>

# SWAT Team: Request Categorization (2020)

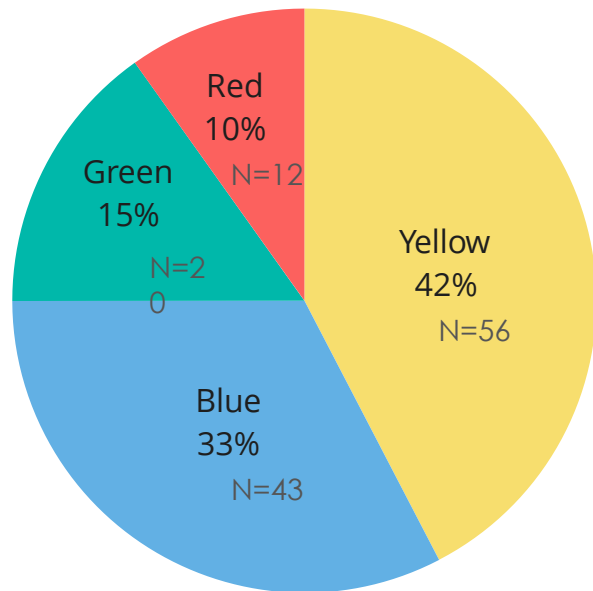
Source: Sequeira, L., Almilaji, K., Strudwick, G., Jankowicz, D., & Tajirian, T. (2021). EHR "SWAT" teams: a physician engagement initiative to improve Electronic Health Record (EHR) experiences and mitigate possible causes of EHR-related burnout. *JAMIA open*, 4(2), oaab018.

**Blue Requests**  
Needs more training

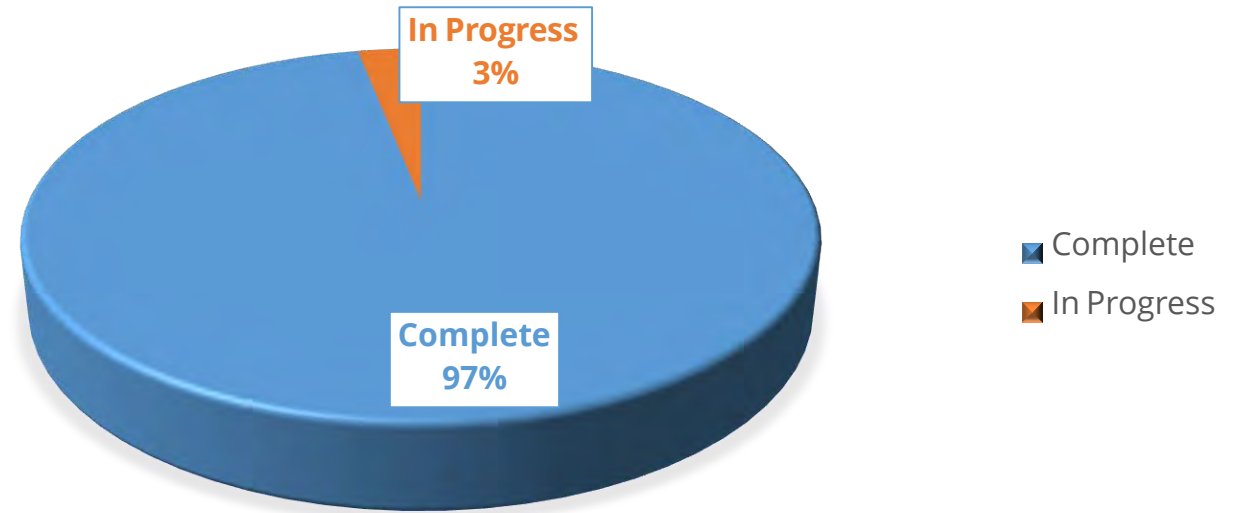
**Green Requests**  
Fixes will be delivered within 6 weeks of submission to change control governance

**Yellow Requests**  
Request is applicable but needs time due to needed system upgrade or other requirement (On-Hold)

**Red Requests**  
Change is not in scope, or not aligned with policies and regulations



## OVERALL COMPLETION STATUS – FEBRUARY 2023

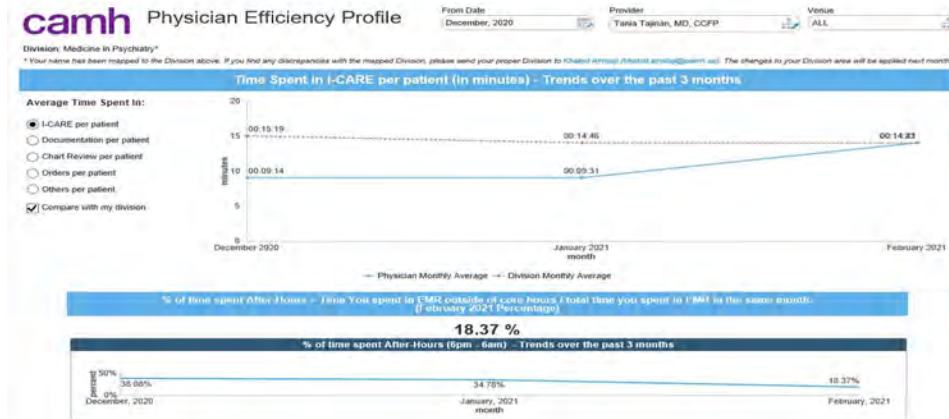


We collected **131** EMR Change Requests

# Physician Leadership in Informatics: Physician Think Tanks (PTT)

## Membership

- CHIO (Chair)
- Physicians 'Divisional Liaisons'
- Clinical Informatics Nurses
- Clinical Applications Team
- Health Information Management Pharmacy
- Informatics Laboratory and Diagnostics Professional Practice Office
- Enterprise Project Management Office



## Goals

- Discuss new topics/changes relevant to practice (Feedback Table)
- Lead the improvements of EHR
- Provide physician feedback on new innovations and tools at CAMH (e.g., virtual care, HIE and now AI)

## Key Success Factors

- Leadership Buy In
- Leadership in Informatics Development
- Governance ( PTT part of it)
- Shared Accountability
- Training

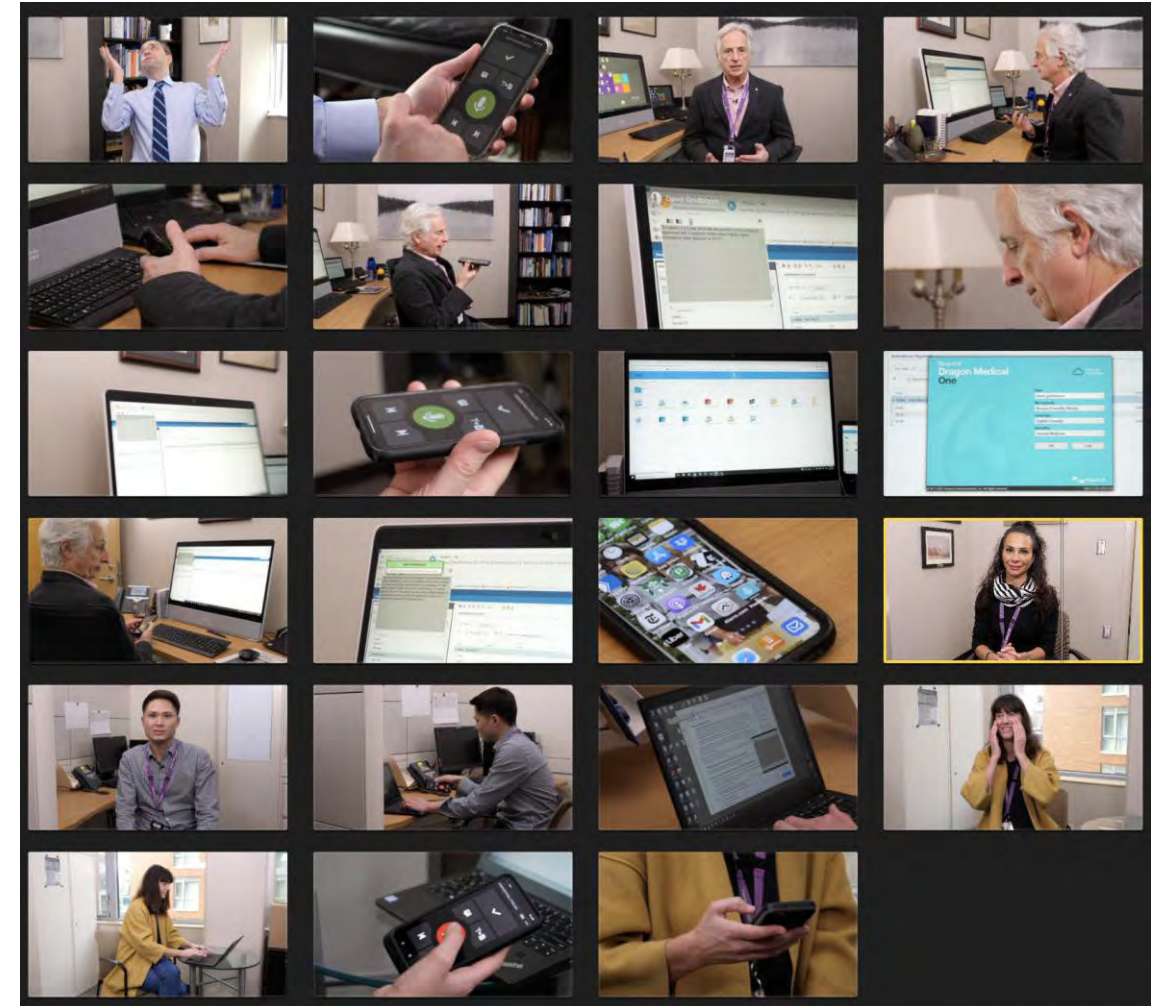
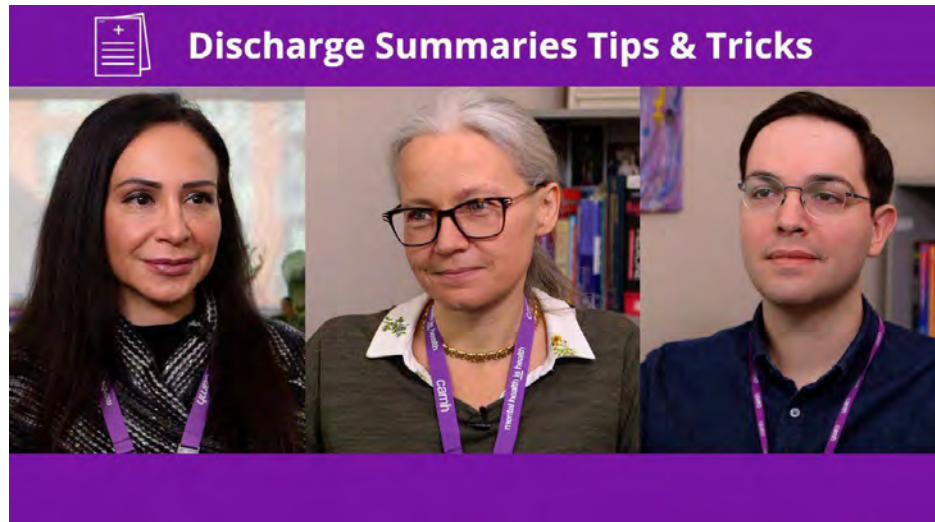


# Tailored Training: Peer Education Videos

Developed by **physicians for physicians** and available on-demand

Contains topics that require education/training (identified from SWAT)

**Short videos** that are embedded as part of EHR training and refreshers



# Reimagining Digital Wellness at System Level



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## Recommendations at System Level

### Finding from Environmental Scan

Develop digital sub-committee with focus on digital tools integration (led by digital leads)

Ensure digital governance structures for engagement with front-line clinicians

Establish appropriate funding mechanisms to encourage engagement in digital initiatives

Need to develop a national standardized organizational Toolkit on Digital Wellness

Need to develop education on best documentation practices (Digital Minimalism)

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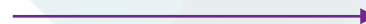
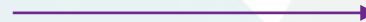
### Suggested Recommendation

Request leadership encourage digital committees/council are part of the governance structures.

