COVID-19 Community of Practice for Ontario Family Physicians

Dec 16, 2022

Dr. Kevin Samson
Dr. Zain Chagla
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Virtual Care and Pandemic Reflections

Family & Community Medicine
UNIVERSITY OF TORONTO

Ontario College of
Family Physicians

Virtual Care and Pandemic Reflections

Co-Moderators:

- Dr. Tara Kiran, Fidani Chair, Improvement and Innovation, DFCM, Toronto, ON
- Dr. Ali Damji, Division Head (Primary Care), THP, Mississauga, ON

Panelists:

- Dr. Kevin Samson, Rockwood, ON
- Dr. Zain Chagla, Hamilton, ON
- Dr. Danielle Martin, Toronto, ON

Co-hosts:

- Dr. Mekalai Kumanan, Cambridge, ON
- Dr. Liz Muggah, Ottawa, ON

The COVID-19 Community of Practice for Ontario Family Physicians is a one-credit-per-hour Group Learning program that has been certified for up to a total of 32 credits.

Land Acknowledgement

We acknowledge that the lands on which we are hosting this meeting include the traditional territories of many nations.

The OCFP and DFCM recognizes that the many injustices experienced by the Indigenous Peoples of what we now call Canada continue to affect their health and well-being. The OCFP and DFCM respects that Indigenous people have rich cultural and traditional practices that have been known to improve health outcomes.

I invite all of us to reflect on the territories you are calling in from as we commit ourselves to gaining knowledge; forging a new, culturally safe relationship; and contributing to reconciliation.

C1.3 Meaningfully involve every DFCM site in addressing the gaps in primary care access and attachment for First Nations, Inuit, and Métis communities, including by partnering with Indigenous health organizations and other agencies

Changing the way we work

A community of practice for family physicians during COVID-19

At the conclusion of this series participants will be able to:

- Identify the current best practices for delivery of primary care within the context of COVID-19 and how to incorporate into practice.
- Describe point-of-care resources and tools available to guide decision making and plan of care.
- Connect with a community of family physicians to identify practical solutions for their primary care practice under current conditions.

Disclosure of Financial Support

This CPD program has received in-kind support from the Ontario College of Family Physicians and the Department of Family and Community Medicine, University of Toronto in the form of logistical and promotional support.

Potential for conflict(s) of interest:
N/A

Mitigating Potential Bias

- The Scientific Planning Committee has full control over the choice of topics/speakers.
- Content has been developed according to the standards and expectations of the Mainpro+ certification program.
- The program content was reviewed by a three-member national/scientific planning committee.

Planning Committee: Dr. Tara Kiran (DFCM), Dr. Mekalai Kumanan (OCFP); Dr. Ali Damji (DFCM), Dr. Liz Muggah (OH), Kimberly Moran (OCFP), Mina Viscardi-Johnson (OCFP), Adrienne Spencer (OCFP), Marisa Schwartz (DFCM), Erin Plenert (DFCM)

Previous webinars & related resources:

https://www.dfcm.utoronto.ca/covid-19-community-practice/past-sessions

Dr. Kevin Samson – Panelist

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- Relationships with financial sponsors:
  - Grants/Research Support:
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  - Others: AFHTO, Ontario Health

- Faculty Name: **Dr. Zain Chagla**
- Relationships with financial sponsors:
  - Grants/Research Support: Gilead (Long COVID), Roche (Tociluzimab) Speakers Bureau/Honoraria: : AZ, Pfizer, Merck, Roche, Gilead, GSK, Moderna
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  - Others: N/A

