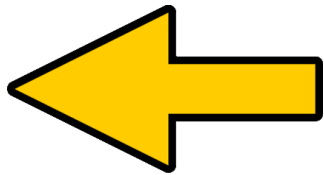# Health Information Technology Burnout: NS and ON

February 14th, 2024

Dara Liu, Timothy Jason, Dr. Mavis Jones, Dr. Jeannette Comeau, and Dr. Janice Graham

As we get started, please use your smart phones to start the Kahoot online polling activity via the QR code or by entering the Game PIN at www.Kahoot.it

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DISCLOSURES

- The authors have no conflicts of interest to disclose.

OBJECTIVES

- Outline the comparative landscapes of health information technology (HIT), including electronic medical records (EMR) and evidence for tech-related burnout in NS and Ontario;

- Describe and introduce a brief tool to assess physician experiences with tech-related burnout;

- Discuss how the survey findings will support physicians to combat administrative burden and optimize their use of patient data.

AGENDA

- How we got here

- Why we're doing it

- And now presenting… "The questionnaire"
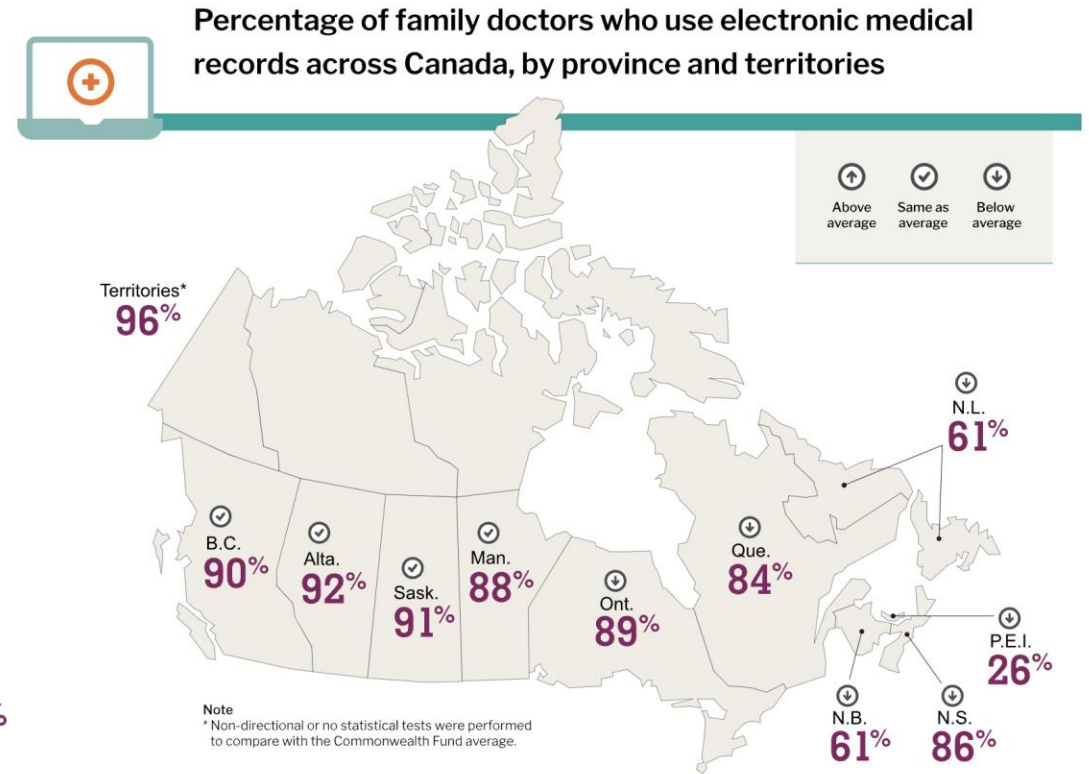
- How we did it

- What we expect

HOW WE GOT HERE: Health Information Technology (HIT)

HIT: Technology that enables the input, transmission, use and extraction of information in healthcare for use by providers, patients, and stakeholders

- In NS, HIT currently includes Share, Meditech, OneContent, Clinical Portal (Central Zone), Millennium, MedAccess, Accuro, Xero, DIS, and others

- Access to these programs varies widely depending on geographic location, availability, institution type and affiliation

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HOW WE GOT HERE: HIT in NS

- Health technology systems are used in combination with paper in hospitals and clinics

- There are pitfalls with this current system, but they are modifiable!