Recommend providing protected time to participate in relevant activities ( hourly OMA rate).

Establish EHR use metrics monitoring requirements as most sites have this ability ( use of analytics).

Review organizational documentation related policies and invest in new digital tools such as generative AI.





# Recommendations in Canadian Setting

**Standardization of Documentation**

**Automation of Routine Tasks**

**Interoperability of Health Systems**



**Feedback Mechanisms**

**Training and Support**

**Policy and Regulatory Reforms**

Enabling Health  
Equity and Population  
Health



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# Hospital Medicine Innovation Hub: CAMH as a Leader in Integrated Physical Mental Health Care

> Healthc Q. 2023 Apr;26(1):38-44. doi: 10.12927/hcq.2023.27053.

## Recommendations to Enhance Physical Health for Individuals with Severe Mental Illness in Canadian Healthcare Organizations

Tania Tajirian <sup>1</sup>, Cristina de Lasa <sup>2</sup>, Caroline Chessex <sup>3</sup>, Brian Lo <sup>4</sup>, Po-Yen Brian Chang <sup>5</sup>, Rola Moghabghab <sup>6</sup>, Dionne Sinclair <sup>7</sup>, Damian Jankowicz <sup>8</sup>, Sanjeev Sockalingam <sup>9</sup>, Vicky Stergiopoulos <sup>10</sup>

Affiliations + expand

PMID: 37144700 DOI: 10.12927/hcq.2023.27053



### Summary of recommendations for developing an integrated care strategy for mental health settings

Level	Recommendation
System-level recommendations	<ul style="list-style-type: none"><li>• Nursing training, upskilling and support to ensure confidence with physical care</li><li>• Funding/support for increased allied health support for on-site physical care provision</li><li>• Partnership with external organizations for access to investigations, subspecialists, hospitalist skills development and provision of care on site and/or at acute care centres</li></ul>
Policy- and administrative-level recommendations	<ul style="list-style-type: none"><li>• Organizational leadership support of data-driven health informatics initiatives that focus on physical healthcare needs</li><li>• Internal policies and clinical workflows focused on the provision of evidence-based integrated physical healthcare</li><li>• Internal and external bidirectional partnerships with a shared vision of a model of care</li></ul>



# Interdisciplinary Collaborations: Colorectal Cancer Screening

**Team:** Po-Yen (Brian) Chang, Satinder Kaur, Brian Lo, Cristina de Las

Patients SMI receive less appropriate screening and treatment for colorectal cancer

**First organization to implement colorectal cancer screening in a specialized mental health care setting for patients in Canada**

Embedding the cancer screening pathway within EHR was critical for enhancing practice adoption



13%

**Baseline** screening rate for eligible patients

36%

**Post-Implementation** screening rate for eligible patients



Need for a Health Maintenance Page for Preventative Care



Continuity of Care in the Community Post-Discharge

Reference: Mahar, A. L., Kurdyak, P., Hanna, T. P., Coburn, N. G., & Groome, P. A. (2020). The effect of a severe psychiatric illness on colorectal cancer treatment and survival: A population-based retrospective cohort study. PLoS One, 15(7), e0235409. doi:10.1371/journal.pone.0235409

# Women's Health QI Project

One of the first organization to develop dedicated pathways and collaborations (WCH) to increase women's health cancer screening for long-stay inpatients (Pap smears and mammograms).

Cervical Cancer Screening (Pap smears)

13 eligible



9 completed

70% Increase

Breast Cancer Screening (Mammograms)

9 eligible



4 completed

44% Increase

## Going for a Mammogram

### What you need to know about breast screening

#### What is breast screening?

Breast screening means checking your breasts for early signs of cancer. Breast cancer is one of the most common cancers in the world. Finding it early is important because it means that treatment is more likely to work. Thanks to early screening, more people in Ontario survive breast cancer than almost every other cancer.



#### What is a mammogram?

A mammogram looks for breast cancer. It is a special machine that takes detailed pictures of your breasts.

#### Why do I need a mammogram?

Having a mammogram does not mean that you can skip the important steps of breast health.

HOW TO GET READY FOR YOUR APPOINTMENT



[Link to Video: Mammogram Desensitization](#)

# Enabling a Learning Health System through Digital Innovation

## Learning Health Systems



Systematically gather and create evidence.

Apply the most promising evidence to improve care.

Source: <https://www.ahrq.gov/learning-health-systems/about.html>



Itchhaporia D, et al. The Evolution of the Quintuple Aim. *J Am Coll Cardiol.* 2021 Nov, 78 (22) 2262–2264. <https://doi.org/10.1016/j.jacc.2021.10.018>



# Nursing and Health Disciplines Engagement Strategy

**Amplify nursing & health disciplines' engagement & leadership in digital health initiatives**

**Improve nursing & health disciplines' experience by rapid handling of I-CARE issues**

**Leverage accessibility to EHR usage data and metrics to measure outcomes**

**Enhance education, communication & digital health strategies**

# Interdisciplinary SWAT (2023 -2024)

Source: Sequeira, L., Almilaji, K., Strudwick, G., Jankowicz, D., & Tajirian, T. (2021). EHR "SWAT" teams: a physician engagement initiative to improve Electronic Health Record (EHR) experiences and mitigate possible causes of EHR-related burnout. *JAMIA open*, 4(2), ooab018.



## Blue Requests

Needs more training



## Green Requests

Fixes will be delivered within stipulated time



## Yellow Requests

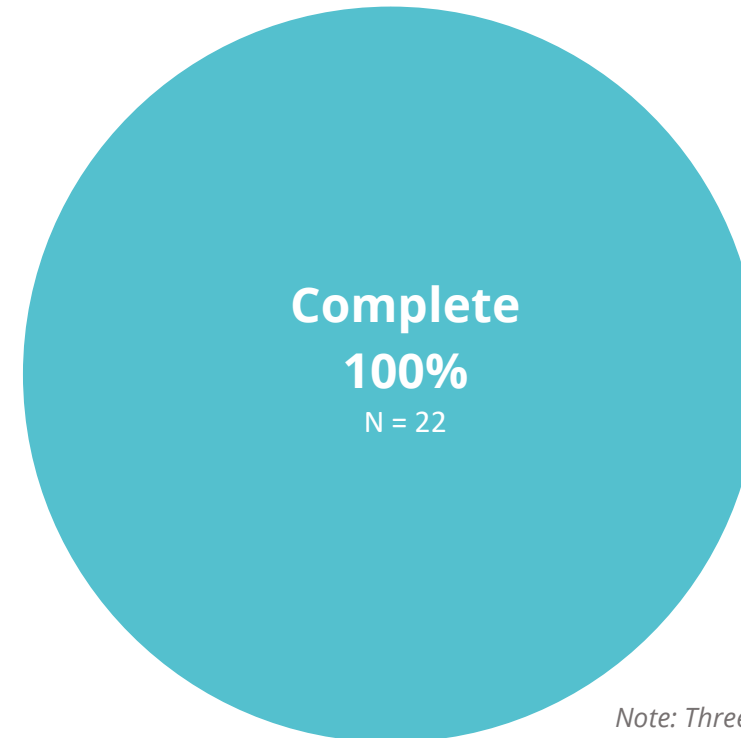
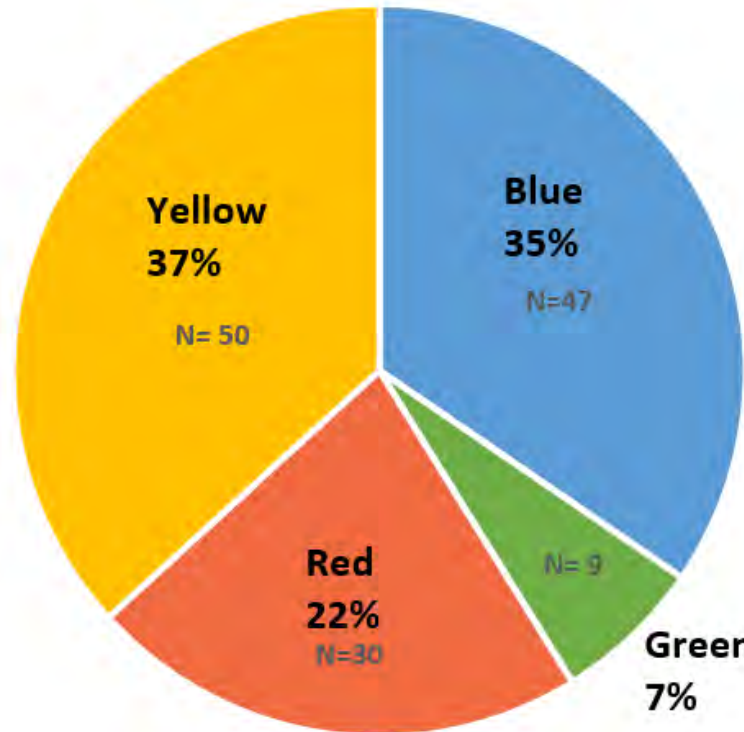
Applicable but needs time due to system upgrade or other requirements



