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# Performance Measurement and Reporting in Primary Care

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June 2016

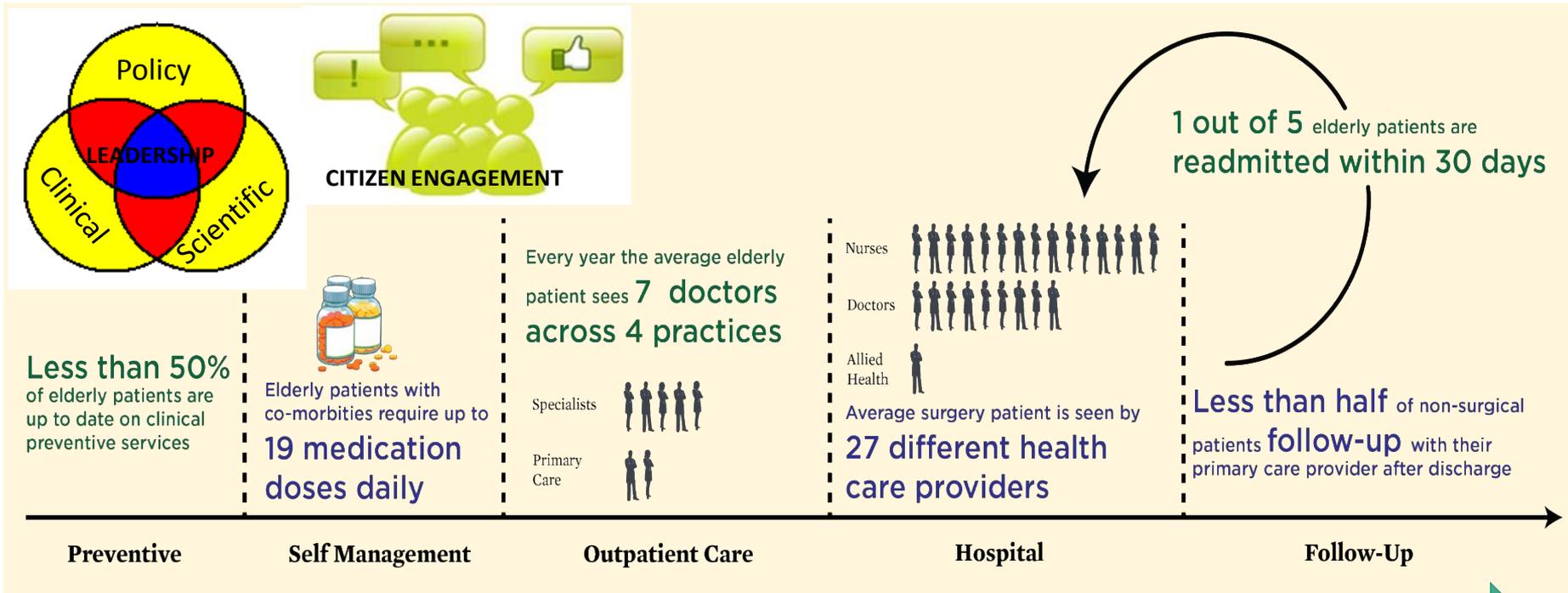
# General Uses of Performance Measurement

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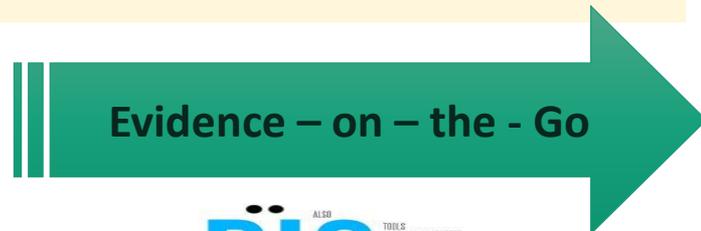
- Practice Quality Improvement
- Pay for Performance
- Reporting and Accountability
- Research to Improve the understanding of best practices

# Pan-Canadian Network – Towards a Continuously Learning Health Care System

## Representative timeline of a patient's experience in the health care system



**International comparisons**



# Current focus: Measurement of health and healthcare indicators

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- “A health indicator is a single measure that is reported on regularly and that provides relevant and actionable information about population health and/or health system performance and characteristics. An indicator can provide comparable information, as well as track progress and performance over time”

(Canadian Institute for Health Information, 2016)

- Indicators should:
  - be important and actionable;
  - capture the essence of the issue;
  - have a clear and accepted normative interpretation;
  - be valid and reliable;
  - use data that are available at national, provincial, territorial, and regional and sub-regional levels, or which are feasible to develop”

(Population Health Promotion Expert Group, Healthy Living Issue Group, & Pan-Canadian Public Health Network, 2010).



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# Primary care performance measurement: Examples of indicators

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- Lots of work happening across provincially, nationally, the world.
  - CIHI your health  
<http://yourhealthsystem.cihi.ca/indepth?lang=en#/>
  - QOF  
<http://qof.hscic.gov.uk/search/>
  - UK health profiles  
[http://www.apho.org.uk/default.aspx?QN=P\\_HEALTH\\_PROFILE\\_S](http://www.apho.org.uk/default.aspx?QN=P_HEALTH_PROFILE_S)
  - My Healthy Communities  
<http://www.myhealthycommunities.gov.au/>



# Performance Measurement and Reporting

## CIHI's Strategic Plan 2016 to 2021

### Vision

**Better data.  
Better decisions.  
Healthier Canadians.**

### Mandate

**Deliver comparable and actionable information to accelerate improvements in health care, health system performance and population health across the continuum of care**

### Strategic goals



**Be a trusted source of standards and quality data**



**Expand analytical tools to support measurement of health systems**



**Produce actionable analysis and accelerate its adoption**

### Priority themes and populations

#### Themes

Patient experience  
Quality and safety  
Outcomes  
Value for money



**Health system performance**

#### Populations

Seniors and aging  
Mental health and addictions  
First Nations, Inuit and Métis  
Children and youth



### Foundation



**Our people**



**Stakeholder engagement and partnerships**



**Privacy and security**



**Information technology**

**Values**

**Respect • Integrity • Collaboration • Excellence • Innovation**

# Related CIHI initiatives & National Considerations

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- Measurement & Reporting
  - Pan-Canadian Primary Health Care Indicators, 2012
  - Chartbooks/Reports and Accompanying Products
  - Tools: Your Health System, OECD, Health Inequalities,
  - HSP Measurement Framework
- Data and Data Standards
- Capacity Building Partnerships
- Measurement
  - Core Set of Pan-Canadian Indicators at all system levels
  - Evolution of PHC indicators
- Reporting, Patient Learning System
  - Lessons to inform future work
- Data – Collect once, use many
- Patient/Citizen Engagement & Partnerships



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# How do the provinces compare?

