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INNOVATIONS STRENGTHENING PRIMARY HEALTH CARE THROUGH RESEARCH


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POLICY DRIVEN RESEARCH AT INSPIRE-PHC

Applied Health Research Questions

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An Applied Health Research Question (AHRQ) is a question posed by a health system policy maker or provider to obtain research evidence to inform planning, policy and program development that will benefit the entire Ontario health system.

In this report:

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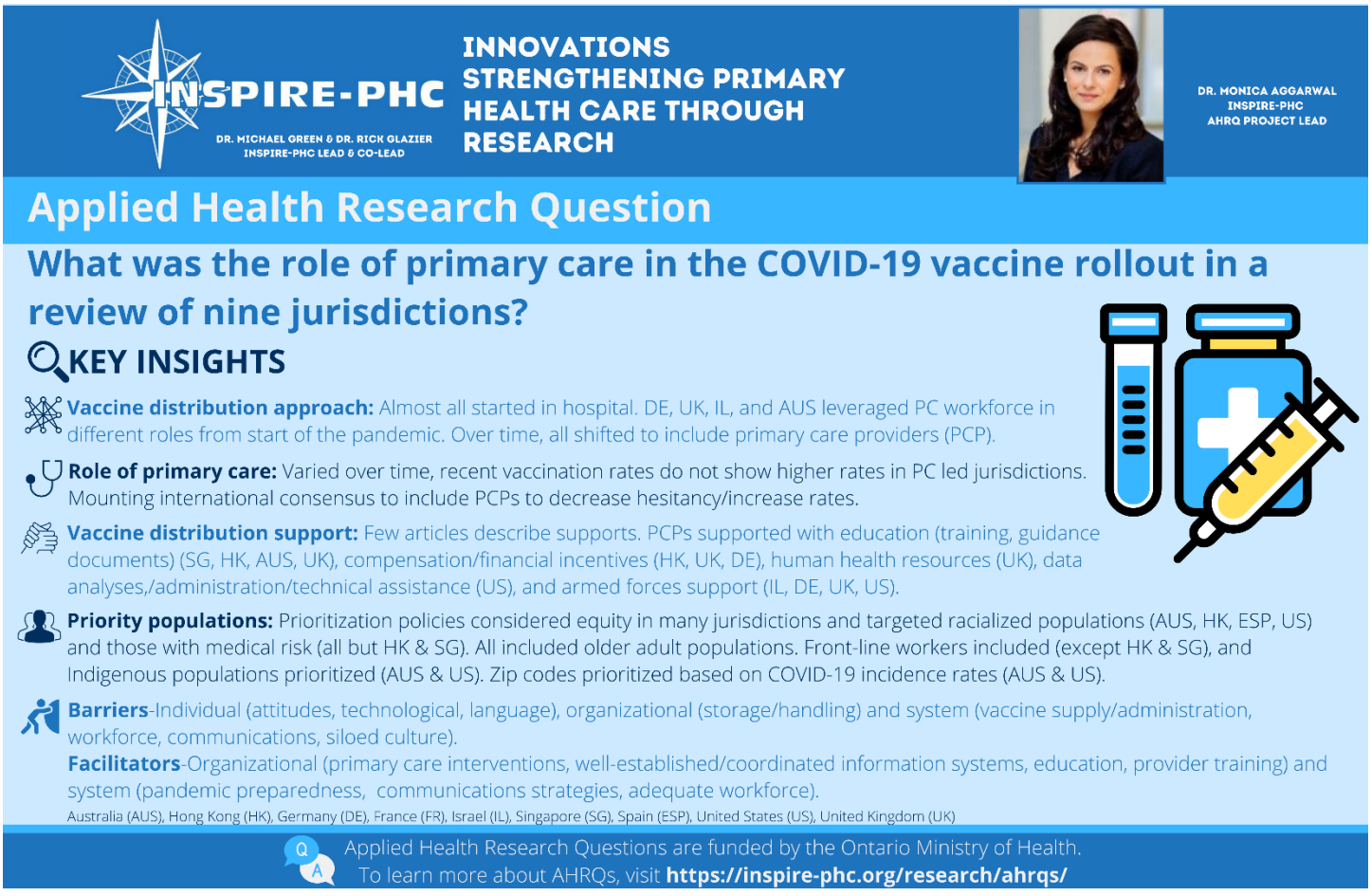
Primary care and COVID-19 vaccines: International evidence

