Physician Burnout: Potential Causes & Solutions

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Burnout is defined as a work-related syndrome, with symptoms consisting of emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment. Given the cognitive and physical demands of providing health care services, physicians are at a higher risk of experiencing burnout compared to other professions.

OntarioMD Review on Physician Burnout

The Ontario Medical Association's (OMA's) Burnout Task Force published a white paper in 2021, which highlighted system-level recommendations to address burnout. Within the top five solutions identified in the white paper[1], two technology-related recommendations were made to simplify administrative demands and streamline workflow processes.

Building on OMA's recommendations, and to better understand the role of technology in causing burnout, OntarioMD's Burnout Working Group[2] conducted a literature review and study.

The review showed the impact that technology and digital health-related solutions might have in mitigating the causes of burnout and improving clinical workflow efficiency (i.e., 4Ts Framework: Technology, Time, Teamwork and Transitions[3]). Technology is a double-edged sword in health care. Despite many digital health-related solutions having been proposed to mitigate causes of burnout, tools such as Electronic Medical Records (EMRs) have also been shown to be among the primary drivers. The OntarioMD review aims not only to determine pain points in physicians' workflow that may contribute to burnout, but also to identify specific digital health tools and applications that have been, or should be, created to alleviate these challenges.

A two-step approach was taken to conduct our study. The first step was to identify potential causes that may lead to physician burnout, and the second step was to determine solutions that could be implemented to help mitigate the effects of burnout. To consult academic sources, Google Scholar and PubMed were used. Medical organization websites, government websites, digital health journals and news sources were also reviewed. Interviews with Ontario physicians (mostly primary care physicians), subject matter experts, OntarioMD Peer Leaders, (Client Services & Engagement), as well as vendors, were also conducted to collect first-hand experiences from users.

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[1] *(1) Streamline and reduce required documentation and administrative work; (2) Ensure fair and equitable compensation for all work done; (3) Increase work-life balance by making organizational policy changes; (4) Promote the seamless integration of digital health tools into physicians' workflows; and 5) Provide institutional supports for physician wellness.*
[2] *OntarioMD's (OMD's) Burnout Working Group aims to research and potentially develop or adapt an assessment tool or inventory to assess/measure the impact of digital health tools and solutions on physicians' and other clinicians' burnout.*
[3] *Thomas Craig KJ, Willis VC, Gruen D, Rhee K, Jackson GP. The burden of the digital environment: a systematic review on organization-directed workplace interventions to mitigate physician burnout. J Am Med Inform Assoc. 2021 Apr 23;28(5):985.*
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What Causes Burnout?

There are many root causes of physician burnout. The identified pain points were categorized into technical, non-technical and health system causes. Technical causes were defined as pain points related to digital health tools such as EMRs, point-of-care solutions, as well as general digital health solutions. Non-technical causes highlight tasks that do not involve technology, but might be mitigated by potential technological solutions. Health system causes pertain to government or organizational policy and other causes that require changes at a system level to have impact.

Technical Causes

- **EMR-Related Challenges:**
  - » EMR Maintenance & Optimization Difficulties
  - » Integration & Interoperability Concerns
  - » Inconsistent Data Input Methods/ Standards
  - » Absence of Standardized Patient Summaries
- **Interface and Usability Issues:**
  - » Suboptimal UX/UI Design
  - » Multiple System Authentication (Logins)
  - » Excessive Clicks & Navigation (Click Fatigue)
- **Administrative Complexity:**
  - » Redundant Administrative Forms
  - » Inefficient Billing Processes
- **Alert and Information Management:**
  - » Overwhelming Alert Notification (Alert Fatigue)
  - » Excessive Information Flow
- **Obsolete or Ineffective Technologies:**
  - » Reliance on Fax Machines
- **Telehealth Struggles:**
  - » Exhaustion from Virtual Care
- **Decision Support Limitations:**
  - » Insufficient Clinical Decision Assistance