## Red Requests

Not possible due to policy or technical constraints

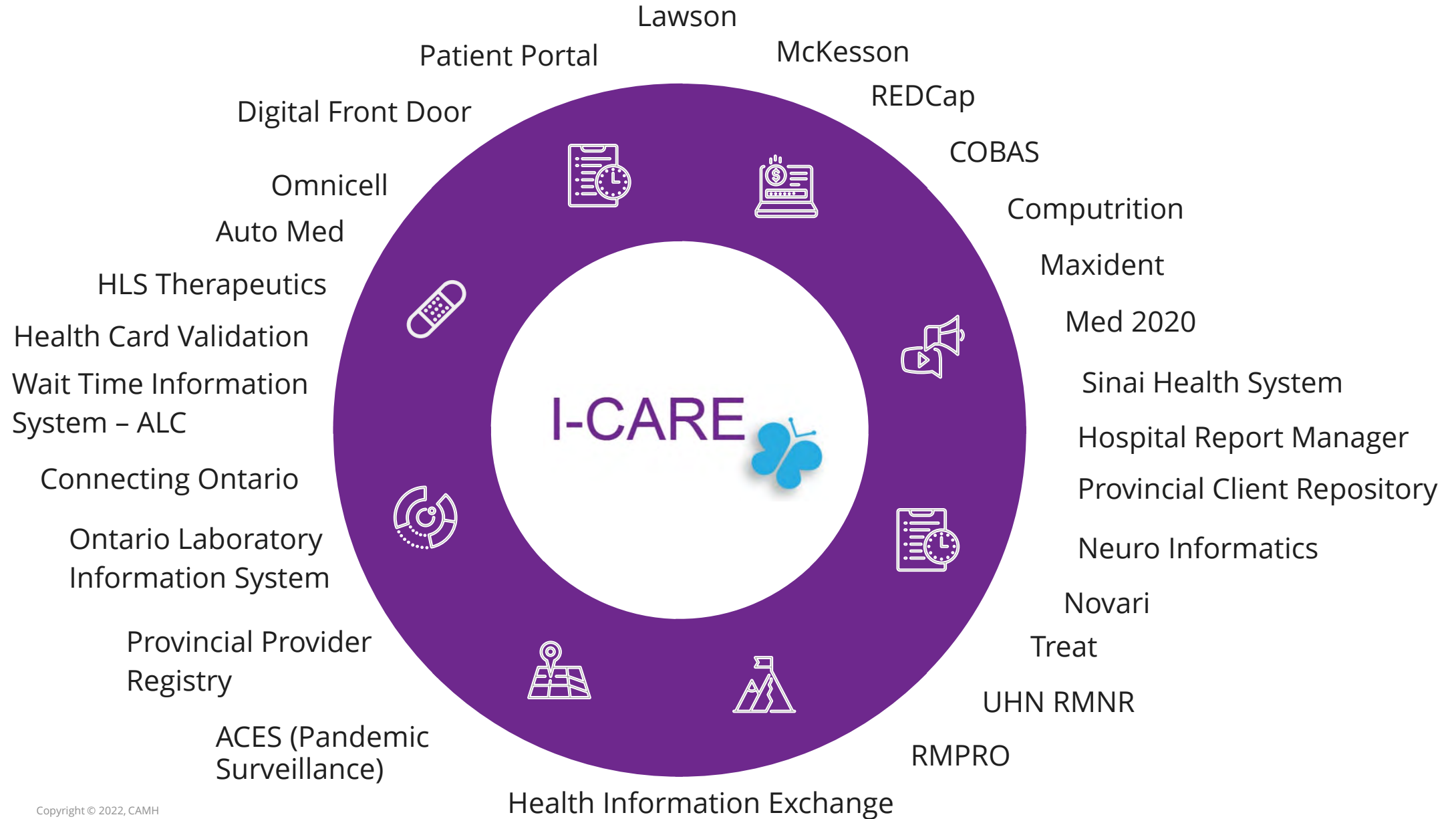
### OVERALL COMPLETION STATUS - MAY 2024



*Note: Three requests transitioned to CSIS tracker for future project resourcing.*

We collected **136** EMR Change Requests

# Other Systems Integrated with I-CARE



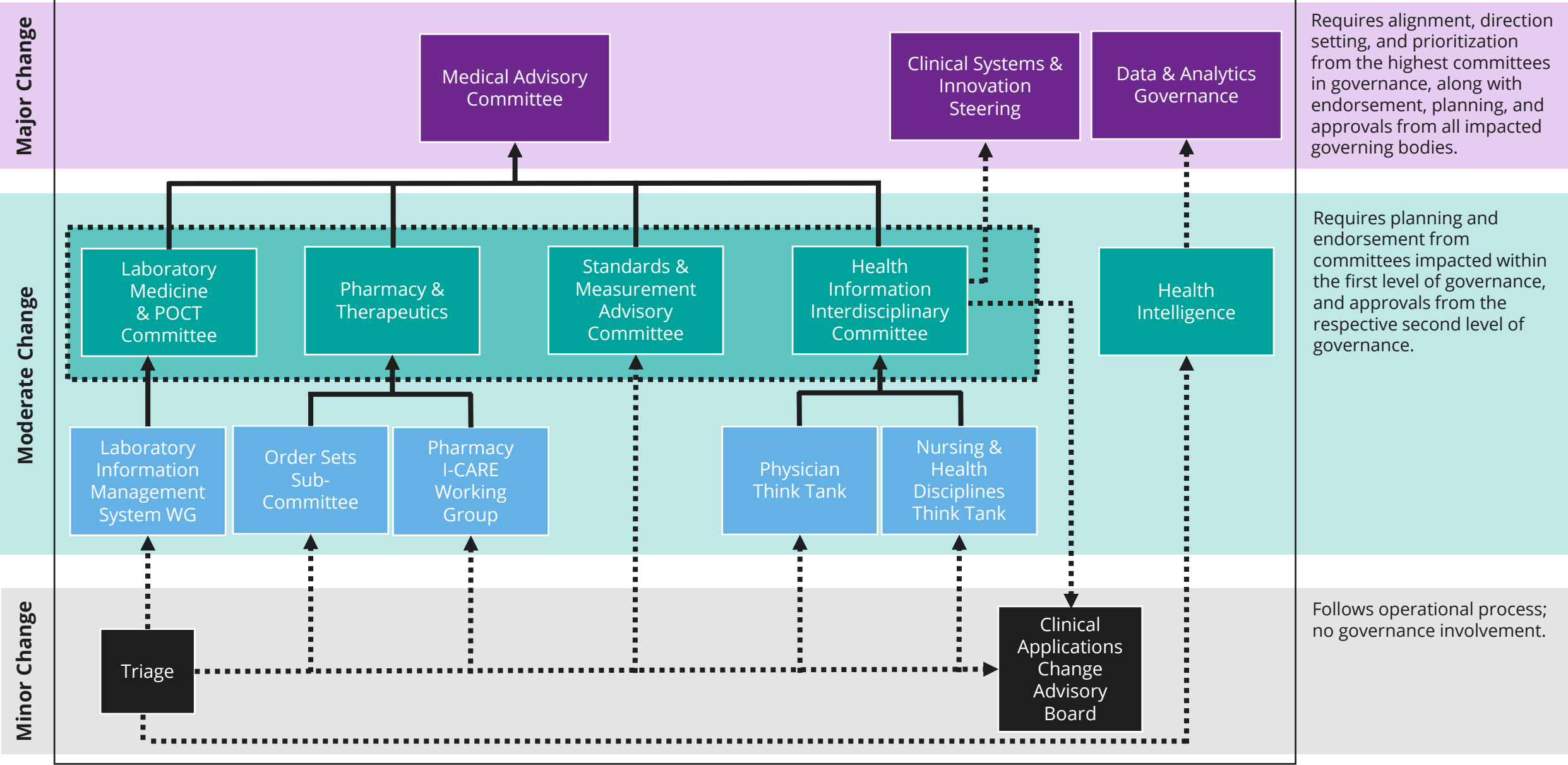


# CAMH Governance



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# Clinical IDEA Governance



Clinical Digital Assist



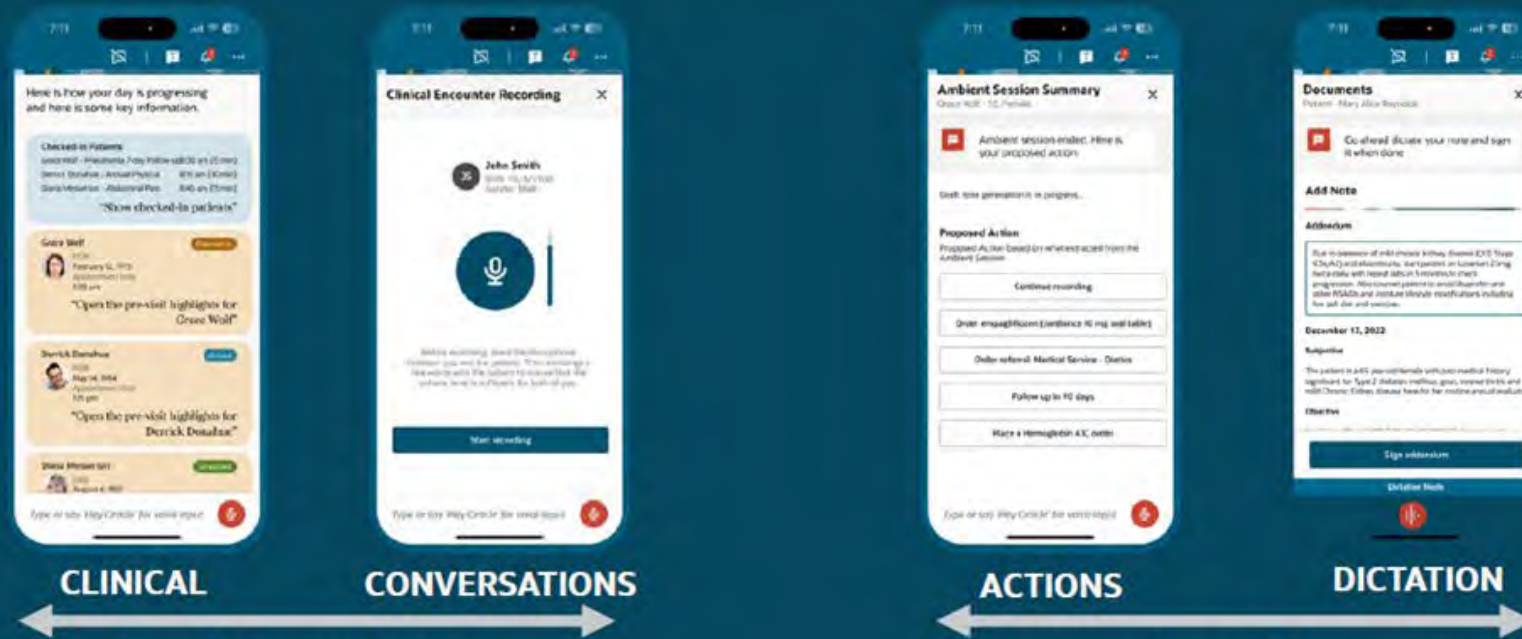
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# Oracle Health Clinical Digital Assistant

- Conversation assistance: Participates in physician-patient conversation and generates draft clinical note for review and signature by physician
- Integrated into EHR: Integrates with dynamic documentation to aggregate chart information from EHR to meet the workflow needs of clinicians
- Quick appointments view: Provides a high-level summary of physician's upcoming appointments, appointments in progress, and completed appointments with notes that are ready to review and sign.

- Four capabilities; one mobile app
- Multimodal (type, gesture, and voice)
- Healthcare-trained Generative AI Assistant



The materials in this presentation pertain to Oracle Health, Oracle, Oracle Cerner, and Cerner Enviza which are all wholly owned subsidiaries of Oracle Corporation. Nothing in this presentation should be taken as indicating that any decisions regarding the integration of any EMEA Cerner and/or Enviza entities have been made where an integration has not already occurred.



