

Advancing the Learning Health System in Ontario

Part 3: Using Evidence in the Learning Health System

HSPN Monthly Webinar

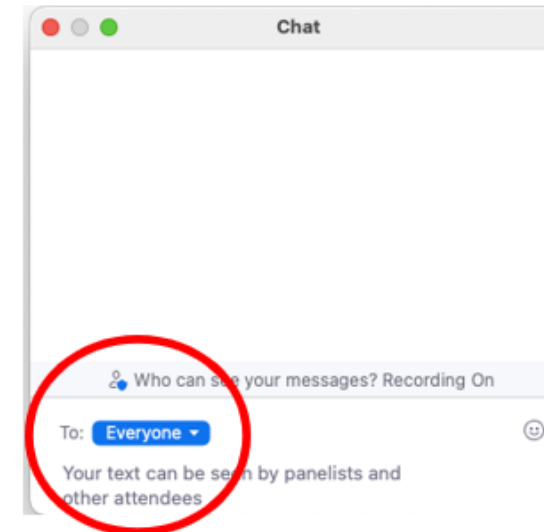
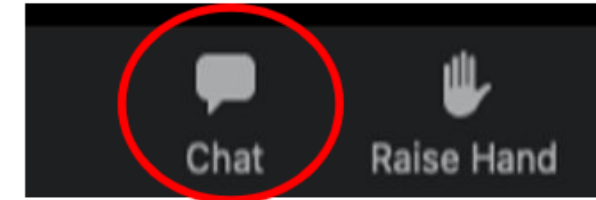
June 25, 2024

Welcome & thank you for joining us!

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

➤ Open Chat

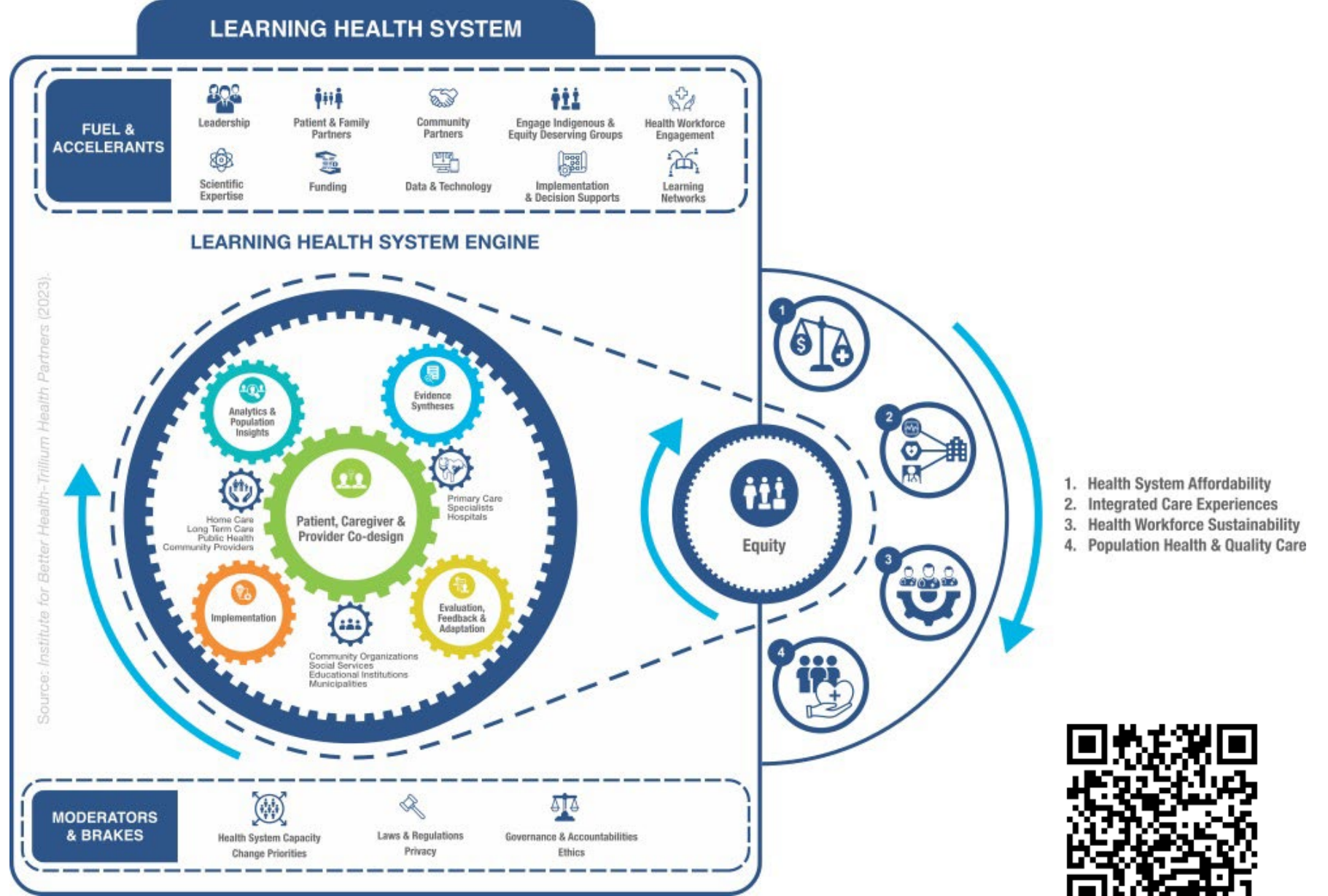
➤ Set response to **everyone** in the chat box



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.

LEARNING HEALTH SYSTEM ACTION FRAMEWORK



SOURCE: *Institute for Better Health-Trillium Health Partners* (2023).

Learning Gear 2: Evidence



Description: Rapid syntheses of existing evidence to understand the success or failure of solutions to similar problems tested elsewhere as well as barriers and promoters.

Sample Questions: What has worked and not worked elsewhere? What are key components & adaptable periphery? What conditions and contextual issues are key? What barriers need to be addressed?

Health System Affinities: Health system librarians, clinical guideline development teams, provincial & federal evidence synthesis supports, Cochrane collaboration, SPOR Evidence Alliance, global evidence consortia

Poll 1

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

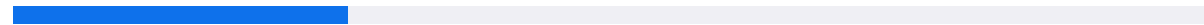
*

46/46 (100%) answered

Yes. I have participated previously (33/46) 72%



No. This is my first event (13/46) 28%



Today's event

LHS Evidence Syntheses & More

Presenters



Dr. Diana Urajnik
Director
Centre for Northern and Rural
Health Research



John Hogenbirk
Associate Director
Centre for Northern and Rural
Health Research



Dr. Justin Presseau
Program Director
Scientific Lead Knowledge
Translation
Ottawa Methods Centre



Kaelen Moat
Managing Director, Senior
Scientific Lead
Evidence Products and Processes
McMaster Health Forum

Host



Dr. Walter Wodchis
Principal Investigator
HSPN

AGENDA

Sources of Evidence and Research

1. Centre for Rural and Northern Health Research
2. Ottawa Methods Centre
3. McMaster Health Forum
4. HSPN



Centre for Rural and Northern Health Research – Laurentian University (CRaNHR Laurentian)

Diana Urajnik, PhD, Director

John C Hogenbirk, MSc, Associate Director

HSPN Webinar - Using Evidence in the
Learning Health Systems

June 25, 2024



Mandate



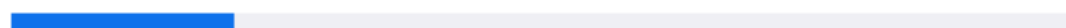
- Established in 1992, CRaNHR's mandate, as an academic and applied research centre, is to conduct interdisciplinary research and evaluation on rural and northern health to improve health services, enable equitable access to health care, and support the health care system.

Poll 2

1. Who supports your OHT's local data analytic and evaluation activities? (check all that apply) (Multiple Choice)

29/29 (100%) answered

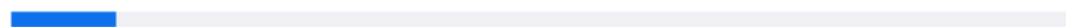
We have dedicated researcher(s)/evaluator(s) who prov... (6/29) 21%



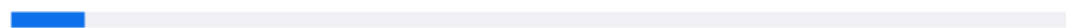
We obtain these services from our partner agencies (e... (19/29) 66%



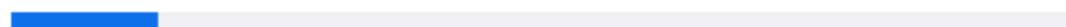
We obtain these services from external organizations (3/29) 10%



We rely on academic institutions to provide these services (2/29) 7%



Other (let us know in the chat) (4/29) 14%

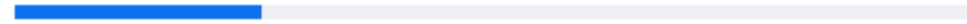


Poll 3

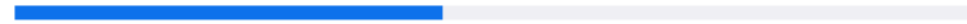
1. How should local data analytic and evaluation services be supported (and organized)? (choose 1) (Single Choice)

38/38 (100%) answered

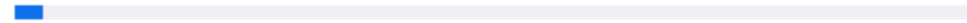
Fund one or more researchers/evaluators in each OHT. (10/38) 26%



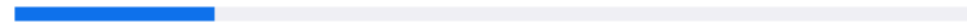
Fund several researchers/evaluators operating at a re... (17/38) 45%



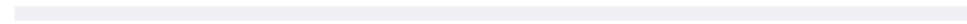
Purchase services from consulting firms or other experts. (1/38) 3%



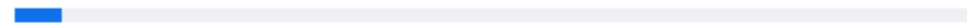
Build capacity within HSPN, RISE, INSPIRE-PHC, etc. (8/38) 21%



