Audit & Feedback MetaLab

International Audit & Feedback MetaLab Meeting:
Putting A&F into real world practice

Co-Development of a Learning Health System for Ontario Health Teams: Applying User-Centered Design to Optimize Audit and Feedback

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SISTEMA SANITARIO REGIONALE
ASL ROMA 1

REGIONE LAZIO

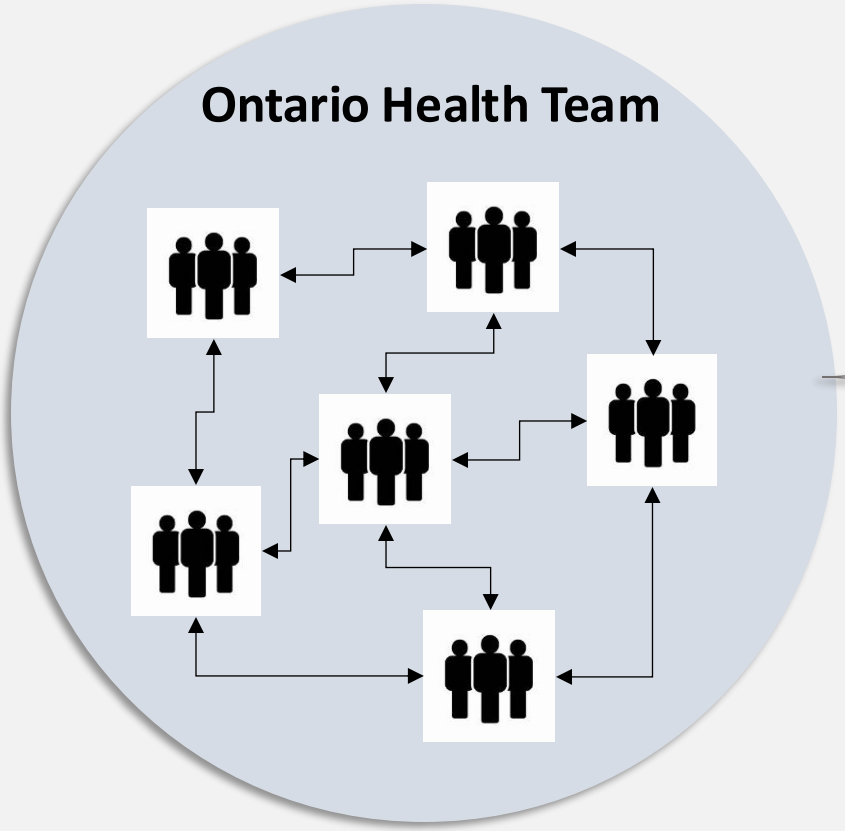
UNIVERSITÀ CATTOLICA del Sacro Cuore

The Ottawa Hospital Research Institute | L'Hôpital d'Ottawa Institut de recherche

ONTARIO HEALTH TEAMS (OHT)

Provincial initiative to foster integrated care:

- Coordination and collaboration among health care delivery services and organizations
- Connectivity with patients and local communities



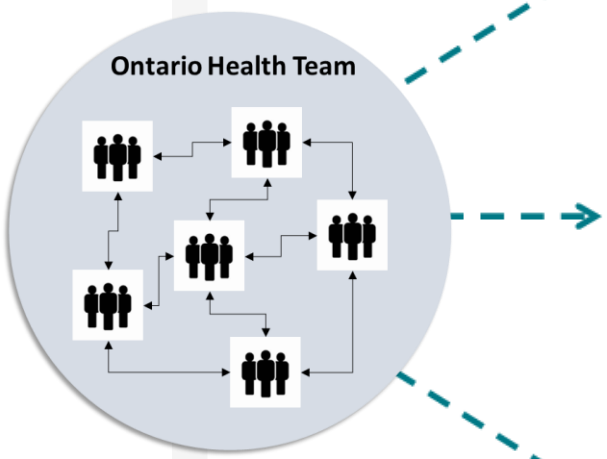
- Health promotion and disease prevention services
- Primary care (including inter-professional primary care and physicians)
- Community support and social services
- Home care
- Emergency health services
- Midwifery services
- Laboratory and diagnostic services
- Hospital and acute care (such as in-patient and [illegible]latory medical and surgical services, including specialist services)
- Mental health and addictions services
- Rehabilitation and complex care
- Residential care and short-term transitional care (such as supportive housing, long-term care homes, or retirement homes)
- Palliative care (such as hospice)

Continuum of care

ONTARIO HEALTH TEAMS (OHT)

A Vision for Ontario Health Teams

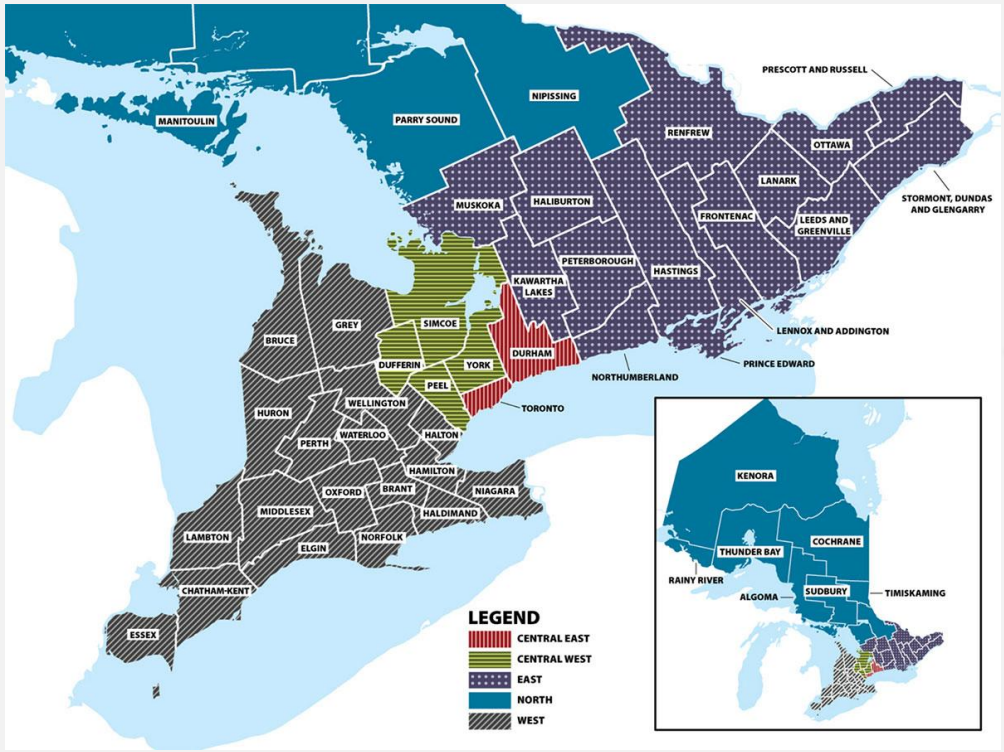
At maturity, every Ontarian will have access to an Ontario Health Team that will:



- Provide a full and coordinated continuum of care for an attributed population within a geographic region
- Offer patients 24/7 access to coordination of care and system navigation services and work to ensure patients experience seamless transitions throughout their care journey
- Be measured, report on and improve performance across a standardized framework linked to the 'Quadruple Aim': better patient and population health outcomes; better patient, family and caregiver experience; better provider experience; and better value
- Operate within a single, clear accountability framework
- Be funded through an integrated funding envelope
- Reinvest into front line care
- Improve access to secure digital tools, including online health records and virtual care options for patients – a 21st century approach to health care

ONTARIO HEALTH TEAMS (OHT)

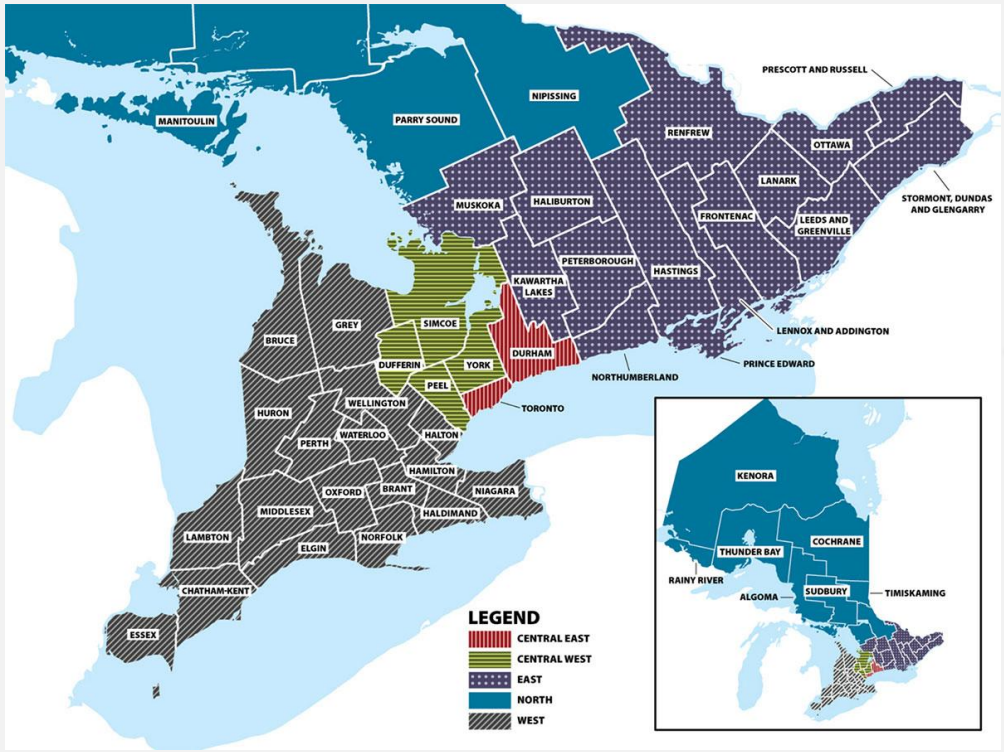
58 OHTs across Ontario



- Total provincial population: ~14 million
- Attributed patient population per OHT: between ~20k and ~900k
- OHTs' organizational structures, priorities, capabilities, and maturity vary significantly

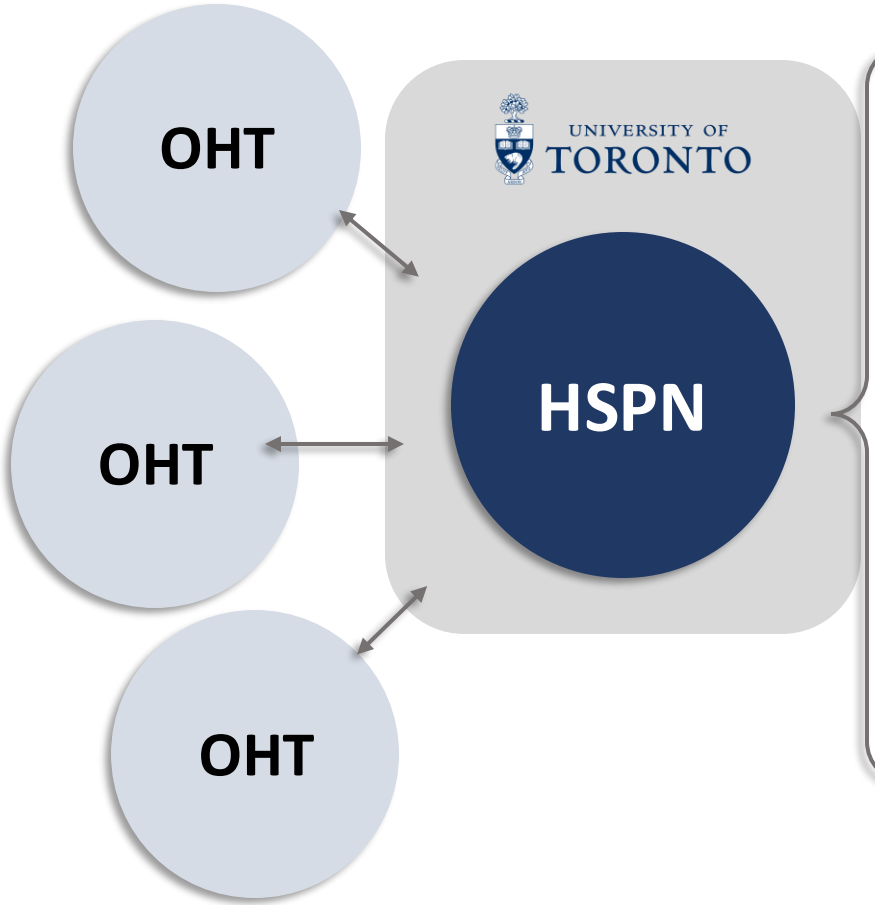
ONTARIO HEALTH TEAMS (OHT)

58 OHTs across Ontario



- Provincial health priorities:
  - **Mental health and addictions**
  - **Palliative care**
  - **Older adults/chronic conditions**:
    - Congestive Heart Failure (CHF)
    - Diabetes (focus on avoiding amputation)
    - Chronic Obstructive Pulmonary Disease (COPD)
  - **Reduce disparities** among different population groups