Despite some variation among provinces, access to timely primary care in Canada is significantly lower than the international average in all reporting provinces.

Proportion of primary care practices who

	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	N.L.	Can.	CMWF avg.
Were able to provide a <b>same- or next-day</b> appointment to <i>almost all or most</i> of their patients	56%	53%	54%	52%	66%	34%	45%	56%	51%	53%	72%
Have an arrangement where patients can see a doctor or nurse if needed when the practice is closed ( <b>after hours</b> ) without going to the hospital emergency department	31%	52%	43%	26%	67%	37%	39%	41%	33%	48%	75%

Compared with the CMWF average results

● Above average 
 ● Same as average 
 ● Below average

# How do the provinces compare?

Most provinces are below the CMWF average in receiving and reviewing data on clinical performance, though variation is substantial in preventive care monitoring.

Physicians who **routinely** receive and review data on

	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	N.S.	N.L.	Can.	CMWF avg.
Clinical outcomes	21%	23%	26%	26%	32%	9%	33%	23%	15%	23%	51%
Surveys of patient satisfaction and experiences with care	11%	21%	31%	23%	24%	7%	11%	19%	10%	17%	47%
Percentage of patients who have received recommended preventive care	32%	23%	25%	38%	72%	6%	13%	26%	22%	37%	38%

Compared with the CMWF average results

- Above average
- Same as average
- Below average

# Challenges with current work

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- “Indicator chaos” – but indicators without context may not help improvement
- Little work on measuring attributes of high quality primary care—especially in the area of equity
- Specific disease focus does not capture breadth of primary care
- Vulnerable and complex population groups

**Figure 1. Typology of complex patients.**

**Medical Complexity**

Discordant conditions  
Chronic pain  
Medication intolerance  
Unexplained symptoms  
Cognitive issues

**Socioeconomic Factors  
Exacerbating Medical  
Condition**

Inability to afford medications, transportation  
Family stressors  
Poor health care literacy

**Mental Illness  
Exacerbating Medical  
Condition**

Depression leading to poor medication adherence  
Addiction  
Anxiety confusing clinical picture

**Patient Behaviors  
and Traits**

Demanding (tests, medication)  
Argumentative (with staff or physicians)  
Anxious (regarding symptoms)



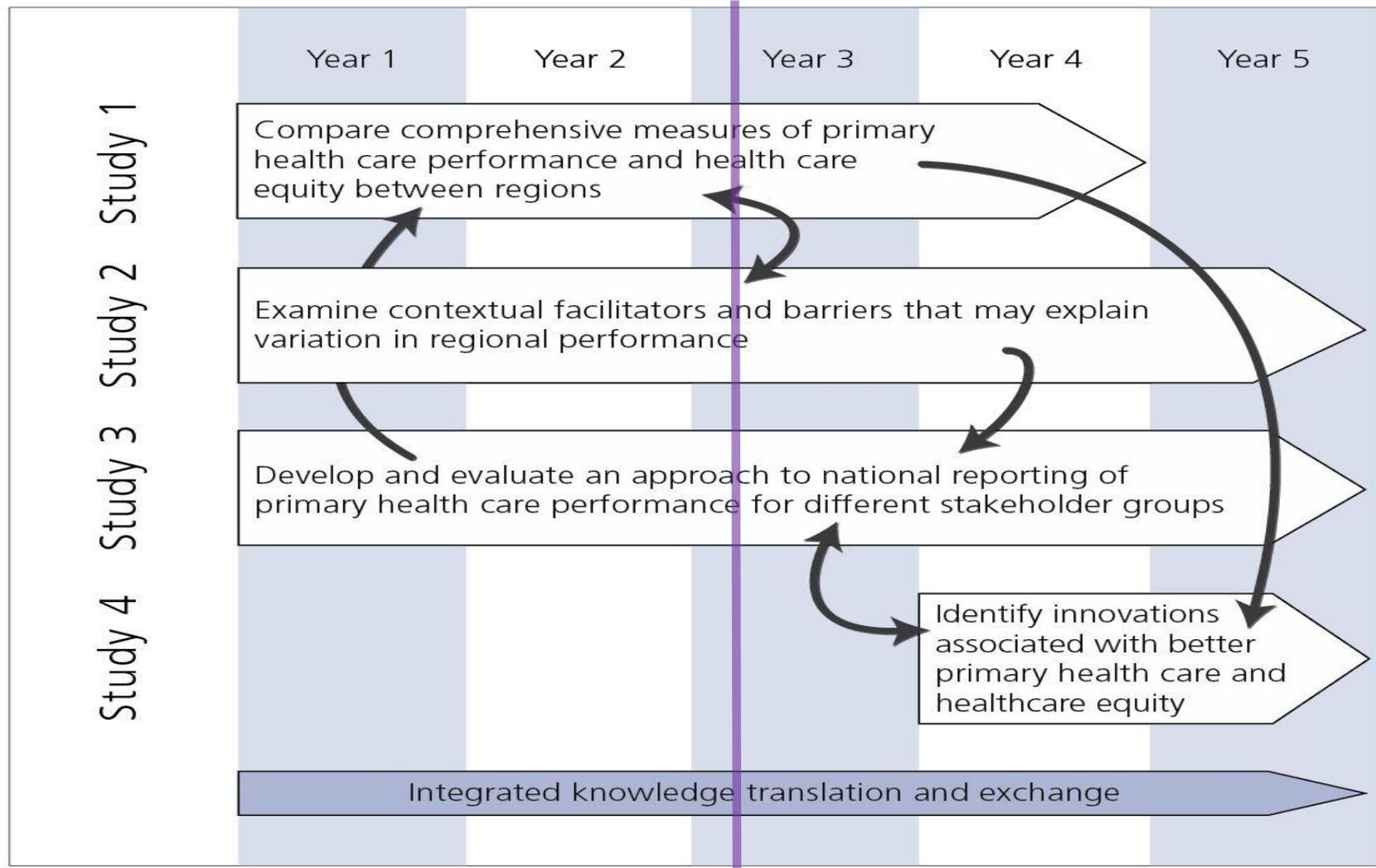
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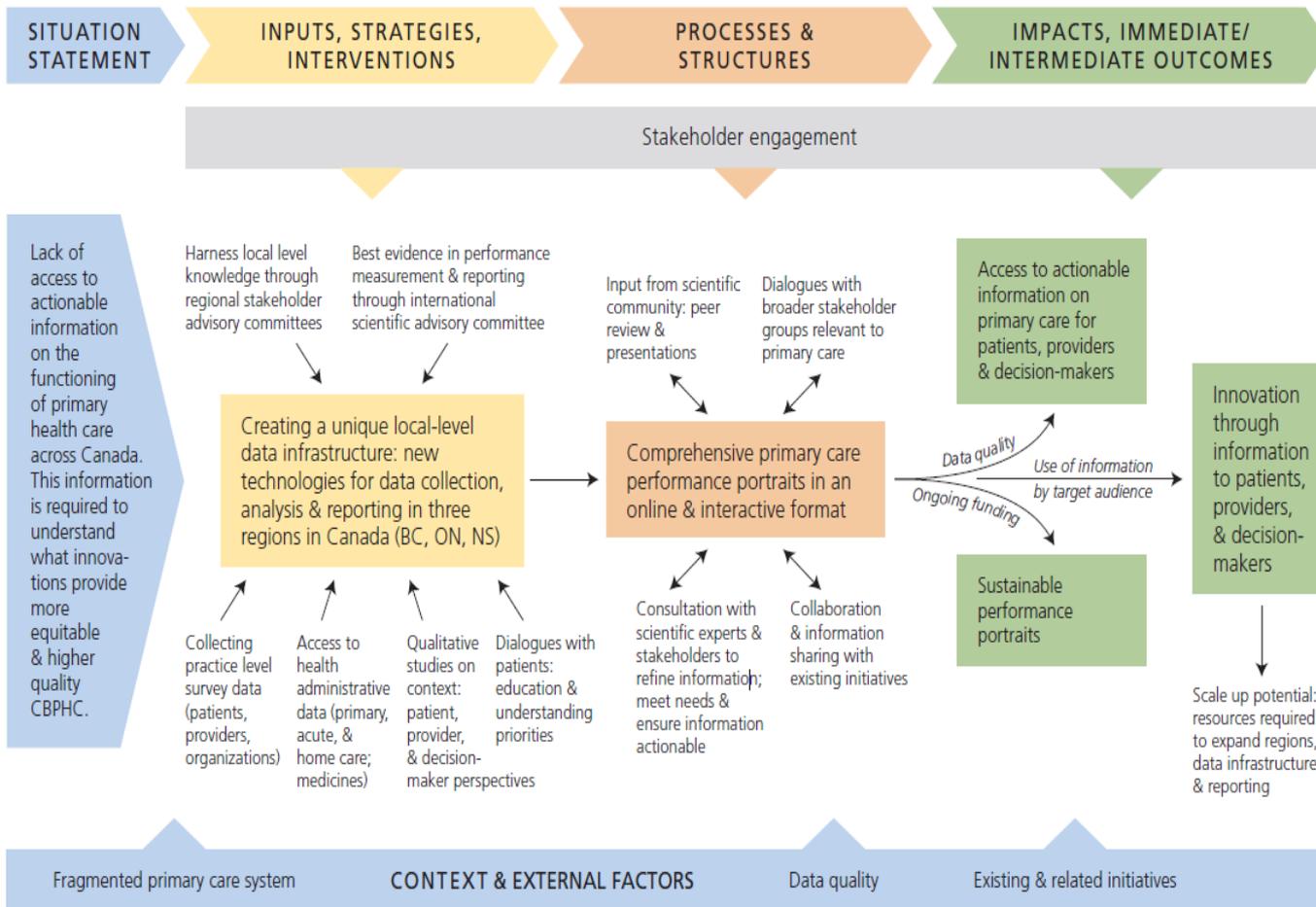
MEASURING AND IMPROVING THE PERFORMANCE OF PRIMARY HEALTH CARE IN CANADA

