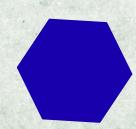
# A PRESENTATION ABOUT BENEFITS EVALUATION OF VIRTUAL MENTAL HEALTH VISIT PROGRAM AT HAMILTON FAMILY HEALTH TEAM



## TODAY'S AGENDA:



Background & Rationale



Strengths & Limitations



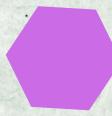
Project Scope and Setting



Knowledge Translation



Stakeholders and Study Questions



Evaluation Timeline

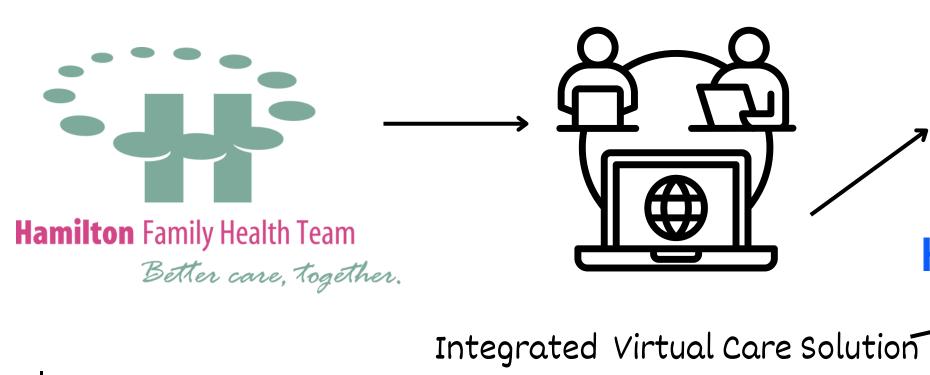


Indicators, Measurement Methods & Data Sources, Ethical Considerations



Conclusion

### SCENARIO



PHIPA-compliant system

**ZOOM**Healthcare

EMR

Implementation Features

The ability to share resources securely

Multi-party video

Integration with the booking system









20 primary care providers and mental health counselors



500 patients

## BACKGROUND & RATIONALE

• Mental health care delivery in Canada, especially for conditions like depression, has faced long-standing challenges.

What are virtual mental health?





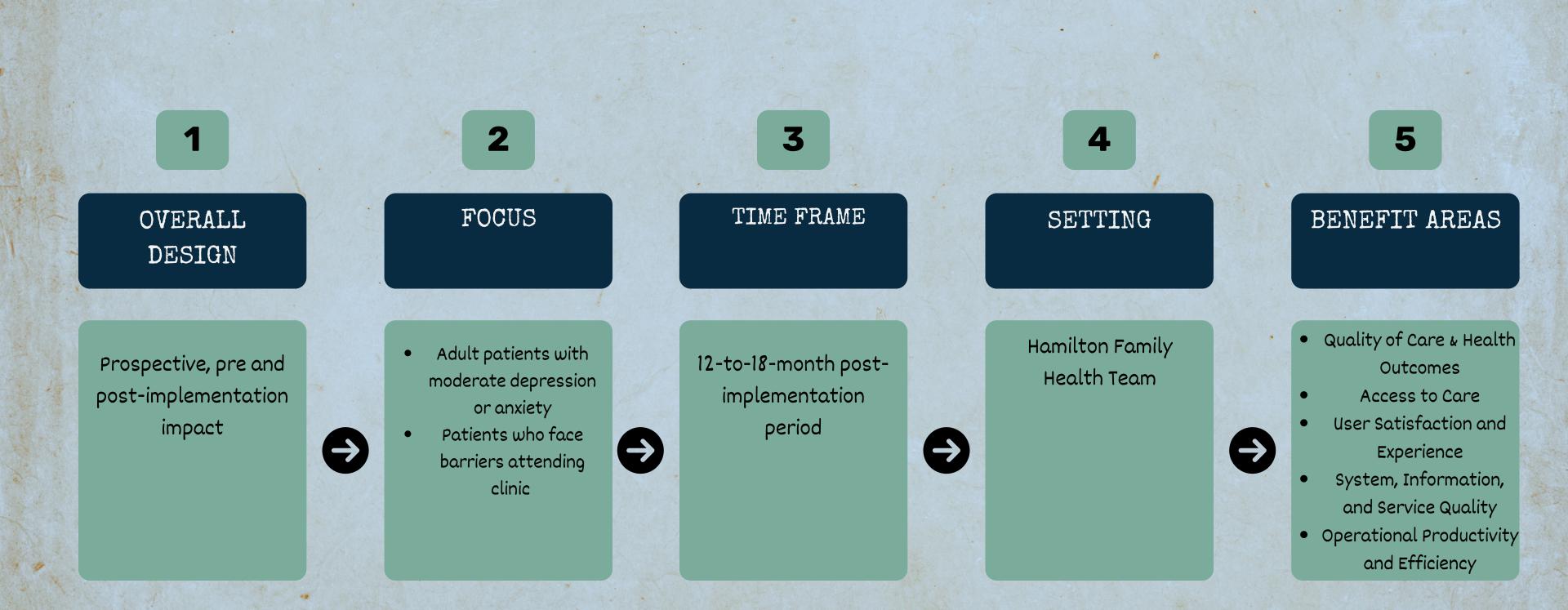
accelerated the adoption of virtual mental health services across Ontario. In fact, at its peak in early 2020, over 60% of outpatient visits were delivered virtually (CMA, 2020).