- Faculty Name: **Dr. Danielle Martin**
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  - Grants/Research Support: N/A
  - Speakers Bureau/Honoraria: N/A
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- Relationships with financial sponsors:
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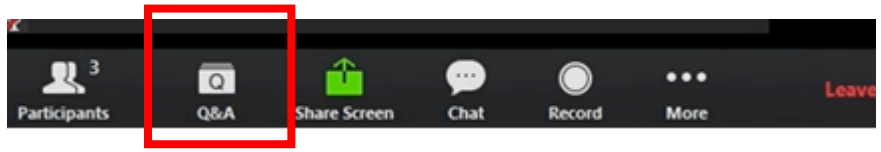
  - Grants/Research Support: Canadian Institute for Health Research, Ministry of Health and Long-Term Care, St. Michael's Hospital Foundation, St. Michael's Hospital Medical Services Association, Women's College Hospital Academic and Medical Services Group Innovation Fund, University of Toronto, Health Quality Ontario, Ontario Ministry of Health, Gilead Sciences Inc., Staples Canada, Max Bell Foundation.

Today's Outline

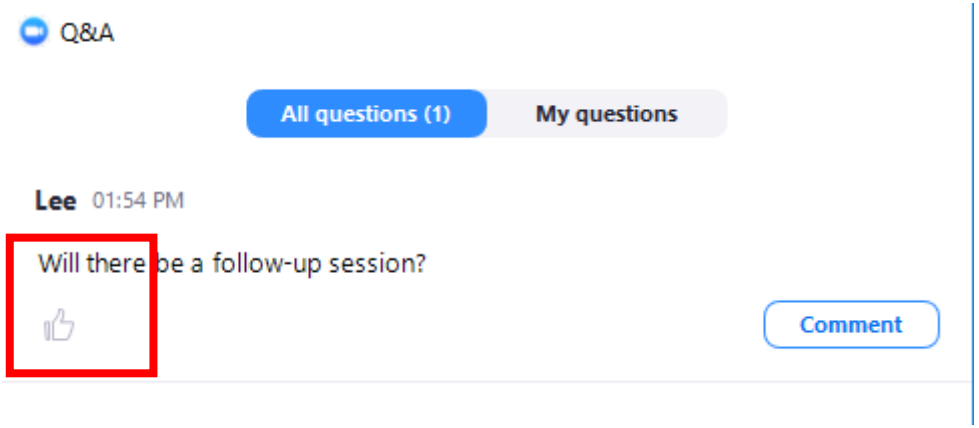
- Practical tips on virtual care
- CareCanvas
- Infectious Disease Update—Boosters, Paxlovid, Evusheld
- Reflections on the role of primary care during the pandemic

How to Participate

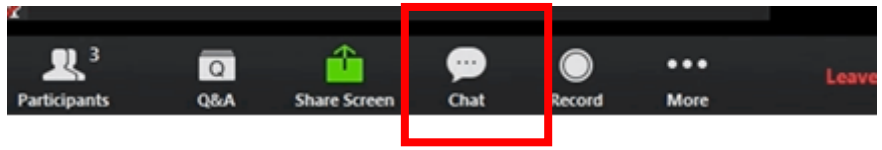
- All questions should be asked using the Q&A function at the bottom of your screen.



- Press the thumbs up button to upvote another guests questions. Upvote a question if you want to ask a similar question or want to see a guest's question go to the top and catch the panels attention.



- Please use the chat box for networking purposes only.



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COVID 19- Community of Practice
for Family Physicians

Virtual Care

Dec 16, 2022

Dr. Kevin Samson

Comprehensive Virtual Care Services

Patient has been seen in person in the past 24 months
or
There is an existing/ongoing patient-physician relationship

Video paid at par with in person
Phone paid at 85% (95% for K005 and K007)

Bill using in person codes with a modality indicator
K300A for video, K301A for phone

Limited Virtual Care Services

A101 Limited Virtual Care by Video $20.00
A102 Limited Virtual Care by Telephone $15.00