# CDA Feedback Survey

Oracle Health presented their CDA tool during PTT

Project team developed a brief survey to gather feedback on the tool



Shared with PTT Members on October 10 (N=38)

Demo recording was also provided for PTT members to review

9

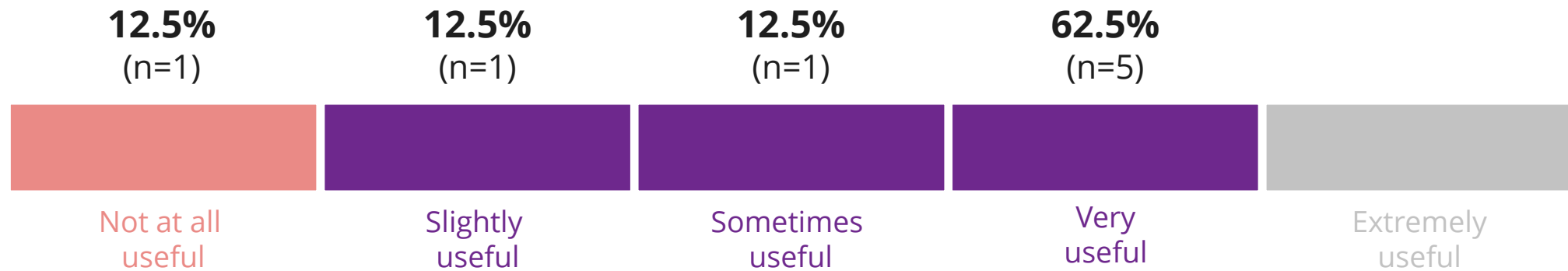
participants have completed the survey as of October 22

**100%**  
(n=9)

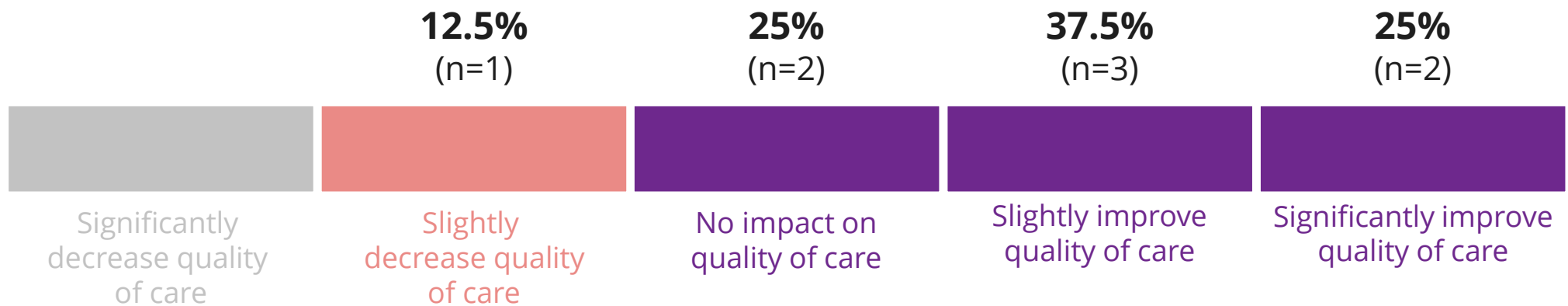
All participants indicated that they are not currently using an AI scribe tool (1 participant has tried one in the past)

# CDA Feedback Survey

**Question #1:** How useful do you think CDA would be for your practice? (n=8)



**Question #2:** To what extent do you think this tool could improve quality of care? (n=8)





# CDA Feedback Survey

## ***General Concerns about the CDA Tool***

- Privacy and confidentiality
- Concerns about environmental impact
- Time required to review AI generated narrative notes
- Tool does not seem refined enough for psychiatry
- Not adapted to mental health
- Unsure how it will work if I-CARE freezes
- Consent process
- Evaluation must occur to ensure tool is high quality

---

## ***How do you think you would integrate the CDA tool into your workflow?***

- Helpful to search for past treatment history and transcribing clinical reports
- Simplify and reduce time spent on documentation
- Free up more time for patient care
- Would work best for feedback sessions and new consultations

# Patient Engagement

- Digital Front Door
- Measurement Based Care
- Patient Journey Dashboards
- BrainHealth Databank



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# Patient Engagement

LESS ENGAGEMENT

MORE ENGAGEMENT



**CONSULT**

Obtain feedback from patients and family members on some aspects of the initiative



**INVOLVE**

Work directly with patients and family members throughout decision-making processes to ensure ideas and concerns are understood and considered



**COLLABORATE**

Partner with patients and family members for (at least) the most important aspects of the initiative



**CO-DESIGN**

All members are involved equally and are empowered to make decisions



Digital Front Door



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# Patient Portal (MyCare)

The Patient Portal went live in April 2019 for outpatient services.

## MEDICAL RECORD

Allergies, documentation, lab results

## COMMUNICATION

Care provider messaging

## EDUCATION

Links to camh.ca

## SELF-REPORT MEASURES

Automated self-assessments, questionnaires (e.g. ICPs, Mood Scales)

