COVID-19 Infection Prevention and Control: A rapid review of primary care resources across Canada

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COVID-19 has placed an incredible burden on health care systems globally.[1,2] Pandemic responses have largely focused on public health measures like masking and movement restrictions, and acute care preparedness with staffing, equipment, and infection prevention and control (IPC) policies and protocols. Through much of this, the voices and support needs of primary care teams have largely been sidelined.[3-5]

This is a missed opportunity not just because the pandemic is predominantly managed in the community, but because treating diseases like COVID-19 is at the centre of primary care's expertise. Improvement efforts have targeted, innovation in the co-ordination[6] and delivery of primary care.[7] Our research team[8] has worked alongside primary care clinics[9] to mitigate some of the challenges of responding to COVID-19 in Alberta. During this time, we have uncovered a pressing need for appropriately tailored IPC resources and supports. Put simply, the primary care teams we have been working with do not have the support they need to effectively implement IPC guidance. With this in mind, we began asking whether Alberta was an outlier, or if this gap in IPC implementation capacity existed in other provinces.

To find an answer, we conducted a rapid review of COVID-19 specific primary care IPC resources across Canada. The materials we collected and studied were sourced from provincial/territorial governments and health authorities, professional associations, and non-governmental organizations. While we cast as broad a net as possible to capture relevant repositories and documents, our rapid review of French and English language resources was not comprehensive. We did not access materials made available by medical associations, or otherwise requiring membership access.

For a full list of the resources we assessed, please refer to our PDF document.

Our review suggests that Alberta primary care is not an outlier. Critical gaps in COVID-19 IPC implementation resources exist across the country.

We describe four key gaps below:

1. Designed in the first instance for acute care

Access to relevant information is a key element in making IPC guidance effective. Our rapid review found that a significant number of resources have been developed in acute care settings and then more or less repurposed for primary care. Often subject to minimal modifications, these documents are incomplete or limited in their applicability to primary care settings.

While some documents include procedures and protocols for donning and doffing personal protective equipment (PPE), often little or no contextually relevant information is provided. As a result, primary care teams find themselves attempting to translate or adapt acute care-based guidance to the unique spaces and operations of their clinics. As an example, available resources assume without mentioning that primary care teams will have already established designated 'hot' and 'cold' areas for 'contaminated' and 'clean' equipment and PPE. Our experience working with these teams is that this is not a good assumption.

2. Designed prior to the pandemic or not updated

Access to the most current information is essential to the effective implementation of IPC guidance. We found resources that had not been updated for several months, or in some cases, used recycled information that was not specific to COVID-19. While accessing resources, primary care teams often encounter external links directing them to outdated or broken links, or irrelevant documents.

While general IPC principles will be relevant to the management of infectious diseases, in order for practitioners to feel confident and effectively implement COVID-19 guidance, it is important that specific updates be reactive to the changing situation.

3. Designed and presented in a disjointed fashion

Ease of access is a key to effectively communicating IPC guidance. We found that IPC resources are scattered across websites. As such, primary care teams searching for resources encounter multiple, sometimes competing, 'sources of truth' to consider. Individual resources often require readers to refer to other sources of information to compile best practices. In some cases, these teams are adapting guidance from a range of provinces or organizations.

Some repositories do not include a search function, instead relying on primary care teams to scroll through long lists and then wade through individual documents. While integrated search functions and organizational systems are features of some health authorities' websites, we found this inconsistent and irregular across jurisdictions.

4. Designed against health communication best practices

Access to easily digestible information is critical to effective IPC guidance implementation. Good health communication practices include not only the use of clear and concise language and its appealing presentation on a page, but also the use of visuals to break up or replace text.[10,11] Several of the documents in our review were composed of pages of dense paragraphs. While this may be useful in communicating the nuances of IPC best practices, it places the onus on primary care teams to sift through information and find contextually relevant information for their clinics.

Final Thoughts

Our rapid review of IPC implementation resources for COVID-19 suggests primary care teams in Canada are accessing disjointed guidance from a range of non-curated repositories. This generalized advice tends to be limited in its applicability to the unique needs of primary care clinics, their staff and practitioners. Providing clinics with COVID-19 IPC guidance designed first for acute care settings is not enough. Primary care teams need relevant, specific and trustworthy resources to effectively implement IPC guidance as they manage the COVID-19 pandemic in Canadian communities.

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technology, policy, organizational, and clinical level reforms that are needed to support the delivery of high quality care. Recent COVID-19 funding has seen him working across the acute, primary, and public health systems to understand policy responses and implementation challenges in the context of the pandemic. He brings extensive international experience in ethnography to his research, and an interest in the origins and challenges of trust in the creation and implementation of policy to his teaching. Dr. Leslie joined the University of Calgary faculty in the autumn of 2016, arriving from the Johns Hopkins School of Medicine in Baltimore, MD. He was trained at the Universities of Toronto and Leicester where he held Canada Graduate and Trudeau Foundation Scholarships, and a post-doctoral position in patient safety and quality.

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