- The key is knowing what to modify

Percentage of family doctors who use electronic medical records across Canada, by province and territories

Above average — Same as average — Below average

Territories* 96%

N.L. 61%

B.C. 90%

Alta. 92%

Sask. 91%

Man. 88%

Ont. 89%

Que. 84%

P.E.I. 26%

N.B. 61%

N.S. 86%

Note
* Non-directional or no statistical tests were performed to compare with the Commonwealth Fund average.

Canada 86%

Commonwealth Fund average 93%

Use of technology | CIHI. https://www.cihi.ca/en/commonwealth-fund-survey-2019/use-of-technology

HOW WE GOT HERE: Burnout in NS

- 2019 CIHI report: 61% of NS primary care physicians feel 'extremely' or 'very' stressed with their jobs compared to 46% nationally.[1]

- 2017 survey: NS physicians experiencing increased burnout identified 2 major contributors: **Administrative hassles** and **Uncompensated work**

1. Canadian Institute for Health Information. How Canada Compares: Results From the Commonwealth Fund's 2019 International Health Policy Survey of Primary Care Physicians — Accessible Report. CIHI; 2020.

2. Physician burnout survey. Doctors Nova Scotia. Accessed March 30, 2023. https://doctorsns.com/news-events/surveys/physician-burnout

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HOW WE GOT HERE: Burnout in ON

- A 2023 Ontario College of Family Physicians (OCFP) survey showed that 65% of family doctors are contemplating either leaving the profession or reducing their working hours within the next five years. This consideration is primarily driven by the overwhelming administrative workload they face[1].

- In Ontario, high levels of physician burnout increased from 29% before the pandemic to 34% as of March 2021[2].

- The Ontario Medical Association (OMA) responded by establishing a task force and developing a white paper that proposes recommendations to address physician burnout[2].

$OMA Ontario Medical Association

Healing the Healers:
System-Level Solutions
to Physician Burnout

Recommendations of the Ontario Medical Association Burnout Task Force

Aug. 18, 2021

[1] https://www.ontariofamilyphysicians.ca/news/new-survey-shows-full-blown-crisis-in-family-medicine/
[2] https://www.oma.org/uploadedfiles/oma/media/pagetree/advocacy/health-policy-recommendations/burnout-paper.pdf

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HOW WE GOT HERE: OntarioMD

About OntarioMD (OMD) *[ontariomd.ca]*

- Subsidiary of the Ontario Medical Association

- Fully funded by Ontario Health (formerly by Ontario Ministry of Health)

- Focused on delivery of health information technology to community-based physicians (recently expanded to others, including nurse practitioners and midwives)

- Since 2017, has run an annual survey of Ontario clinicians on their use of, challenges with, and priorities for the HIT they use in patient care.

HOW WE GOT HERE: Burnout initiatives

- System-level recommendations from the 2021 OMA white paper on physician burnout include <u>two with implications for technology</u>:

  > Streamline and reduce required documentation and administrative work
  >
  > Promote the seamless integration of digital health tools into physicians' workflows

- As the tech-focused subsidiary of the OMA, OntarioMD established a working group that aligns with the OMA's continuing work in this area, and focuses specifically on technology-related issues

- In 2021, OMD added two questions about burnout to the OMD annual clinician survey:

  > How would you rate your <u>level of burnout associated with digital health technology</u>, on a scale of 1 to 10 where 1 is "no burnout" and 10 is "completely burned out"?
  >
  > What would you describe as the <u>number one cause</u> of your tech-related burnout? (open text)

- Open text responses are coded using Nvivo. In the 2022 survey we coded over 800 of these write-in answers to identify patterns and themes for further investigation

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WHY WE'RE DOING IT (aka the Purpose)

- To quantitively analyze:

- **WHAT** it is about the technology we are using that is contributing to burnout for physicians

- **WHO** in particular is being disproportionately/most affected by the technology-related burnout

THE CLINICIAN TECH-RELATED BURNOUT QUESTIONNAIRE

THE CLINICIAN TECH-RELATED BURNOUT QUESTIONNAIRE

Accessing the Survey: laptop or smart phone
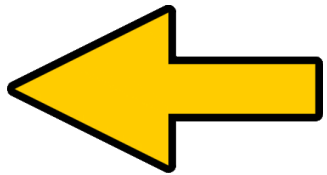
https://ncv.microsoft.com/aNWWzATDPt

- When the survey opens you will be asked to read a consent form
- Please click on the button below the consent form if you agree to participate
- The questionnaire should take 10-15 minutes to complete
- After the questionnaire, you will have the opportunity to compare your responses with those of your colleagues in an interactive online polling activity

THANK YOU FOR YOUR PARTICIPATION!!

➢ Now, if you wish, let's see if there are any trends in responses to some of the survey questions using **Kahoot**

➢ Use a nickname to remain anonymous. Responses are aggregated

KAHOOT ONLINE POLLING ACTIVITY

o **Use the QR code or enter the Game PIN at www.Kahoot.it** to start the online polling activity. We will also paste the link in Zoom chat

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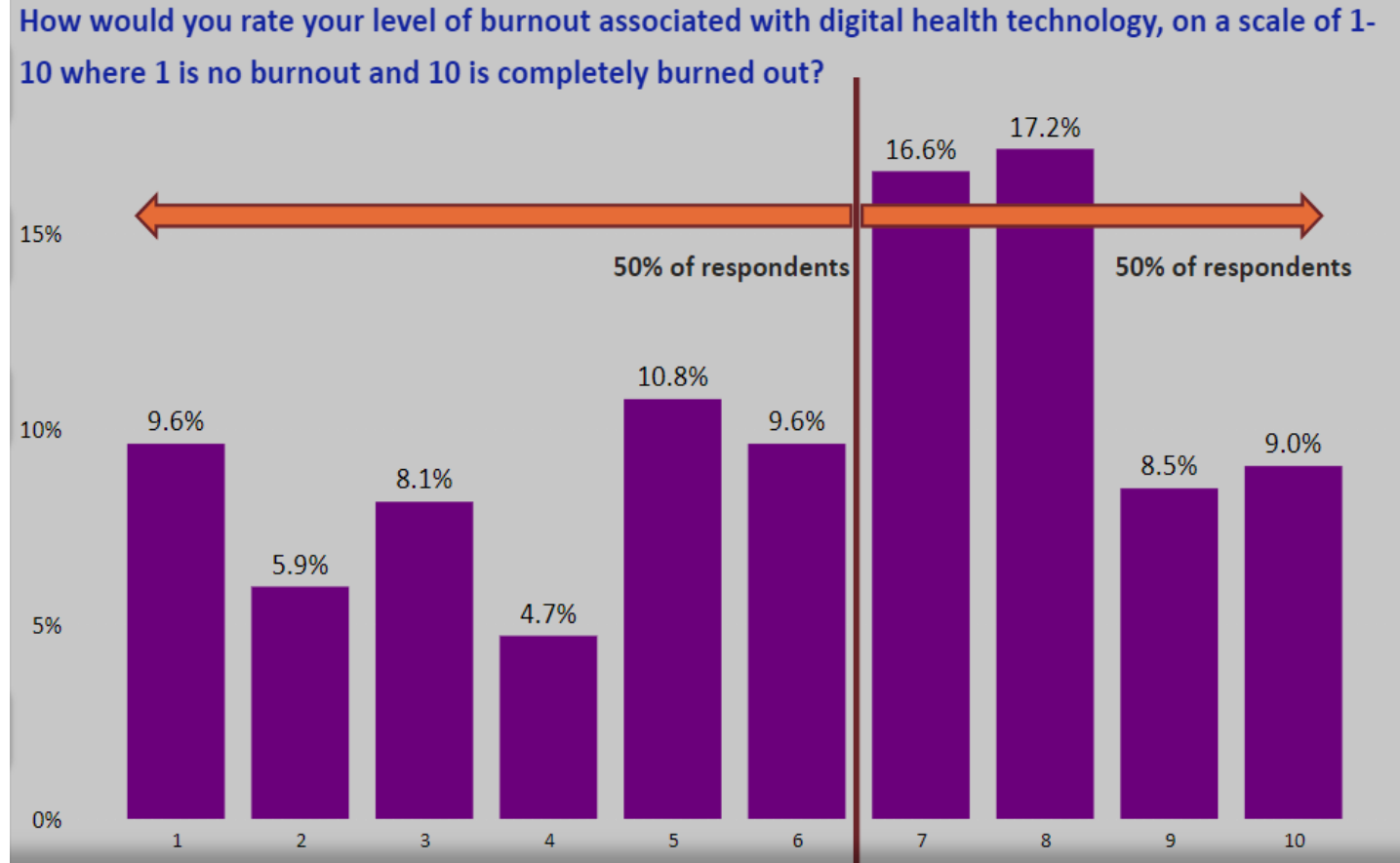Canadian Institutes of   Instituts de recherche
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HOW WE DID IT (aka the Methods)

