

Primary Care in Crisis: Data-Driven Insights and Solutions

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Martin Bass Lecture
Trillium Primary Health Care Research Day
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Outline

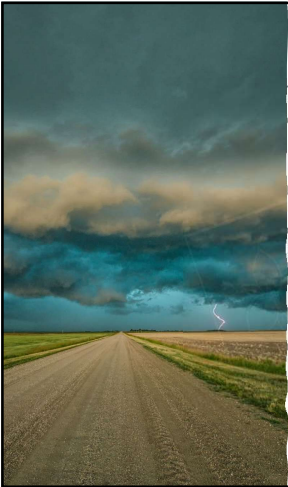
- Disclosures
- Key takeaways
- Primary care policy in Ontario: A trip back in time
- The current state:
 - What are we observing?
 - Why are we seeing these trends?
- Solutions
- Discussion

Disclosures and affiliations

- No industry affiliations or disclosures to declare.

Disclosures and affiliations





Key takeaways

1. “A perfect storm” of policy changes, an evolving workforce, an evolving patient population, and system-level inefficiencies have created a primary care crisis in Ontario.
2. The status quo is unsustainable.
3. Primary care is an investment.
4. This is a solvable problem.

Context

- Pre-Primary Care Reform in Canada



Recession fallout pre-primary care reforms: A worrisome state of affairs in Canada

“During the 1980s and 1990s, primary health care reform in Canada was characterized by false starts, myriad small-scale pilot and demonstration projects, futile advocacy of fundamental system-wide change, and failure to embrace the alternative strategy of progressive incremental change.”

- Hutchison 2011

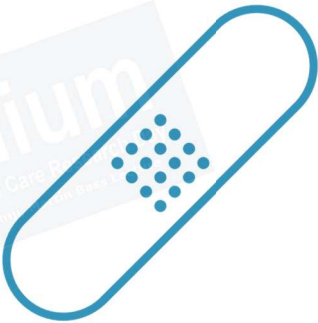
By the early 2000s...



Ontario's primary care reforms

Aims:

- Improve patient access to primary care
 - Grow the primary care workforce
 - Key indicator: Attachment
- Improve the quality and continuity of primary care
- Improve provider and patient satisfaction
- Increase cost-effectiveness



MOHLTC 2011; Sweetman & Buckley 2014; Kralj & Kantarevic 2012

Ontario's primary care reforms

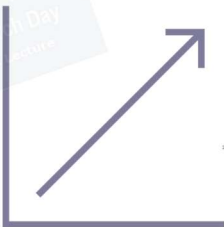
- Established the Northern Ontario School of Medicine
- Increased medical school enrolment and training of primary care nurse practitioners
- Transition from solo or small groups to team-based interprofessional care
- Transition from the fee-for-service model to a capitation-based payment model
 - Officially enrolling ("rostering") patients
 - "Patient Enrolment Models" (PEMs)
- Mandatory after-hours availability
- IT support for adopting Electronic Health Records (EHRs)
- Pay-for-performance – attachment, quality, services, access

Sweetman & Buckley 2014; Kralj & Kantarevic 2012

What did Ontario's primary care reforms achieve?

1. Strengthened the primary care workforce

- FP workforce
- Entry into FM residencies
- Entry into new funding models
- Work satisfaction among FPs in non-FFS



CD Howe 2019; CaRMS R-1 Data & Reports 2023; Green et al 2009

What did Ontario's primary care reforms achieve?

2. Access

- More patients with a family doctor
- High patient-reported timeliness of access, satisfaction with access across all new enrolment models



Bayoumi et al 2023; Premji et al 2018; Kiran et al 2020

What did Ontario's primary care reforms achieve?

3. Patient satisfaction with team-based care



Conference Board of Canada 2014

What did Ontario's primary care reforms achieve?