For example, the proportion of physicianprovided mental health services delivered virtually in Canada jumped from 4% prepandemic to 57% during 2020–2021 (CIHI, 2022)



### PROJECT SCOPE





## STAKEHOLDERS



Patients and Families

Mental Health Care Providers(Clinicians)

Hamilton FHT Leadership

Ontario Ministry of Health/Funders

HFHT Administrative StaffS

Virtual Platform Vendor

IT Support StaffS





## BENEFITS EVALUATION FRAMEWORK

#### **SYSTEM QUALITY**

- Functionality
- Performance
- Security

#### **INFORMATION QUALITY**

- Content
- Availability

#### **SERVICE QUALITY**

Responsiveness

#### USE

- Use behaviour/pattern
- Self-reported use
- Intention to use

#### **USER SATISFACTION**

- Competency
- User satisfaction
- Ease of use

#### **NET BENEFITS**

#### **QUALITY**

- Patient safety
- Appropriateness/
   Effectiveness
- Health outcomes

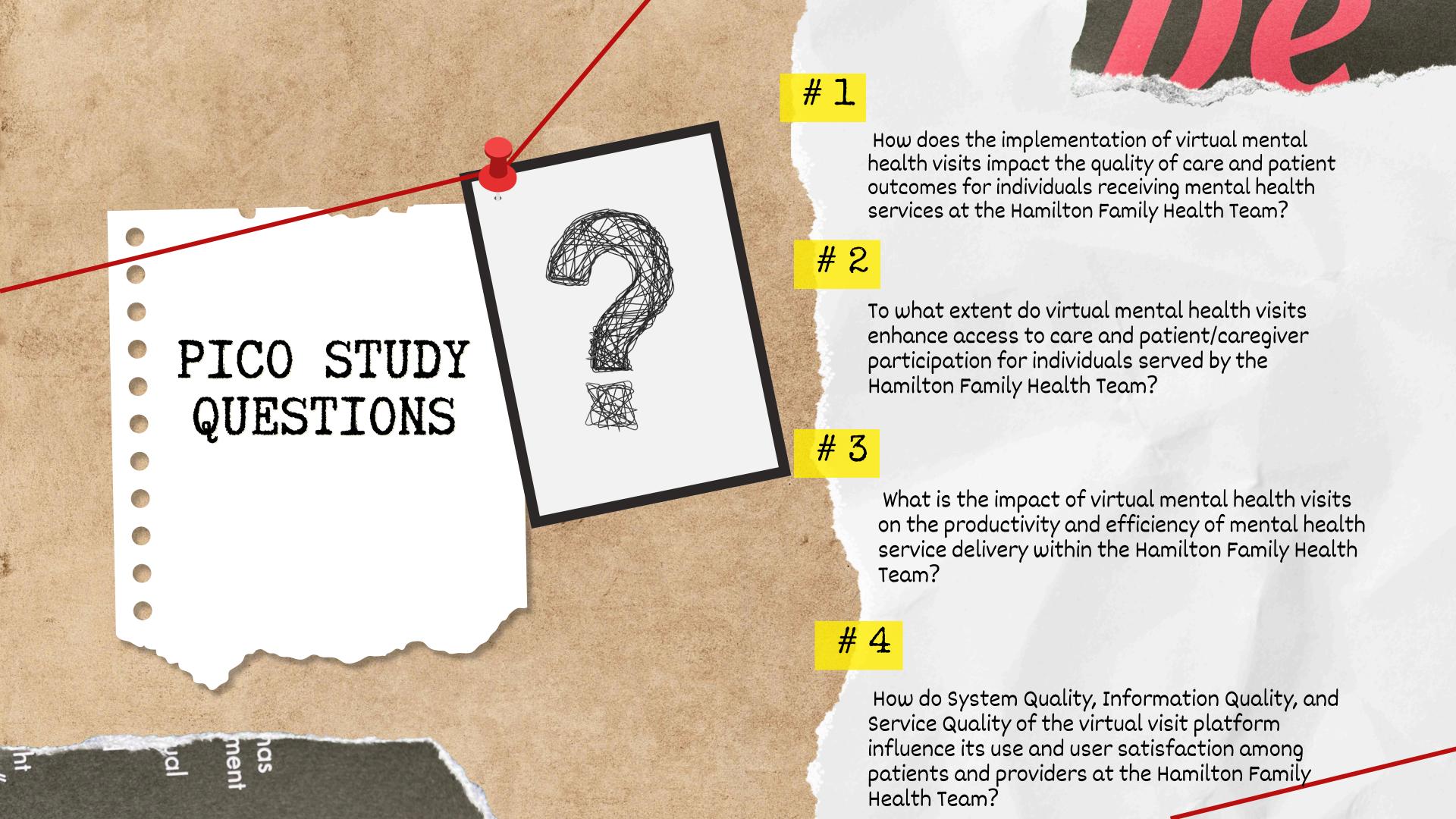
#### **ACCESS**

- Ability of patients/ providers to access services
- Patient and caregiver participation

#### **PRODUCTIVITY**

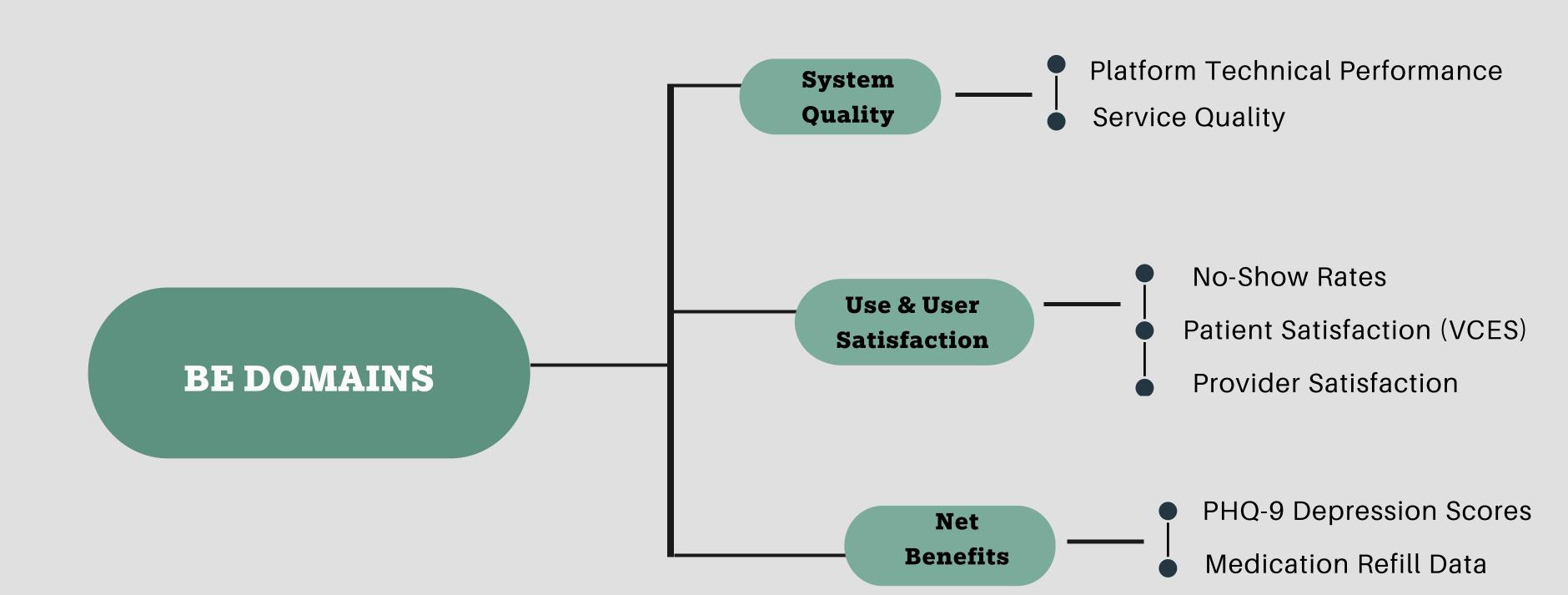
- Efficiency
- Care coordination
- Net cost