Monica Aggarwal, Kristina Kokorelias, Alan Katz, Rick Glazier, Ross Upshur, Kavita Mehta (KU), Leanne Clarke (KU).

The vaccines developed against COVID-19 have been determined to be among the most effective long-term methods to bring an end to the severe phases of the pandemic. However, there are significant concerns about vaccine hesitancy and the equitable distribution of the COVID-19 vaccines. The inclusion of first-contact primary care providers in the vaccine distribution is one approach that can increase vaccine confidence and adoption. This study aimed to examine the experience of nine global jurisdictions that engaged primary care providers to administer COVID-19 vaccines during the pandemic. This included Australia, Hong Kong, Germany, France, Israel, Singapore, Spain, the United States, and the United Kingdom. A rapid review methodology was adopted to identify peer-review and grey literature in multiple databases for the period between January 2020 to July 2021. The findings were synthesized and reported narratively. This study found the vaccine distribution approach in almost all jurisdictions started in hospital sites. Germany, the United Kingdom, Israel, and Australia leveraged their primary care workforce from the beginning of the pandemic. Over time, all jurisdictions shifted to include first-contact primary care providers in the vaccine distribution strategy. Equity was considered in the prioritization policies for various marginalized communities in several jurisdictions, including older adults and racialized individuals. Recent data suggest that vaccination rates were not higher in jurisdictions that began with a primary care-led vaccine distribution strategy. However, there was an international consensus on the importance of including first-contact primary care providers in vaccine distribution to reduce vaccine hesitancy and increase vaccination rates. In addition, several factors influenced the vaccine rollout. There were several individual, organizational, and contextual factors that were barriers during the vaccine rollout. Pandemic preparedness, well-established and coordinated information systems, primary care interventions, adequate supply providers, education and training of providers, and effective communications strategy were facilitators of the vaccine rollout. Available supports to primary care providers included education and training, financial incentives, and organizational support.



Patients' experiences with virtual care primary care

Rachelle Ashcroft, Simone Dahrouge, Judith Belle Brown, Lisa Dolovich, Catherine Donnelly, Jean Grenier, Bridget Ryan, David Verrilli, Javed Alloo, Jennifer Rayner, Kavita Mehta, Sandeep Gill, Simon Lam, Kiran Saluja, Payam Pakravan (KU).