4. Cost-Effectiveness



Laberge et al 2017; Conference Board of Canada 2014; Glazier 2012; Bhuiya 2020

But there were also concerns



Access:
Same day/next day vs
timeliness and satisfaction



Inequities:
Healthiest and wealthiest
populations in capitation-
based models and teams



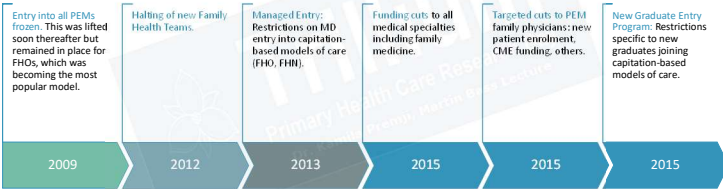
Pay-for-Performance:
Preventive care bonuses,
access bonus



Auditor General Report:
Productivity,
accountabilities

Commonwealth Fund International Health Policy Survey of the General Public 2016; Glazier 2012; Kiran 2014; Glazier 2019; Premji 2021; Ontario Auditor General 2016

Policy shifts affecting Patient Enrolment Models



Where are we now?

- 1. Attachment
- 2. Equity
- 3. Interest
- 4. Comprehensiveness
- 5. Capacity

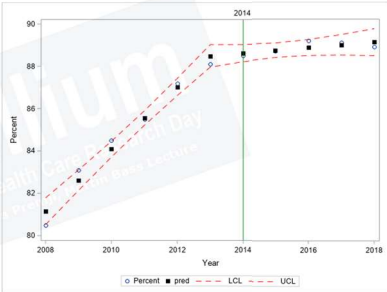
Where are we now?

1. Attachment to primary care



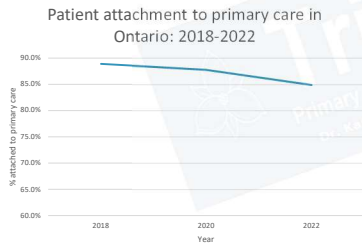
Attachment to primary care over time

- Number of Ontarians with a regular source of primary care increased by 21.1%
- Rapid growth in attachment during early Primary Care reform until 2014, after which it was stagnant



Bayoumi et al 2023

Erosions in gains made



Green et al 2023

As of September 30, 2022, **2.3 million Ontarians** are without a regular source of primary care (compared with 1.6 million in 2018)

Disparities in Equitable Attachment to Primary Care in Ontario (2022)

Patient Characteristics	A	B	C	D
Income	~90%	~88%	~85%	~80%
Housing Instability	~90%	~88%	~85%	~80%
Material Deprivation	~90%	~88%	~85%	~80%
Racialized Neighbourhoods	~90%	~88%	~85%	~80%
New Arrivals	~85%	~80%	~75%	~65%

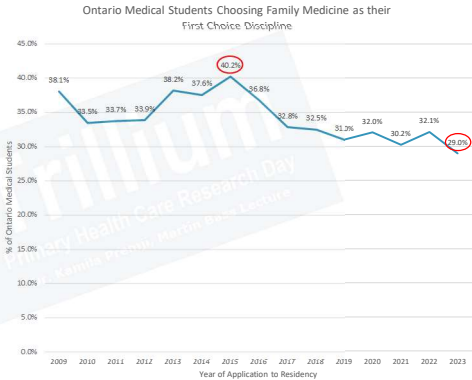
Region	Percentage of patients unattached to family health teams (FHTs)
Greater Toronto Area	10%
Peel	12%
York	15%
Halton	16%
Simcoe	17%
Georgian Bay	18%
Barrie	18%
Kenora	19%
Neuro Perth	22%
Chatham Kent	24%
Brant	26%
Markham	27%
Grey Bruce	34%
North York	36%
King	43%
Simcoe Muskoka	44%
London	48%
ESL (Bilingual)	49%
ESL (English)	49%
ESL (French)	50%
North Hastings	50%
N. Simcoe	51%
Haliburton	52%
Ottawa E.	53%
Simcoe	54%
Tim. L. Egn.	58%
Ottawa Valley	60%
North York	61%
Simcoe	62%
Midland	64%
London	66%
Central	68%
North	70%
Simcoe	72%
N. Ontario	74%
Western Toronto	75%
Windsor	76%
South	77%
Halton	78%
North York	79%
North Toronto	80%
Mid-N. Toronto	81%
East York	82%
Durham	83%
Brantford	84%
South	85%
ESL (English)	86%
ESL (French)	87%
ESL (Bilingual)	88%
West-Northwest	89%
West-Northwest	90%
West-Northwest	91%
West-Northwest	92%
West-Northwest	93%
West-Northwest	94%
West-Northwest	95%
West-Northwest	96%
West-Northwest	97%
West-Northwest	98%
West-Northwest	99%
West-Northwest	100%