(DeLone & McLean, 2003)



## INDICATORS & DATA SOURCES

I selected a mix of indicators that map to Canada Health Infoway's Benefits Evaluation (BE) logic model (Infoway, 2012). Each indicator fits into this chain of logic:



## INDICATORS & DATA SOURCES

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	BE DOMAIN	INDICATOR	MEASUREMENT METHOD	DATA SOURCE	FREQUENCY	
<b>&gt;</b>	Net Benefits-Quality	Depression Symptom Outcome	PHQ-9 (Patient Health Questionnaire-9)	HFHT Patient Portal, Integrated EMR	Baseline, 3-months, 6-months post- initiation	
	Net Benefits-Quality	Treatment Adherence(Adoption Rate)	%of Visit Attendance/ No Show Rate	HFHT Scheduling System, Virtual Visit Platform Logs	Monthly	
¥	Net Benefits-Quality	Treatment Adherence(Medication Refill)	Proportion of prescribed mental health medications refilled on schedule	HFHT EMR or Linked Pharmacy system	Monthly	
<b>&gt;</b>	Net Benefits-Access	Access to Care: Wait Times	Average time from referral to first virtual appointment	HFHT Scheduling System	Quarterly	
	Net Benefits-Access	Access to Care: Geographic Reach	Number of unique patient postal codes utilizing virtual visits	HFHT EMR (Patient Demographics)	Quarterly	
	Net Benefits-Access	Patient & Caregiver Participation	Patient Portal Engagement (login frequency, resource access); Caregiver presence in sessions	HFHT Patient Portal Logs, HFHT EMR	Monthly (logs), Ad-hoc (documentation)	
	Net Benefits- Productivity	Provider Efficiency & Workflow Impact	Provider surveys on time savings, visit volume; System logs for visit duration	Custom Provider Surveys, Virtual Visit Platform Logs	Quarterly (surveys), Monthly (logs)	

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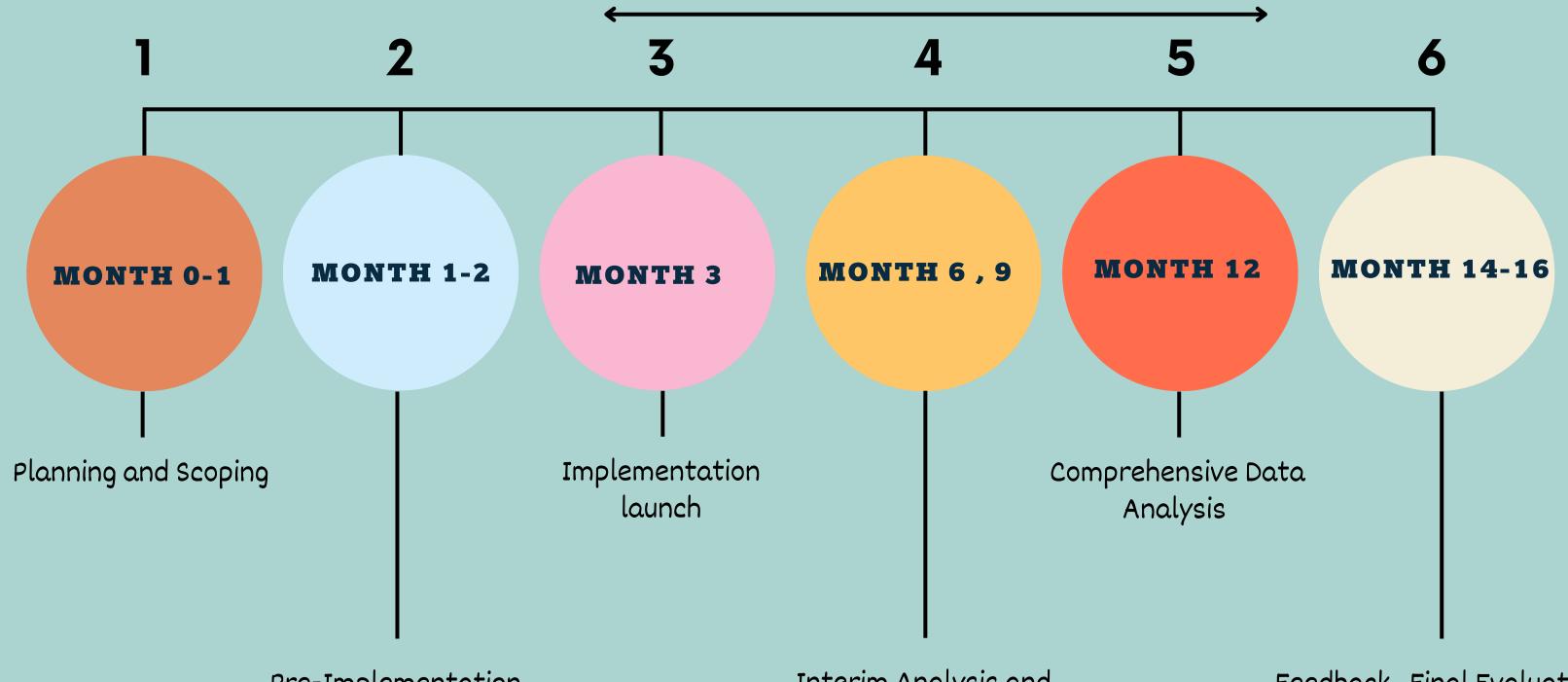
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## INDICATORS & DATA SOURCES