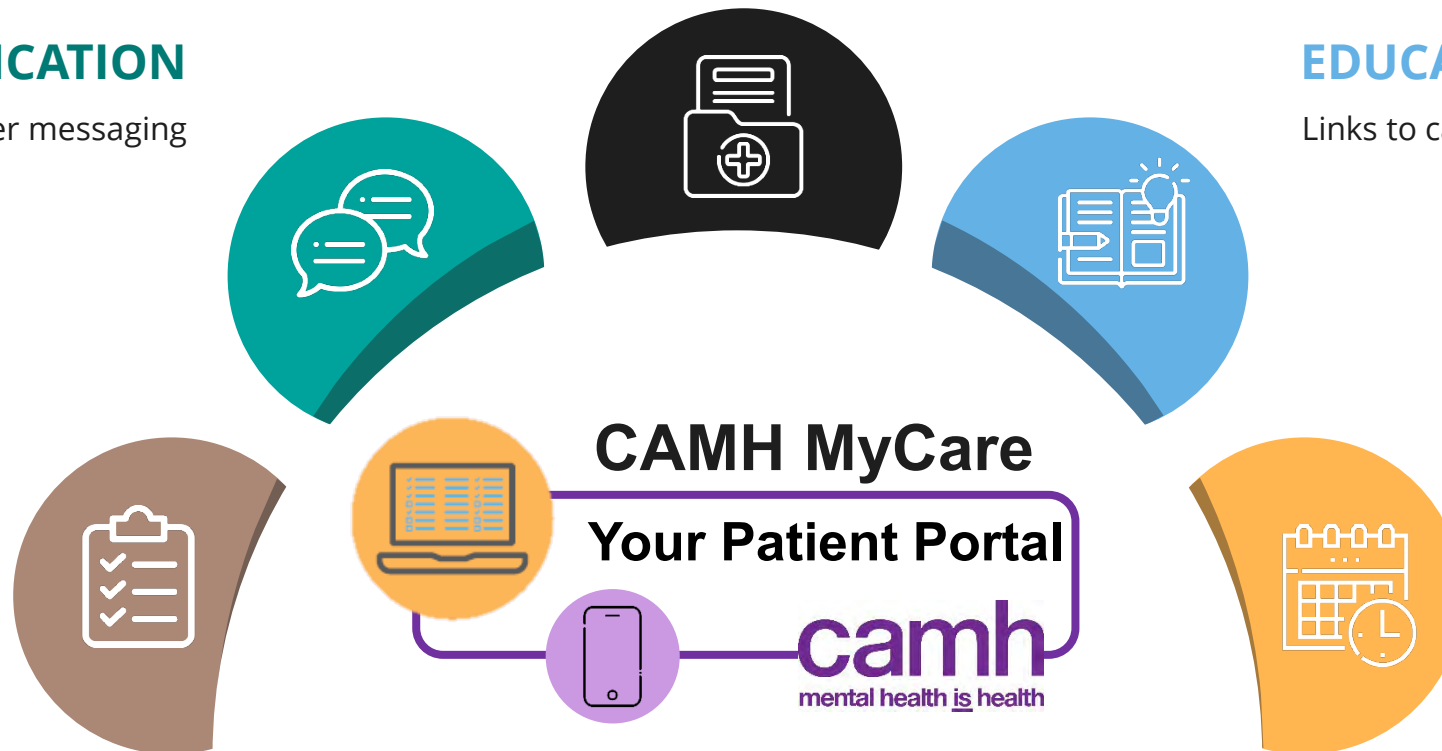
## CAMH MyCare

Your Patient Portal

**camh**  
mental health is health

## APPOINTMENTS

Appointment list, Google Maps, instructions



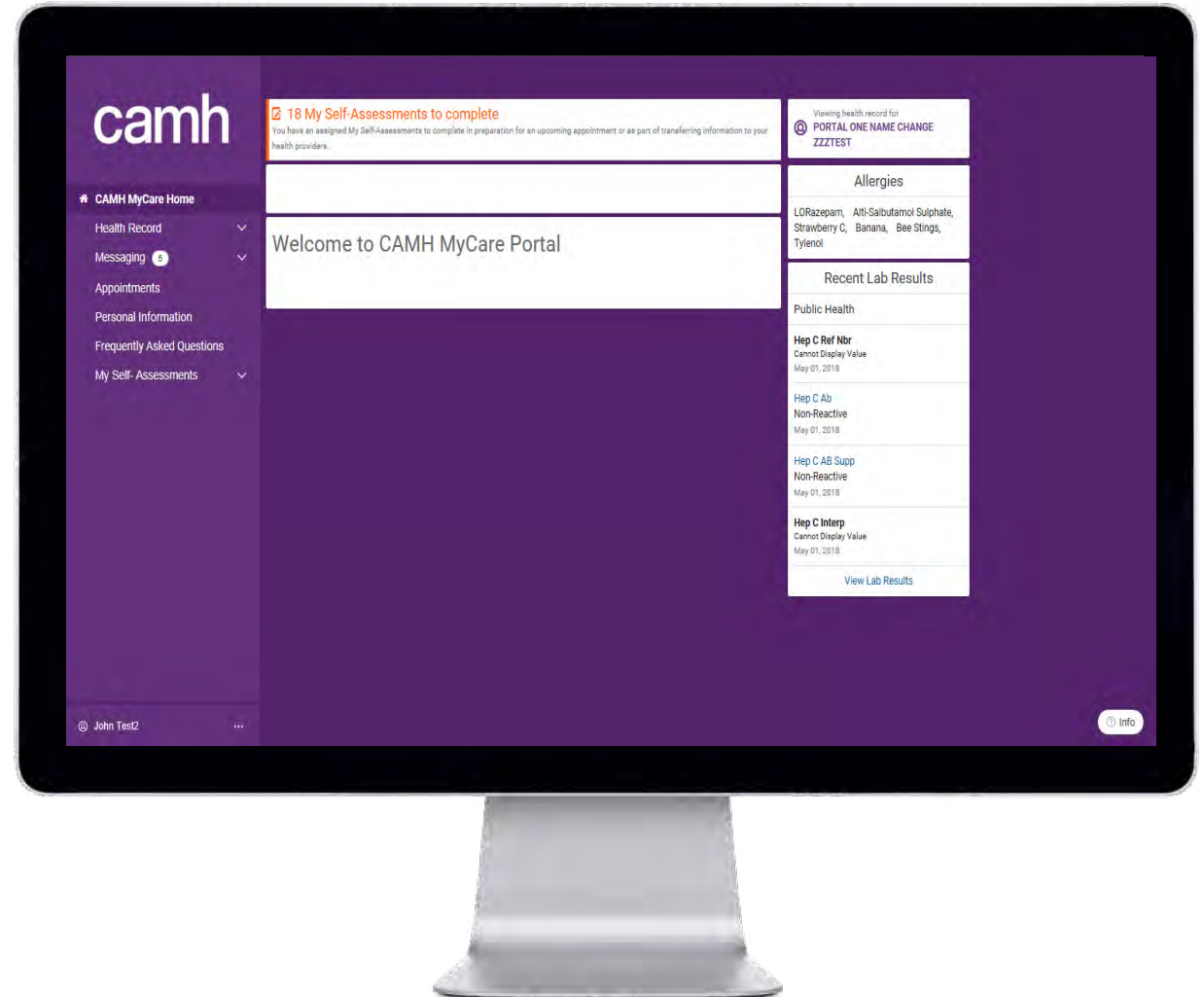
# Patient Portal (MyCare) Numbers

15

services offering MyCare

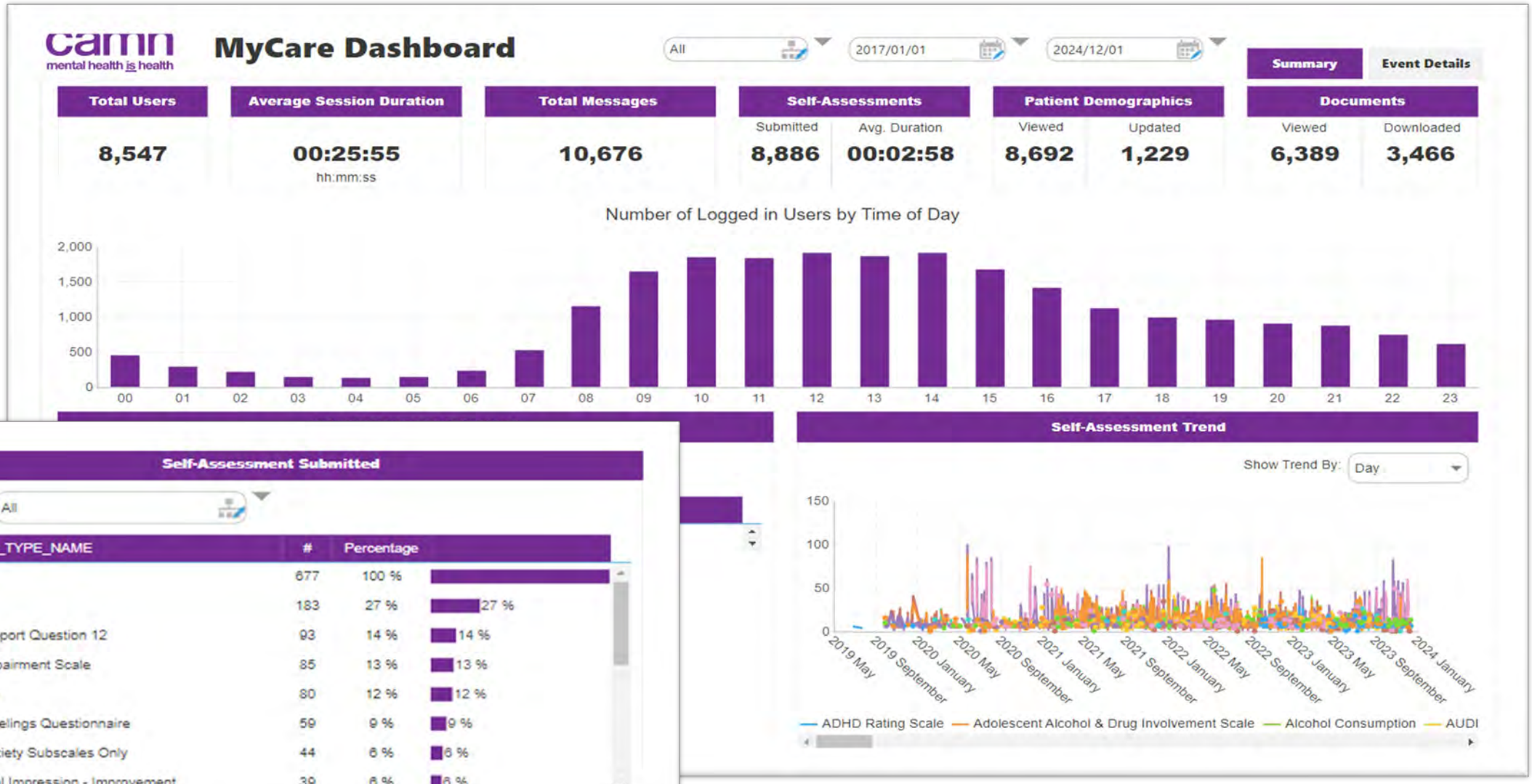
55

new sign-ups per month

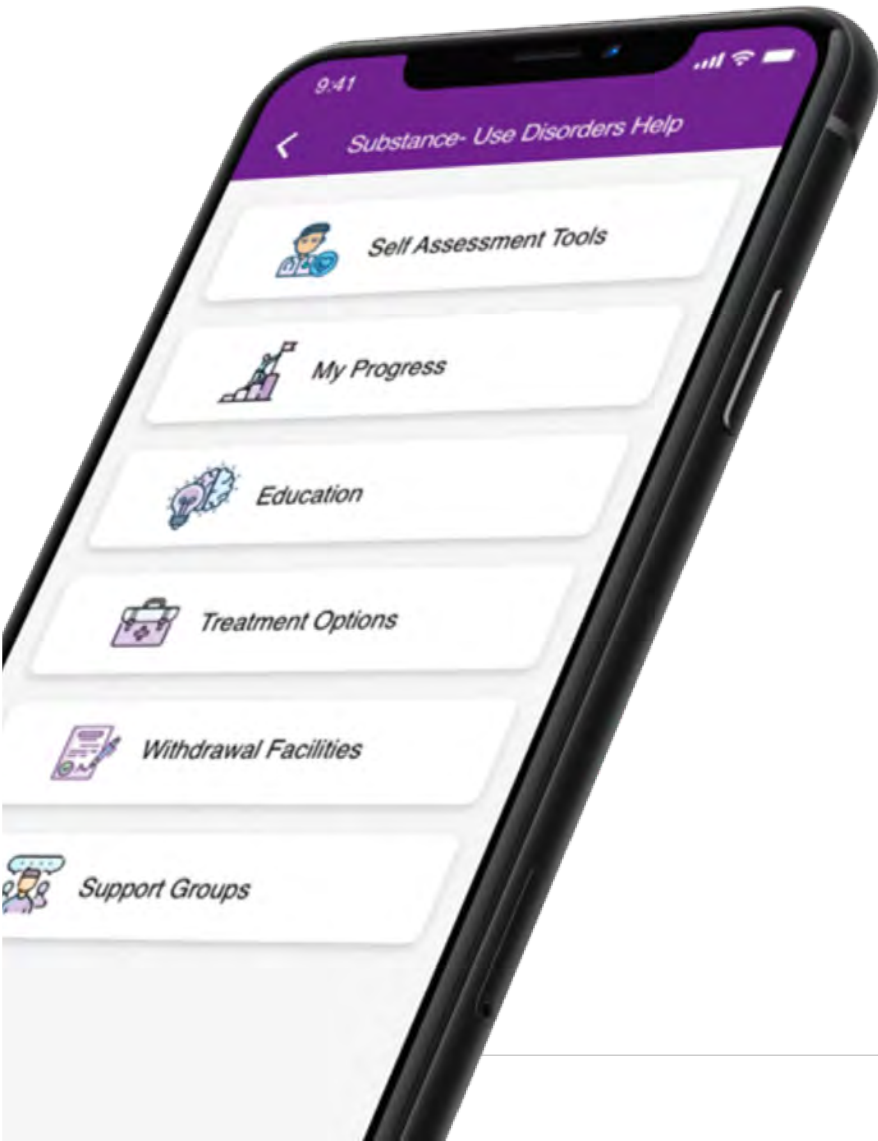




# Patient Portal (MyCare) Dashboard



## All-in-one Platform (MyCAMH)



Patients will have one point of access for everything they need to know before, during and after their time with CAMH and will be able to create their own individual accounts where they will have options to personalize their experience at CAMH.

# MyCAMH Components

The MyCAMH platform will serve as the main point of entry with CAMH.

## Data-Driven Care

Patients will automatically receive self-assessments done with clinicians

## Research

Find and enroll into research studies that clients may be interested in

## Education

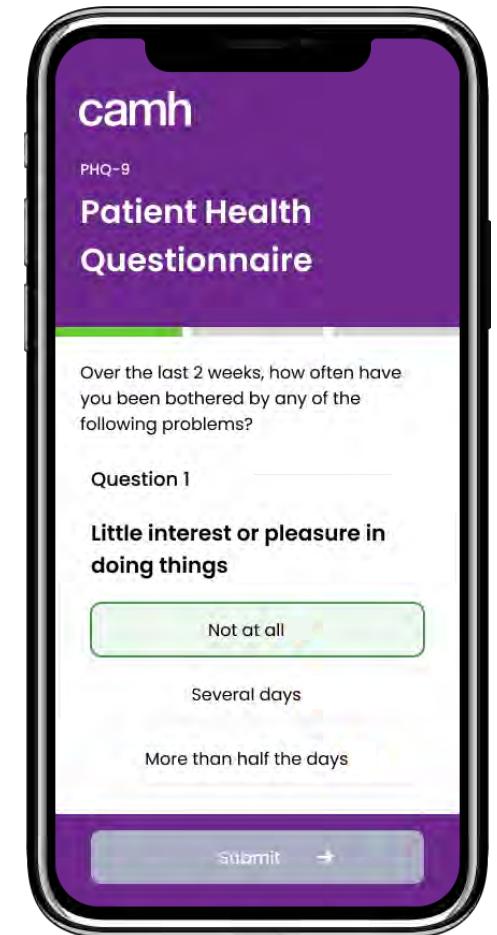
Offer tailored resources across the care journey

## Virtual Care

Attend virtual care appointments through the DFD Platform

## Quality

Allow patients to fill out satisfaction surveys about their care



Measurement Based  
Care



CONNECTED **camh**



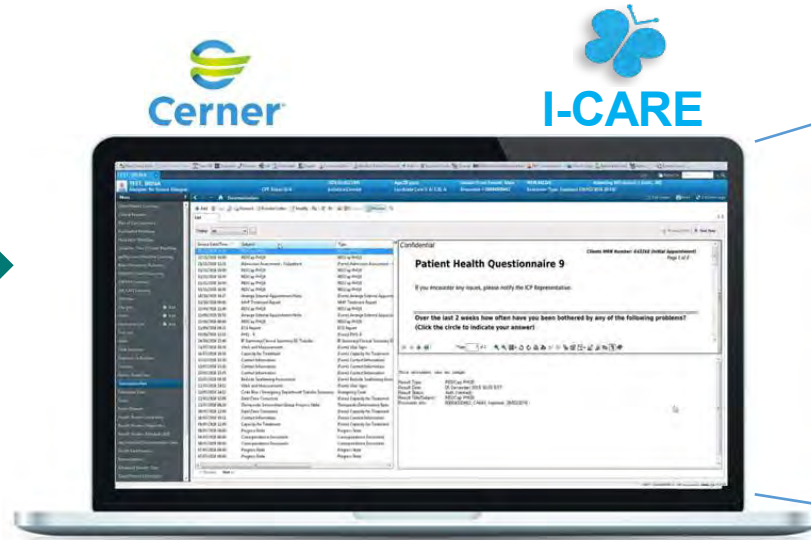
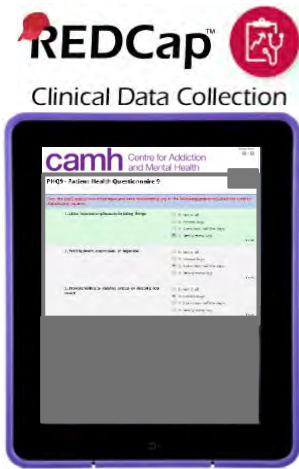
# Measurement Based Care

The MBC project involves the standardization of care across the hospital ensuring that patients receive similar treatment for similar diagnoses, regardless of which clinic they attend. Patients and families will also benefit from greater clarity of what to expect of the care provided to their loved one.