Virtual Care Billing Tips

- Virtual visits can be **initiated by patients or physicians**
- **Modality (phone or video) must be documented** in the patient's medical record
- **Virtual visits must be medically necessary** (ex. can't just be administrative or conveying normal results)
- **Service can't be delegated** (except when supervising medical trainee)
- **Services involving a direct physical encounter must be made available** by the physician providing **Comprehensive Virtual Care** Services, or by the physician's group, within a clinically appropriate time-frame, if it becomes apparent during a Virtual Care Service that a service involving a direct physical encounter is medically necessary, or if at the time of scheduling the service the patient expresses preference for a service involving a direct physical encounter
- **Patient and physician must be located in Ontario** (different from CPSO and CMPA)
- **In-basket rules** are similar for virtual claims
- **Premiums and management fees** mostly apply to virtual services

  *A virtual K030 is only eligible for payment if a K030 involving a direct physical encounter has been performed in the preceding 12 months.
- Virtual care claims are generally **not applicable to in patient care** (but there are exceptions)
- **Verified-Virtual Visit Solution must be used when billing for video visits**

  https://www.ontariohealth.ca/our-work/digital-standards/virtual-visits-verification-standard/vendor-list
- **Virtual Visits must be clinically appropriate**

Appropriate Virtual Care Decision Points

Patient

- Patient preference
- Available to patient – device/data
- Patient ability

Clinician

- Available to clinician
- Clinically appropriate
- Clinician competency

Why Virtual

Sometimes patients prefer virtual to in-person

Difficult to attend in-person

- Transport
- Cost
- Time
- Mobility
- Anxiety

Virtual allows family/caregivers to join the visit

Virtual can be more convenient

Phone vs Video

Sometimes patients prefer phone to video

More comfortable with phone

Video not accessible

Concern that not able to use video

Don’t see need/benefit for video

Sometimes patients prefer video to phone

More personal – expression, body language, …

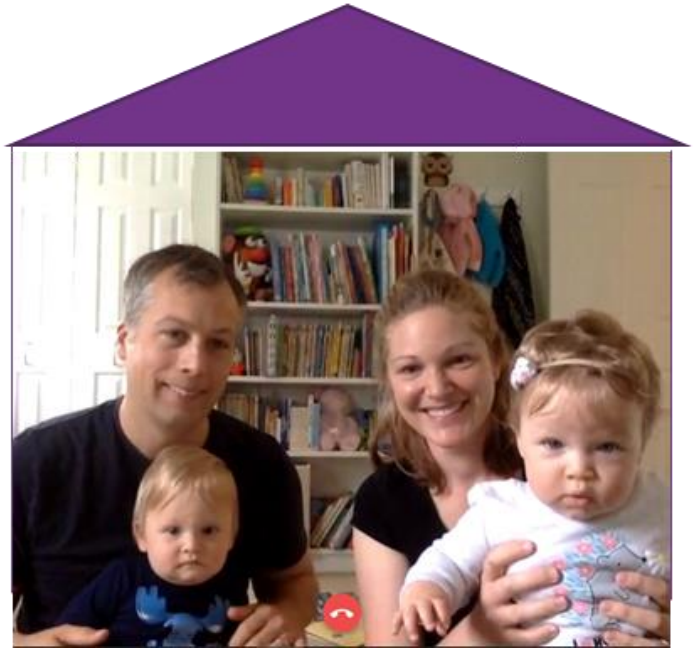
Can show stuff – rashes, where it is, how much it can move, …

Used to video with family/friends/work

Skype, FaceTime, Zoom, WhatsApp, Teams, WebEx, …

Virtual Care Tips

- Review Guidance documents
- Choose the system that will work best for you
  Phone softphones Video integration, ease of use, functionality
- Setup and skills
  Using second monitor for video
  Competency and confidence with clinical skills for virtual care
- Check with colleagues
- Practice – be the patient, be the doc, try different devices
- Establish good workflows and scheduling
  Work with office staff
  Have blocks of virtual care time rather than intermixing
- List visits that you would be more comfortable with doing virtually
- Inform and educate patients
- Soft launch
- Patient feedback
- OMD – Practice Advisors and Consultants + One on One Peer Leader Sessions