Expand role of evaluation coaches. (0/38) 0%



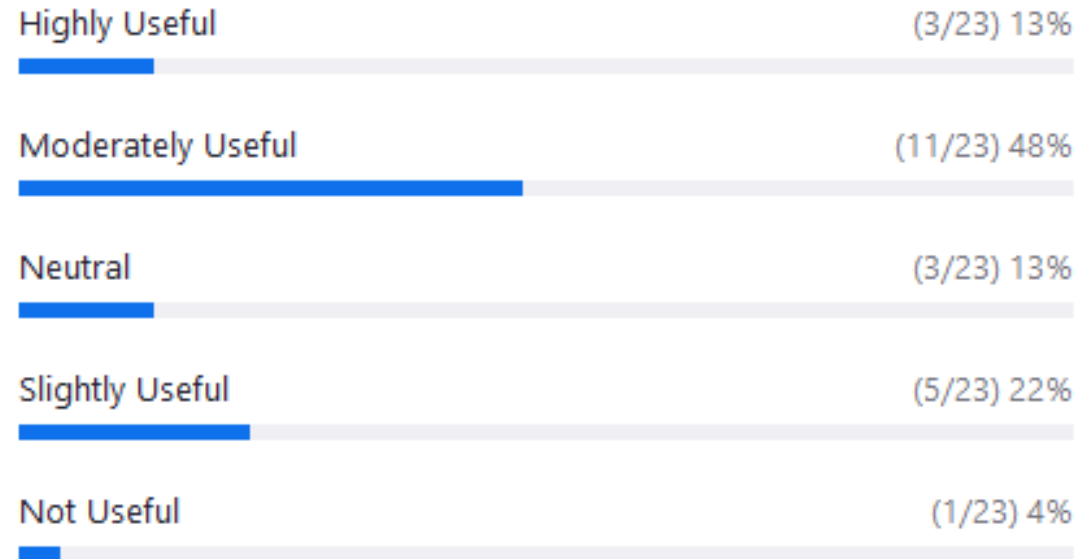
Other (let us know in the chat) (2/38) 5%



Poll 4

1. How useful, for your OHT, are the existing data analytic and evaluation services that you have access to? (choose 1) (Single Choice)

23/23 (100%) answered



Broad Support Services



- Capacity-building (e.g., internal evaluation; embedded OHT Fellow)
- Document analyses, literature/rapid reviews, policy analyses
- Program evaluation
- Continuous quality improvement

Areas of expertise



- Patient-oriented research & training (with an equity, diversity, inclusion, Indigeneity lens)
- Minority and marginalized populations
- Learning Health Systems (embedded partner in OHTs and member of the OSSU LHS WG)
- Health service access and use
- Human resources for health
- Digital / Virtual care

CRaNHR is an OSSU Centre under the Strategy for Patient-Oriented Research initiative. CRaNHR is the only such centre in northern Ontario.



Skills



Collaborative approach

- Our partners set the agenda
- We provide advice and nimble support, and help build capacity (e.g., consultation, mentorship)

Technical services

- Writing proposals to obtain funds
- Designing studies that are rigorous, practical, and responsive to changing context
- Creating surveys, chart extraction tools, or other data collection instruments
- Conducting analyses (quantitative-statistical and qualitative)
- Creating dissemination products (e.g., reports, presentations, newsletters)

Services to OHTs



- Provide data analytic support: framework development; data collection/extraction; targeted analyses; and shared interpretation.
- Help with regional coordination of data requests: work with partners to clarify and fully articulate data needs, and help provide local context in interpreting data and analyses.
- Facilitate data gathering and analyses to enable strategic planning.

Evidence/Analytic Support



- Since 2020, CRaNHR has been providing direct support to OHTs in response to requests for data extraction and analysis, as well as guidance in the use of data for evaluation, monitoring, and performance reporting.
- CRaNHR has shared the results through reports and presentations, as well as through ongoing discussion and participation on Committees within OHTs.

Some Examples...



- Demographics of the attributed patient population and resident population, overlap and differences
- Characteristics of attached, unattached, and loosely attached patients
- Analysis of ED visits by CTAS score by patient residence
- Socio-economic status of attributed and resident population
- Mental health and addiction service use by attributed and resident population, including seasonal variation
- Use of X-ray, CT, and MRI services by the resident population

Many analyses include consideration of community differences.

Concluding Remarks



CRaNHR advocates for patient-oriented care and facilitates evaluation in the context of a learning health systems approach.

For more information, please contact

➤ Diana Urajnik, Director, CRaNHR-Laurentian,

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➤ John Hogenbirk, Associate Director, CRaNHR-

Laurentian, jhogenbirk@laurentian.ca

Using Evidence in the Learning Health System: Leveraging expertise in Ottawa

Justin Presseau PhD

Program Director, Methodological and Implementation Research, OHRI

Incoming Director, Centre for Implementation Research, OHRI

Scientific Lead for KT, Ottawa Methods Centre

Associate Professor, School of Epidemiology and Public Health, uOttawa



The Ottawa
Hospital
Research Institute

L'Hôpital
d'Ottawa
Institut de recherche

Inspired by research. **Inspiré** par la recherche.
Driven by compassion. **Guidé** par la compassion.

Affiliated with Affilié à



Ottawa as expertise hub for each 'gear' of the LHS



The Ottawa Methods Centre: expertise infrastructures that you can draw from



Established in 2006, now includes 30+ specialists spanning 9 specialty areas

Our clients include:



Scientists



Clinicians



Trainees



Students



Research Staff

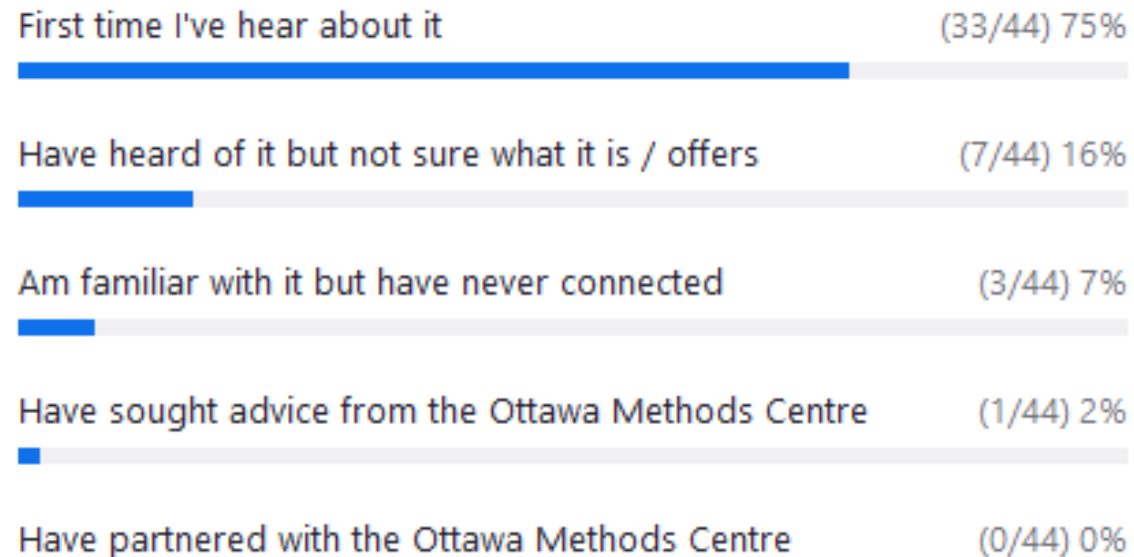


Government

Poll #5

1. How familiar are you with the Ottawa Methods Centre? (Single Choice)

44/44 (100%) answered





The Ottawa
Hospital
Ottawa
Methods Centre

**What
we do**

**Research
Design
Methodology**

**Knowledge
Synthesis**

Biostatistics

**Data
Management**

**Big Data
Analytics**

**Knowledge
Translation**

**Journalology/
Publication**

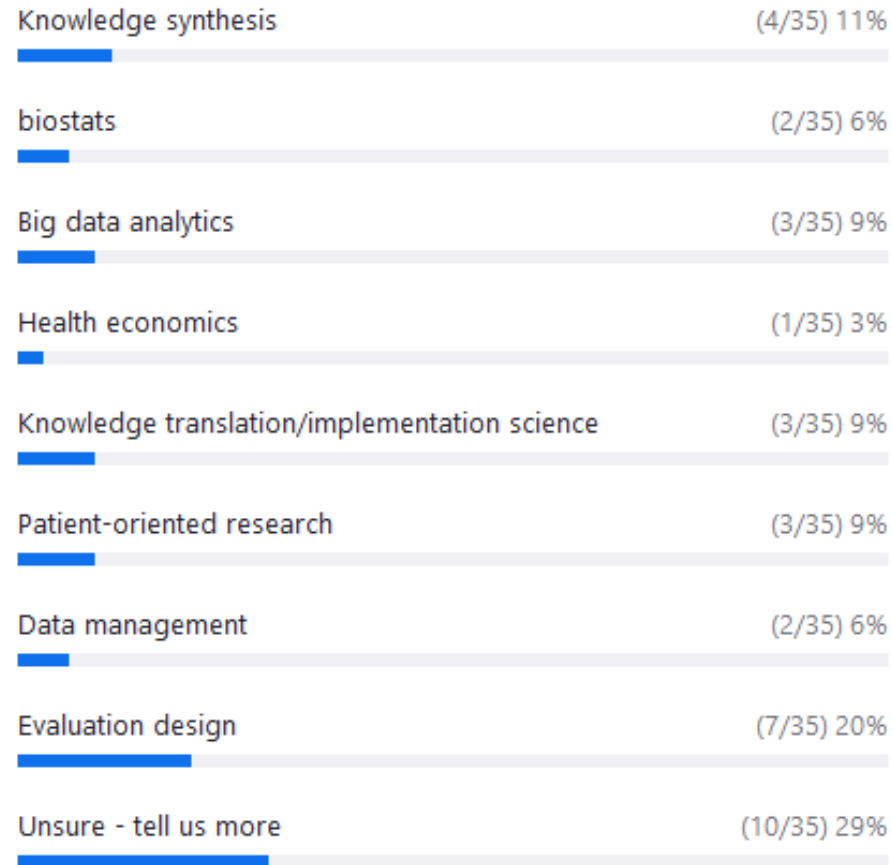
**Health
Economics**

**Patient-Oriented
Research (POR)**

Poll #6

1. What services within the Ottawa Methods Centre have/might be useful to your team/organization? (Single Choice)

35/35 (100%) answered





Research Design Methodology

Knowledge Synthesis

Biostatistics

Data Management

Big Data Analytics

Knowledge Translation

Journalology/ Publication

Health Economics

Patient-Oriented Research (POR)