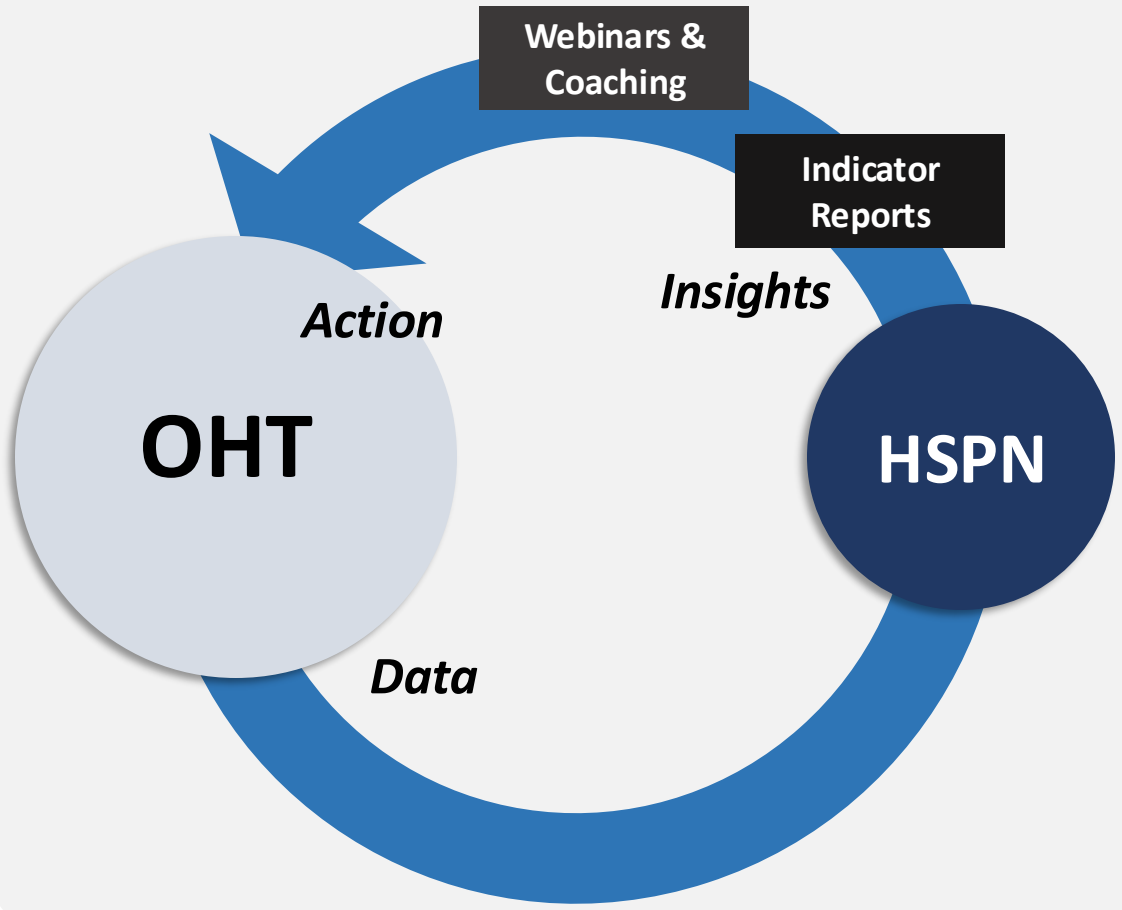
HEALTH SYSTEM PERFORMANCE NETWORK (HSPN)



- Collaborative research network established in 2009
- Focused on helping OHTs achieve their objectives
  - Research and evaluation to assess policy directions and organizational strategies
  - Support health system leaders and policy-makers in improvement efforts
  - Multiple domains of health system performance: perspectives of patients, providers, population health, and cost

https://www.hspn.ca/

PERFORMANCE MANAGEMENT AND A&F



Feedback loops of comparative performance data

- Data on population health indicators based on provincial administrative datasets
- Insights on indicator trends and comparisons: baseline of OHT performance
- Support action and implementation activities
  - Understand how OHTs are delivering care to facilitate decision-making and improvements in practice

Ontario Health Teams Central Evaluation

Quantitative Evaluation

Total OHT Attributable Population Improvement Indicators at Baseline: Fiscal Year 2018 to 2020

Walter P. Wodchis

January 2024

OHT Central Evaluation – HSPN Indicator Reports

Total Population

- Premature Mortality
- Cost per Month
- Days in Acute Care
- ALC Days
- ACSC Hospitalizations
- 30D Readmission
- ED Visit managed elsewhere
- 7D Physician Follow up
- Continuity of Care
- Virtual Visits

Mental Health & Addictions Care

- Outpatient visits within 7d of MHA hospital discharge
- ED as first point of contact for MHA
- Frequent (4+) ED visits for MHA
- Repeat ED visits within 30d for MHA
- Rate of ED visits for deliberate self-harm

Older/Frail Adults

- 2+ fall-related ED visits (among frail)
- Days at home (among frail)
- Change in ADL long form
- Caregiver distress
- Change in MDS-HSI

Palliative & End-of-Life Care

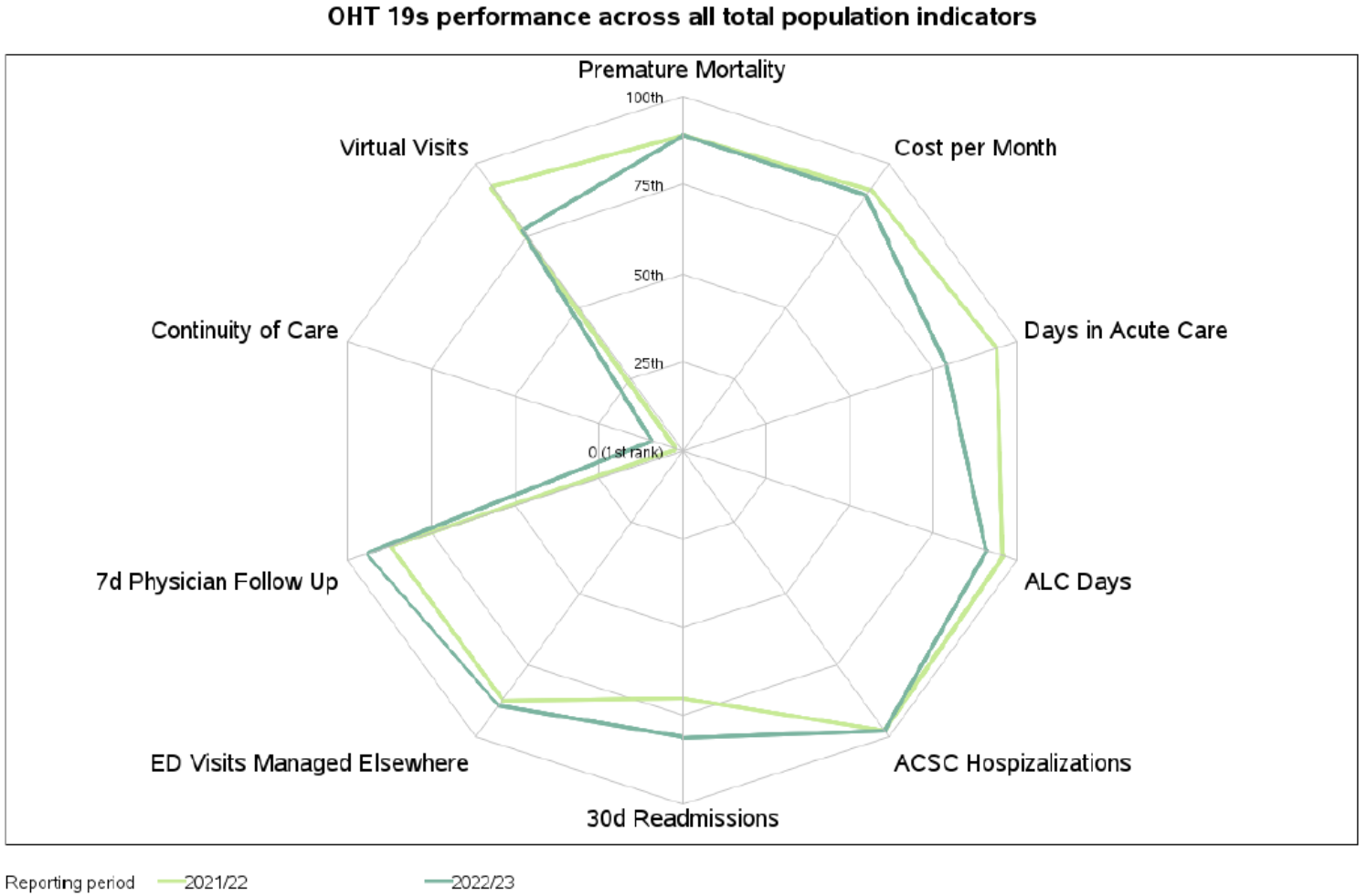
- Deaths in hospital
- ED visit in the last 30d of life
- Palliative - physician home visits in the last 90d of life
- Palliative home - care in the last 90d of life
- Days at home in the last 6mons of life