3. Interest among medical school graduates



Declining
interest in
family medicine

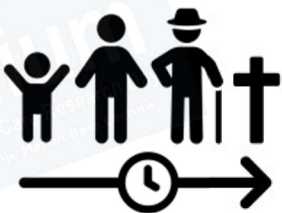
- Lowest in 15 years



CaRMS R-1 Data and Reports (2009-2023)

Where are
we now?

4. Comprehensive
family medicine



The practice of comprehensive
family medicine

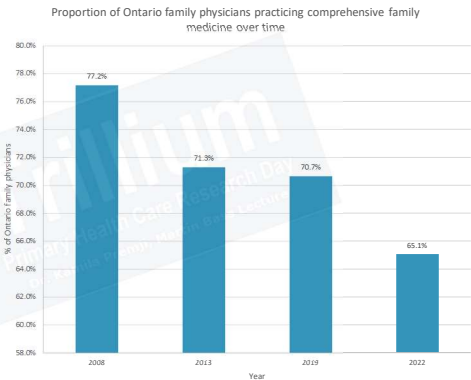


“Cradle to Grave”

- The delivery of a broad range of primary care services to a defined population (“panel”/“roster”) on a continuous basis
 - Improved health equity, outcomes, and costs
- Distinct from:
 - Episodic primary care (e.g., walk-in clinic)
 - Focused scopes of FP practice (e.g., sports medicine, ER, hospitalist)
 - Other primary care practitioners (e.g., primary care NPs, PAs)

Declining practice of
comprehensiveness

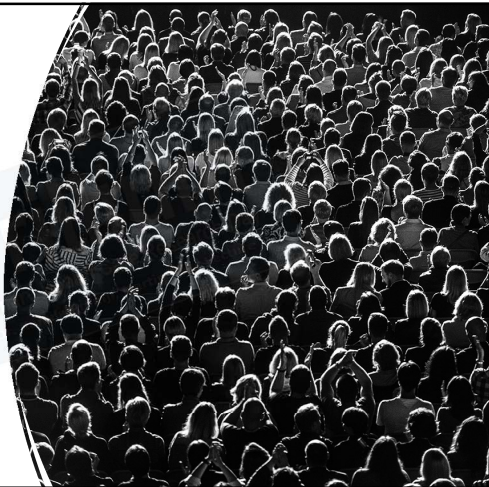
This shift away from
comprehensiveness is
occurring across ALL family
physician career stages.



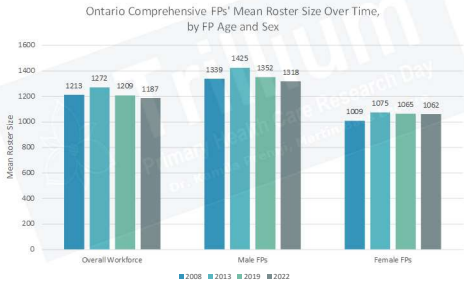
Premji et al 2023a; Premji et al 2023b

Where are we now?

5. Capacity

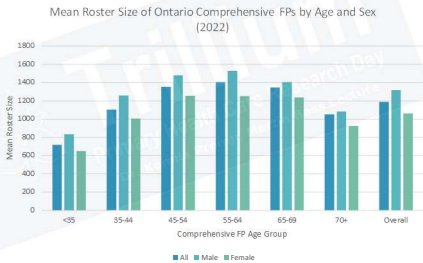


Roster size as a measure of capacity



Premji et al 2023a; Premji et al 2023b

Roster size as a measure of capacity



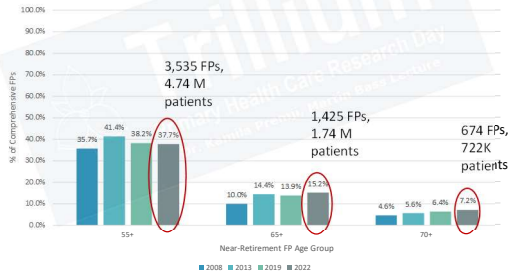
Premji et al 2023a; Premji et al 2023b

Impending retirements

“The [Canadian] working-age population (age 15-64) has never been older.”
Statistics Canada, April 2022