Office for Patient Engagement in Research Activity (OPERA)

ohri.ca/opera

Identify patient
partners



Patient engagement in
study design



Co-develop research
questions

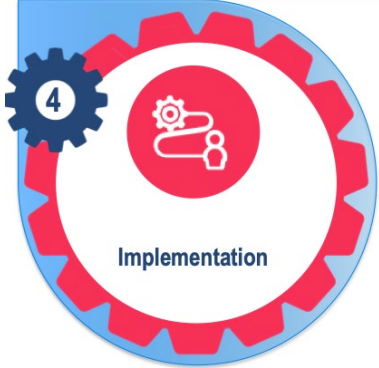


Patient engagement
research methods



Training in patient-
oriented research





Centre for Implementation Research



Established in 2018, assembles world-leading interdisciplinary implementation scientists with expertise in:

- Audit and feedback
- Decision aids
- Clinical practice guideline development/evaluation
- Evidence synthesis
- Integrated knowledge translation and community partnerships
- Health care professional behaviour change
- Behaviour change in patients/general public
- Health economic evaluation
- Qualitative, survey, and consensus methods
- Intervention evaluation
- Barriers/enablers assessment
- Intervention co-development

Today's webinar



Two examples of evidence synthesis expertise informing all steps

- OPTimise Platform
- Diabetes Eye Screening Ottawa

Examples of Rapid Responsive Evidence Syntheses

Factors affecting COVID-19 vaccination acceptance and uptake among the general public: a living behavioural science evidence synthesis (v5, Aug 31st, 2021)

Jacob Crawshaw, PhD ^{1*}; Kristin Konnyu, PhD ^{2*}; Gisell Castillo, MA ¹; Zack van Allen, MA MBA ¹
Maureen Smith, MEd ³; Natasha Trehan ³; François-Pierre Gauvin, PhD ⁴; Jeremy M. Grimshaw,
MBChB PhD ^{1,3}; Justin Presseau, PhD ^{1,5}

Factors affecting healthcare worker COVID-19 vaccination acceptance and uptake: a living behavioural science evidence synthesis (v3, Jun 18th, 2021)

Jacob Crawshaw, PhD ^{1*}; Kristin Konnyu, PhD ^{2*}; Gisell Castillo, MA ¹; Zack van Allen, MA MBA ¹;
Jeremy Grimshaw, MBChB PhD ^{1,3}; Justin Presseau, PhD ^{1,4}

Understanding the role of personal risk perceptions during the COVID-19 pandemic: a rapid behavioural science evidence synthesis

September 30th, 2022

Gail McMillan¹, Zack van Allen¹, Justin Presseau^{1,2}

BeSci Rapid Evidence Synthesis

RS13

COVID-19 vaccine mandates and their relationship with vaccination intention, psychological reactance, and trust: a rapid behavioural evidence synthesis (March 2024 update)

27 March 2024

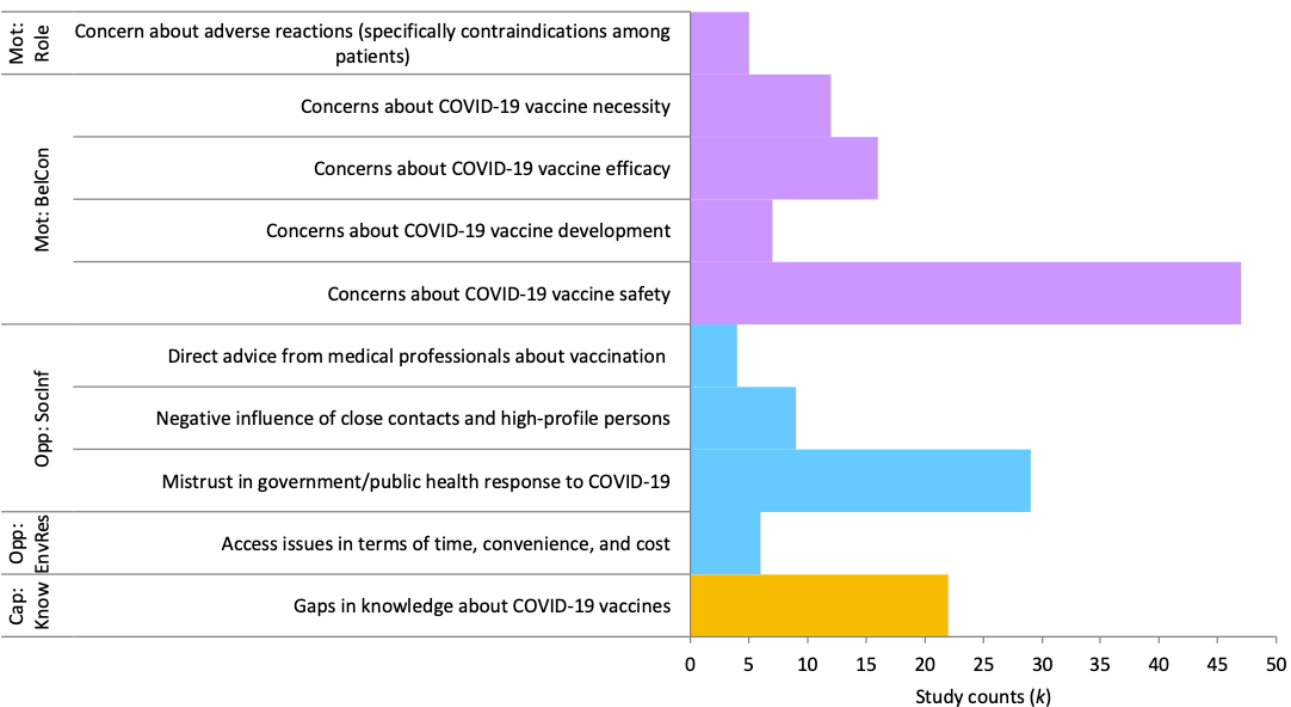
COVID-19 Living Evidence Synthesis #19: Effectiveness of interventions for promoting adherence to PHSMs for preventing COVID-19 and other respiratory infections in non-health care community-based settings

Date of Literature Search: 3rd March 2023

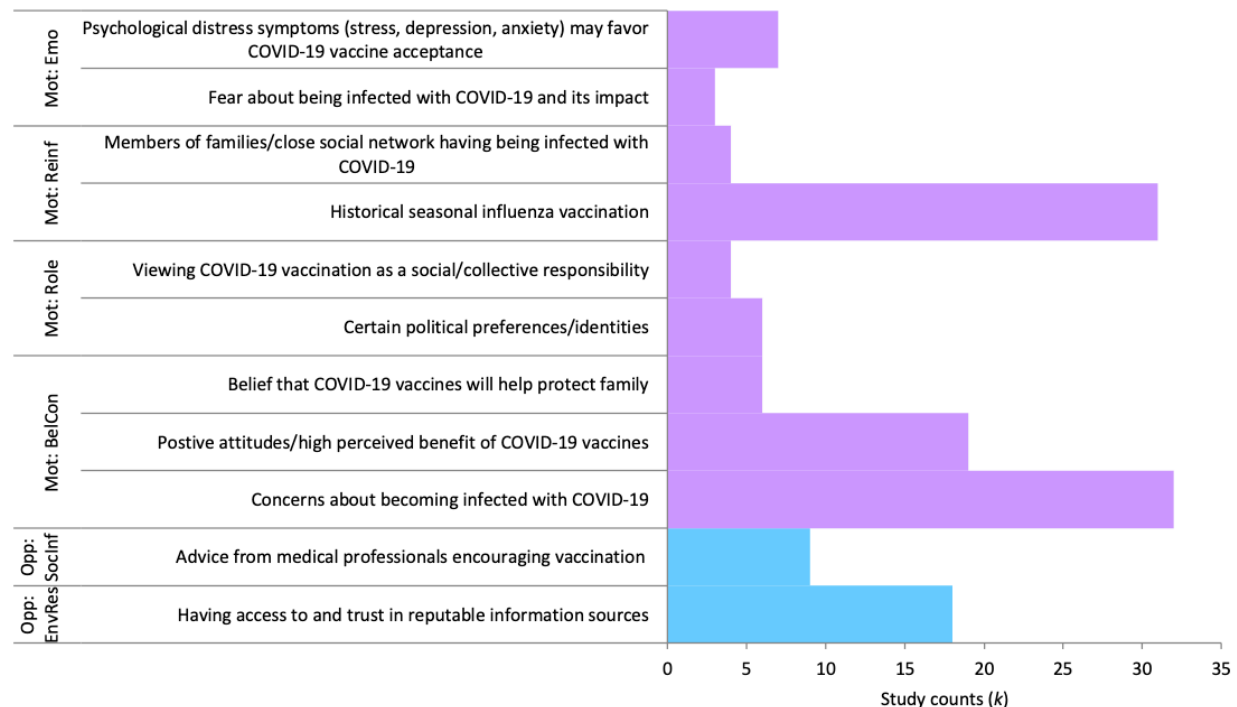
Suggested citation: McMillan, G., Hussain, J., Abdullah, K., Chan, E., Van Allen, Z., Palumbo, A., Grenier, A.-D., Smith, M., Strain, K., & Presseau, J. COVID-END PHSM LES Working Group. Ottawa Hospital Research Institute, 24 March 2023.