Broad set of indicators prioritized by OHTs

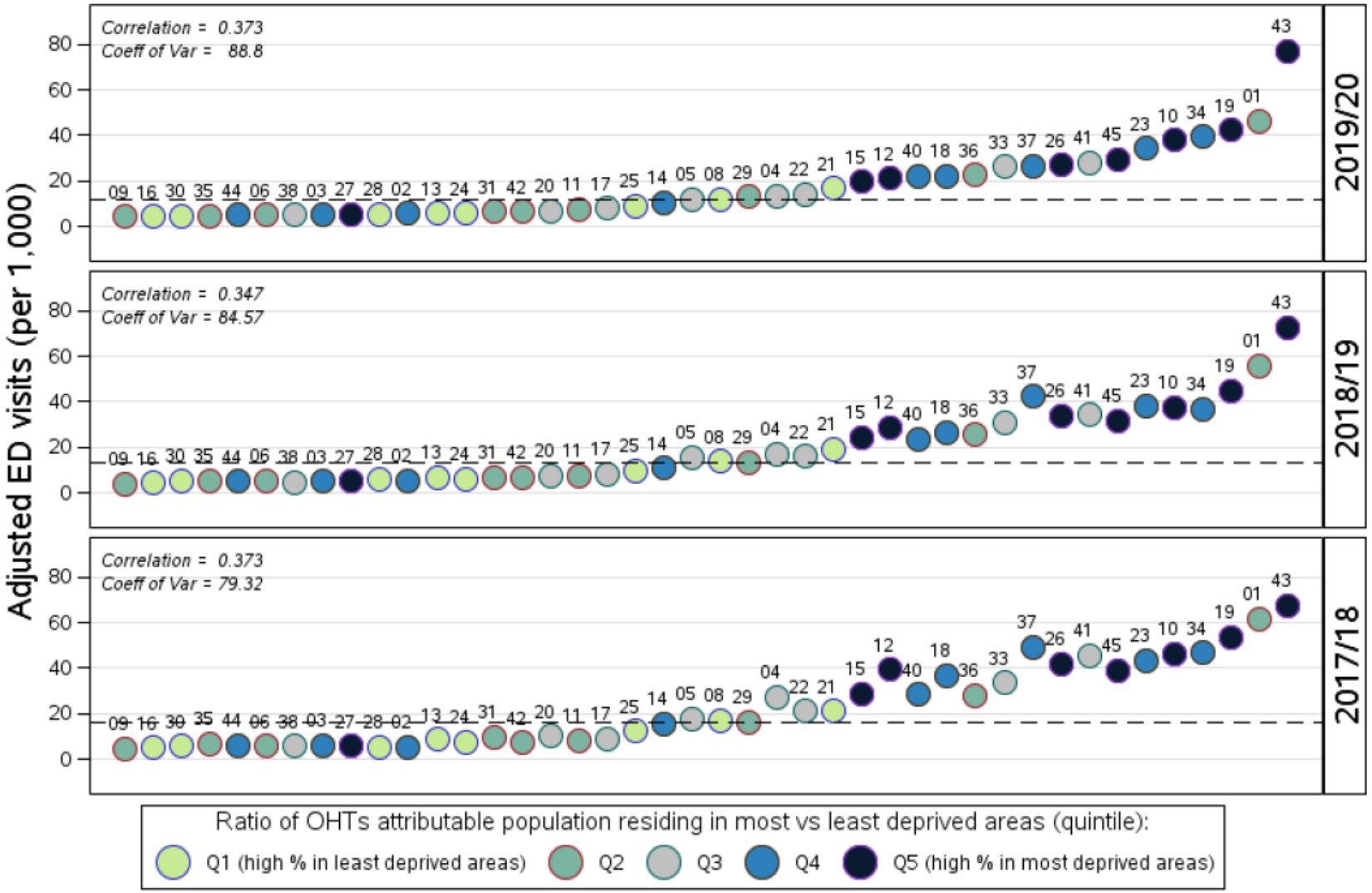
INDICATOR DEFINITIONS

Indicator	Definition	Quadruple Aim
ED visits best managed elsewhere	Number of low-acuity, unscheduled visits to emergency departments for conditions that could be treated in a primary care setting among persons aged 1 to 74 years of age	Patient Experience (access) & Cost/Efficiency
Hospitalizations for ACSCs	Number of hospital admissions for ambulatory care sensitive conditions (including grand mal status and other epileptic convulsions, chronic obstructive pulmonary disease, asthma, congestive heart failure and pulmonary edema, hypertension, angina, diabetes, and lower respiratory illness) among persons aged 0 to 74 years of age	Health Outcomes
Continuity of care	Average proportion of an attributed person's physician visits that was with their most regularly seen doctor	Patient Experience
Frequent (4+) emergency department visits for help with MHA	Proportion of individuals with an unscheduled emergency department visit that had 4 or more emergency department visits within a 365-day period	Patient Experience & Cost/Efficiency (Health Service Use)
Repeat emergency visits for MHA (within 30 days)	Proportion of unscheduled emergency department visits for care for MH conditions with a second unscheduled emergency department visit for MH or substance abuse within 30 days	Patient Experience & Cost/Efficiency
First contact in the emergency department for MHA	Proportion of incident unscheduled emergency department visits for MHA-care where the patient had no prior MHA-related contact (hospitalization, emergency department or physician visit)	Patient Experience (Timely Access) & Cost/Efficiency
ALC days	Proportion of days in acute inpatient care that were spent in alternate level of care (ALC)	Patient Experience & Cost/Efficiency
PAP Screening	Proportion of screen eligible patients (women 23-69 years of age) up to date with Papanicolaou (Pap) tests	Patient Experience (access)
Mammogram	Proportion of screen-eligible patients (women 52-69 years of age) up to date with a Mammogram	Patient Experience (access)
Repeat fall-related emergency visits, among those identified as frail	Proportion of older adults >65 years of age identified as being frail that had 2 or more unscheduled emergency department visit for fall-related injuries	Health outcome
Proportion of decedents receiving palliative home care in the last 90 days of life	The proportion of decedents that had one or more palliative home care services (excluding care management and placement services) in their last 90 days of life	Patient Experience (access) & Health Outcome
Proportion of decedents with 1 or more emergency department visits in the last 30 days of life	The proportion of decedents that had one or more unplanned emergency department visits in their last 30 days of life	Patient Experience (access) & Cost/Efficiency