**Goal:** To demonstrate the feasibility and usefulness of comparative and comprehensive CBPHC performance measurement and reporting to inform innovation of the Canadian PHC system.

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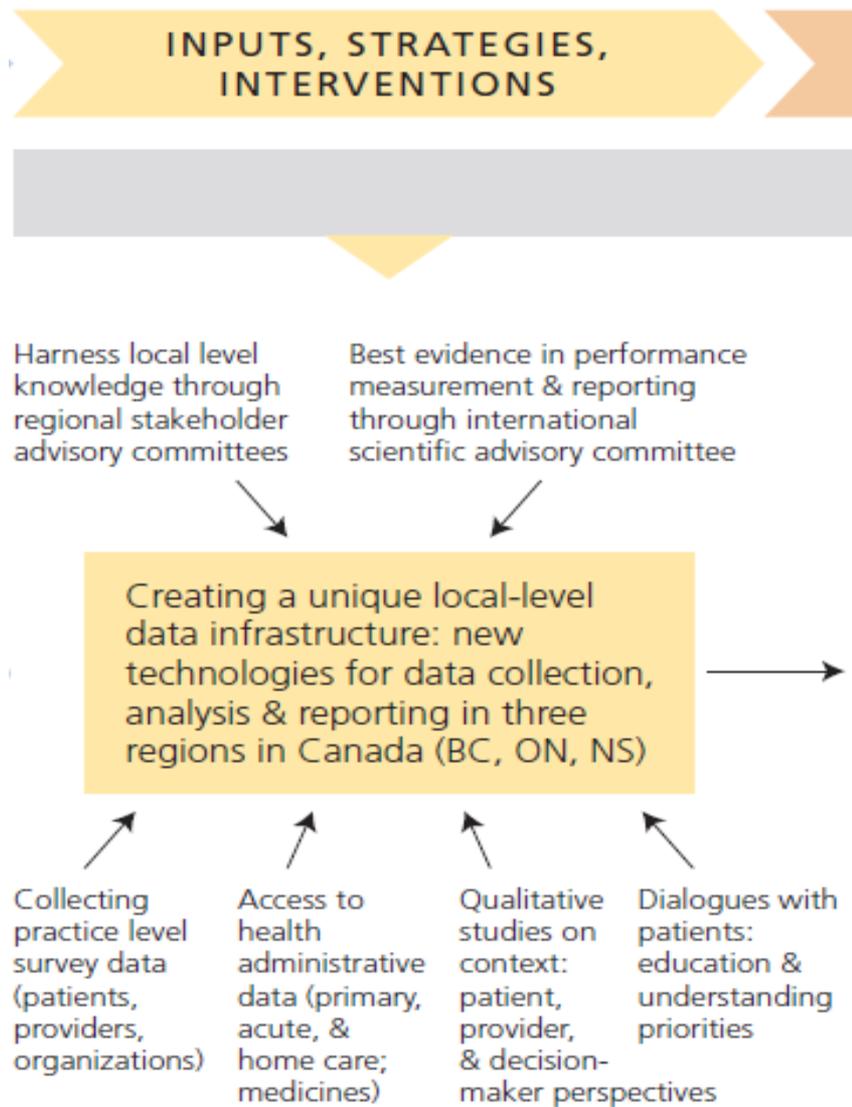
# Where we're going...