Identified 175 studies up to Aug 2021 assessing factors associated with COVID-19 vaccination acceptance

Themes of **barriers** across studies



Themes of **enablers** across studies



Capability Opportunity Motivation



Rapid evidence syntheses informed subsequent equity-informed, responsive, community-partnered programs

**Example 1:
OPTimise Platform**





The Ottawa-Peel-Toronto (OPT)imise Platform

- Drawing from our synthesized COVID-19 vaccination literature
- We established the **OPTimise Platform**, a CIHR-funded project involving partnerships with Public Health Units (PHUs) and community leaders in 3 cities

Aims:

- ✓ Provide BeSci support to PHUs
- ✓ Develop authentic and trusting partnerships with communities
- ✓ Connect with equity-deserving communities to amplify their views & experiences
- ✓ Draw from evidence synthesizes and primary evaluation using BeSci tools to provide recommendations to PHUs



Key Steps in the (OPT)imise Platform

1 PHU prioritized under-served group in their city re: vaccination

2 Co-led by citizen partner, built relationships w/ community leaders

3 Community leaders connected to community members to have BeSci-based barriers/enablers interview about vaccination dose

4 Clarify strategies already used in each PHU to support vaccination

5 Co-develop BeSci-informed strategies in each city w/ each community group, briefs to PHUs



The Ottawa-Peel-Toronto (OPT)imise Platform

1 PHU prioritized under-served group in their city re: vaccination

2 Co-led by citizen partner, built relationships w/ community leaders

3 Community leaders connected to community members to have TDF-based barriers/enablers interview about vaccination dose

4 Clarify strategies already used in each PHU to support vaccination

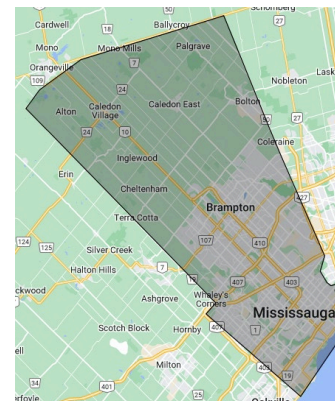
5 Co-develop BeSci-informed strategies in each city w/ each community group, briefs to PHUs



3rd dose in particular 5th quintile SES neighbourhoods



Black/Caribbean communities in particular neighbourhoods with low uptake



1st and 3rd dose in adults from Eastern European communities



The Ottawa-Peel-Toronto (OPT)imise Platform

1 PHU prioritized under-served group in their city re: vaccination

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Ottawa: 7 meetings

Toronto: 7 meetings

Peel: 6 meetings

Meetings:

- Led by engagement co-leads, multilingual in Ottawa at request (English, French, Arabic)
- Focus on trust building:
 - Cultural and linguistic competence
 - Transparent engagement process
 - Acknowledging historical injustices
 - Engagement in research process and feedback on what we heard from partners



The Ottawa-Peel-Toronto (OPT)imise Platform

1 PHU prioritized under-served group in their city re: vaccination

2 Co-led by citizen partner, built relationships w/ community leaders

3 Community leaders connected to community *members* to have TDF-based barriers/enablers interview about vaccination dose

4 Clarify strategies already used in each PHU to support vaccination

5 Co-develop BeSci-informed strategies in each city w/ each community group, briefs to PHUs

- ✓ Interview guides: intersectionality-enhanced Theoretical Domains Framework adapted & piloted w/ community partners
- ✓ **Community partners connect interested community members with team for interviews** (translated outreach materials; dedicated phone and email)

Ottawa (N=22; all 2+doses)

Age: 19-75; **Gender:** 18 women; 4 men

Interview languages: 10 Eng, 4 Fr, 8 Arabic

Race/ethnicity: Afghani, African, Arab, Congolese, Black, Egyptian, Indigenous, Jordanian, Middle-eastern, Palestinian, Somalian, Syrian, Turkish, White (n=3)

Toronto (N=25; ~half 0 dose)

Age: 19-66; **Gender:** 22 women; 3 men

Race/ethnicity: 14 Caribbean; 2 African; 9 Black

Peel (N=21; 6 zero dose)

Age: 19-70; **Gender:** 13 women; 8 men

Interview languages: 17 Eng, 3 Ukrainian, 1 Polish

Race/ethnicity ID: 14 Ukrainian; also Polish, Russian, Serbian



The Ottawa-Peel-Toronto (OPT)imise Platform

1 PHU prioritized under-served group in their city re: vaccination

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3 Community leaders connected to community members to have TDF-based barriers/enablers interview about vaccination dose

4 Clarify strategies already used in each PHU to support vaccination

5 Co-develop BeSci-informed strategies in each city w/ each community group, briefs to PHUs

- ✓ 'Did our homework': used BeSci methods to clarify which strategies were already being used by each PHU to ensure complementarity of our recommendations
- ✓ PHU website + social media pages and up to two deviations (links), supplemented with strategies reported by PHU partners



The Ottawa-Peel-Toronto (OPT)imise Platform

1 PHU prioritized under-served group in their city re: vaccination

2 Co-led by citizen partner, built relationships w/ community leaders

3 Community leaders connected to community members to have TDF-based barriers/enablers interview about vaccination dose

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✓ Persona-based co-development



#1 "Malik"

- ❖ Felt forced to take the first two to keep his job
- ❖ Feels that the government took away his personal choice
- ❖ Thinks vaccines don't work because he still got COVID after taking them
- ❖ Worried about short- and long-term side effects, he has heard stories



#2 "Alesha"

- ❖ Feels strong and healthy and doesn't need more than two vaccines
- ❖ Thinks that the world should move on from COVID
- ❖ Doesn't want to hear about COVID anymore
- ❖ Worried about anti-Black racism in the development of the vaccines



#3 "Gabrielle"

- ❖ Very scared about side effects, even death from the vaccine
- ❖ Doesn't trust politicians or scientists or any mainstream media
- ❖ Believes in doing your own research

✓ BeSci taxonomy-informed strategies and recommendations vetted and adapted by leaders

✓ Policy briefs

Policy Brief

Community informed behavioural science strategies to support COVID-19 vaccine booster doses in priority neighbourhoods in Ottawa

May 8, 2023

Key messages

- Based on eight in-person neighbourhoods in Ottawa, researchers partnered with community leaders and then conducted behavioural science informed interviews with diverse community members in each neighbourhood
- In partnership with community leaders, researchers developed behavioural science informed strategies to address issues of community members' views, aiming to encourage existing and/or emerging behaviours
- Community members' views reflect perspectives on vaccination at the end of 2022 and start of 2023, providing a local view of vaccination that has been previously used to encourage third and fourth doses
- Other opportunities are needed that have been previously used to encourage third and fourth doses
- After having identified the strategies that OPT has already used, we suggest behavioural science informed strategies to address barriers to 3rd dose uptake expressed by Ottawa's priority neighbourhoods at the end of 2022
- These strategies were developed in partnership with the priority Ottawa communities and designed to be practical, relevant and supported by the residents of these communities

Capability

- Keep boosters on the radar by localising messaging and amplifying and diversifying existing OPH resources**
 - Identify OPH resources and messages about 3rd doses and how they are used
 - Identify the key communities, more than one of the same is needed

Opportunity

- Continue to strive to make it easier to get a booster for a diversity of life circumstances in Ottawa**
 - Clarify when to get it, continue running and promoting local clinics with flexible hours, and provide alternatives
- Create accessible and tailored materials to help people have conversations within their communities**
 - Provide look and resources that can empower people to answer questions on requests from friends, family, neighbours, and coworkers
- Launch a vaccine buddy campaign**
 - Recruit trusted local volunteers in buildings and workplaces to assist with conversations and transportation to clinics
- Use windows of opportunity to normalize talking about COVID**
 - When windows of opportunity is right, launch a campaign on having conversations about COVID and what Ottawa's learned and how to know their focus on the frame

Motivation

- Update people about changing risk levels and why and when it is still important to get a third dose**
 - Update people when transmission or severity rates change so they can reconsider why third doses are still relevant to them at a given time, disseminated through trusted sources
- Social feedback on what other people are doing is important: use stories to prompt action**
 - Provide case examples and stories reflecting local community experiences to show that the third dose is still relevant alongside population level data

For more information, please visit our webpage: <https://www150.ca.gov/2023/05/08/behavioural-science-strategies-to-support-covid-19-vaccine-booster-doses-in-priority-neighbourhoods-in-ottawa/>