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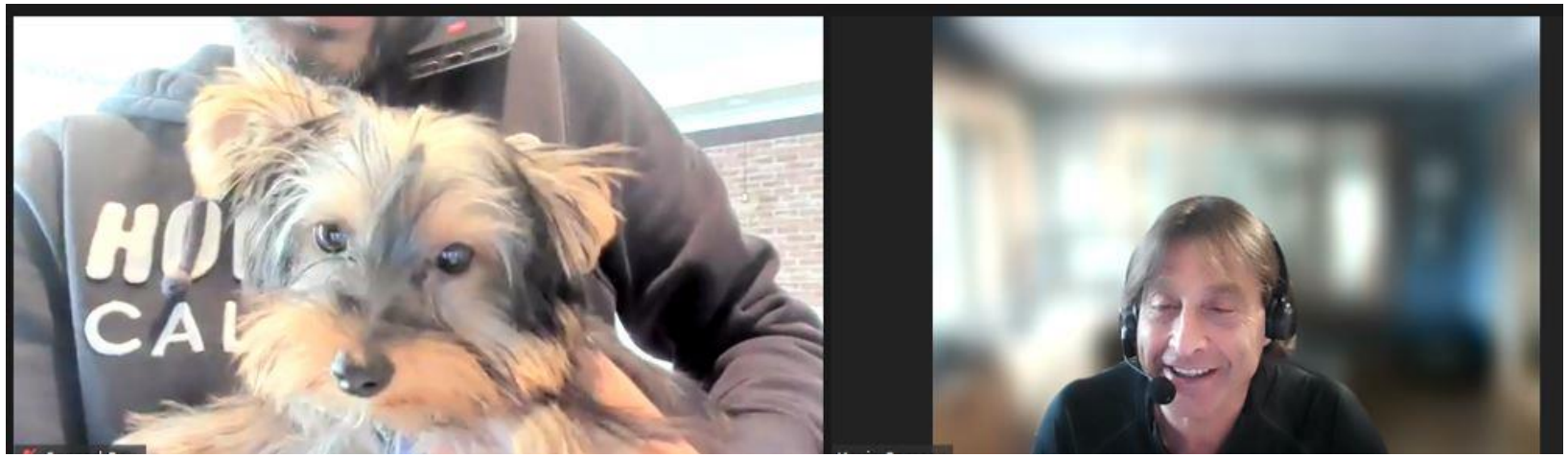
Patient - 11:06



Resources

Ministry of Health: Schedule of Benefits Dec 1, 2022
https://www.health.gov.on.ca/en/pro/programs/ohip/sob/physserv/sob_master_20221201.pdf

Healthcare Excellence Canada: Clinician Change Virtual Care Toolkit
https://www.healthcareexcellence.ca/en/news/2022-06-08-new-toolkit-will-help-health-care-providers-deliver-virtual-care-to-canadians/

Ontario Health: Virtual Visits Verification Standard
https://www.ontariohealth.ca/system-planning/digital-standards/virtual-visits-verification

Ontario Health: Verified Solutions List for Virtual Visits
https://www.ontariohealth.ca/system-planning/digital-standards/virtual-visits-verification/verified-solutions-list