Impending retirements

3 near-retirement comprehensive FP age groups: 55+, 65+, 70+



Premji et al 2023a; Premji et al 2023b

Impending retirements



- Large numbers of patients with chronic conditions attached to near-retirement comprehensive FPs (COPD, diabetes, CHF, mental illness, frailty).
- Among patients with chronic conditions who do not have a regular family doctor:
 - > 118,000 excess emergency room visits annually
 - > 17,000 excess hospital admissions annually

Premji et al 2023a; Glazier et al 2008

Head counts of family physicians do not accurately represent workforce supply/capacity

“Back of the envelope” math:

- 2022: Net increase of only 315 Ontario FPs
- With only 65% practicing comprehensiveness → 205
- Average roster size of 1200
- Estimated 1.7M patients expected to lose their FP to retirement by 2025

Need 1,417 net new FPs by 2025

- At current pace, it would take 7 years to absorb the retirements expected in the 2 years

And that is not considering:

- Pandemic-related changes in retirement plans
- Population growth

Ontario Physician Reporting Centre 2023; Premji et al 2023a

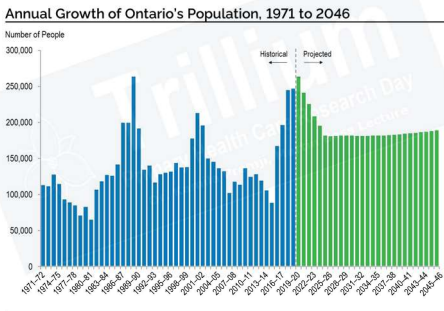
Impending retirements

- Pandemic:
 - ~3% of FPs stopped work during the first 6 months of the pandemic — about 2x as many as in previous years.
- Changes in retirement intentions during the pandemic indicate retirements may be hastened.
 - Proportion of Ontario FPs planning to retire early increased from 6.7% to 21.8% from the 1st to the 3rd wave.
 - Among factors associated with increased likelihood of intending to retire early: Age >50 years.



Kiran et al 2022, Walsh et al 2022

Population growth



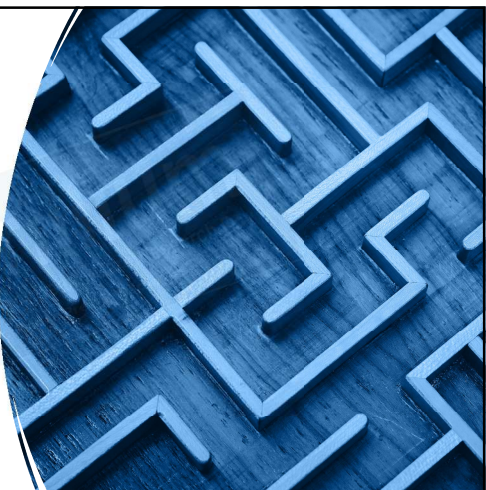
Statistics Canada for 1971-2019 and Ontario Ministry of Finance projections 2020 (from: Ontario's Long-Term Report on the Economy)

Why do we see these trends?

- 1. Complexity
- 2. Evolving Workforce
- 3. Health System Inefficiencies
- 4. Inadequate Support
- 5. Burnout

Why do we see these trends?

- 1. Complexity



Complexity of patients

Population aging



- Population of older Canadians is growing 6x faster than that of younger Canadians
- Nearly 1 in 5 Canadians (19.0%) are 65+ (vs. 16.9% in 2016).

Statistics Canada April 2022

Complexity of patients

Multimorbidity



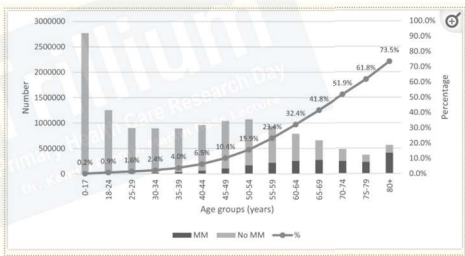
- From 2008 → 2019:
 - Proportion of Ontario primary care patients in the highest comorbidity group: 16.5% → 19.8%.
 - Patients attached to **near-retirement FPs** have especially high health system resource needs.