	BE DOMAIN	INDICATOR	MEASUREMENT METHOD	DATA SOURCE	FREQUENCY
#3	Net Benefits- Productivity	Net Cost Implications	Qualitative cost savings vs. direct costs.	Financial records; qualitative feedback	End of evaluation period
1	System & Service Quality	System & Service Quality	Infoway System and Use Assessment Survey (adapted for virtual care)	Online Survey Tool (administered to patients & providers)	3-months, 9-months post- implementation
	System & Service Quality	Technical Performance	Uptime %, Error Logs, Support Ticket Frequency	Vendor Reports / Internal IT Logs	Monthly Audit
# 4	User Satisfaction	User Satisfaction (Patient )	VCES(VirtualClient Experience Survey)	Online or Phone Survey	Ongoing Post Visit Collection
	User Satisfaction	User Satisfaction (Provider )	Custom Provider Survey (Likert Scale or Open Ended)	Online Survey or Internal Clinican Feedback Form	Quarterly
	Use	Platform Usability and Use	Session frequency/duration; feature usage; satisfaction ratings.	System logs; Infoway- style surveys	Ongoing; 3-month; 6-month
1	Use	Use Behavior/Patterns	Number of virtual visits, duration, frequency, type of service	Virtual Visit Platform Logs	Monthly

## TIMELINE HIGHLIGHTS

Ongoing Data Collection (Surveys, Logs, EMR)



Pre-Implementation Baseline Data Collection Interim Analysis and Stakeholder Check in Feedback, Final Evaluation Report, Dissemination and KT Activities

## LIMITATIONS



- Observational Design
- Context-Specific Findings
- Potential Biases
- Data Quality
- Timeframe Constraints
- Scope Limitations
- Equity and Technology
   Barriers
- Provider Burden



## BE VS RESEARCH EXERCISE

BE Iterative: results inform realtime or near-term program changes, course corrections Practical: "How well is this working?" "Should it be improved, continued, scaled? Ethics reviewed as needed (if involving human subjects/PHI) Pragmatic, context-specific High