- Comprehensive performance portrait
- Datasets from individual study components
- Integrated dataset for comprehensive comparisons of performance across study regions

**ASSUMPTION** Providing access to actionable information on the functioning of primary care will result in innovation in primary care delivery

# How we get there...

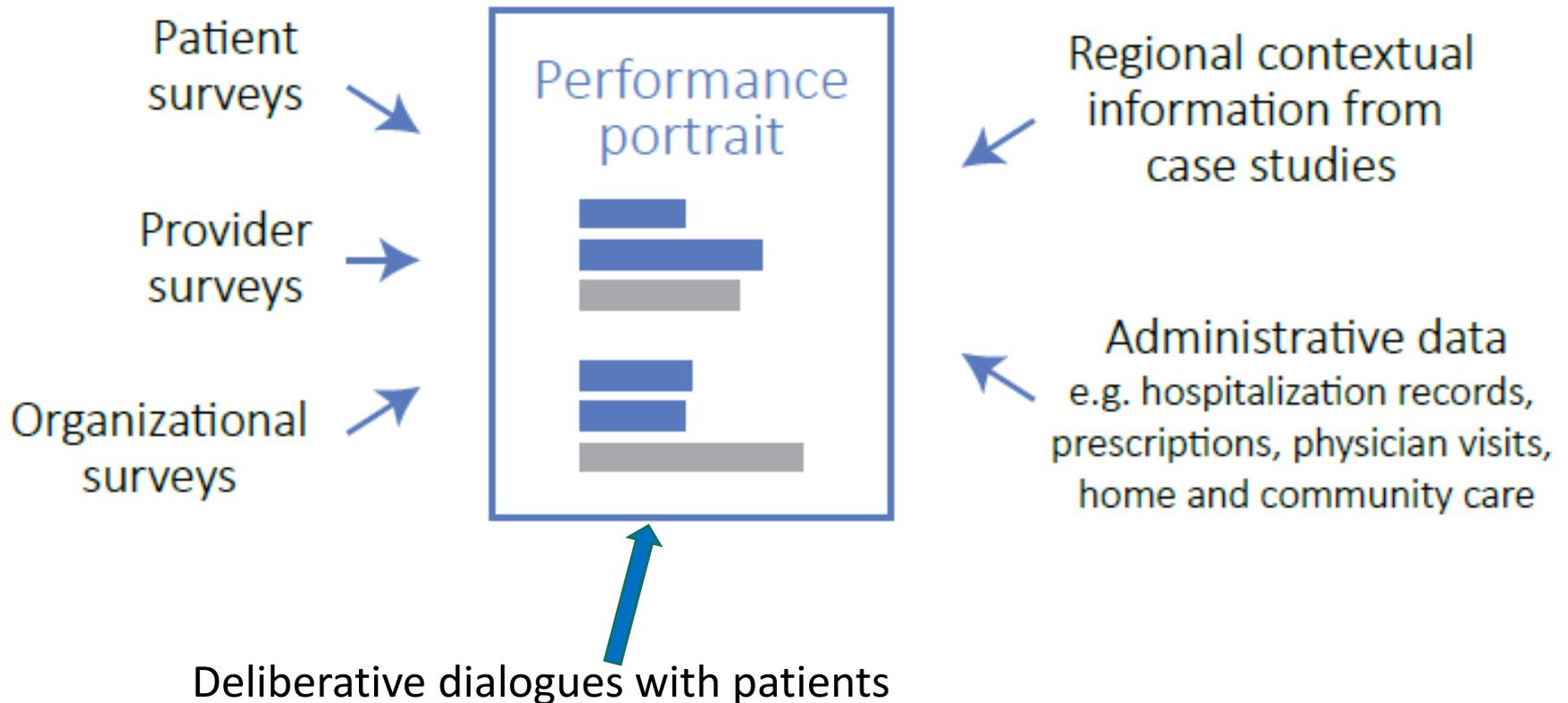


- Practice surveys
- Case studies
- Deliberative dialogues
- Linkage to health administrative data
- Vulnerability index
- Population segmentation
- Stakeholder engagement throughout



# Developing a primary care data infrastructure

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# Our study fills an important knowledge gap

## CIHI Primary Health Care (PHC) Indicators Chartbook: An Illustrative Example of Using PHC data for Indicator Reporting- *released 28 April 2016*

2012 Primary Health Care indicators excluded	Intended audience, 2012	Proposed data source in 2012	Rationale for exclusion from this chartbook
Scope of PHC Services	Policy-makers	Canadian Practice-Based Primary Health Care Survey Tools: Organization component	Pan-Canadian practice-based survey data not available
Uptake of Information and Communication Technology (ICT) in PHC Organizations*	Providers		
Collaborative Care With Other Health Care Organizations	Policy-makers		
PHC Needs-Based Planning	Policy-makers		
PHC Provider Full-Time Equivalents	Providers		
Point-of-Care Access to PHC Client/Patient Health Information	Policy-makers	Canadian Practice-Based Primary Health Care Survey Tools: Provider component	
PHC Team Effectiveness Score	Providers		
Unnecessary Duplication of Medical Tests Reported by PHC Providers	Providers		
PHC Services Meeting Client's/Patient's Needs	Providers	Canadian Practice-Based Primary Health Care Survey Tools: Patient component	
PHC Support for Self-Management of Chronic Conditions	Providers		
Wait Time for Immediate Care for a Minor Health Problem	Providers		



# Inputs, Strategies, Interventions

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- **Creating the local level infrastructure**
  - Data collection at regional level- practice based surveys:
    - NS: **38** (30%); ON: **26** (41%); BC: **24** (41%); case studies (key informant interviews, focus groups with clinicians)
    - Goal is **20 practices** (minimum) per region
  - Data linkage (survey and administrative data)
- **Early findings: Context variation** (e.g., policy, practices) for primary care reform are different in NS, BC, ON. BC is focused on operations and implementation, less on research; 30% of documents about expanding number and types of providers and 35% about multi interventions; NS [Ruth]
- **Strategy for Sustainability: Innovative technologies to collect data**
  - Automated patient surveys (robocall, email)
  - Online surveys
  - Old school (face-to-face meetings)



# Impacts and Outcomes

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- **Sustainable Regional Performance Portraits**
  - Work to be done: identify key components (population segments, dimensions of primary care performance, analysis to present data on each component)
- **Fair comparison of performance**
  - Work to be done: link data, statistical analysis (e.g. GEE)
- **Recommendations**
  - Work to be done: next steps for continued development of platform for performance measurement and reporting; produce actionable information for clinicians and policy makers; opportunities for scale-up of information system

## Processes & Structures

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- **Comprehensive performance measurement portrait-** Regional level
- **Early findings: Tailoring to audience-**using Deliberative Dialogues with patients, Case Studies to refine needed on multiple levels (policy, within sites and practices, across team, with individuals)
- **Structure for sustainability:** online and interactive format; could be used across different regions, engagement of practices-defining value to patients, clinicians, decision-makers



# Principles for reporting- lessons from the UK

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- **Explicit clarity of purpose and audience**
- **Market research:** Iterative and ongoing work to examine factors that increase usage of performance information
- **Indicators for the public:** thought should be given to a range of complementary methods for displaying information, as well as online resources. Such activity may be more effective around a 'trigger point', such as someone moving house.
- **Indicators for professionals :**The term 'scorecard' is divisive - recommend avoiding this terminology if a key purpose is for improvement.