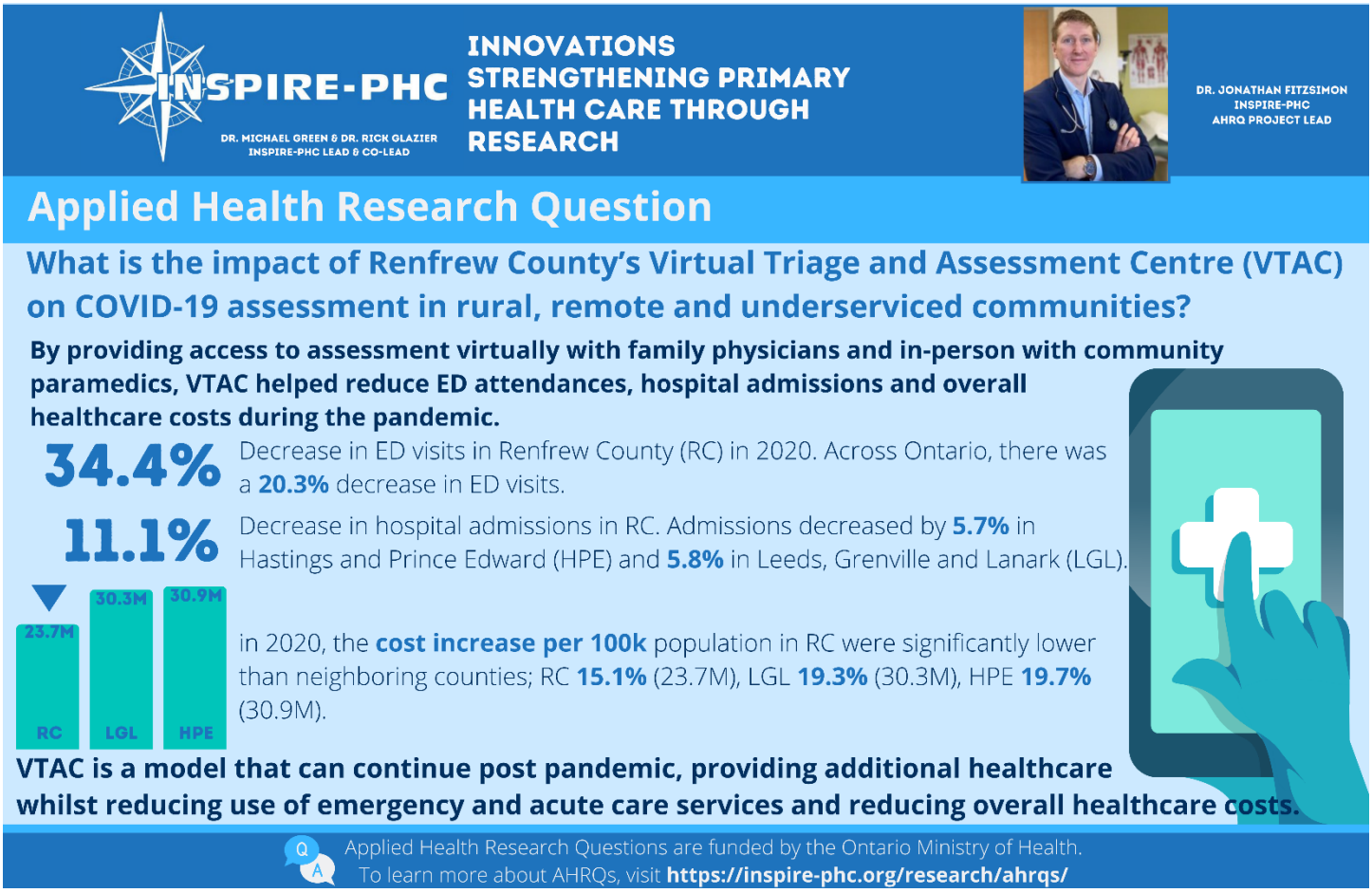
This AHRQ supported an integrated knowledge translation strategy whereby we met with our provincial knowledge user to generate a report that aligned with their needs. We developed a comprehensive report detailing recommendations for the future use of virtual care in Ontario. Ontario Health disseminated the report to a provincial advisory committee, which used the report to inform the advisory committee's decision-making. Six recommendations were provided for optimizing primary care patients' future experience with virtual care: i) Improving processes to facilitate appointment booking and scheduling, ii) Providing patients with choice of appointments, iii) Asynchronous sharing of information before and after appointments, iv) Ensuring and reassuring about privacy and confidentiality, v) Inclusion of family and caregivers, and vi) Provider communication that encompasses the range of topics, and at pace, comparable to in-patient appointments. We recommend that the impact of virtual care continues to be monitored, with attention to the following four items: i) Potential impact of the limitations of the virtual modalities on the Quality of care, ii) Changes in the strength of the relationship between patient and provider due to decreased in-person encounters, iii) Diminished Comprehensiveness of services and delivery of Whole-Person-Care because the virtual modalities may favour a problem-solving approach over preventative care, and iv) Explore whether unscheduled telephone calls, which became more common during the pandemic and well received by the patient, enhances the patient's perception of the Patient-Provider Relationship.