Spider Diagrams for Total Population Indicators



Distribution of risk-adj ED visits managed elsewhere, according to OHT



Note: Dashed lines reflect total population (crude) average in given year

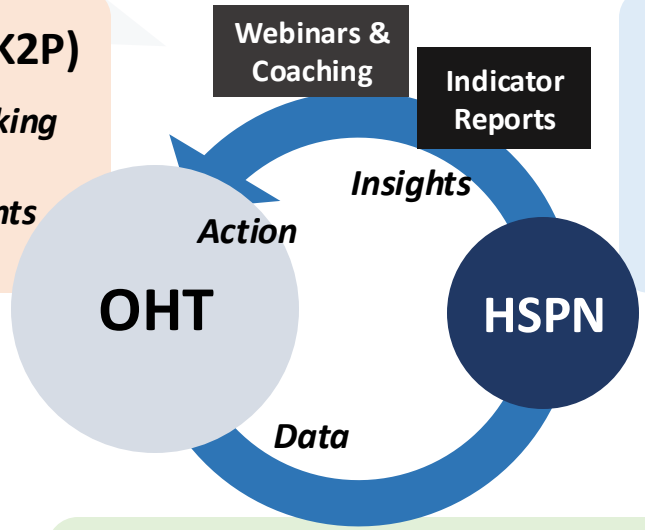
Formative qualitative assessment of the A&F program

Continuous improvement of HSPN evaluation cycles

Comparative Performance Indicators to 58 OHTs

Knowledge to Practice (K2P)

- ***Prioritization & Decision-making***
- ***Co-design & Implementation***
- ***Sustainability of Improvements***



Data to Knowledge (D2K)

- ***Data Analysis & Visualization***
- ***Interpretation of Findings***
- ***Feedback Delivery Modalities***

Questions:

- *How are OHTs **using or planning to use** HSPN indicator reports in practice?*
- *To what extent are the data visualizations within the HSPN reports **understandable and actionable**?*

Practice to Data (P2D)

- ***Indicator Selection***
- ***Data Sources***
- ***Data Quality***

Questions:

- *What are the key **strengths and opportunities for improvement** in how reports are designed and delivered to OHTs?*
- *What **implementation barriers** are OHTs facing when acting upon data insights?*

Adapted from Friedman et al

DATA COLLECTION AND ANALYSIS METHODS

HSPN-OHT Indicator Reports

- ***Indicators***
  - *Total Population Indicators*
  - *Mental Health and Addiction*
  - *Older and Frail Adults*
  - *Palliative Care*
  - *Collaborative Quality Improvement Indicators*
- ***Stratifications***
  - *Material Deprivation*
  - *Primary Care Patient Enrolment Model*
  - *CIHI Pop Grouper Health Profile Categories (HPCs)*
  - *BC Health System Matrix Segments*

Think-aloud technique

Cognitive Interviews

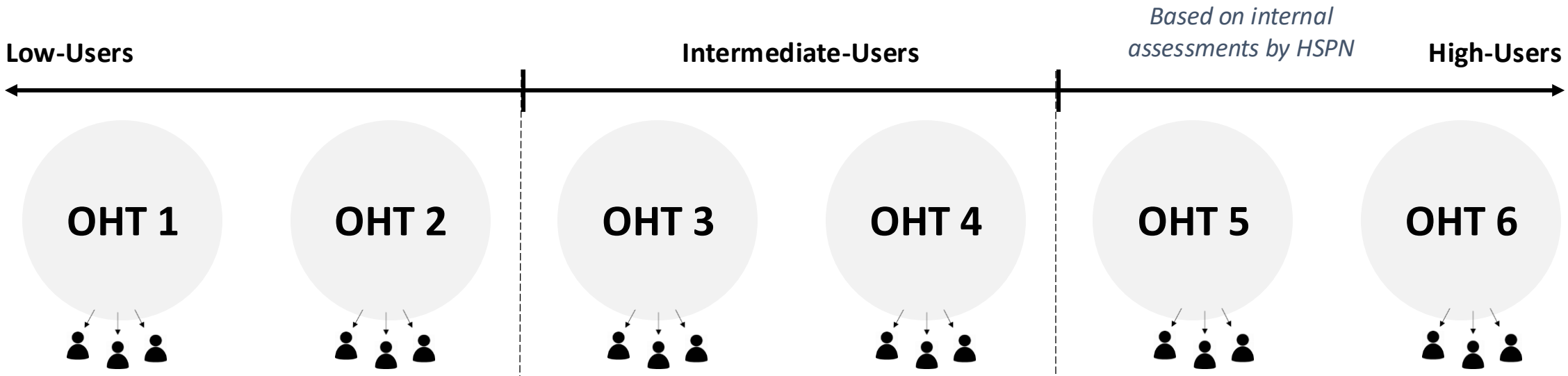
- ***Interview Guide Topics***
  - *Indicator Selection*
  - *Data Analysis and Visualization*
  - *Stratifications*
  - *Interpretations of Findings*
  - *Delivery Modalities*
  - *Implementation Barriers*

Rapid Qualitative Analysis

- ***Findings***
  - *Strengths, weaknesses, and opportunities for improvement in the reports - Stanford Lightning Report Method (interview transcripts & recordings analysis)*
  - *Summary of recommendations for future HSPN reports*
  - *Insights about Audit & Feedback at the meso/organizational level*

OHT Sampling

Case-study



3 interviewees per OHT:

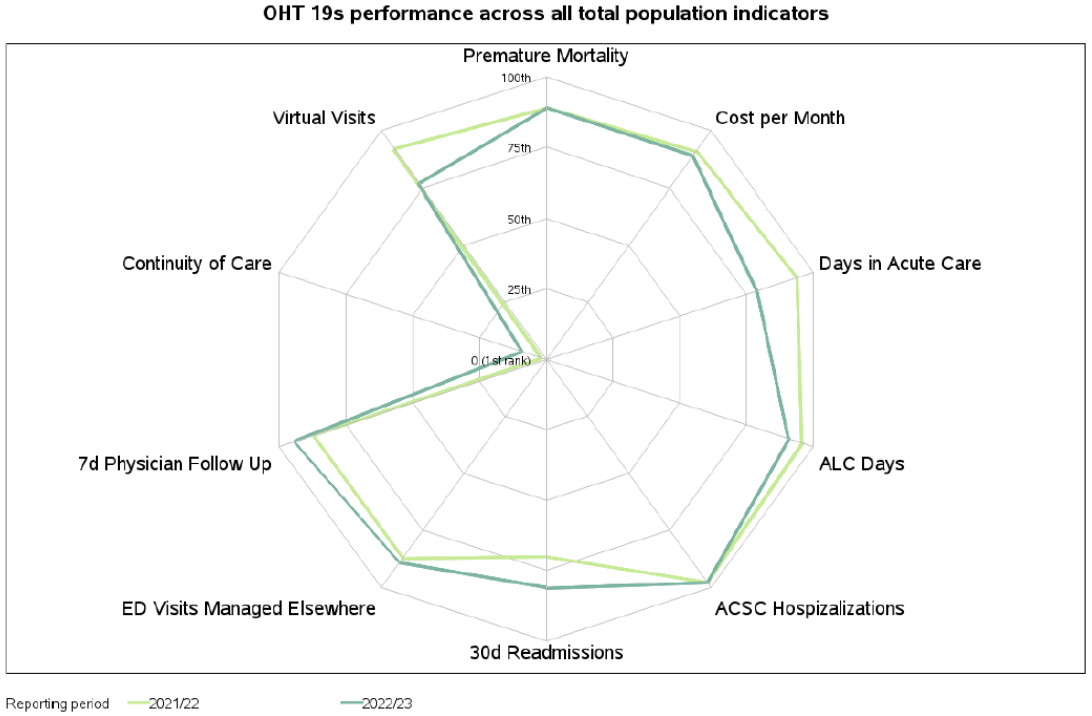
- 1 Executive Director
- 1 Working Group Lead
- 1 Data Analyst/Evaluation Lead

COGNITIVE INTERVIEWS

Spider Diagrams for Total Population Indicators

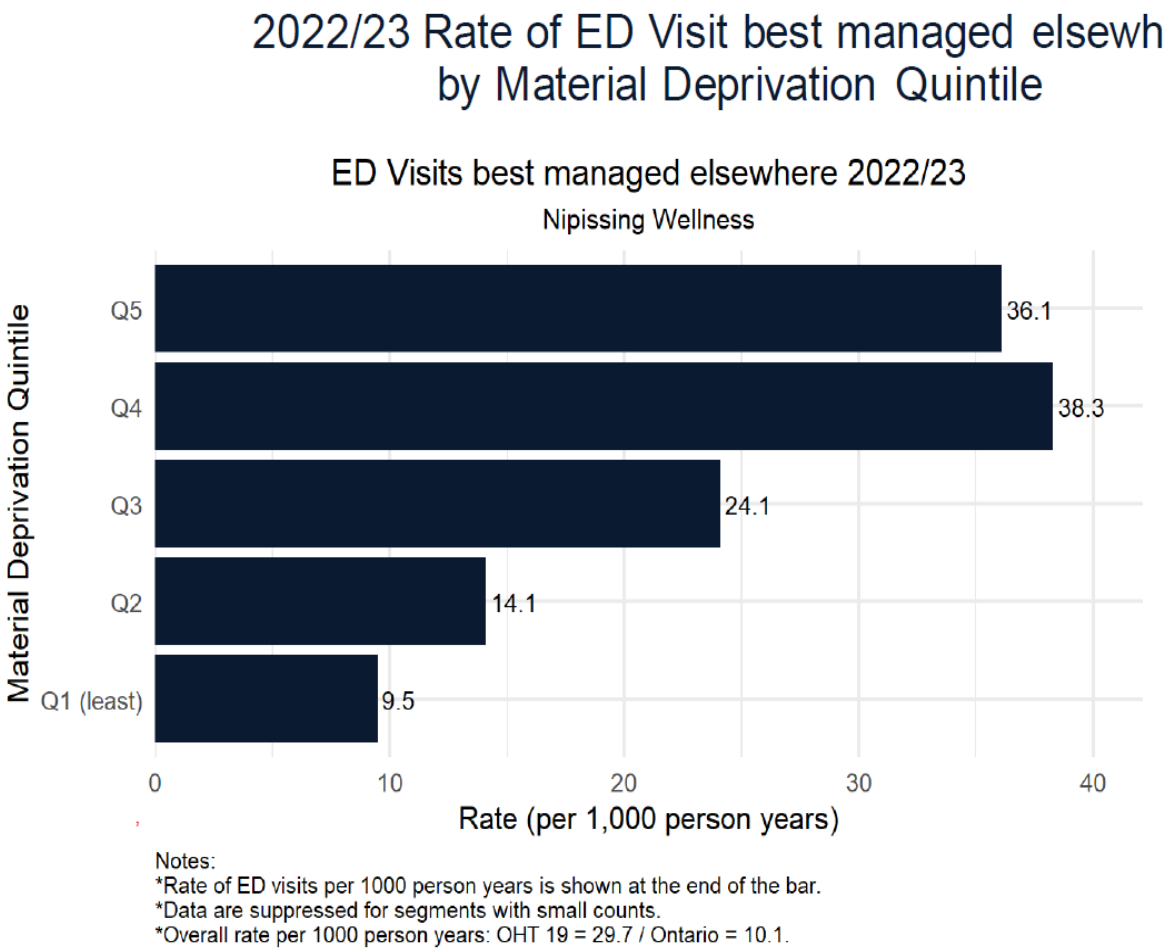
To what extent does your OHT make use of the indicator report?

- Have you already made much use of the report?
- Do you expect to use the reports in the future?
- Who uses the reports in your OHT? For what purposes?



- Are the spider diagrams easy to understand?
- Are the OHT percentile rankings within the spider diagrams useful/actionable?

COGNITIVE INTERVIEWS



- What is the most/least useful stratification to your OHT? Why?
- How were/are/will findings from these stratifications (be) used in your OHT?

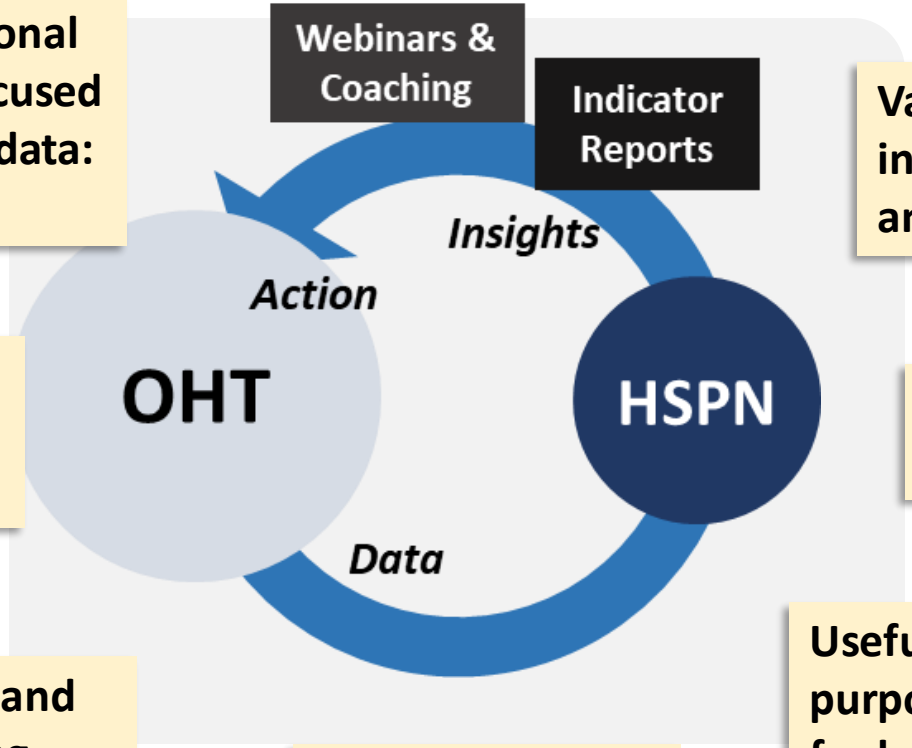
Data Analysis Report Template

(adapted from the Stanford Lighting Report Method by Brown-Johnson et al)