Low awareness, among GPs in particular, of the main websites currently containing quality indicators for general practices. We recommend market research and engagement to understand how those working in general practice make use of online information.

- **Composite scores and population grouping :** Advise against composite measures for a public or professional audience.

Users should be able to select from a full menu of indicators by various groupings. Such an approach could readily be seen as responsive to the needs and aspirations of patients themselves, and thus offer additional credibility with the public. Such groupings could include age groups or other population groupings, or groupings by clinical condition or service.

Selection could also include comparison, allowing in part for context.



# Principles for reporting- what we learned in BC, ON, NS (preliminary)

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- Workshop, regional stakeholder advisory committee, deliberative dialogues with patients
  - Importance of comparisons with other regions

▶ Flexible

▶ Comprehensive

▶ Interactive

▶ Accurate

▶ Timely

▶ Easy to access

▶ Support providers & decision makers

▶ Comparative: cross-sectional & longitudinal

▶ Data for learning & action

▶ Integration with other systems e.g. EMRs

▶ Mechanism for user feedback

▶ Support education



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# Ideas for organizing practice-based portrait: The patient's medical home: College of FPs

*Meeting the following 10 goals transforms a family practice into a Patient's Medical Home:*



## **1. Patient-Centred Care**

A PMH provides care that is focused on the individual patient and tailored to his or her specific needs.



## **6. Continuity of Care**

A PMH provides continuity of care, continuity of relationships, and information for its patients.



## **2. Personal Family Physician**

The patient's own family doctor, the most responsible care provider, is at the core of the PMH.



## **7. Electronic Medical Records**

A PMH maintains and meaningfully uses electronic medical records (EMRs) for its patients



## **3. Team-Based Care**

A PMH offers a broad scope of services carried out by teams or networks of providers, including each patient's personal family physician



## **8. Education, Training, and Research**

A PMH serves as an ideal site for training medical students, family medicine residents, and those in other health professions. A PMH is also an ideal setting for carrying out medical research.



## **4. Timely Access**

A PMH ensures timely access to appointments within the practice. The PMH also coordinates timely appointments with services outside the practice.



## **9. Evaluation and Quality Improvement**

A PMH regularly evaluates the effectiveness of its services as part of its commitment to continuous quality improvement.



## **5. Comprehensive Care**

A PMH provides each of its patients with comprehensive family practice services. A PMH also meets and supports the public health needs of the community.



## **10. Internal and External Supports**

A PMH has strong internal support, from practice-appropriate administration. A PMH also is supported by governments, the public, and other health professions.



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# Practice-based portrait: The patient's medical home

## About this Portrait

This portrait provides an overview of information about a practice in NS. The information presented in this document was collected using an organizational and provider survey. This portrait is organized using the ten goals of the Patient's Medical Home.

## Executive Summary

The Patient's Medical Home (PMH) is the Canadian College of Family Physicians vision for the what the future family practice in Canada will be. (1) The information provided in this portrait shows your results compared to other participating practices in Fraser East and to all other practices in similar sites: Eastern Ontario, ON and Central Zone, NS. In order to become a PMH, family practices must strive to meet the following ten goals:



### 1. Patient-Centered Care



### 2. Personal Family Physician



### 3. Team-Based Care



### 4. Timely Access



### 5. Comprehensive Care



### 6. Continuity of Care



### 7. Electronic Medical Records



### 8. Education, Training, & Research



### 9. Evaluation & Quality Improvement

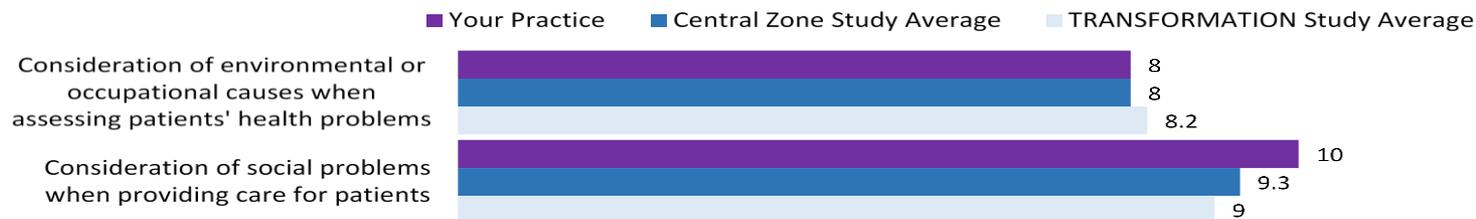


### 10. Internal & External Supports

# Practice-based Portrait: Core Dimensions of Patient's Medical Home

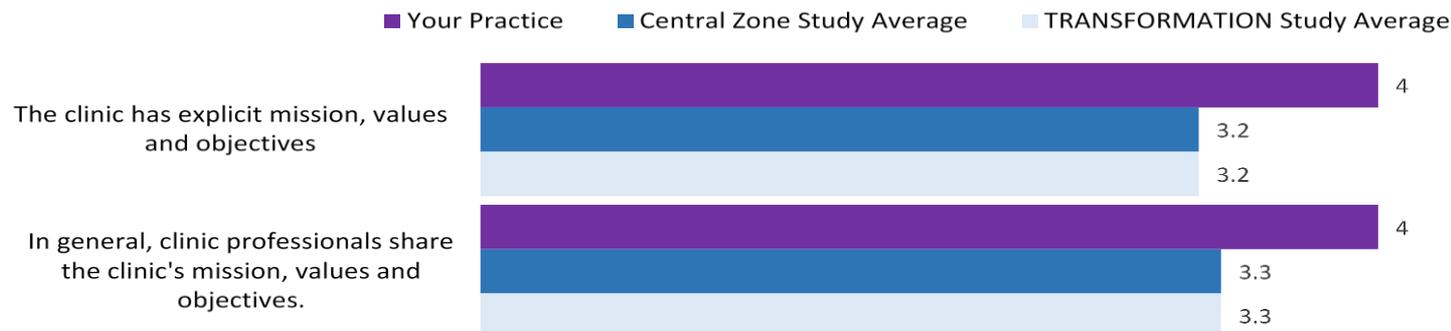
**Patient-Centered Care** means that the care provided to patient is focused on their individual needs.

On a scale of 1-10, how important are the following goals for your practice?