2022 Clinician Survey

- In-field Sept 28 – Oct 16, 2022

- Deployed to 23,606 clinicians via OntarioMD's CRM database service

- Data collected using Customer Voice

- 925 usable responses for analysis

- 166 repeat respondents

How would you rate your level of burnout associated with digital health technology, on a scale of 1-10 where 1 is no burnout and 10 is completely burned out?

Scale	%
1	9.6%
2	5.9%
3	8.1%
4	4.7%
5	10.8%
6	9.6%
7	16.6%
8	17.2%
9	8.5%
10	9.0%

50% of respondents | 50% of respondents

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HOW WE DID IT (aka the Methods)

Respondents identified eight contributors to their tech-related burnout:

Functionality, general - *200 references*
References to concerns about functionality of EMRs and associated digital health tools.

Inbox & administrative burden - *191 references*
References to inbox volume and the requirement for the clinician to view and address each item, and other references to clinicians taking on aspects of administrative work that previously could be delegated to staff.

Duplication - *112 references*
References to duplication both in terms of a) requirements to enter the same information in more than one place, or copy/paste, rather than it being possible to draw on information already entered; and b) duplicate reports received from various sources.

Time and speed - *104 references*
References in general to amount of time things take using digital health tools, including speed (i.e. "slow").

Documentation - *75 references*
References to the burden of documentation (e.g. charting) via digital health tools.

Too many clicks - *65 references*
References to mouse clicks (explicitly).