Premji et al 2023a

Complexity of patients

Multimorbidity

- MM is high even among younger individuals



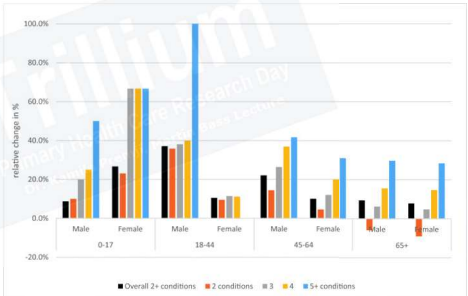
Ontario population with multimorbidity:
Volume (number) and percentage by age group

Ryan et al 2018

Complexity of patients

Multimorbidity

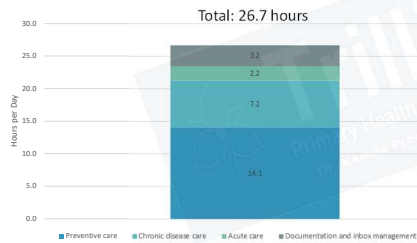
- MM is highly prevalent, continues to increase over time in all ages, sexes, and income quintiles.



Relative differences from 2003 to 2016 in multimorbidity prevalence in Ontario, by age, sex, and multimorbidity level

Pefoyo Kone et al 2021

Complexity of medicine



How much time per day is needed for a physician to provide guideline-adherent primary care for a U.S. nationally representative adult patient panel?

Porter et al 2022

Complexity of medicine

Research Paper
Healthcare Policy 19(1) August 2023 : 114-129.doi:10.12927/hcpol.2023.27152

Productivity Decline or Administrative Avalanche? Examining Factors That Shape Changing Workloads in Primary Care 

Ruth Lavergne, Sandra Peterson, David Rudoler, Ian Scott, Rita McCracken, Goldis Mitra and Alan Katz

 Article PDF  Citation Manager

Complexity of medicine

Between 1999/2000 and 2017/2018 in BC:

- Shift in care from the hospital to the community.
- Increased number of treated comorbidities in the population, above expected levels attributable to population aging.
- Increased FP workload per visit due to increased volume of care processes requiring FP coordination.
 - Increased per visit workload ranged from 32% (diagnostic radiology) to 122% (lab tests).

Lavergne et al 2023

Why do we see these trends?

2. Evolving workforce characteristics



Evolving workforce characteristics

- Comprehensive FP workforce in Ontario (2022): 48.5% M, 51.5% F
- Across all age groups, compared with male FPs, female FPs:
 - Have smaller roster sizes (overall mean roster size: M: 1318 (±905) vs F: 1062 (± 726))
 - Are less likely to practice FTE (overall proportion of M FTE = 74.7%, F FTE = 58.6%)

Premji et al 2023a, Premji et al 2023b

Evolving workforce characteristics

- Compared with male FPs, female FPs:
 - Have longer patient visits
 - Receive more requests from patients outside of appointments
 - Have a higher proportion of female patients (Ontario data: Male FPs' mean proportion of F patients 45.7% (± 8.6) vs Female FPs mean proportion of F patients 59.7% (± 10.4))
 - Carry more household and parenting responsibilities

Ganguli et al 2020; Rittenberg et al 2022; Pelley et al 2020; Premji et al 2023b; Jin et al 2022

Evolving workforce characteristics

- Ontario: Compared with the patients of male FPs, patients of female FPs were more likely to have:
 - Received recommended cancer screening
 - Received recommended diabetes management
 - Had fewer emergency room visits and hospitalizations
 - Had higher referrals

Dahrouge et al 2016

Why do we see these trends?