LHS Cycle Phase	Topic	Strength (what has worked well for OHT)	Opportunities (what needs to change)	Insights (suggestions for improvements)
P2D	Indicator Selection			
	Data Source and Quality			
D2K	Data Understandability			
	Data Usability & Actionability			
	Delivery Modalities & Frequency			
K2P	Decision-Making Based on Data Insights			
	Implementation of Action Plans			

Formative Evaluation: Population Health Indicators - OHTs

Foster organizational culture that is focused on performance data: "socialization"



Validation of internal data analysis

Appropriateness of indicator selection and definitions

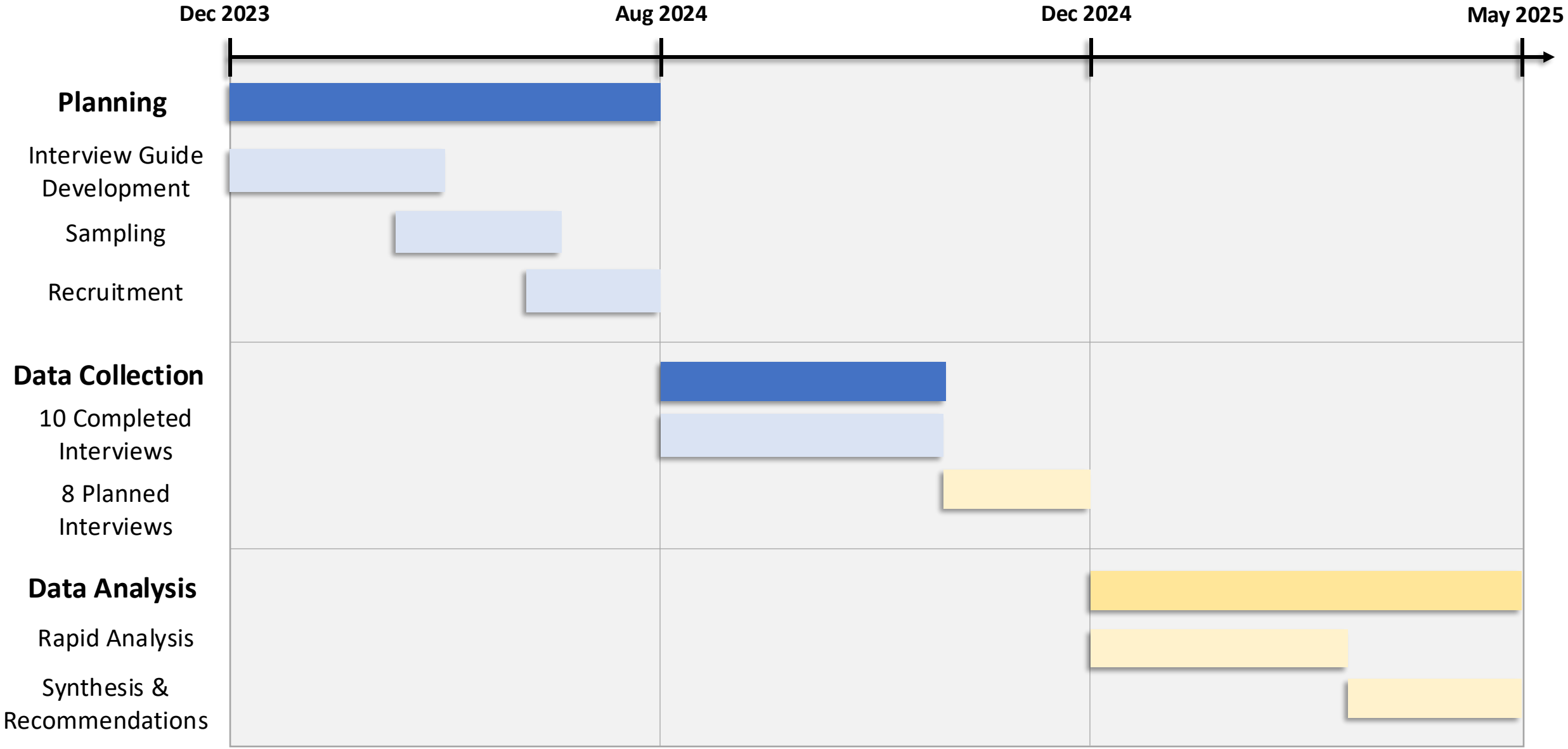
Need for data granularity

Useful resource to have and go back to/consult during team discussions: "single package, easy-to-understand"

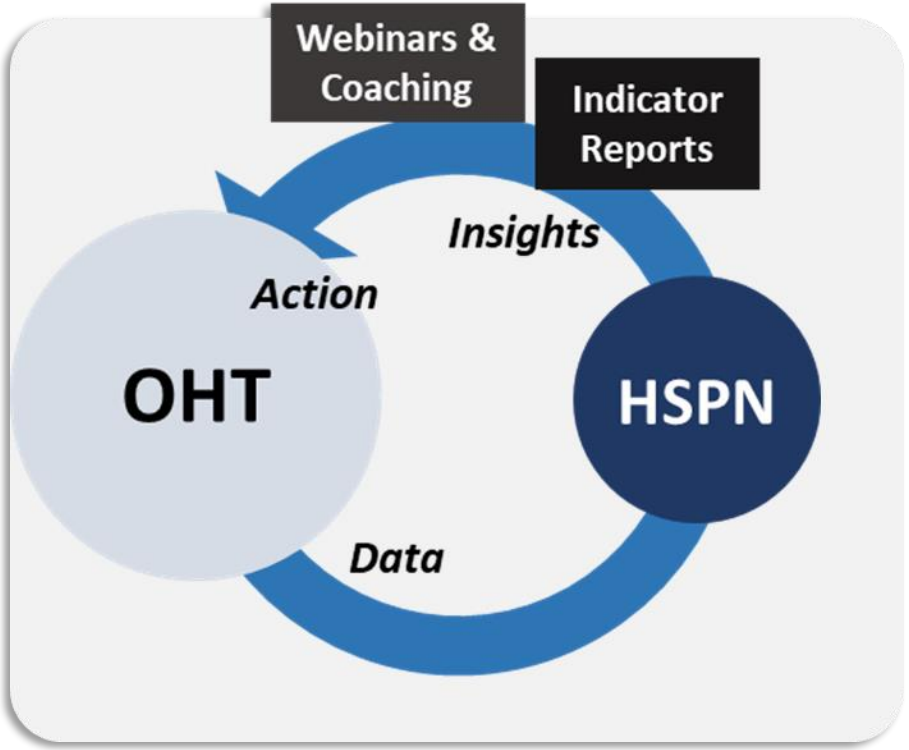
"So what? What should we do about this?"