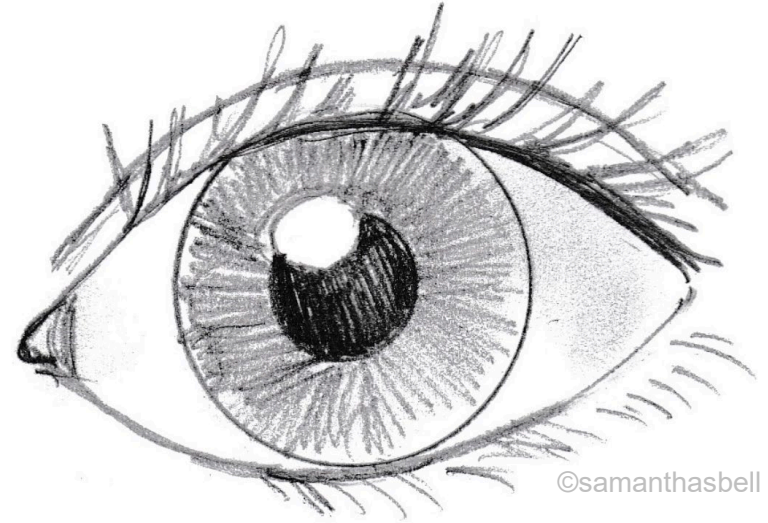
Evidence syntheses informed subsequent equity-informed, responsive, community-partnered programs

**Example 2:
Diabetes Eye Screening Ottawa**



Diabetic Retinopathy

Retinopathy is the most common microvascular complication of people with diabetes in Canada



In Canada, **most people with diabetes develop a degree of retinopathy** in their lifetime

- ✓ Guideline-recommended treatment options available to manage retinopathy progression **BUT requires detection through annual diabetic retinopathy screening (DRS) attendance**
- Diabetic retinopathy screening rates are low across Canada; **30% not had their eyes screened in the last 2 years, and 38% had never been screened**
- Immigrants to Canada have **lower attendance** to retinopathy screening: In Ottawa in 2019, **40% of immigrants to Canada with diabetes had not had their eyes screened in last 2 years**

What do we know about barriers/enablers to screening attendance?¹

Evidence synthesis: 69 interview and survey-based studies

TDF Domains

Knowledge

Skills

Memory, attention and decision processes

Behavioural regulation

Environmental context and resources

Social Influences

Beliefs about capabilities

Intention

Goals

Social/professional role and identity

Beliefs about consequences

Reinforcement

Emotion

Optimism

• **Awareness** of diabetes-retinopathy link; **Confusion** between retinopathy screening & routine eye exam (35 studies)

• **Forgetting** (34 studies)

• **Accessibility; Competing demands; Cost** (52 studies)

• **Trust** in doctors; family **support**; doctor-patient **communication** (35 studies)

→ Only 3 studies conducted in Canada, and only 1 conducted in a minority group

• **Discomfort; Inconvenience** (26 studies)

• **Fear** of vision loss; **Fear** of the procedure (23 studies)

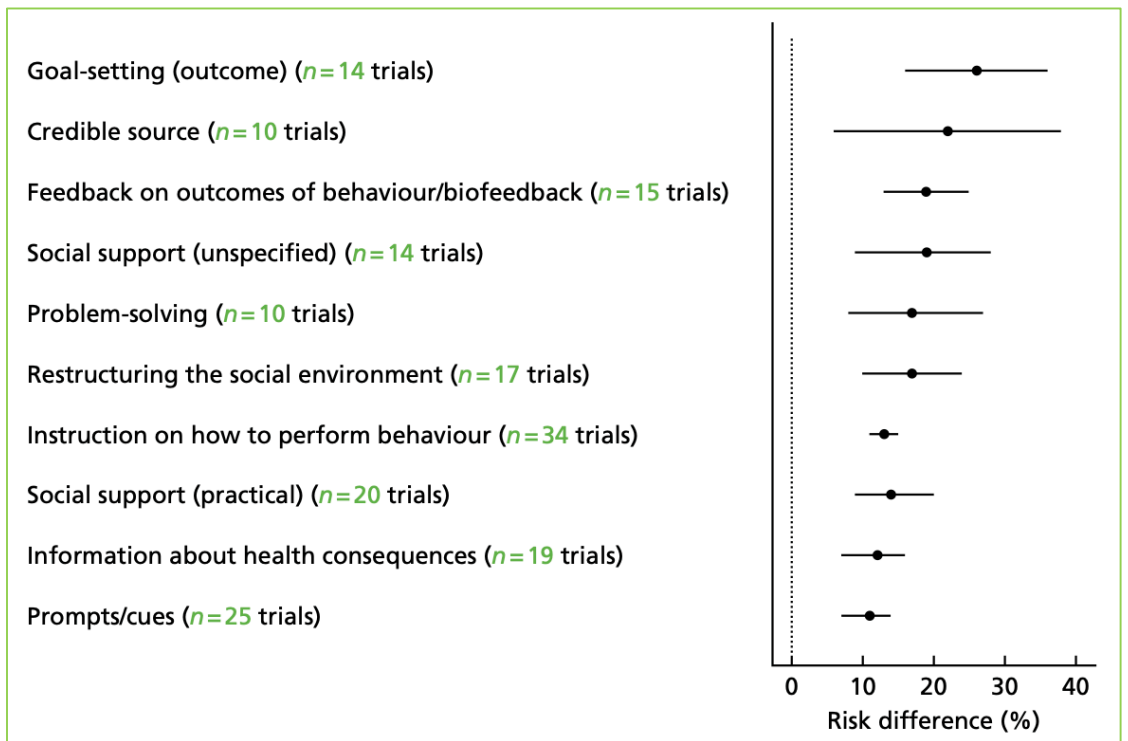
What works for increasing retinopathy screening attendance?

Interventions to increase attendance for diabetic retinopathy screening (Review)

Lawrenson JG, Graham-Rowe E, Lorencatto F, Burr J, Bunce C, Francis JJ, Aluko P, Rice S, Vale L, Peto T, Pesseau J, Ivers N, Grimshaw JM

66 RCTs: interventions to increase diabetic retinopathy screening attendance increased attendance by 12% (95%CI 0.10-0.14)

Intervention strategies associated with greater attendance



We then conducted 39 interviews in Urdu, French, or Mandarin in Ottawa or Montreal

21 men; 18 women (mean age: 47.5 yrs [sd=10.3])

Half had attended eye screening in last 2 years

TDF Domains

Knowledge

Skills

Memory, attention and decision processes

Behavioural regulation

Environmental context and resources

Social Influences

Beliefs about capabilities

Intention

Goals

Social/professional role and identity

Beliefs about consequences

Reinforcement

Emotion

Optimism

Key barriers/enablers

- **Lack of awareness** about retinopathy screening; about diabetes-retinopathy link; lack of clarity on difference between routine eye exam
- **Forgetting**
- **Lack of transparency on screening costs**
- **Wait times and distance**
- **Making/getting to appointments**
- Family and clinical **support and communications or lack thereof**
- **Language barriers**
- **Views/fear about physical harms to eyes** caused by screening itself

Co-developed and established a new community health centre-based telemedicine eye screening program


Diabetes Central Ottawa
Intake & Referral

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[Diabetes Education](#) [Diabetes Eye Screening Ottawa](#) [Foot Care](#)

[SELF-REFERRAL FORMS](#) [HEALTHCARE PROVIDER REFERRAL FORMS](#)



Integrated care partnership between Centretown Community Health Centre, OHRI, and Ottawa Hospital Eye Institute

Diabetes Eye Screening Ottawa

diabetesottawa.ca/english-diabetes-eye-screening-ottawa/

Diabetes Eye Screening Ottawa (DESO)

- ✓ Co-designed to address evidence synthesis and interview-based barriers/enablers experienced by equity deserving groups (Mandarin speakers immigrating from China and French speakers from African/Caribbean countries)
 - ✓ 12 co-design workshops: 7 bilingual community partners, 6 health system partners, 13 people living with diabetes in Ottawa whose first language was Mandarin or French and had immigrated to Canada from China or African/Caribbean countries
- ✓ **State of the art camera (OCT)** in dedicated room at CCHC that runs Ottawa Diabetes Education Program
- ✓ **Referral pathways** established
- ✓ **Language interpretation** services for booking and during screening
- ✓ Outreach materials **tailored to language** and **culture** co-developed with community members to address barriers to attendance
- ✓ Task shift: instead of optometrist/ophthalmologist doing screening, a trained **screeener** at CHC screens and uploads images securely to **Ottawa Hospital Eye Institute** for **grading** and **follow-up care** where needed
- ✓ **Next steps**: data-informed outreach and expanding language and cultural tailoring/co-development



Rapid evidence syntheses for government and health system requestors

Evidence synthesis and support can provide foundational perspectives on factors to address and strategies to leverage in changing practice

What we can support:

Draw from state of the science approaches in implementation science and behavioural science, rapidly synthesize studies of:

- ✓ Barriers/enablers to implementation/de-implementation (health system) and health decisions and actions (population/community)
- ✓ Feasibility/acceptability of health/healthcare interventions
- ✓ Effectiveness of rigorously-evaluated implementation or behaviour change interventions

Interested in leveraging OMC expertise?

Put in a Service Request: ohri.ca/ottawamethodscentre



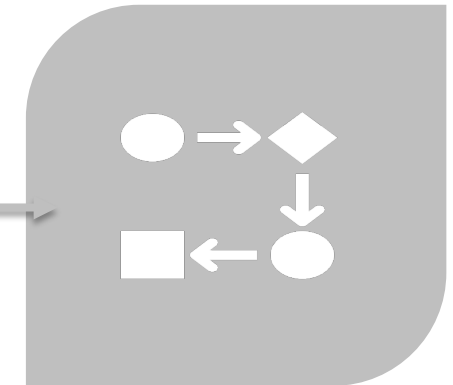
VISIT THE OMC WEBSITE & FILL OUT A SERVICE REQUEST



OMC REVIEWS ALL REQUESTS & TRIAGES TO THE RIGHT OMC EXPERT



YOU ARE SET-UP WITH A CONSULTATION TO ADDRESS YOUR NEEDS



AFTER YOUR CONSULTATION, THE OMC WILL GUIDE YOU THROUGH THE NEXT STEPS

Have a short question & don't need a consult?

