A primary care prevention revolution?

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Recently I was quizzing my son about the industrial revolution. The memory of my grade 7 social studies class was faint, with vague recollections of the steam engine and the mechanization of manual labour–intensive tasks. What struck me was the considerable societal change that occurred then. It is difficult to imagine the rapid movement away from agriculture and small-scale craftsmanship to a machine- and mass manufacturing–based society. The industrial revolution took people from working at home to working away from home.

The coronavirus disease 2019 (COVID-19) pandemic has seemingly reversed the trend toward working away from home. Indeed, COVID-19 has challenged many of our societal norms—this is particularly evident in primary care. The desire to keep patients and staff safe has resulted in increased use of virtual visits. These visits, while not funded in many provinces just months ago, are becoming recognized as valid for the provision of care. Inherent in this situation, many family physicians are delaying less urgent visits such as annual physical examinations. Restricted access to screening services in many provinces means that screening tests are being delayed. Perhaps most meaningfully, the proliferation of false and misleading evidence on treatment for COVID-19 has reminded us to be skeptical and demand high-level evidence to guide our care. As we see, once again many apparent "good ideas" are later disproved by well-conducted randomized controlled trials.

Primary care is no stranger to good ideas based on limited evidence. Prevention is a good example. In theory, the more disease is prevented, the less it will need to be treated down the road. During the industrial revolution, prevention in the form of housing, sewage treatment, and water regulations curbed the tide of endemic diseases in industrial towns. A rapid increase in vaccine development in the 1950s changed the distribution of pediatric disease. However, in recent years we might have become overzealous in our pursuit of prevention. With most interventions of meaningful effect identified, new recommendations for prevention and screening have become more niched, with little to no evidence or evidence of little to no benefit.

Medical care has changed substantially since the industrial revolution began in 1760. Physical examination was in its infancy then—percussion was discovered in 1761 and the stethoscope invented in 1816.[1] The average life expectancy was less than 40 years and the disease profile was much different than it is today.

Today primary care physicians face an overwhelming list of recommendations for prevention, screening, and chronic disease management. If all current recommendations directed at primary care were implemented by clinicians, estimates suggest it would take 18 hours per day, with no time left for managing acute presentations.[2] Screening and preventive care recommendations often come through guidelines developed by special interest or specialty groups that do not understand the entirety of roles in primary care or recognize opportunity costs in a finite system. Furthermore, the evidence for many recommendations is limited and might not demonstrate improved patient outcomes. Prioritizing these recommendations leaves little room for the management of symptoms—which might have a greater effect for more patients (conservative estimates suggest a ratio of benefit of 26:1).[3] Something needs to change.

Revolutions are complex processes and might happen for a variety of reasons. They are often the result of multiple factors that converge in time and place. Primary care is at the tipping point where physicians cannot (and likely should not) meet the demands of multiple special interest groups. After decades of being the recipients of recommendations, we must lead in the prioritization of interventions—preferably by those with greatest evidence of benefit (and minimal harm). Canada is fortunate to have several groups dedicated to the development and dissemination of best evidence that could aid in these decisions. The COVID-19 pandemic has furthered discussions by pushing most patients into virtual visits, and forcing physicians to prioritize who needs to be seen in person and which screening interventions have benefits that outweigh potential exposure risks. Ideally, the use of best evidence will empower primary care clinicians to participate in optimal informed decision making along with their patients, resulting in better care for all.

In this issue, the article by Dr James Dickinson et al nicely highlights the screening and preventive interventions with the best level of evidence in primary care (**page 571**).[4] The article also questions practices that are accepted but deserve critical evaluation of their ultimate value. It is a good place to start when reevaluating what constitutes high-value care and where priorities should lie. To some, this might feel revolutionary, but perhaps a prevention revolution is what we need.

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Competing interests
None declared

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