3. Health system inefficiencies



Health system inefficiencies

Challenge	Challenges Magnitude (Strongly/Completely Agreed %)
Other parts of the health care system often place unnecessary and/or inappropriate burden back onto me/my practice.	98
I am overwhelmed with administrative burden and paperwork related to the care requirements of my patients.	94
It is difficult to access specialist care for patients.	93
I spend a burdensome amount of time filling out patient forms.	92
It is difficult to manage patient expectations.	92

On average, FPs reported spending **40% of their time (19.1 hours/week)** on administrative tasks rather than on direct patient care.

Ontario College of Family Physicians 2023.

Why do we see these trends?

4. Inadequate support



Inadequate support

- Survey of Ontario FM residents:
 - 96.2% intend to work in a group practice environment
 - 93.7% intend to work in an interprofessional team
- Survey of BC FM residents:
 - 71% prefer non-fee-for-service practice models
 - 86% identified the payment model as very or somewhat important in their choice of future practice

Lavergne et al 2019; Brcic et al 2012

Inadequate support

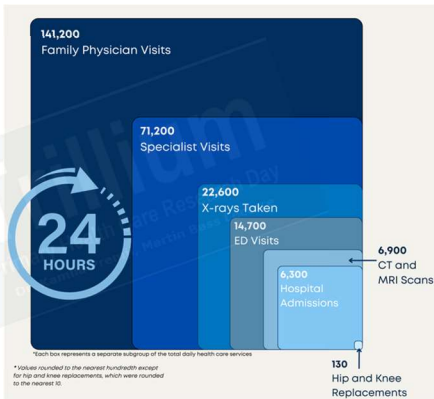


Bayoumi et al 2023; Green et al 2023

Attachment to primary care over time

Inadequate support

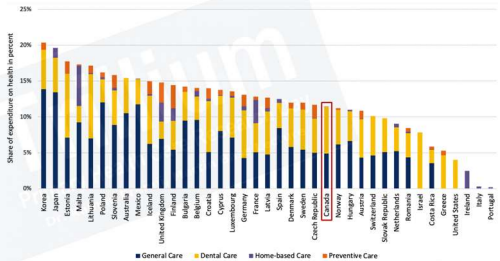
Average number of health care services accessed in a 24-hour period in Ontario (2019-2020)



Jaakkimainen et al 2023

Inadequate support

Spending on primary health services as share of current expenditure on health



OECD 2018

Why do we see these trends?

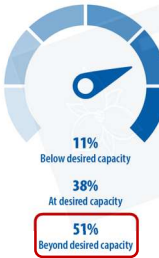
5. Burnout

<https://twitter.com/DGlaumfleck/status/1365742715405701120>

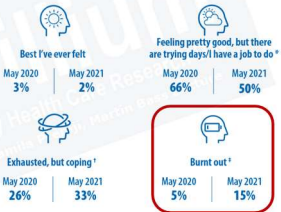


Burnout

How proportions of family physicians describe their work levels (May 2021)



How family doctors describe their personal wellness



Fewer family doctors are feeling "pretty good" and that they "have a job to do," while more are exhausted, but coping.
There has been a three-fold increase in the percentage of family doctors who feel burnt out.
* P < 0.001; † P < 0.05; ‡ P < 0.01

College of Family Physicians of Canada 2022

Burnout

Physicians in Canada experiencing burnout by area of practice, years in practice and community size.

	Burnout in 2021	Burnout in 2017	Percentage point difference between 2021 and 2017
AREA OF PRACTICE			
General practitioner	57%*	33%	+24
Medical specialist	52%	30%	+22
Surgical specialist	53%	30%	+23
Other/Admin	40%*	19%	+21
YEARS IN PRACTICE			
5 or less	62%*	36%	+26
6 to 10	68%*	33%	+35
11 to 20	60%*	34%	+26
21 to 30	51%	31%	+20
Over 30	32%*	19%	+13
COMMUNITY SIZE			
Urban/suburban	54%*	31%	+23
Small town/rural	58%*	31%	+27
Isolated/remote	60%*	44%	+16