Integration - *59 references*
References to poor integration of add-ons with EMRs, mostly related to the need to log in and out of platforms, remember passwords, or switch between functions that should be available within the EMR.
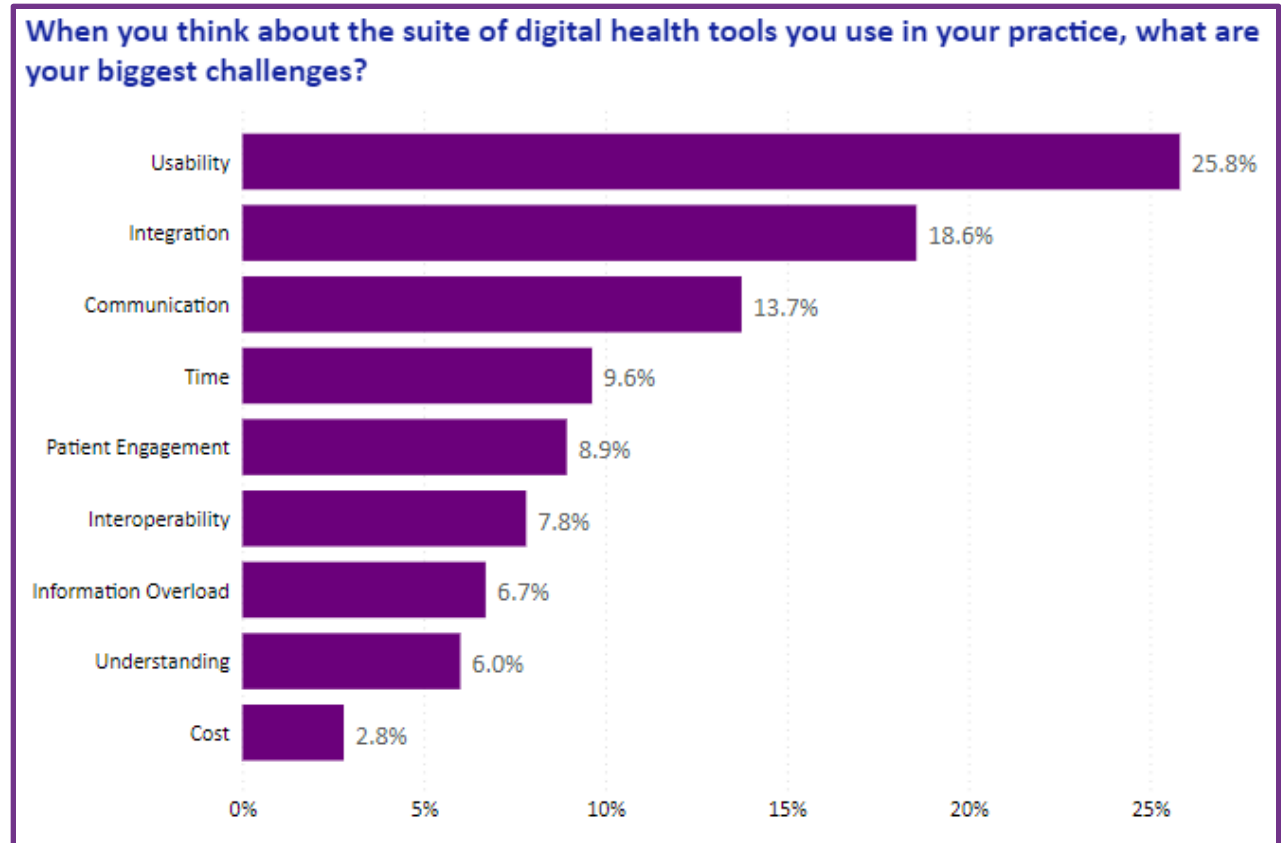
Learning new tech and upgrades - *51 references*
References to difficulties learning new tools or upgrades to current tools; includes concerns about frequency of changes, and lack of guidance. Excludes references to support (from vendor or IT) for technical issues.

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HOW WE DID IT (aka the Methods)

- Respondents listed up to three main challenges related to the digital health tools they use.

- The top challenges were USABILITY, followed by INTEGRATION and COMMUNICATION (with other care providers – e.g., specialists for referrals/consults, pharmacies).

- COST was least challenging, preceded by UNDERSTANDING (i.e., which new tools to use).

When you think about the suite of digital health tools you use in your practice, what are your biggest challenges?

Category	Percentage
Usability	25.8%
Integration	18.6%
Communication	13.7%
Time	9.6%
Patient Engagement	8.9%
Interoperability	7.8%
Information Overload	6.7%
Understanding	6.0%
Cost	2.8%

HOW WE DID IT (aka the Methods)

Clinician Survey

- Yields mostly categorical (ordinal) data for descriptive purposes.

- Qualitative data specific to tech-related burnout

Burnout Analytical Survey

- An intentional, purpose-built analytical questionnaire designed specifically to yield data in a format that can be analyzed quantitatively

- Combination of categorical and numeric data specific to tech-related burnout

HOW WE DID IT (aka the Methods)

Burnout Analytical Questionnaire

- Informed by:
  - Clinician Survey findings
  - evidence from literature review
  - stakeholder interviews
  - Other similar questionnaires

- Design:
  - Quantify clinician survey qualitative findings
  - Explore clinician survey findings analytically (i.e., using quantitative analytical techniques)
  - Best practices
  - Intentional, systematic, and methodical
  - Reviewed and vetted

HOW WE DID IT (aka the Methods)

Burnout Analytical Questionnaire

- Screening question - conditional branching (Yes/No)

- ABOUT YOUR HEALTH INFO TECHNOLOGY - Tell us about the health info tech used at your practice (e.g. perceptions, proficiency, motivations, experience, support)
    - Why? These are known contributors to admin burden & tech-related burnout
    - Which ones are more significant? Relate to other attributes?