Non - Technical Causes

- Limited Digital Proficiency (Illiteracy)
- Time Constraints
- Inconsistent Documentation (Lack of Standard Forms)
- Keeping up-to-date with the latest research and guidelines
- Personal traits, cognitive flexibility, and coping skills
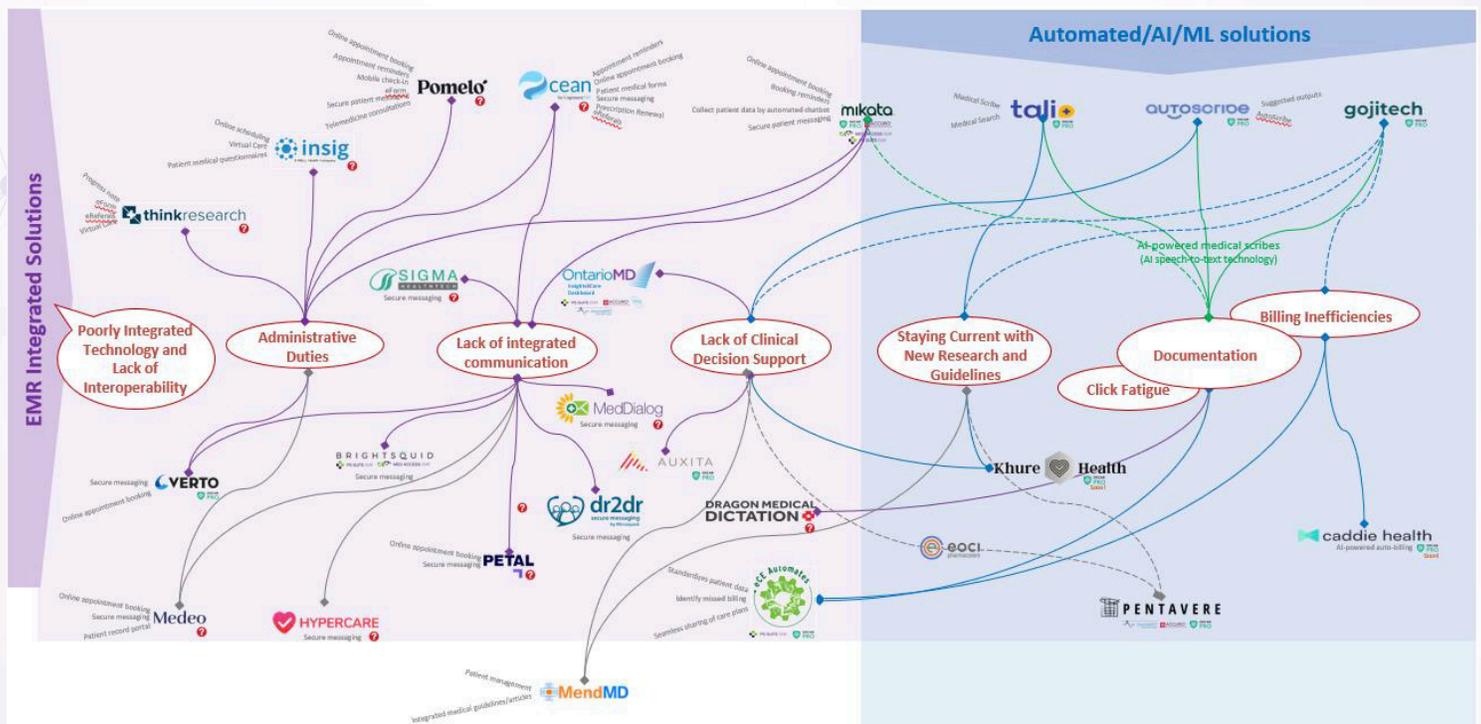
Health System Causes

- **Financial and Compensation Factors:**
  - » Physician Compensation Model
  - » Inadequate Pay
- **Administrative & Organizational Burdens:**
  - » Transfer of Administrative Duties to Physicians
  - » Mismatch Between System & Clinician Objectives
  - » Organizational Climate Influences
  - » Monitoring & Complaint Management
- **Resource & Access Constraints:**
  - » Challenges in Accessing Specialists & Tests
  - » Insufficient Human Resources
- **Evolving Physician Roles & Demands:**
  - » Shifting Role of Primary Care Physicians
  - » Increased Patient Involvement
  - » Rising Demand for Services
- **Work-Life Balance & Demographic Factors:**
  - » Difficulty Achieving Work-Life Balance
  - » Demographic Considerations

What Are Some Potential Solutions?

The map (Figure 1) illustrates the most prevalent causes of burnout, (ovals as red text). Each cause is connected to potential solutions, with some employing AI technology represented in the blue area. Although there are more solutions available in the market to tackle burnout causes, the current map – with limited solutions – already appears intricate. The complexity of the map itself adds to the overwhelming feeling when attempting to find suitable and effective solutions for each issue. Further investigation is required to identify or design appropriate methods or metrics for evaluating the effectiveness and functionality of each category of digital health solutions.

Causes and Solutions Mapping (Fig.1)

As a result of the findings from our review, in addition to the 4Ts Framework mentioned in Craig et al.'s systematic review, OntarioMD recommends adding another 'T' category to represent the need for 'Training.' Implementing digital health tools can be overwhelming for many physicians, thus leading to hesitancy in adopting them. Leveraging change management processes to prepare, select, implement and use such solutions can be a key factor in catalyzing their adoption. Similar to the role of Peer Leaders and Advisors, digital health experts who can support physicians throughout the process and share their own experiences, can motivate uptake. Training in the form of AI-enabled chatbots, customized online learning platforms, and mobile applications can also be leveraged to allow physicians to have a centralized space to ask questions, gain knowledge and collaborate with their colleagues. Supporting physicians through education and mentoring may make them more receptive to adopting technological solutions within their practices and ultimately enable them to increase efficiency with their use.

By consolidating our study findings into a comprehensive report, OntarioMD hopes that solution providers, policymakers, and governing organizations will gain a better understanding of physicians' many challenges and the steps that need to be taken to address them. To implement system-level solutions, all stakeholders involved need to come together to design and fully integrate innovative tools, assess current policies, and prioritize physicians' partnering. On the technology side, OntarioMD, the trusted technology advisor to Ontario physicians for almost 20 years, is with solution providers to engage physicians with educational and training opportunities and to implement solutions with the least amount of disruption to their practice.