**Patient's Complete Electronic Self-Report Assessments**

**Results Available in Digital Health Record**

**Patient Trajectory Chart**



# SmartZone & Care Pathways

The screenshot displays a medical software interface for a patient named TEST, SLAIGHT. The patient's information includes DOB: 01/01/1990, Age: 34 years, Gender: Man, MRN: 1000077, and Attending MD: John Strauss, MD, FRCPC. The interface shows a list of documents with columns for 'Arranged By: Date' and 'Newest At Top'. The list includes entries such as '(Form) Emergency U...', '(Form) Client/Patient...', 'CAMH Referral', 'Social Work Docume...', '(Form) Contemplatio...', '(Form) Clinical Global...', and 'Case Management N...'. A red box highlights an 'Alerts' panel on the right side of the screen, which contains two alert entries: 'Abnormal Involuntary Movement Scale-BPSD ICP' and 'Clinical Global Impression-BPSD ICP'. The interface also features a navigation menu on the left and a top navigation bar with various tools and links.

External Links RMNR

Home Message Centre CareCompass Patient List Physician Handoff Schedule Multi-Patient Task List Group Notes RAI-MH Unit Report Staff Assignment Tracking Shell I-CARE Help

Connecting Ontario

TEST, SLAIGHT

TEST, SLAIGHT DOB:01/01/1990 Age:34 years Gender:Man MRN:1000077 Attending MD:John Strauss, MD, FRCPC Notifications 2

Allergies/Sensitivities: peanut allergen... CPR Status:Full Co... Isolation: N/A Loc:For Gen Unit ... Encounter #:00064... Encounter Type: Inpatient [11/09/2023 ...]

Menu Documentation

Client/Patient Summary This is ME Clinical Research Plan of Care Summary Hospitalist Workflow Psychiatrist Workflow Ambulatory Clinician Workflo Brain Stimulation Summary Metabolic Health Summary RAI-MH Summary Overview Allergies/Sensitivities + Orders + Medication List + Task List MAR MAR Summary Omnicell

+ Add Submit Forward Provider Letter Modify In Error Preview

List

Display: All Advanced Filters

Arranged By: Date	Newest At Top
(Form) Emergency U...	05/04/2024 14:52
Emergency Use of Res...Registered Nurse - Flo...	
(Form) Client/Patient...	05/04/2024 14:51
Client/Patient Event D...Registered Nurse - Flo...	
CAMH Referral	22/03/2024 11:30
NVPDF	
CAMH Referral	22/03/2024 11:30
NVPDF	
Social Work Docume...	20/03/2024 11:22
Simplified Progress N... Registered Nurse - Flo...	
(Form) Contemplatio...	23/02/2024 11:51
Contemplation Ladder Occupational Therapi...	
(Form) Clinical Global...	23/01/2024 12:45
Clinical Global Impres... Physician - Float Test ...	
Case Management N...	09/01/2024 14:39
Case Management N... Robyn Mauro, RN	

Previous Page Next Page

Alerts

Abnormal Involuntary Movement Scale-BPSD ICP

Alerts

Clinical Global Impression-BPSD ICP

Activate Windows  
Go to Settings to activate Windows.

Patient Journey  
Dashboards



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# Clinical Dashboards Landing Page

**Menu**

- Hospitalist Workflow
- Psychiatrist Workflow
- Plan of Care Summary
- Social Rec Ther OT Amb Workflow
- Brain Stimulation Summary
- Metabolic Health Summary
- RAI-MH Summary
- Overview
- Allergies/Sensitivities + Add
- Orders + Add
- Medication List + Add
- Task List
- MAR
- MAR Summary
- Omicell
- Diagnosis & Problems
- Histories
- AdHoc PowerForm
- Documentation
- Interactive View
- Notes
- Forms Browser
- Results Review- Laboratory
- Results Review- Diagnostics
- Results Review- Metabolic/ASI
- Health Maintenance
- Immunizations
- Advanced Growth Chart
- Client/Patient Information
- Client / Patient ID Sheet
- Social Work Workflow
- Nursing Workflow
- WebEx Appointments
- Form Browser
- Clinical Dashboards
- Pass Sign In and Sign Out

**Clinical Dashboards**

**CARIBOU**

**Forensic**

**MDD-ICP**

**OSP**

Tableau is directly integrated into the I-CARE, pulling patient-specific content from multiple sources



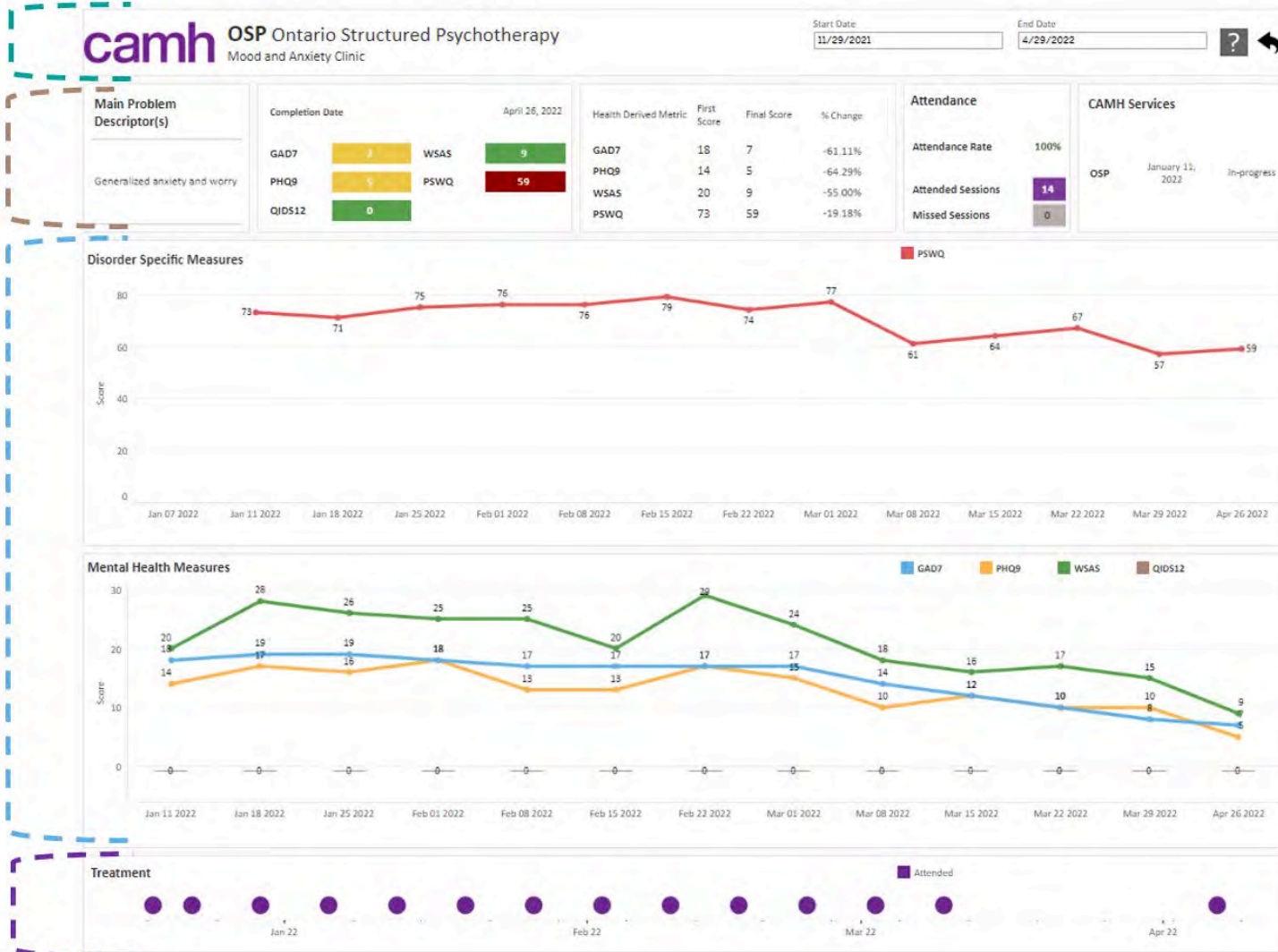
# Clinician-Facing Dashboard

## 1. Navigation

## 2. Dynamic visit summary information

## 3. Patient Trajectory

## 4. Treatment



## Objectives of the dashboards:

- Better understanding about treatment progress over time
- Support clinical decision-making
- Provide a holistic view of the patient
- Empower patients