VS

Ethics/Review

Focus of Questions

Feedback/Ad aptation

Design Orientation

Stakeholder Involvement

#### RESEARCH EXERCISE

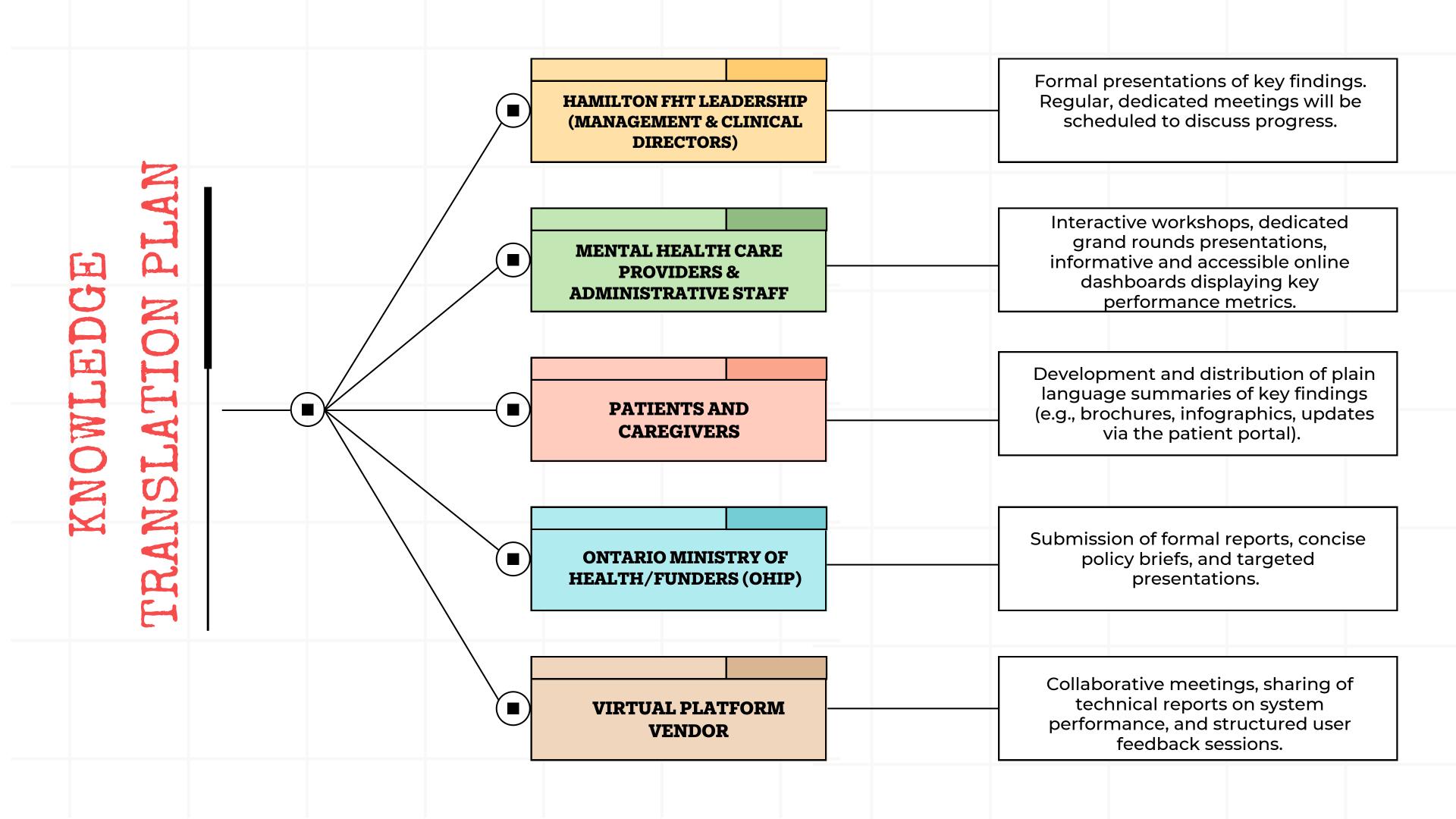
Typically one-time or at end of study; rarely feeds back into practice immediately

Theoretical: "What do we not know?" "Why does this happen?"

Stringent research ethics; may require full IRB/REB (especially for intervention trials).

Prioritizes rigor, control, internal validity (RCTs, matched controls, experimental designs

Generally low





# ETHICAL CONSIDERATIONS AND APPROVAL PROCESS



## CONCLUSION

This Benefits Evaluation plan for virtual mental health visits at the Hamilton Family Health Team demonstrates a comprehensive and systematic approach to assessing the value and impact of this eHealth intervention.

The detailed fictional implementation establishes a clear context for the evaluation, highlighting the well-documented benefits of virtual mental health care in terms of accessibility, patient satisfaction, and provider efficiency. This systematic measurement across System Quality, Information Quality, Service Quality, Use, User Satisfaction, and Net Benefits (Quality, Access, Productivity) will enable HFHT to understand not only what benefits are realized but also why and how they are achieved.

Finally, the emphasis on tailored Knowledge Translation strategies will ensure that the evaluation's findings are effectively communicated to all relevant stakeholders, fostering evidence-informed decision-making and driving the ongoing optimization of virtual mental health services at the Hamilton Family Health Team. This Benefits Evaluation will serve as a vital tool for HFHT to enhance patient care, improve operational efficiency, and demonstrate accountability to its community and funders.





## REFERENCES

## THANK YOU FOR LISTENING



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