COVID-19 assessment in rural, remote and underserviced communities

Jonathan Fitzsimon, Christopher Belanger, Roshanak Mahdavi, Lesley Plumptre, Cayden Peixoto, Lise Bjerre, Arnprior Regional Health (KU).

Background: At the start of the COVID-19 pandemic, a collaboration of local health care providers in Renfrew County, Ontario established VTAC, ensuring COVID-19 testing and assessment for all residents. Community Paramedics provide testing at drive-through sites and in-home. Family Physicians provide assessment by virtual means for any urgent health concerns.
Approach: This impact analysis used ICES health-administrative data to compare pre-pandemic and intra-pandemic use of emergency departments (ED), primary care services and hospital admissions. The Renfrew County District Health Unit (RC) catchment was compared to two neighbouring health units; Hastings and Prince Edward (HPE) and Leeds, Grenville and Lanark (LGL). Data was also collected for the Champlain region and Ontario as a whole.
Results: In 2020, there was a 20.3% decrease in ED visits across Ontario (21.8% in HPE and 20.5% in LGL). In RC the decrease was 34.4%. Hospital admissions decreased by 5.7% in HPE and 5.8% in LGL. In RC the decrease was 11.1%. Costs were calculated for ED use, hospital admission, physician costs, OHIP lab costs and OHIP non-physician costs. Total costs per 100K population increased by 19.7% ($30.9M) in HPE and 19.3% ($30.3M) in LGL. Total costs in RC increased by 15.1% ($23.7M).
Conclusions: By providing access to assessment virtually with family physicians and in-person with community paramedics, VTAC helped reduce ED attendances, hospital admissions and overall healthcare costs during the pandemic.

VTAC is a model that can continue post pandemic, providing additional healthcare whilst reducing use of emergency and acute care services and reducing overall healthcare costs.



Primary care in Ontario Health Teams

Colleen Grady, Han Han, Da Hye Kim, Angela Corderre-Ball, Nadia Alam, David Mathies (KU).

Purpose: Understand how family physicians (FPs) are represented in Ontario Health Teams (OHTs) and explore structures and processes used by primary care (PC) sector to participate in the work of the OHT.

Scoping review- Results: Focus on the structures/processes used by FPs to support active collaboration and participation in integrated health care around the globe. Began with over 11,000 references, screened to include 32 studies. Successful structures supporting FP participation included three primary elements; 1) shared vision/values, 2) strong and positive FP leadership, and 3) defined decision-making procedures. Catalysts for FP participation included: effective communication, collective sense of motivation for change and collaboration, and relationships built on trust and not hierarchical.