Ontario Health: Clinically Appropriate Use of Virtual Care in Primary Care
https://www.ontariohealth.ca/providing-health-care/clinical-standards-guidelines/clinically-appropriate-virtual-care-guidance-primary-care

ipfiniti: Cloudvoice softphone solution
www.ipfinity.com

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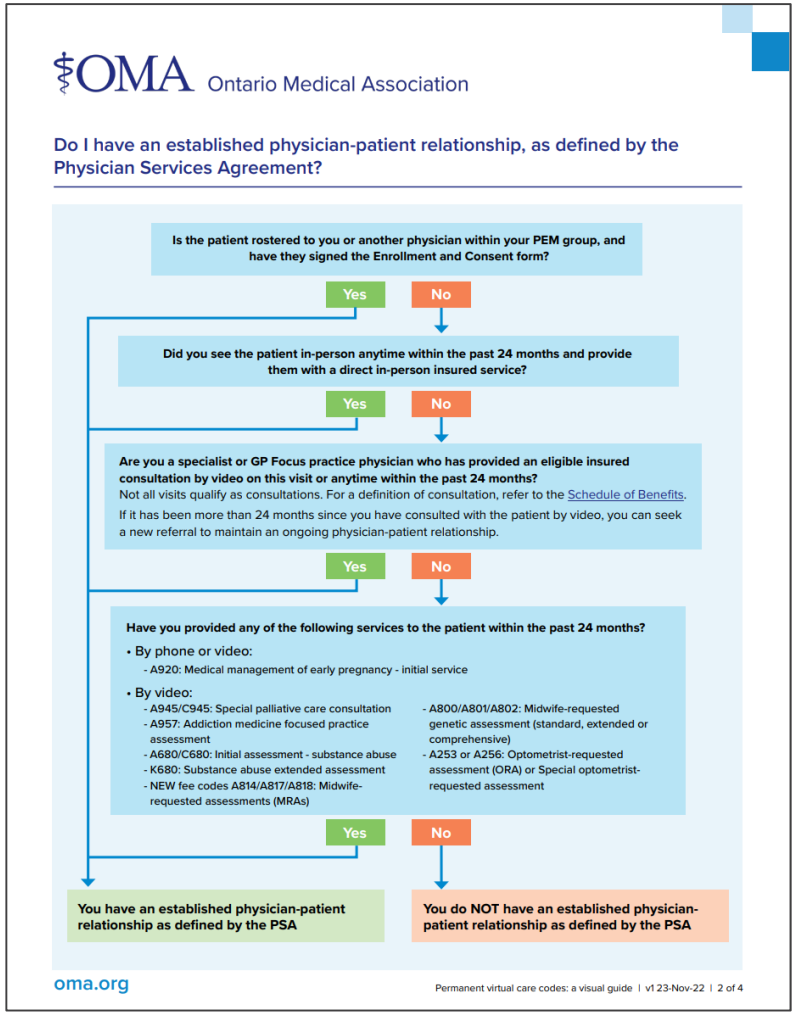
OMA Tools

Virtual Care Billing: a Visual Guide

A visual guide explaining the new permanent billing codes for virtual care that went into effect December 1st.

- https://www.oma.org/uploadedfiles/oma/media/member/membermappedpdfs/negotiations/psa/oma-virtual-care-codes-visual-guide.pdf/



OMA Ontario Medical Association

Do I have an established physician-patient relationship, as defined by the Physician Services Agreement?

Is the patient rostered to you or another physician within your PEM group, and have they signed the Enrollment and Consent form?

Yes / No

Did you see the patient in-person anytime within the past 24 months and provide them with a direct in-person insured service?

Yes / No

Are you a specialist or GP Focus practice physician who has provided an eligible insured consultation by video on this visit or anytime within the past 24 months?
Not all visits qualify as consultations. For a definition of consultation, refer to the Schedule of Benefits.
If it has been more than 24 months since you have consulted with the patient by video, you can seek a new referral to maintain an ongoing physician-patient relationship.

Yes / No

Have you provided any of the following services to the patient within the past 24 months?