# Patient-Facing Dashboard

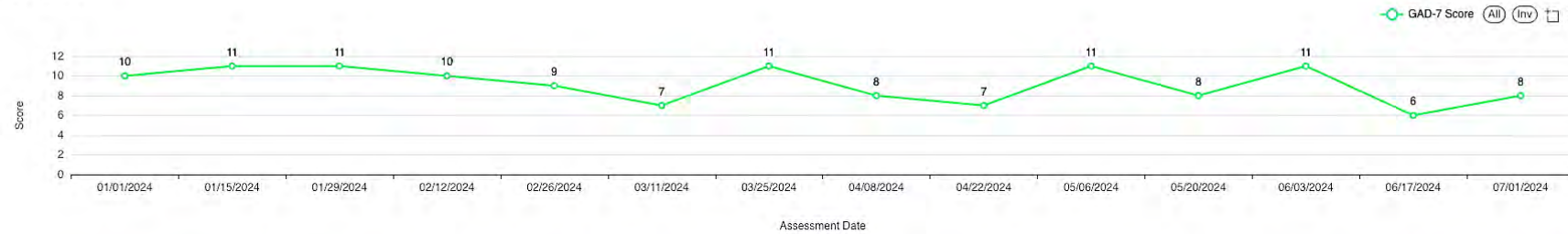
Most Recent GAD-7 Score



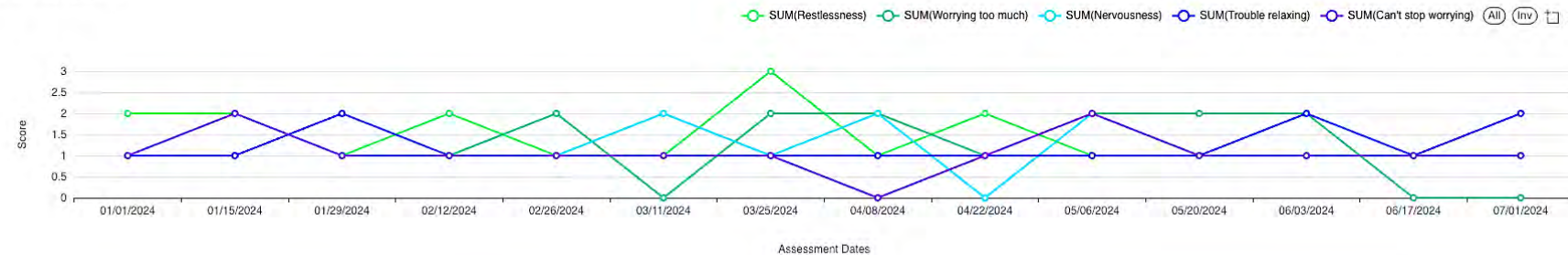
Space for Rent

Insert text + table or ranges

GAD-7 Score



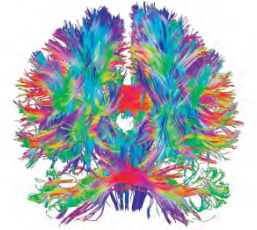
GAD-7 Symptoms



BrainHealth Databank



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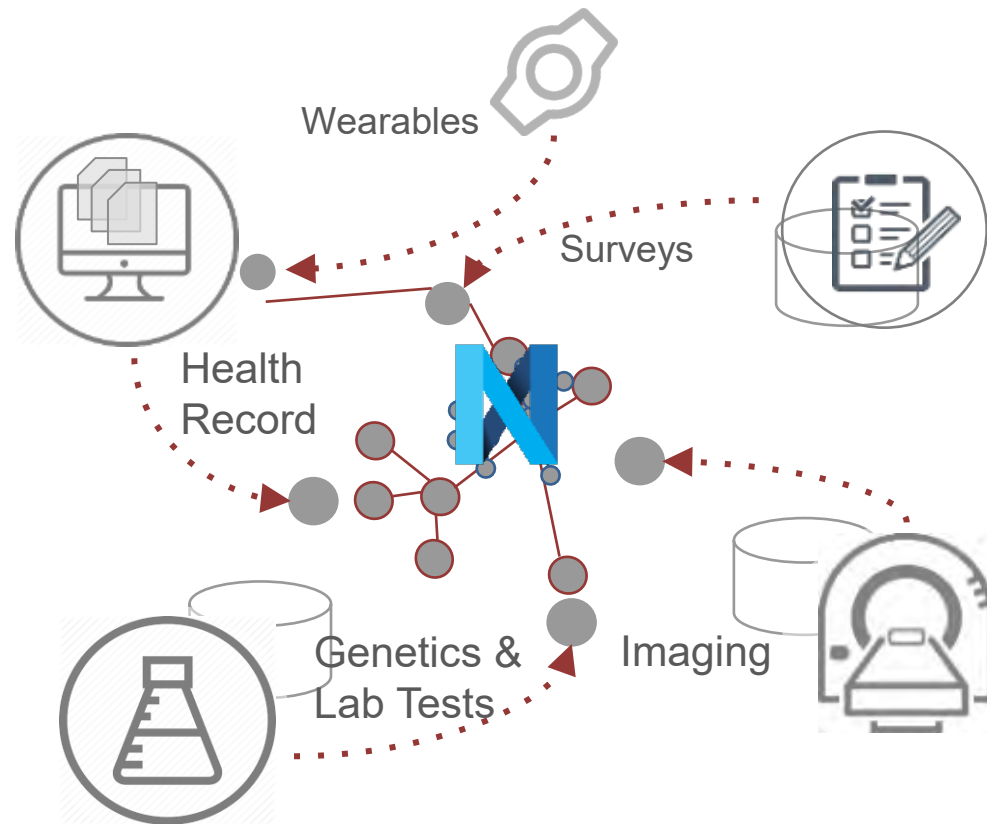
The BrainHealth Databank is a cutting-edge Learning Mental Health System designed to enhance patient care while driving discovery and innovation.

The BrainHealth Databank organizes comprehensive data and biological samples; positioned to become the largest and most robust digital repository of mental health information.





# Data Integration – BrainHealth Databank



Data from multiple sources is brought together in the Neuroinformatics Platform.

These data types are not usually examined all together.

The BHDB can allow patients to be seen holistically, with all their data in one place.

# BHDB Research Data Portal

The screenshot displays the BHDB Research Data Portal interface. At the top left is the 'camh' logo. Below it is a 'Filters' sidebar with categories: Data Types (Cross-Sectional, Longitudinal, Other), Age of Participants (30-100), Number of Participants, Sex, Diagnosis, Publication Date, Experimental Design, Intervention, and Contacts. The main area is titled 'Projects' and features a search bar with 'Trauma' entered. Below the search bar are filter tags: 'Visual Cortex', 'Longitudinal', and '0 - 30'. A 'Clear All Filters' button is also present. The results section shows 'These filters return: 12 Projects' and a 'Sort By: Most Recent' dropdown. Two project entries are visible: 'UCLA Consortium for Neuropsychiatric Phenomics LA5c Study' (marked 'New') and 'Raw data for Engaging in word recognition elicits highly specific modulations in visual cortex' (marked 'Recently Updated'). Each entry includes a publication date, an abstract snippet, and a 'Read More' link. Below each entry are statistics: Data Type, Participants, Participant Ages, Sessions, and Files.

**Filters**

**Data Types**

- Cross-Sectional
- Longitudinal
- Other

**Age of Participants**

30 100

**Number of Participants**

**Sex**

**Diagnosis**

**Publication Date**

**Experimental Design**

**Intervention**

**Contacts**

## Projects

Search: Trauma Clear All Filters

Keyword: Visual Cortex Data Type: Longitudinal Age of Participants: 0 - 30

These filters return: 12 Projects Sort By: Most Recent

**UCLA Consortium for Neuropsychiatric Phenomics LA5c Study** New

Publication Date: Jan 8, 2023

Abstract: Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit dolore...[Read More](#)

Data Type: Longitudinal Participants: 54 Participant Ages: 30 - 100 Sessions: 5 Files: 312

**Raw data for Engaging in word recognition elicits highly specific modulations in visual cortex** Recently Updated

Publication Date: Jan 8, 2023 Last Updated: Jan 3, 2023

Abstract: Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit dolore...[Read More](#)

Data Type: Longitudinal Participants: 54 Participant Ages: 30 - 100 Sessions: 5 Files: 312

# BHDB Research Data Portal

The screenshot displays the user interface of the BrainHealth Databank (BHDB) Research Data Portal. At the top, there is a navigation bar with the 'camh' logo, 'BrainHealth Databank' text, and menu items for 'Projects' and 'Support'. A search bar is located on the right side of the header. The main content area features a project card for the 'UCLA Consortium for Neuropsychiatric Phenomics LA5c Study'. The card includes a 'New' badge, a 'Recently Updated' badge, a back arrow, and buttons for 'Follow' and 'Download'. Below the title, it shows the publication date as 'Jan 8, 2023' and the last update as 'Jan 23, 2023'. A navigation bar below the title allows switching between 'About', 'Measures', 'Files', and 'Metadata' tabs. The 'About' tab is active, displaying a summary of the study with four key metrics: Total Participants (154), Participant Ages (20 - 40), Data Type (Logitudinal), and Study Duration (12 Months). An abstract section follows, providing a brief overview of the project. Below the abstract are two donut charts: 'Diagnosis' showing 78% Alcohol Use, 18% Bipolar, and 4% Depression; and 'Gender' showing 52% Female and 48% Male. On the right side of the page, there is a 'Main Contact' section for Laurie Science, including her email and a contact ID. Below this is a 'How To Cite' section with a dropdown menu set to 'APA' and a 'Copy' button. The citation text is displayed in a light blue box.

camh BrainHealth Databank

Projects Support

Search all projects

New Recently Updated

## UCLA Consortium for Neuropsychiatric Phenomics LA5c Study

Publication Date: Jan 8, 2023 Last Updated: Jan 23, 2023

Follow ☆ Download ↓

About Measures Files Metadata

**Total Participants**  
154

**Participant Ages**  
20 - 40

**Data Type**  
Logitudinal

**Study Duration**  
12 Months

**Abstract**

Project brief...Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fu. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi Ut enim ad minim veniam, quis nostrud exercitation ullamco... [Read More](#)

**Diagnosis**

- Alcohol Use (78%)
- Bipolar (18%)
- Depression (4%)

**Gender**

- Female (52%)
- Male (48%)

**Main Contact:**

Laurie Science  
0000-0001-5109-3700  
CAMH  
lsience@camh.com

[View All Contacts](#)

**How To Cite:** APA [Copy](#)

Bilder, R and Poldrack, R and Cannon, T and London, E and Freimer, N and Congdon, E and Karlsgodt, K and Sabb, F (2020), UCLA Consortium for Neuropsychiatric Phenomics LA5c Study. BrainHealth Databank. [Dataset] doi: 10.18112/Brainhealthdatabank.ds000030.v1.0.0

[More Citation Info](#)

# What's Next?



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# Drive Digital Transformation and Innovation



## Patient

Meet the patient where they are  
Measurement and evaluation of implemented technologies  
Continuous **engagement**



## Clinician/ Scientist

**High-value impact**  
Minimizing disruption;  
maximizing efficiency  
Foster interdisciplinary  
collaboration



## Administrator

Return on Investment  
Quality assurance,  
performance monitoring, and  
**continuous improvement**

Human-Centric Justice/Equity/Diversity/Inclusion ConnectedCAMH Cybersecurity/Privacy Value/Safety/Outcomes

**Patient:**  
Thriving Minds  
Partnership

(Collaboration with SickKids and  
the Garry Hurvitz Centre for  
Community Mental Health)



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# Overview

The Partnership between SickKids, CAMH, and the Gary Hurvitz Centre for Community Mental Health (GH-CCMH) is designed to take advantage of the expertise in research, education and clinical care within these institutions to transform mental health care for children and youth.