Drop us a line through the **ASK A QUESTION** feature on the OMC Website

(or reach out to me anytime)

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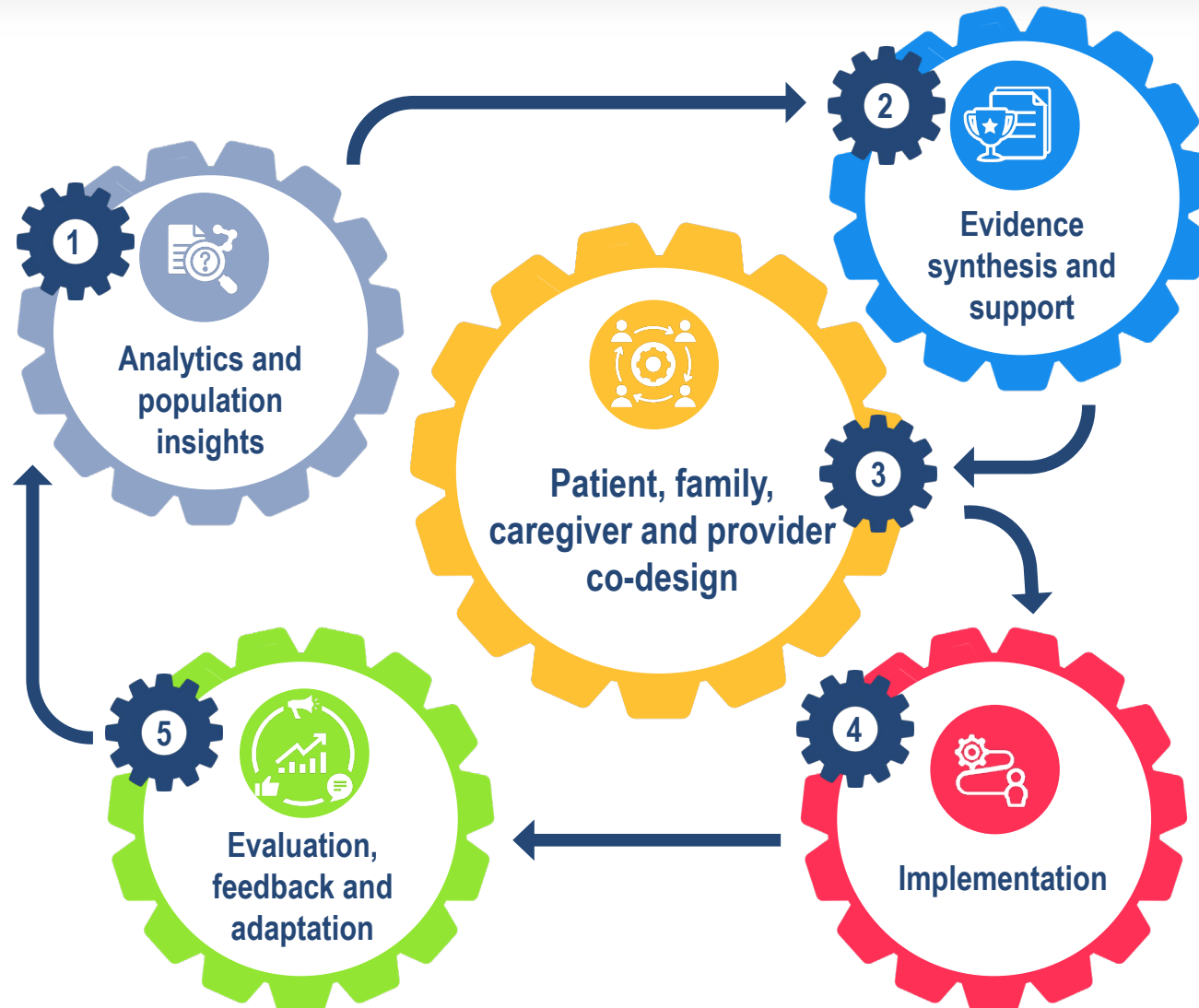


Enabling evidence-informed learning and improvement processes

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25 June 2024

Five 'gears' involved in learning and improvement cycles, whether focused on 'big bang' policy decisions or 1,001 organizational (e.g., OHT) decisions



Source: Reid RJ, Wodchis WP, Kuluski K, Lee-Foon N, Lavis JN, Rosella LC, Desveaux L. [Actioning the learning health system: An applied framework for integrating research into health systems](#). *Social Science & Medicine*; 2024.

Evidence synthesis and support is key to ensure you're building on 'best evidence' of what works, how it works, and for whom



Why this gear is important: (Rapid) evidence syntheses of existing evidence can help you understand the problems to be addressed, success or failure of solutions to similar problems tested elsewhere as well as barriers and promoters

- E.g., What has worked and not worked elsewhere?
- E.g., What are key components & what can be adapted?
- E.g., What conditions are key, including contextual issues? What barriers need to be addressed?

Benefits of evidence synthesis (vs. single studies): Summarizes what has been learned from around the world, including how it varies by groups and contexts (rather than what can be learned from one study conducted in single context and with a single population)

- Less likely to be misled by the results
- Can increase our confidence something will work when similar results are seen over many studies over time, studying many diverse groups, and across different contexts
- For questions about effectiveness → more precise estimates

Increasingly we're seeing **living evidence syntheses** that are updated as context, issues and evidence evolve

Evidence synthesis and support is key to ensure you're building on 'best evidence' of what works, how it works, and for whom (2)



What we mean by evidence synthesis and support:

- refers to both drawing on **existing evidence syntheses** (global evidence) AND having access to **evidence support units** (see slides 12-16) that can rapidly synthesize evidence in response to the demands of decision-makers (contextualized evidence synthesis)
- is a key input into gear 3 (patient, family, caregiver and provider co-design), but can also be important in other gears (see next slide)

Other forms of existing evidence remain important at different points in the learning and improvement cycle (next slide), but we'll mostly focus on evidence syntheses today

Our focus today:

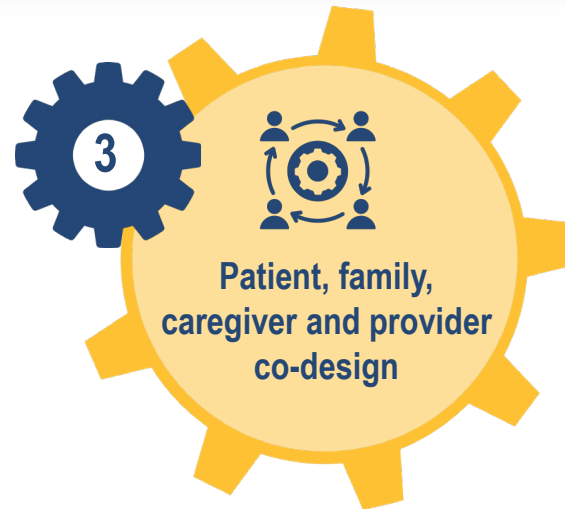
- **Five prompts** for being systematic and transparent when using existing evidence syntheses and drawing on evidence support units in learning and improvement cycles

Aside: Other forms of existing evidence remain important



Where are system gaps & what's driving them? Where are the inequities? What priorities are we addressing (or what problems are we solving)?

- Stocks of **existing** evidence:
- 1) Data analytics
 - 2) Modeling
 - 3) Qualitative insights
 - 4) Evidence synthesis of the above (global)**



What evidence-informed solutions exist? How will solutions be adapted/designed with input from system users and communities?

- Stocks of **existing** evidence:
- 1) Evaluation
 - 2) Modeling
 - 3) Qualitative insights
 - 4) Evidence synthesis of the above (global)**
 - 5) *Possibly HTAs/CEAs and guidelines*



Does this model work? How & for whom? What adaptations are needed to cement and scale?

- Stocks of **existing** evidence:
- 1) Behavioural/implementation research
 - 2) Qualitative insights
 - 3) Evidence synthesis of the above (global)**
- Flows of new evidence:*
- 1) Data analytics
 - 2) Evaluation

Five prompts for being systematic and transparent when drawing on existing evidence syntheses in rapid learning and improvement



1)1. Confirm that **research evidence** (or another type of information) is actually what is needed



1)2. Use a **framework** to generate a mutually exclusive and collectively exhaustive (MECE) list to work with



1)3. Leverage the right **evidence repositories** (and living evidence syntheses) for the form of evidence and topic area you're interested in



1)4. Know **what to look for** in the existing evidence, especially for evidence synthesis:
2)- currency (or recency)
3)- quality
4)- local applicability (e.g., including for equity-deserving groups)



1)5. Know where to go to find high-performing **evidence-support units**, by form of evidence and topic area, and how to set standards for those supporting the flow of new evidence

Keep in mind

- How far and how fast evidence support has moved
- How these new developments can help you do your work more efficiently and/or with greater confidence
- How easy it is for people outside your organizations to assess documents it puts in the public domain

An example of a two-page prompts sheet is available upon request

1. Confirm that research evidence is actually what is needed



Research evidence has three attributes

- 1. An output of empirical research** that was conducted systematically and reported transparently (regardless of whether it was peer-reviewed or where it was published or posted)
- 2. Typically one of five forms of domestic evidence, one form of global evidence, two forms of recommendations:**
 - **Domestic:** data analytics; modeling; evaluation; behavioural / implementation research; qualitative insights
 - **Global:** evidence synthesis
 - **Recommendations:** technology assessment / cost-effectiveness analysis and guidance
- 3. Explicit criteria** can be used to assess its quality (or credibility or risk of bias depending on the evidence paradigm being used), which we return to in strategy 4.