Useful for reporting purposes (especially for lower-maturity OHTs)

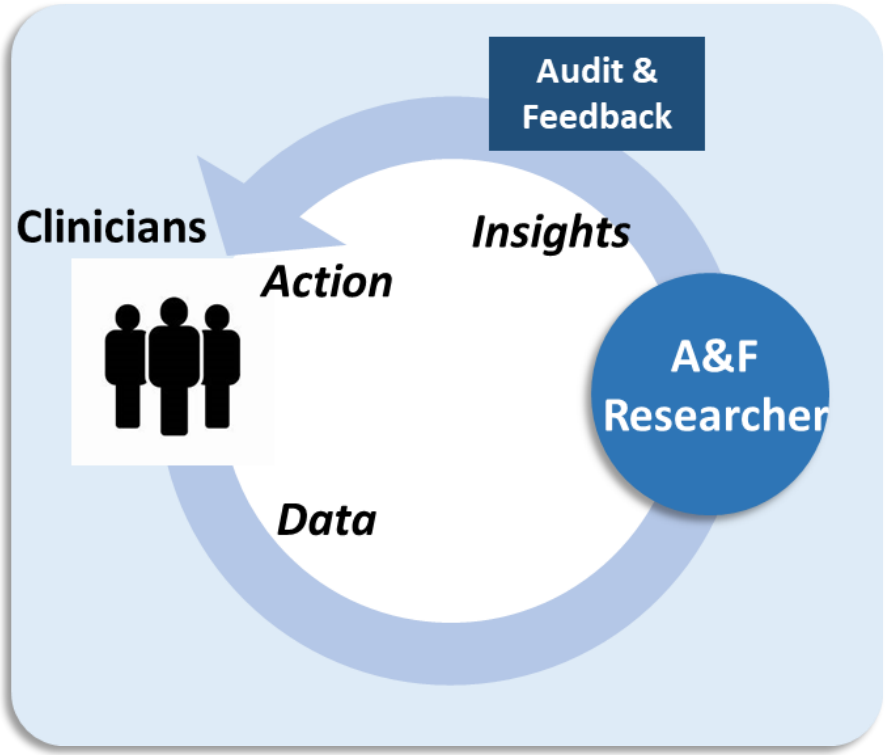
Timeline


Dec 2023
Aug 2024
Dec 2024
May 2025
Planning
Interview Guide Development
Sampling
Recruitment
Data Collection
10 Completed Interviews
8 Planned Interviews
Data Analysis
Rapid Analysis
Synthesis & Recommendations

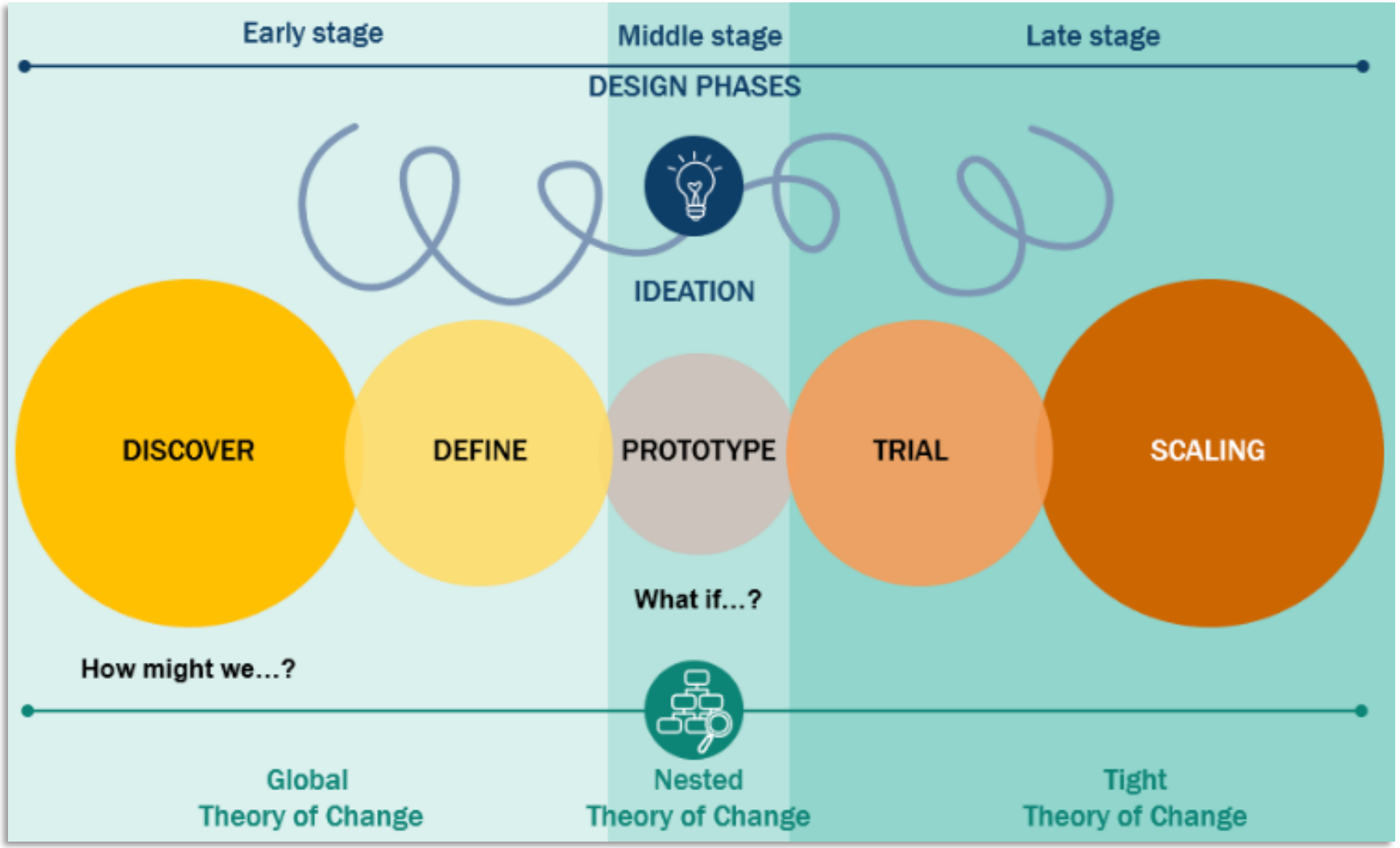
Population Health Indicators – OHTs
Organizational



Clinician Audit & Feedback
Individual



	Organizational	***Individual***
		
Lead Time	Long	Short
Indicator Selection	Broad	Narrow
Heterogeneity of Recipients	High	Low
Targeted Behavior Change	General	Specific
Effect Measurability	Low	High



The Australian Center for Social Innovation (TACSI) & Clear Horizons model for integrating TOC for design

Questions, comments, feedback?

Thank you

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