- By phone or video:
  - A920: Medical management of early pregnancy - initial service
- By video:
  - A945/C945: Special palliative care consultation
  - A957: Addiction medicine focused practice assessment
  - A680/C680: Initial assessment - substance abuse
  - K680: Substance abuse extended assessment
  - NEW fee codes A814/A817/A818: Midwife-requested assessments (MRAs)
  - A800/A801/A802: Midwife-requested genetic assessment (standard, extended or comprehensive)
  - A253 or A256: Optometrist-requested assessment (ORA) or Special optometrist-requested assessment

Yes / No

You have an established physician-patient relationship as defined by the PSA

You do NOT have an established physician-patient relationship as defined by the PSA

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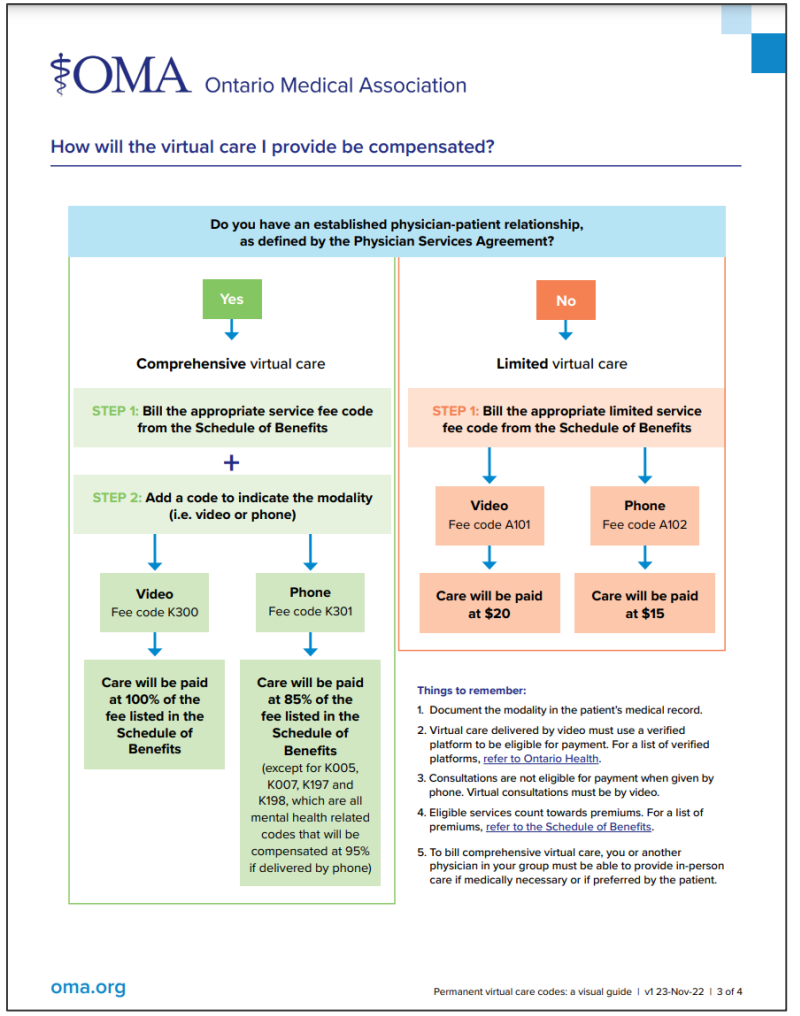
Permanent virtual care codes: a visual guide | v1 23-Nov-22 | 2 of 4



OMA Ontario Medical Association

How will the virtual care I provide be compensated?

Do you have an established physician-patient relationship, as defined by the Physician Services Agreement?

Yes

Comprehensive virtual care

STEP 1: **Bill the appropriate service fee code from the Schedule of Benefits**

+

STEP 2: **Add a code to indicate the modality (i.e. video or phone)**

- **Video** Fee code K300 → **Care will be paid at 100% of the fee listed in the Schedule of Benefits**
- **Phone** Fee code K301 → **Care will be paid at 85% of the fee listed in the Schedule of Benefits** (except for K005, K007, K197 and K198, which are all mental health related codes that will be compensated at 95% if delivered by phone)

No

Limited virtual care

STEP 1: **Bill the appropriate limited service fee code from the Schedule of Benefits**