- ABOUT YOUR AVERAGE WORK WEEK - Tell us how you spend your work time (e.g., greater percentage toward patients or administration?)
    - Why? Indicator of admin burden? Relates to contributors? Numeric - parametric analysis?
    - Which admin is the greatest burden? Patterns? Relate to above contributors?

- ABOUT YOUR TECH-RELATED BURNOUT - Outcome measure (scale of 0 to 10 can be treated as interval/ratio for parametric analysis

- ABOUT YOU / ABOUT YOUR PRACTICE - Do the patterns that emerge from the analysis differ according to whom you are and where you work?
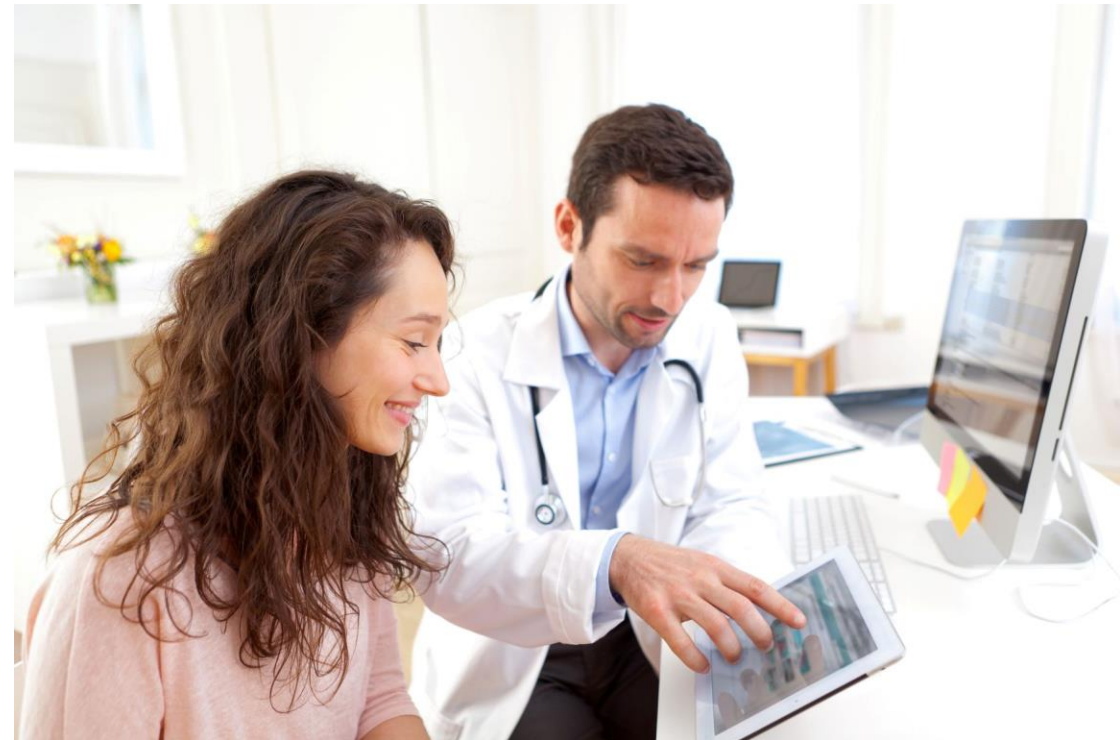
WHAT WE EXPECT (i.e., next steps)

Analysis

- Statistical tests of association (parametric / nonparametric)

- Statistical tests of group difference (parametric / nonparametric)

- Regression

- Statistical rank order tests

Insights

- Sharing with key stakeholder / partners

- Publication

- Conferences

- Action / intervention?

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