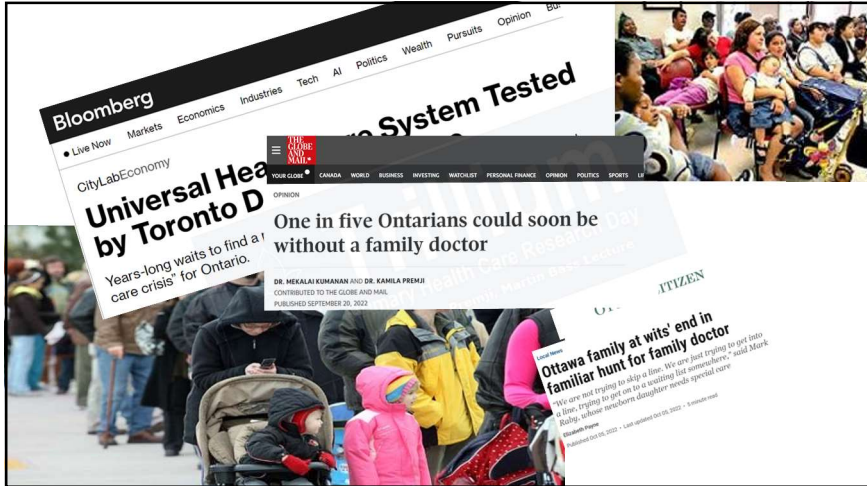
Canadian Medical Association 2022

Burnout

Ontario Family Physicians' intentions to make a change or reduce their hours in the next 5 years



Ontario College of Family Physicians 2023



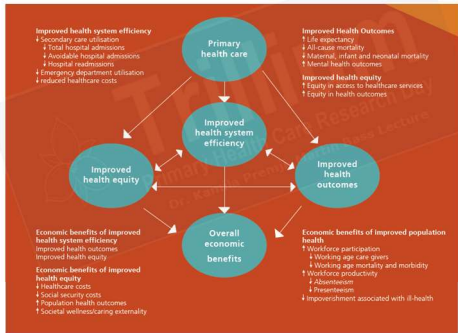
Solutions

- 1. Investment
- 2. Core Elements of Strong Primary Care
- 3. Patients
- 4. Clinicians
- 5. Solutions Underway



Primary care is an **investment**, not a cost.
A **value**, not an expense.

The economic case for primary care



World Health Organization 2018

Core dimensions of primary care reform



Aggarwal & Williams 2019



Solutions: What do patients say?

- Expand publicly funded primary health care to include other services/providers.
- Ensure interoperability between EHRs and patient access to data.
- Expand team-based care to every Ontarian. Primary care access is a right.
- Establish and ensure compliance with accountability measures.
- Hold Ontario accountable to the principles of the Canada Health Act.
- Include community members in the governance of primary care organizations.
- Increase family medicine residency seats.
- Address reasons for shifts away from the practice of comprehensive primary care.
- Educate the public on their rights, on the value of primary care.
- Invest a greater proportion of total healthcare funding in primary care.

OurCare/Kiran et al <https://www.ourcare.ca/prioritiespanels#reports>

Solutions: What do primary care clinicians say?



Build workforce capacity and improve retention: expand teams, improve efficiency.



Grow the family medicine workforce: credentialing, training.



Equity: Prioritize underserved populations and geographies through targeted solutions to physician shortages in these areas.



Build on our current primary care models to better fit today's population and clinician needs.

Ontario College of Family Physicians 2023

What are **not** solutions

OTTAWA, Ont. — Ontario faces calls to fund nurse practitioners as clinics charge patients a fee



- Further fragmentation of primary care and disruption of continuity of care.
 - Team-based care ≠ Care by siloed professionals
 - Continuity of care → health outcomes, costs, mortality
- Corporatization of primary care.
- Virtual care-only platforms.
- Private-pay primary care.