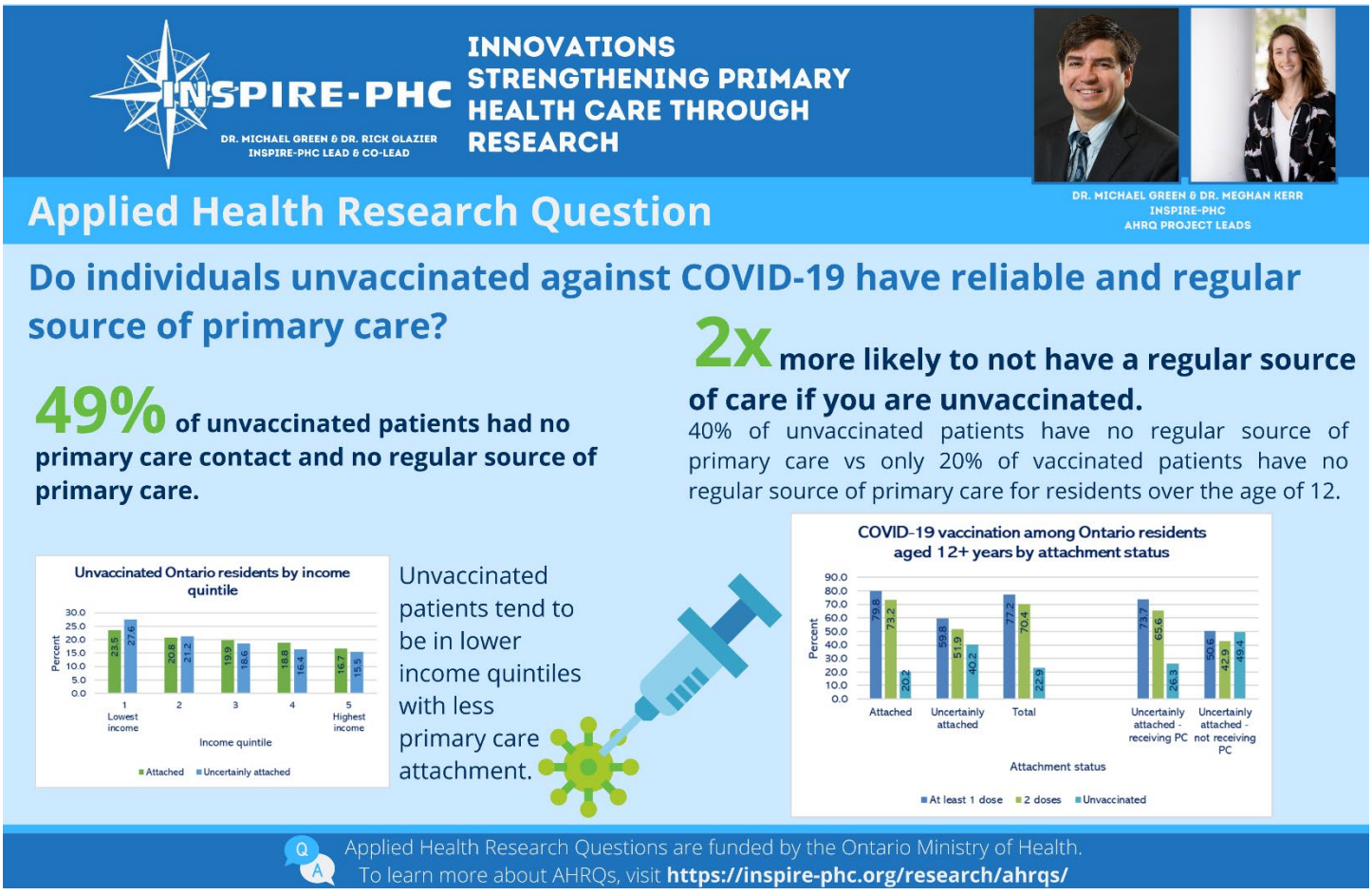
Multiple case study- Results: Four OHTs included, one from Cohort 1 and three from Cohort 2, representing rural and urban regions. Semi-structured interviews and document analysis with 39 interviews completed, 17 (44%) were FPs. Structures enabling FP participation were few, some a resurrection of previous alliances. In two cases, a developed structure with Terms of Reference is in place. Efforts to include FPs in OHT development varied in progress made and the intensity (high to none). COVID-19 efforts overwhelmed each OHT and slowed down, or temporarily stopped, progression in development. Challenges to participation of FPs included: time to attend meetings, inconsistent or inadequate communication, loss of revenue for some FPs and impact on patient care when attending OHT meetings. Rural/northern OHTs are particularly challenged by physician recruitment and retention, and geographical challenges with rural providers feeling 'left out'. A history of collaboration (or absence of such) among FPs influenced participation, support and/or value of the OHTs. In one case, previous work enabled greater participation, whereas, in another, distrust and skepticism about government initiatives, and inequities between OHT partners limited progression of the OHT and inclusion of FPs. Physician champions are pivotal to success.