**Internal & External Support** pertains to support provided to the practice by both internal and external support systems. The Patient's Medical Home should also be supported by the public and other health professionals.

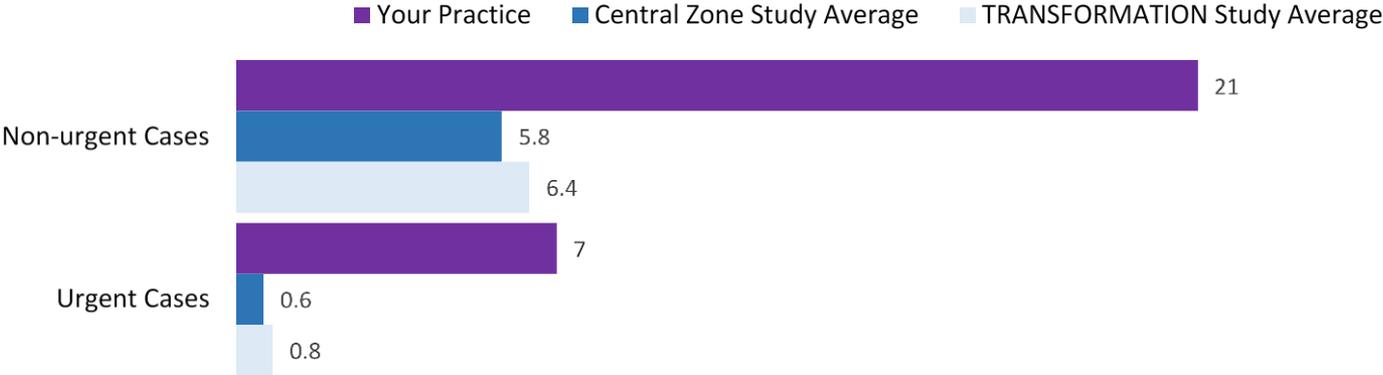
On a scale of 1-4 (with 4 representing total agreement), indicate your level of agreement with the following statements:



# Practice-based Portrait: Core Dimensions of Patient's Medical Home

**Timely Access** refers to the ease at which patients are able to access appointments within your practice and the extent to which your practice coordinates appointments with other healthcare services.

In general, how long is the delay between the patient making an appointment and the visit? (mean days)



On a scale of 1-10, how important is the accessibility of the services offered by your practice?



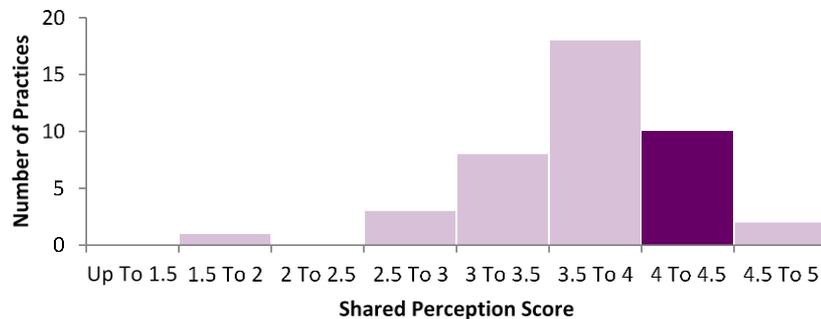
# Practice-based Portrait: Core Dimensions of Patient's Medical Home—Team Functioning

## How do our team climate scores compare with participating practices?

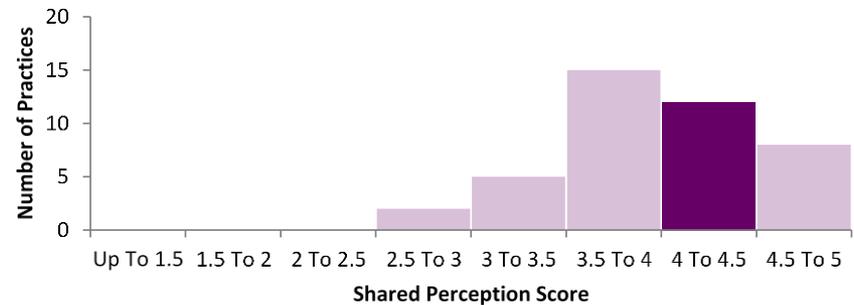
For each team climate dimension, a histogram is used to display the distribution of the overall dimension score from participating practices for which reliable data were available (N=42). The darker shaded area indicates where your overall team climate dimension score falls within the distribution.