## STAKEHOLDER ENGAGEMENT

- Develop a stakeholder engagement and co-design strategy that meaningfully involves patients, families and caregivers, and those from underserved populations

## DATA & EVALUATION

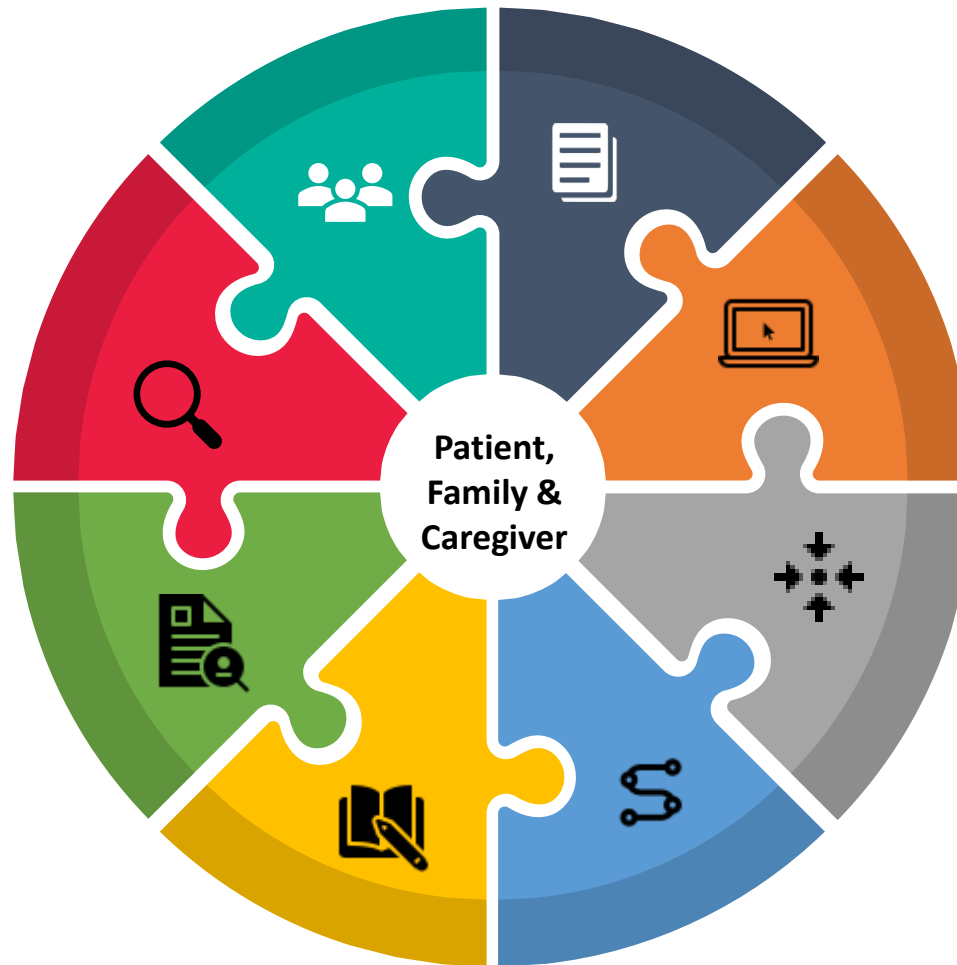
- Establish common data points, data collection mechanisms and methodologies
- Identify and align on a minimal data set, key performance indicators, and other metrics
- Design and implement a shared dashboard for shared data & analytics review

## RESEARCH

- Create and leverage opportunities for research collaboration

## EDUCATION

- Identify educational opportunities for keystakeholders of the Partnership such as physicians and professional practice



## SERVICE MAPPING

- Construct a comprehensive inventory of services across SickKids, the Centre for Community Mental Health (GH-CCMH) and CAMH

## INFORMATION HUB

- Develop an information hub where patients, families, and caregivers can access credible resources before needing to access services

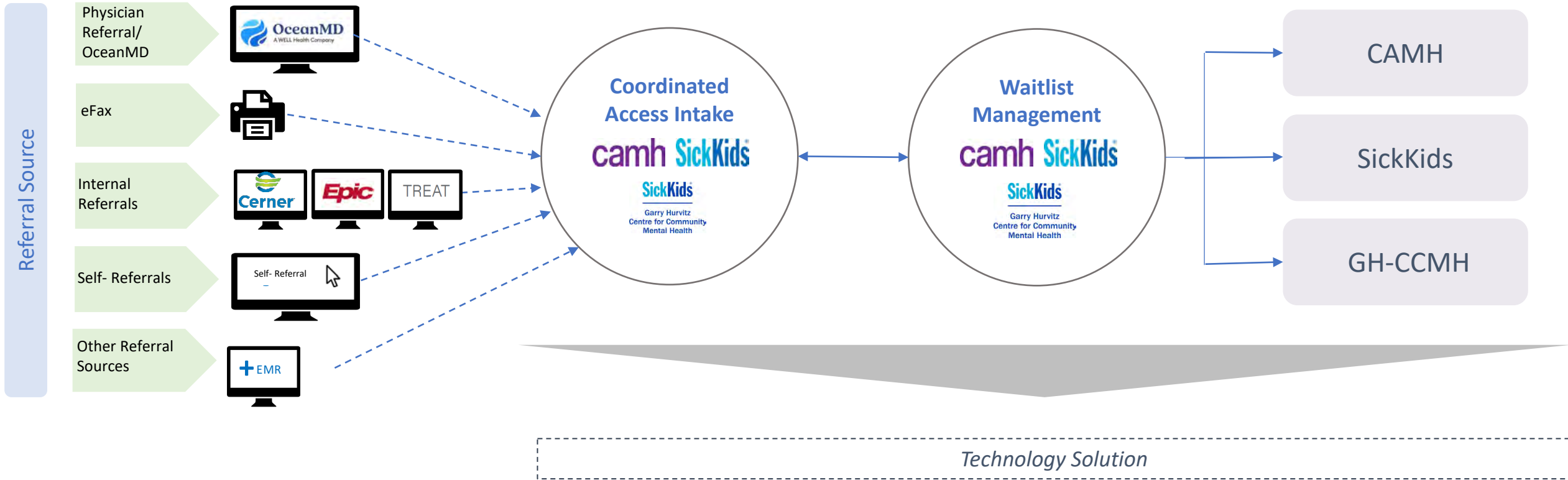
## COORDINATED ACCESS

- Develop a shared intake point for SickKids, CAMH, and GH-CCMH to reduce complexity and eliminate duplication

## CLINICAL PATHWAYS

- Identify, optimize and create transition and collaborative care pathways between organizations

# Draft Model





**Clinician/Scientist:**  
Research  
Organization



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# Research Organization Overview

**Objective:** Transition from paper research source documentation to electronic and integrate source documentation within the hospital's electronic medical record.

## **Benefits:**

- Accommodate the linkage of clinical documentation with research documentation
- Assist clinical-based decisions by readily providing research data to clinicians in a central location (I-CARE)
- Fulfil the hospital's requirement to create a health record that documents all care and examination provided to non-patient participants
- Streamline processes, aligned with clinical operations (e.g. referrals, registration, scheduling)

# High Level System Design



- Research data
- Standardized assessments

REDCap to I-CARE

- Copy of summary research data
- Copy of standardized assessments



- PowerTrials study build / enrollment (on-study flag)
- Demographics information

Administrator:  
HIVE

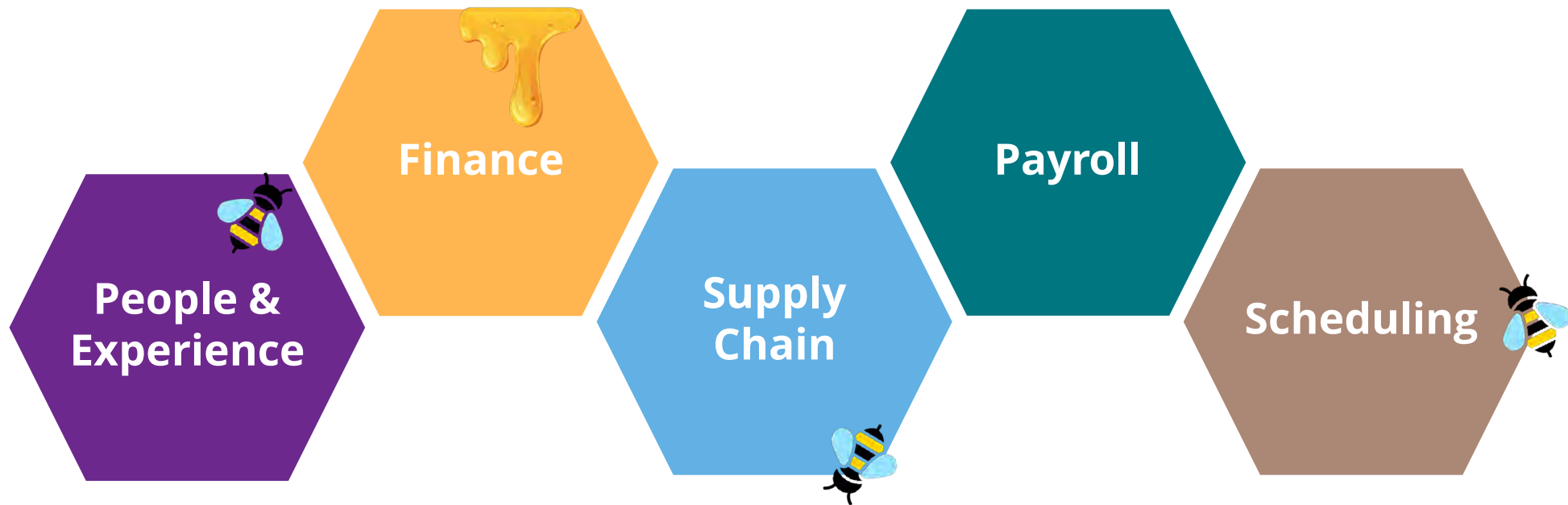


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# Core Business Functions

HIVE, our new Enterprise Resource Planning (ERP) system, will connect CAMH across key areas including:



# Intended ERP Transformation Outcomes

Enhancing efficiency and data accuracy by implementing more automated workflows



Improving the system user interface and experience for staff



Integrating systems to support a single source of truth and accurate data synchronization



Establishing a flexible and scalable solution to meet CAMH future state needs



Enabling self-service capabilities to support an analytics driven culture among CAMH end-users



Enabling AI technology to use predictive analytics, automation and advanced data processing.



# Digital Innovation Hub



camh

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# Digital Innovation Hub

**Gillian Strudwick** RN, PhD, FCAN, FAMIA

Scientific Director (Interim), Digital Innovation Hub, CAMH  
Senior Scientist & Chief Clinical Informatics Officer, CAMH  
Associate Professor, IHPME, University of Toronto

**camh**

DigitalMentalHealthLab.ca





# Why Launch a Digital Innovation Hub at CAMH?



Significant gap in educational needs of clinicians (among others) in the digital health space



Increasing presence of digital technologies in all areas of mental health clinical care and research often paired with insufficient supports for their success



Many digital mental health technologies present with limited evidence or scientific backing



No clear pathway for technology companies to work with CAMH to co-design, test, study etc. digital mental health technologies



# ● Overall goal

**Develop evidence-based digital solutions to prevent and treat mental illness, faster and with global impact.**

The digital innovation hub will accelerate the development and scaling of these digital interventions.

**For digital interventions to be successful, we need:**

Interventions that are scientifically evaluated and meet clinical needs

Patients that have the skillsets, technology and interest to utilize digital interventions for their mental health

Health professionals that have competencies in the use of digital interventions

Seamless integration of these technologies into clinical care processes



# ● Areas of Focus

Establish hub and complete set of catalyst projects in the following areas:

## Area of Focus

## Projects

---

1. Interventions that are scientifically evaluated and meet clinical needs

---

- Monitoring e.g. wearables
  - Intervention
- 

2. Patients that have the skillsets, technology and interest to utilize digital interventions for their mental health

---

- DOORs program
  - Digital Navigators
- 

3. Health professionals that have competencies in the use of digital interventions

---

- Digital and Mental Health AI Certificate Program
- 

\*\*\*Seamless integration of these technologies into clinical care processes \*\*\*



# *Thank You*

Gillian.Strudwick@camh.ca

DigitalMentalHealthLab.ca





**Thank You**