COVID-19 vaccination status and attachment to primary care

Michael Green, Meghan Kerr, Eliot Frymire, Shahriar Khan, Jennifer Shuldiner, Noah Ivers, Mina Tadrous, Jeff Kwong, David Kaplan (KU).

The purpose of the present study is to look at the association between primary care attachment rates and patient enrolment models with COVID-19 vaccinations rates among people aged 12 and older in Ontario, Canada using ICES data from August 2021. Patient attachment status of people aged 12 years and older receiving healthcare in Ontario was identified using a validated patient attachment algorithm. Vaccination status of individuals was identified using COVAX data and reported as, either 0, 1, or 2 doses of any COVID-19 vaccine.

Of patients attached to primary care, 20.2% were unvaccinated; of patients uncertainly attached to primary care, 40.2% remained unvaccinated. Of those 20.2% unvaccinated patients attached to primary care, the highest proportion of unvaccinated patients were attached to Enhanced Fee-For-Service models (37%). Uncertainly attached, unvaccinated patients; were over 3x more likely to have had 0 core primary care visits compared to attached patients (74.0% with 0 core primary care visits vs. 21.8%); were more likely to have no medical comorbidities or score low on the ADG comorbidity index as compared with attached patients (86.1% with an ADG score of 0-4 as compared with 21.8%); were 3x more likely to be generally healthy as per the RUB ranking system as compared with attached patients: 63.8% ranked as non-user/healthy user of the healthcare system as compared with 21.8%. The data presented here will assist in guiding government investment in public health immunization campaigns to optimize uptake of vaccine when faced with the vagaries of novel COVID-19 variants as well as target high risk groups.



COVID-19 services needs assessment: Francophone and vulnerable populations

Sharon Johnston, William Hogg, Elizabeth Tanguay, Joseph Abdulnour, Julienne Niyikora, John Hoyles (KU).

We have demonstrated that the Canadian Primary care Information Network (CPIN) communication platform can provide reliable health information by e-mail and text to patients and families including francophone patients and those with low health literacy. We have recruited more practices than promised, installed the service and are sending health promotion messages in English and French to the patients in these practices. Following the messages, the patients are given the opportunity to rate the usefulness of the messages and suggest additional topics of interest. We are now using this feedback to better understand the health information of different segments of the practice populations, to improve the quality of the messages and to improve this new communication channel between primary care providers and their patients.

This collaboration between researchers from the University of Ottawa and the Eastern Ontario Public Health Unit, the Ottawa East Ontario Health Team and regional organizations representing francophone interests has progressed to a program of related research that is allowing us to recruit hundreds of additional practices in the area and across Canada.

Supporting family physicians with data-driven care during the pandemic

Tara Kiran, Jennifer Shuldiner, Adam Cadotte, Payal Agarwal, Susie Kim, Maryam Danesh, Kirsten Eldridge, Michelle Greiver, Noah Ivers, David Kaplan (KU), Zara Ismail (KU).

How can we optimally design a QI dashboard to support family physicians to take a proactive, population-based approach to supporting COVID-19 recovery?

First, we identified and integrated best practices in Audit and Feedback including simplification of text and visual display, judicious use of comparisons, and development and integration of practical tips and resources.

Second, we embarked on a user-centred design process that included development of four user personas: "Dr. Skeptic, the Frazzled Physician, the Eager Implementer, and Sidney Big Wig". These personas are being used to guide the design process. We also conducted design sessions with physicians who could review their own dashboard and data. We learned the importance of comparators, clearly describing the value-add of the dashboard, and the utility of patient-level data, ideally integrated with the electronic chart.

An interactive HTML-based dashboard for physicians who contribute data to one of seven practice-based research networks associated with POPLAR is under development. The dashboard together with continuing professional development supports will help physicians take a data-driven, population-based approach to support an equitable COVID recovery. Work is being done collaboratively with Ontario Health, POPLAR and other organizations to support scale up provincially once the dashboard is ready for use.