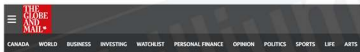
Examples of solutions underway



Steps toward health spending accountabilities

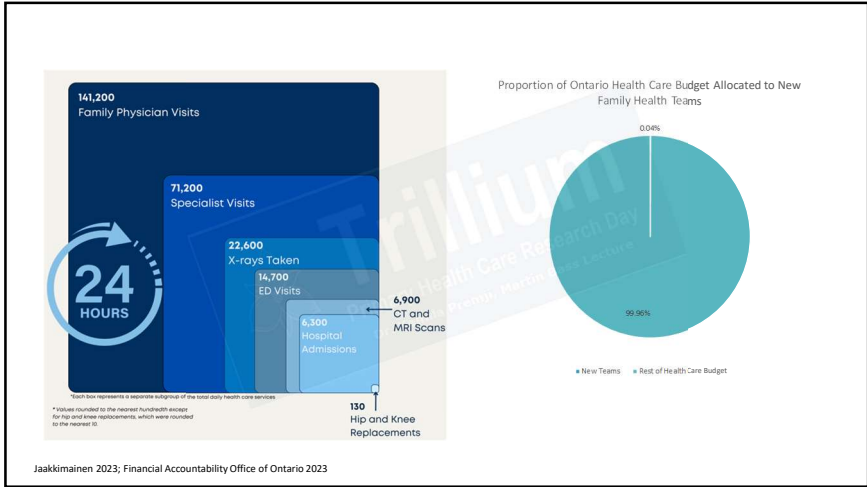
 **THE HILL TIMES**
On health, premiers cherish their jurisdiction, not their responsibilities

Expansion of teams



Ontario announces \$30-million for new primary care teams, commits to share data with Ottawa as health deal looms

LAURA STONE > QUEEN'S PARK REPORTER
DUSTIN COOK >
KELLY GRANT > HEALTH REPORTER
PUBLISHED FEBRUARY 2, 2023



Training and credentialing

Doctor shortage prompts Queen's to train more family physicians for Ontario

People aren't getting the care they need as quickly as they need it

Ryerson University hopes to open Brampton medical school by 2025

By Isaac Cohen - Global News
Posted Nov 15, 2023 2:02pm

CPSO Removes Barriers for Internationally Educated Physicians

Leveraging virtual care and interprofessional collaboration

RC VTAC
Renfrew County Virtual Triage and Assessment Centre
1-844-727-6404

Telephone Appointment

Community Paramedic

Video Appointments

Remuneration

'An opportunity to transform': Details on B.C.'s long-awaited payment plan for family physicians released

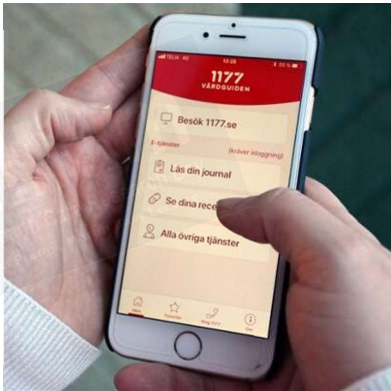
PAYMENT MODEL FOR FAMILY DOCTORS

Manitoba's Doctors Ratify New Historic Agreement

Accessible health data

Journalen

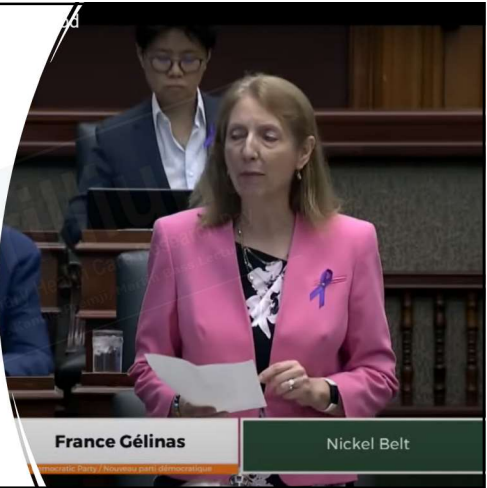
- National web-based patient portal in Sweden
- Patients have a single access point to all EHR information, regardless of the type of EHR system.
- Includes all medical records, including hospitals, primary clinics, and psychiatric facilities.



Lee et al 2021; Hägglund et al. 2022

Advocacy

https://www.youtube.com/watch?v=mcj0T3w6k&list=PL_qufv0EPOBkZKG8GxrwGt4Pd72Cv0T2&index=12



Key takeaways

1. “A perfect storm” of policy changes, an evolving workforce, an evolving patient population, and system-level inefficiencies have created a primary care crisis in Ontario.
2. The status quo is unsustainable.
3. Primary care is an investment.
4. This is a solvable problem.

Thank you!

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