Distinguish research evidence from helpful complements to it: stakeholder positions*/public sentiment (e.g., as expressed in social media)/events (and other signals of system problems)/ misinformation claims (and sources)/ internal policy documents/other jurisdictions' work (provinces and territories; comparator countries)/lived experiences/Indigenous ways of knowing

*A stakeholder engagement (including an engagement of experts) can answer questions like how do the positions of key groups compare to others, but you then need to ask what evidence underpins their positions. A jurisdictional scan can answer questions like what are comparator countries doing on this topic, but you then need to ask what the evidence tells us about their approach

2. Use a framework to generate a mutually exclusive and collectively exhaustive (MECE) list to work with



Policy analysis framework for:

1. understanding a problem and its causes
2. selecting an option for addressing the problem
3. identifying implementation considerations
4. monitoring implementation and evaluating impacts (where data analytics, evaluation, and qualitative insights can help).

Program analysis framework for asking whether:

1. the right problems and causes are being targeted for prioritized groups
2. the most effective, cost-effective and valued interventions are being provided
3. the most efficient delivery arrangements and implementation strategies are being used to get effective interventions to all those who need them
4. monitoring and evaluation strategies are targeting the right reach and other process measures
5. there is the capacity to model contributions to impacts and/or cost savings.

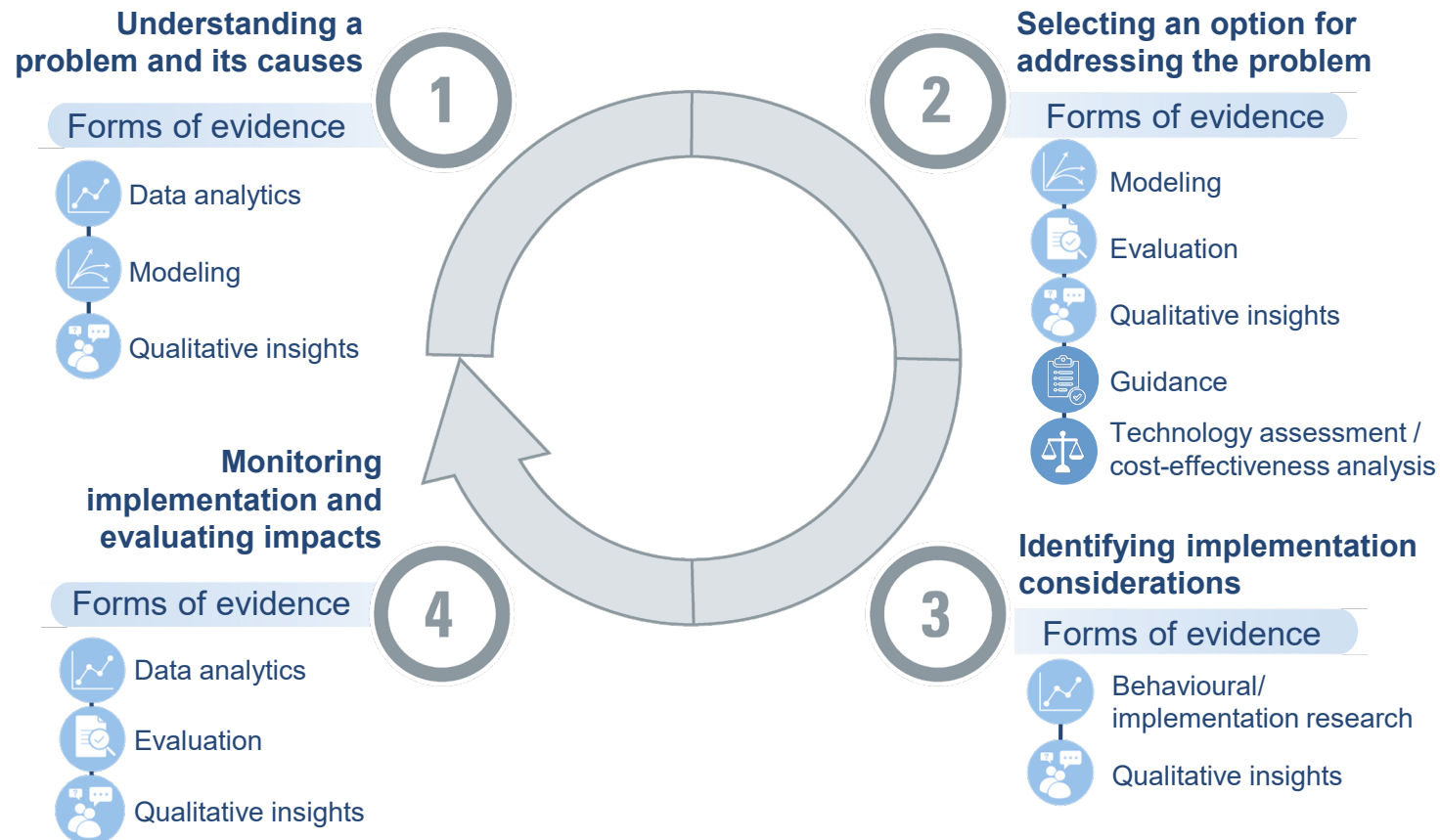
Systems analysis framework for asking whether the problem is caused by/solutions can be found in adjusting: 1) governance arrangements; 2) financial arrangements; 3) delivery arrangements; or 4) implementation strategies targeting citizens, service providers or organizations.

Additional frameworks can also add value, including sector-specific frameworks, behavioural/implementation frameworks (e.g., COM-B), and equity analysis (e.g., SGBA+, PROGRESS-Plus).

2. Example of a policy analysis framework mapped to forms of evidence (and note the similarities w/ slide 5)


Domestic evidence

(by step in the policy cycle, any of which could also be the focus of a contextualized evidence synthesis)





Global evidence


(each for one or more steps in the decision-making cycle)


 **Evidence synthesis**
(what has been learned from around the world, including how it varies by groups and contexts)

Increasingly in **game-changing living evidence syntheses** that are updated as context, issues and evidence evolve

 **Jurisdictional scan**
(to learn from experiences – and ideally evaluations – in other provinces & countries)

 **Horizon scanning**
(to leverage foresight work done nationally and globally)

 **Key-informant interviews**
(to leverage rich experiences)

 **Deliberative processes**
(to engage citizens and stakeholders in collective problem solving)

3. Leverage the right evidence repositories for the evidence syntheses and topics your interested in



Important repositories of quality-rated evidence syntheses (i.e., global evidence):

- [ACCESSSS](#) for clinical programs, services and products
- [Health Evidence](#) for public health programs and services
- [Health Systems Evidence](#) for health systems governance, financial and delivery arrangements and implementation strategies
- [Social Systems Evidence](#) for programs and system arrangements in non-health sectors
- Others to consider: [Education Endowment Foundation](#) (education), [Evidence Aid](#) (humanitarian assistance), [3ie DEP](#) (int. development)

Tips when using repositories of existing evidence:

- Determine whether components of the MECE framework you've adopted to organize your work is reflected in advanced search filters or types of evidence you may be interested in:
 - Document type (e.g., evidence syntheses of effects when determining whether your chosen option(s) work)
 - Program type or approach
 - System arrangements
 - Population focus
- Look for a filter for 'living' evidence syntheses (to find evidence syntheses that are updated as the context, issue and/or evidence evolves)

For other forms of (domestic) evidence/single studies:

- Bibliographic databases such as [PubMed](#) or [EconLit](#)
- Websites – and specify the form of evidence, topic area, and geographic focus, as well as recognize that you are typically on your own for quality ratings (see strategy 4).

4. Know what to look for in the existing evidence (esp. for evidence syntheses)



Four important steps:

1. **Confirm the broad relevance to the scope of your area of interest** (i.e., an element in your MECE list)
2. **Confirm the specific relevance to the question(s) being asked in your work** (e.g., benefits and harms of a policy or program option)
3. **Identify the ‘best’ evidence for your question**
 - **Quality assessed using an explicit criteria** (using either the repositories’ approach, such as AMSTAR*, or an approach you have adopted) → **NOT based on poor proxies** (e.g., credibility of the author(s), credibility of the organization that produced the work, credibility of the organization that funded the work, and whether the work has been peer reviewed)
 - **Availability of a GRADE profile**, which will tell you how much certainty you can have about the evidence contained in an evidence synthesis (e.g., there is a lower risk of bias)
 - **Currency/recency** (search date for an evidence synthesis and data collection for an empirical study, not publication date) and **whether ‘living’**
 - **Countries studied and included in the syn**
4. **Summarize in plain language what we know (and don’t know) based on the best available evidence**
 - E.g., summary of key insights in relation to your MECE framework (noting where high-quality evidence does and doesn’t exist)
 - E.g., supporting table that allows a reader to navigate to particular documents of interest, and provides a statement of the main findings and quick access to the full text (through hyperlinked declarative titles)

**AMSTAR: High ≥ 8 , medium 4 to 7, low ≤ 3), keeping in mind that a high score means the evidence synthesis was conducted to a high standard, however, the evidence summarized in the synthesis may still cause concern (e.g., there may be no eligible studies or the studies may have a high risk of bias)*

5. Know where to go to find high-performing evidence-support units (by form of evidence and topic area)



Four important steps to consider:

1. Clarify the form of evidence you're looking for

- **Domestic evidence:** Data analytics, modeling, evaluation (esp. impact and process evaluation), behavioural / implementation research, and qualitative insights from your country
- **Global evidence** (evidence synthesis)
- **Recommendations** in the form of technology assessments and guidelines

2. Decide whether you want a **specific trade** (producing any of the above eight forms of evidence) or a **'general contractor'** who can mobilize the right trades'

3. Look at their website to see what **'self-serve'** options are available (e.g., databases of all existing evidence by topic area, not just their own evidence)

4. Look at their website to see what **evidence products and processes they can support** (e.g., living products), on what timeline (hours and days, weeks and months, years), and with what engagement processes

5. Know where to go to find high-performing evidence-support units (by form of evidence and topic area) (2)



Example of the McMaster Forum 'self-serve' options

McMaster Health Forum | Our Products



Browse or search the array of health- and social-system topics for which we have prepared evidence products (rapid syntheses, evidence briefs and citizen briefs), products that capture insights from our stakeholder dialogues and citizen panels (dialogue summaries, panel summaries and videos of interviews with dialogue participants), and topic overviews that capture both research evidence and stakeholder and citizen insights.