- **Video** Fee code A101 → **Care will be paid at $20**
- **Phone** Fee code A102 → **Care will be paid at $15**

Things to remember:

1. Document the modality in the patient's medical record.
2. Virtual care delivered by video must use a verified platform to be eligible for payment. For a list of verified platforms, refer to Ontario Health.
3. Consultations are not eligible for payment when given by phone. Virtual consultations must be by video.
4. Eligible services count towards premiums. For a list of premiums, refer to the Schedule of Benefits.
5. To bill comprehensive virtual care, you or another physician in your group must be able to provide in-person care if medically necessary or if preferred by the patient.

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Permanent virtual care codes: a visual guide | v1 23-Nov-22 | 3 of 4

CareCanvas

Better Care, Made Easier

A NEW TOOL TO SUPPORT PRACTICE IMPROVEMENT

An interactive web-based dashboard that summarizes clinical information from your practice EMR.

- Designed for family physicians and primary care teams
- Three dashboards will be available: one for physicians, one for clinics, and one for Ontario Health Teams
- More than 15 quality of care measures
- Makes it easy for physicians to identify patients who need follow-up and for clinics to meet reporting requirements
- Private, secure, and available at no cost
- Any physician who is a member of Telus Practice Solutions, Accuro, or Oscar EMR can contribute data to UTOPIAN or POPLAR
- The physician dashboard will be available to existing UTOPIAN contributors in November, with plans to expand the program to all of POPLAR in early 2023

Visit: https://www.carecanvas.ca

POPLAR

Family & Community Medicine
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The dashboard was developed by the University of Toronto and POPLAR

Vaccines

- Vaccines available for use in Canada
- Primary series: Moderna (original), Pfizer, Novavax, J+J
- Booster: Moderna (BA1, BA5), Pfizer (BA5), Novavax
- Pfizer BA5 approved as booster for 5-11
- All can be coadministered with influenza vaccine

Real World Efficacy - USA

TABLE 2. Absolute vaccine effectiveness against symptomatic SARS-CoV-2 infection for a single bivalent mRNA COVID-19 booster dose received after 2, 3, or 4 doses of monovalent vaccine compared with no doses, by age group and number of monovalent COVID-19 vaccine doses — Increasing Community Access to Testing program, United States, September–November 2022

	Absolute VE (95% CI), by no. of monovalent doses received before the bivalent vaccine dose			
Age group, yrs	2 doses	3 doses	4 doses*	≥2 doses
18–49	41 (31–49)	43 (39–46)	NA	43 (39–46)
50–64	50 (35–61)	25 (17–33)	28 (20–34)	28 (22–33)
≥65	32 (9–49)	19 (8–29)	23 (15–30)	22 (15–29)

Abbreviations: NA = not applicable; VE = vaccine effectiveness.

* Persons aged <50 years without moderate or severe immunocompromise were not eligible for a fourth monovalent (second booster) dose.

Link-Gelles, R. *et al.* Effectiveness of Bivalent mRNA Vaccines in Preventing Symptomatic SARS-CoV-2 Infection — Increasing Community Access to Testing Program, United States, September–November 2022. *MMWR Morb. Mortal. Wkly. Rep.* **71**, 1526–1530 (2022).

TABLE 3. Relative vaccine effectiveness of a single bivalent mRNA COVID-19 booster dose against symptomatic SARS-CoV-2 infection* received after 2, 3, or 4 monovalent vaccine doses, by age group, number of monovalent COVID-19 vaccine doses received, and interval since last monovalent dose — Increasing Community Access to Testing program, United States, September–November 2022