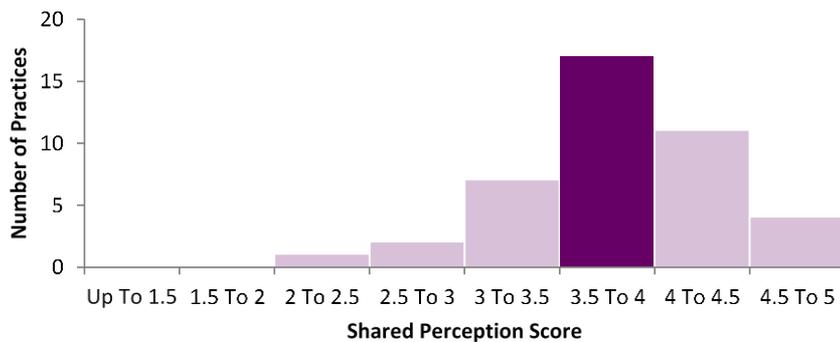
**Team Objectives**



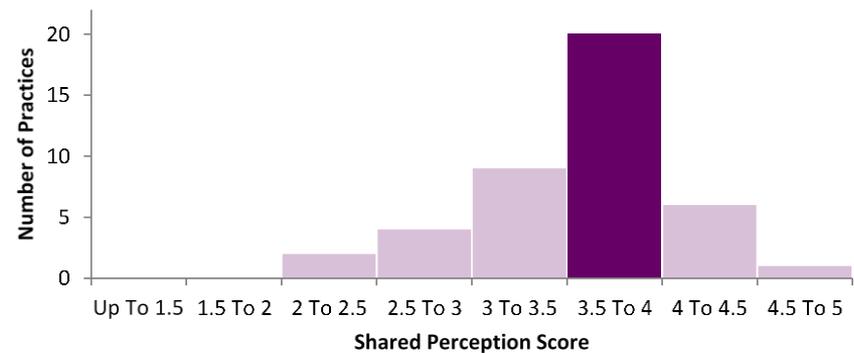
**Participative Safety**



**Support for New Ideas**



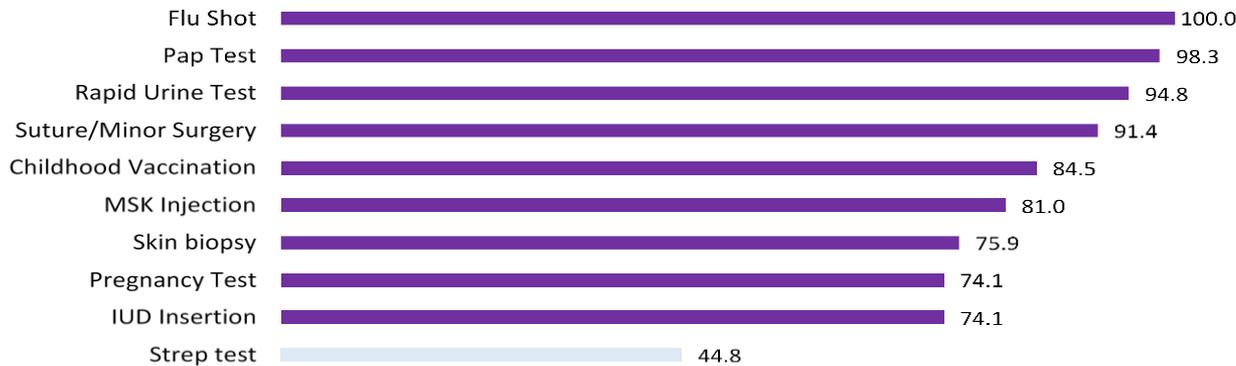
**Task Orientation**



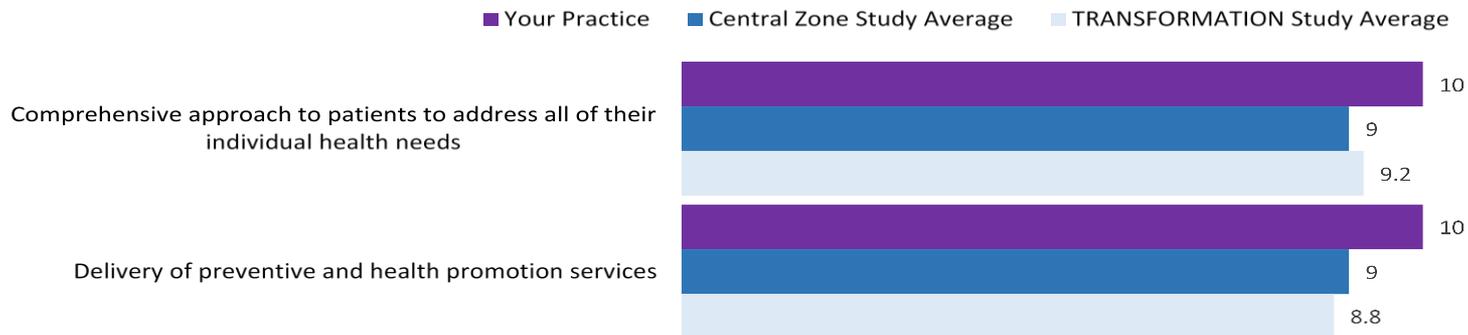
# Practice-based Portrait: Core Dimensions of Patient's Medical Home-Comprehensiveness

**Comprehensive Care** refers to the scope of services provided by the practice to meet both the patient and public health needs.

The graph belows shows the proportion of all practices in the TRANSFORMATION study that reported offering a given procedure. The procedures shaded in purple are those currently offered at your practice; the services in light blue are not currently offered.



On a scale of 1-10, how important are the following goals for your practice?



# Practice-based Portrait: Core Dimensions of Patient's Medical Home—Continuity

**Continuity of Care** refers to the consistency of care provided over time and the scope of services provided by the practice to meet both the patient and public health needs.

On a scale of 1-10, how important is it for your practice to maintain a continuous relationship with patients?



The table below shows which formal and informal arrangements you have with other hospitals and future coordination opportunities.

## With other hospitals:

- ✓ Planning services (e.g. on call)
- ✓ Manage patients together

## Future coordination

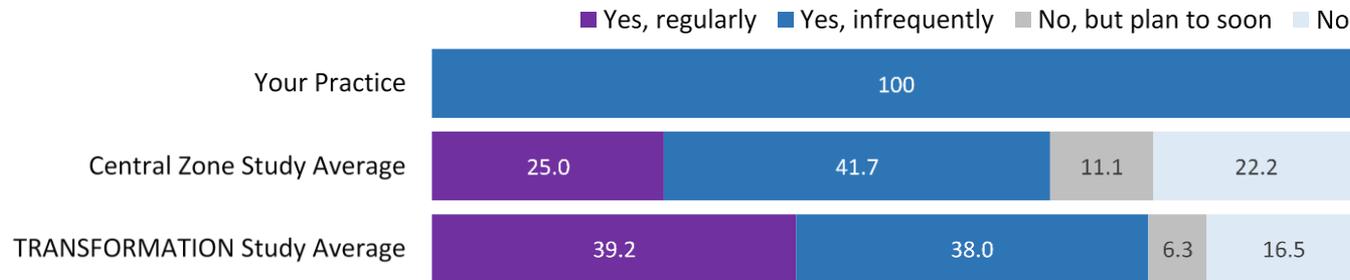
### opportunities may include:

- Access to technical services (radiology, labs)
- Exchange of resources (e.g. loan of professionals)
- Follow-up for hospitalized or clinic patients

# Practice-based Portrait: Core Dimensions of Patient's Medical Home—QI Feedback

**Evaluation & Continuous Quality Improvement** refers to whether your practice regularly evaluates the effectiveness of the healthcare services you provide. This refers to the care provided to patients during and between visits.

Are you involved in quality improvement initiatives at your practice? (% respondents)



Your practice currently:

- ✓ Reviews patients' hospital admissions or emergency department use

Future opportunities include:

- reviewing clinical outcomes
- completing surveys of patient satisfaction and experiences with care
- reviewing frequency of ordering diagnostic tests

# Idea for organizing regional portrait: Accreditation Canada Primary Care Services: sector and service based standards

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## Dimensions



**Population Focus:** Work with my community to anticipate and meet our needs



**Accessibility:** Give me timely and equitable services



**Safety:** Keep me safe



**Worklife:** Take care of those who take care of me



**Client-centred Services:** Partner with me and my family in our care



**Continuity of Services:** Coordinate my care across the continuum



**Appropriateness:** Do the right thing to achieve the best results



**Efficiency:** Make the best use of resources



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# Regional portrait-Patient Survey Data

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- Intended to integrate and use all data sources (patient, provider/organizational, administrative data, case study)
- Patient survey data: (n=1,206 total; n=583 Central Zone; n=325 Eastern Ontario; n=298 Fraser East)
  - % female: 72, 56, 67 (CZ, EO, FE)
  - Mean age: 53, 52, 56
  - Education, % undergrad degree: 21, 14, 11
  - % born in Canada: 93, 91, 82
  - % depression: 40, 32, 33
  - % heart disease: 11, 14, 18