Click on a topic below to browse the full array of related products we've prepared. Alternatively, you can search for results of particular interest to you, filtering by topic, product type, year of publication or geographic focus.

Search Products

Ontario Health Teams

<https://www.mcmasterf...>

Copy permanent link

Advanced filters

- Topic +
- Program +
- Geographical focus +
- Area of site +
- Product type +

RISE brief 33: Approaches to address and remove policy and program roadblocks to support northern Ontario Health Teams

Northern teams have experienced different policy and program 'roadblocks' throughout the development of the teams. RISE convened a dedicated jamboree to discuss these roadblocks and how they could be removed going forward. This RISE brief was then refined based on insights shared at the jamboree.

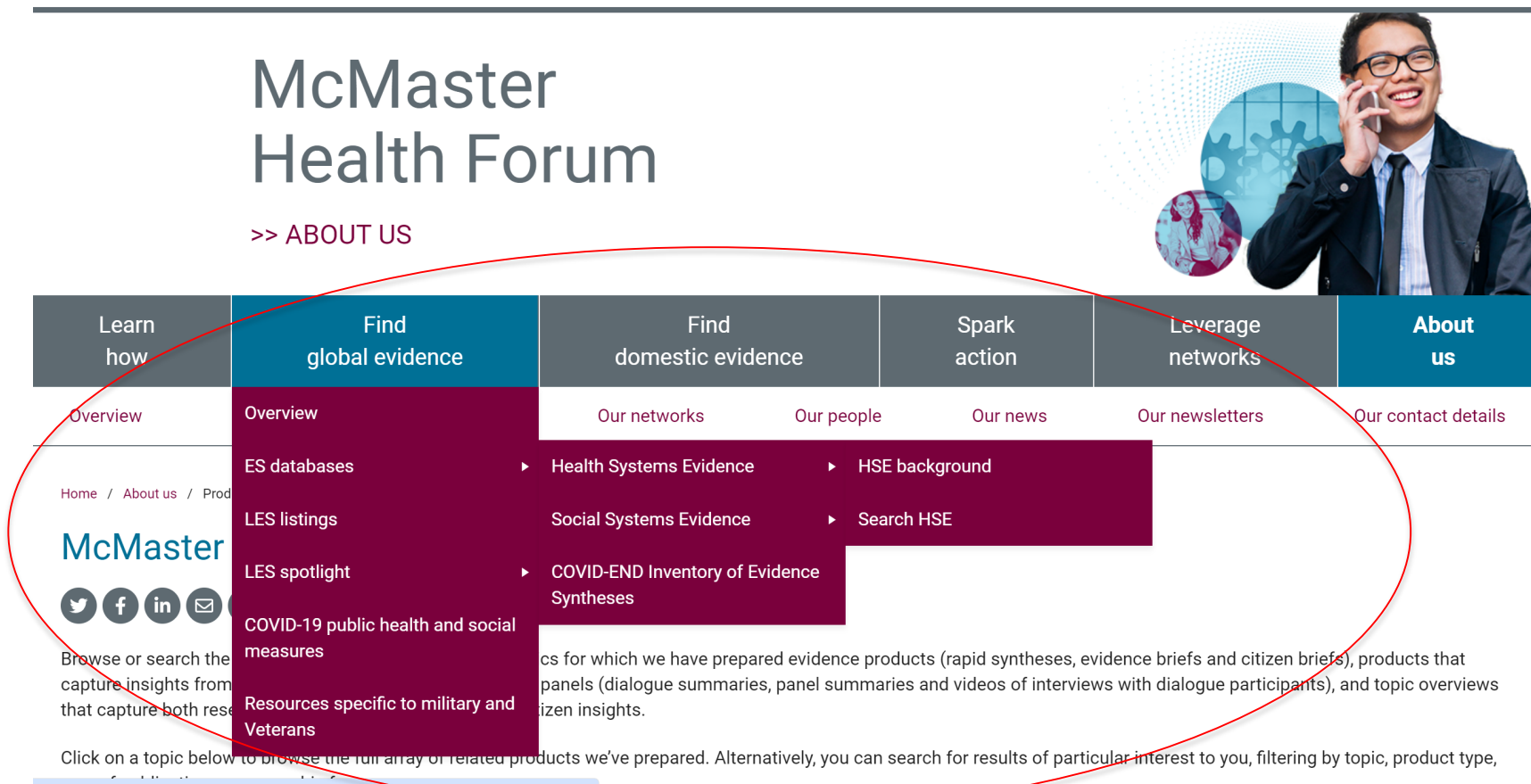
RISE brief: [View PDF](#) | [View PDF \(French\)](#)

Examining system navigation for Ontario Health Teams

5. Know where to go to find high-performing evidence-support units (by form of evidence and topic area) (3)



Example of the McMaster Forum 'self-serve' options (2)



McMaster Health Forum

>> ABOUT US

Learn how	Find global evidence	Find domestic evidence	Spark action	Leverage networks	About us
Overview	Overview ES databases LES listings LES spotlight COVID-19 public health and social measures Resources specific to military and Veterans	Our networks Our people Our news Our newsletters	Our news Our newsletters	Our newsletters	Our contact details

Home / About us / Prod

McMaster

Browse or search the capture insights from that capture both res

Click on a topic below to browse the full array of related products we've prepared. Alternatively, you can search for results of particular interest to you, filtering by topic, product type,

5. Know where to go to find high-performing evidence-support units (by form of evidence and topic area) (4)



Example of the McMaster Forum available evidence products and process supports:

McMaster Forum | Contextualized evidence syntheses



The Forum prepares timely and demand-driven contextualized evidence syntheses that address pressing health and social system issues faced by decision-makers as well as the type of ‘global public good’ producers over much longer time frames. This includes evidence syntheses produced in the timelines in the table below.

Goal	Timeline*	Type of product(s)	Scope
Profile evidence and experiences quickly	1-5 days	<ul style="list-style-type: none"> • Rapid evidence profiles • Living evidence profiles (updated at regular intervals) 	<ul style="list-style-type: none"> • Key insights from highly relevant evidence syntheses (and sometimes primary studies where no evidence syntheses exist) identified from targeted searches of bibliographic databases • Experiences from relevant jurisdictions identified from targeted searches of websites and documents

Examples of units providing timely, demand-driven evidence support 'up' to advisory and decision-making processes and 'out' to learning and improvement platforms, by 'trade' (or form of evidence)

- Data analytics (and modeling)
 - e.g., **MoH Digital and Analytics Strategy Division, IC/ES**, and many sector-, condition-, treatment- and population-specific entities (e.g., **INSPIRE-PHC**, OH-Cancer, **ODPRN, RISE-NOSM**)
 - e.g., HDRN Canada, CIHI, Health Workforce Canada, Statistics Canada
- Evaluation (e.g., rapid evaluations of 'tests of change')
 - e.g., **HSPN, Centre for Digital Health Evaluation, Public and Patient Engagement Collaborative**
- Behavioural / implementation research
 - e.g., OHRI Centre for Practice-Changing Research
- Qualitative insights
 - Under development
- Evidence synthesis (ultra-rapid and regular)
 - e.g., **MoH RAEB, RISE-McMaster Health Forum** and its national network
 - e.g., SPOR-Evidence Alliance and national collaborating centres for public health
- Health technology assessments
 - e.g., OH-Health technology assessments
 - e.g., CDA (formerly CADTH)
- Guidance
 - e.g., OH-Quality standards, OH-Guidance documents
 - e.g., Canadian Task Force on Preventive Health Care

Helpful links to key evidence repositories

These repositories can be used to identify quality appraised evidence syntheses, and have advanced search options that can help you map to a MECE framework/evidence type for your specific question

- [ACCESSSS](https://www.accessss.org/) for clinical programs, services and products: <https://www.accessss.org/>
- [Health Evidence](https://www.healthevidence.org/) for public health programs and services: <https://www.healthevidence.org/>
- [Health Systems Evidence](https://www.healthsystemevidence.org) for health systems governance, financial and delivery arrangements and implementation strategies: <https://www.healthsystemevidence.org>
- [Social Systems Evidence](https://www.socialsystemevidence.org) for programs and system arrangements in non-health sectors: <https://www.socialsystemevidence.org>

Discussion Topics

- *What are the opportunities to use evidence to advance OHTs ?*
- *Should there be supports provided very locally or Centrally?*
- *What does equity look like in supporting evidence-informed Learning Health System in OHTs?*

Up Next

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

Upcoming July & September 2024:

Advancing the Learning Health System in
Ontario: Parts 4 & 5

THANK YOU!



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The Health System Performance Network



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