# Regional portrait-Organizational/Provider Survey Data

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- Organizational data: (n=68 practices; n=35 Central Zone; n=17 Eastern ON; n=16 Fraser East)
  - Practices have been in operation for >10 years, few of whom have joined with other PHC organizations
  - % practices are group practices: 57, 47, 81 (CZ, EO, FE-no statistical significance)
  - % in only a single setting (vs. satellite sites, more than one setting, etc): 51, 41, 88
  - % practices only seeing pts with active record or registered: 64, 88, 93
  - % FFS: 79, 6, 100
  - % practices who routinely receive patient satisfaction data: 13, 53, 13



# Regional portrait-Organizational/Provider Survey Data

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- Organizational data: (n=68 practices; n=35 Central Zone; n=17 Eastern ON; n=16 Fraser East)
  - % practices improved clinical practice support: 9, 35, 79
  - % practices reporting quality of care to patients has improved: 32, 47, 93
  - % practices have improved possibility of one or more RNs: 6, 18, 20

# Regional portrait

## Fraser East British Columbia

### Primary Health Care Performance Portrait

A **stronger primary health care system** is one that yields **better health outcomes** for Canadians at a **lower cost**. A key part of improving the primary health care system is to measure how it performs. This portrait provides comprehensive information on **primary care performance** in the Fraser East region of British Columbia. Information is compiled from a range of sources and perspectives, including patients, providers, and primary care organizations, and for multiple dimensions of primary care performance. This report is preliminary and shows results for three of these dimensions, access, continuity, and patient-centred care.

#### ACCESS

e.g. % of patients that reported having a family physician or nurse practitioner that they see for regular check-ups or when they are sick

p. 2

#### COMPREHENSIVENESS

e.g. % of patients that reported that their main place of care provided everything they needed to manage their health concerns

#### CONTINUITY

e.g. % of patients that reported that there is a health professional who knows them best at their main place of care

p. 7

#### COORDINATION

e.g. % of patients that reported that there were times when the healthcare team at their main place of care did not seem to work well together

#### EFFECTIVENESS

e.g. % of patients that reported visiting the emergency department for an issue that could have potentially been managed by their family doctor

#### EQUITY

e.g. % of patients that reported that their family doctor or nurse seem open to talking about sensitive issues, for example, grief, mental health problems or abuse experiences

#### PATIENT-CENTRED CARE

e.g. % of patients that said their provider always explains things in a way that is easy to understand

p. 9

#### SAFETY

e.g. % of patients that reported that they have been given the wrong medication or wrong dose by a doctor, nurse, or pharmacist

#### HEALTH CARE USE

e.g. average number visits per patient with a primary care doctor in an office setting, at home or in a walk-in clinic, over the last 12 months

#### HEALTH CARE COSTS

e.g. average government expenditure for primary care visits, per person, over the last 12 months

- Uses all data sources
- Comparisons across regions
- Comparisons within region

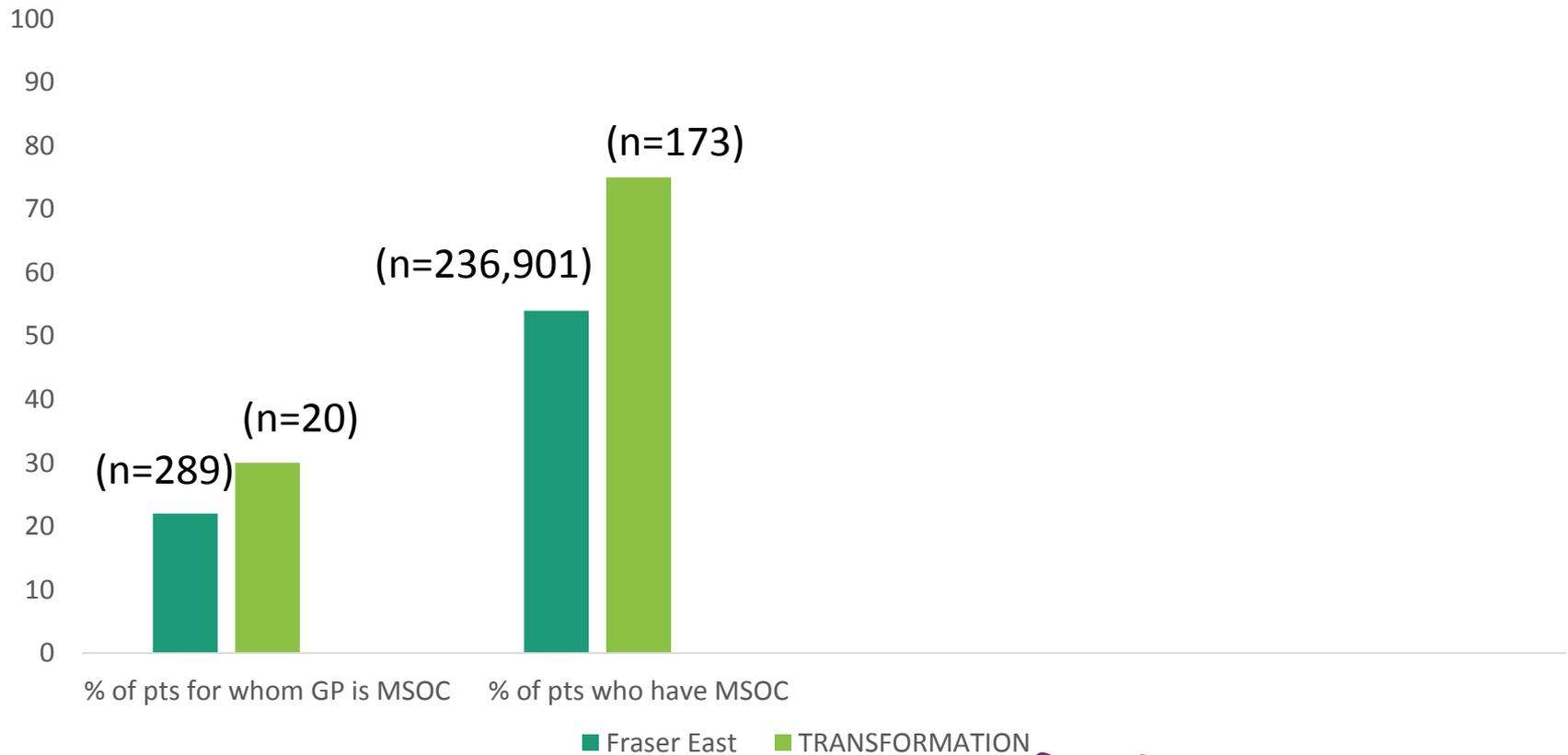


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# Regional portrait: Continuity [BC admin data]

Provider and Patient Views of Continuity: Majority Source of Care





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