Age group, yrs/mos since receipt of most recent monovalent dose	Relative VE (95% CI), by no. of monovalent doses received†			
	2 doses	3 doses	4 doses§	≥2 doses
18–49				
2–3	45 (31–56)	24 (14–33)	NA	30 (22–37)
4–5	47 (35–57)	41 (35–47)	NA	43 (38–48)
6–7	42 (30–52)	47 (42–52)	NA	46 (41–50)
≥8	53 (45–60)	58 (56–61)	NA	56 (53–58)
50–64				
2–3	—	15 (–4–31)	33 (24–41)	31 (24–38)
4–5	44 (18–62)	31 (18–42)	36 (29–43)	36 (30–41)
6–7	46 (22–62)	36 (25–45)	40 (32–47)	38 (32–43)
≥8	61 (49–70)	51 (45–55)	NA	48 (45–51)
≥65				
2–3	—	—	32 (23–40)	28 (19–35)
4–5	—	21 (1–36)	36 (29–42)	33 (27–39)
6–7	—	14 (–6–30)	40 (33–46)	36 (29–41)
≥8	45 (27–58)	42 (35–48)	NA	43 (39–46)

Real World Efficacy - UK

- UKHSA report – based on minimal testing – BA4/5 wave (BA1 vaccine)
- Compared those with at least 2 vaccine doses, with last dose being > 6 months ago, to those who received a bivalent vaccine
- incremental protection conferred by the bivalent vaccines estimated relative to those with waned immunity was 57% (95% C.I.: 48- 65%)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1121345/vaccine-surveillance-report-week-48-2022.pdf

Bottom Line

- Some benefits to preventing infection – albeit short lived
- No data on prevention of hospitalization – although if as good as ancestral vaccine in high-risk populations still significant benefits
- More immune evasive variants emerging – some data suggesting protection albeit getting lower with every variant
- Still marked benefits in high-risk folks

COVID therapeutics

- Paxlovid
- Evusheld

Paxlovid

- Changes as of Dec 12th
  - Pharmacy prescribing
  - Enhanced criteria

Paxlovid should be strongly considered for individuals who have a confirmed COVID-19 diagnosis (based on positive PCR, rapid molecular, or rapid antigen test result), present within 5 days of symptom onset, and meet one or more of the following criteria:

- 60 years of age or older;
- 18 years of age or older and immunocompromised;
- 18–59 years of age and is at higher risk of severe COVID-19. Patients at higher risk of severe COVID-19 include:
  - Those who have one or more **comorbidity** that puts them at higher risk of severe COVID-19 disease OR
  - Those with inadequate immunity, i.e.:
    - Unvaccinated or incomplete primary series OR
    - Completed primary series AND last COVID-19 vaccine dose was more than 6 months ago AND last SARS-CoV-2 infection was more than 6 months ago

Underlying medical conditions associated with more severe COVID-19 disease

- Cancer
- Cerebrovascular disease
- Chronic kidney disease
- Chronic liver diseases (limited to: cirrhosis, non-alcoholic fatty liver disease, alcoholic liver disease, and autoimmune hepatitis)
- Chronic lung diseases (limited to: bronchiectasis, chronic obstructive pulmonary disease, interstitial lung disease, pulmonary hypertension, pulmonary embolism)
- Cystic fibrosis
- Diabetes mellitus, type 1 and type 2
- Disabilities (e.g. Down syndrome, learning, intellectual, or developmental disabilities; ADHD; cerebral palsy; congenital disabilities; spinal cord injuries)
- Heart conditions (e.g., cardiomyopathies, coronary artery disease, heart failure, etc.)
- HIV infection
- Mental health disorders (limited to: mood disorders, including depression; schizophrenia spectrum disorders)
- Obesity
- Pregnancy and recent pregnancy
- Primary immunodeficiency diseases
- Smoking, current or former
- Solid organ or blood stem cell transplant
- Tuberculosis
- Use of corticosteroids or other immunosuppressive medication

Real world evidence

- Population based cohort study in Ontario for paxlovid (4 April to 31 Aug) – using OLD criteria (>70, undervaccinated > 60 or with a medical condition, immunocompromised)

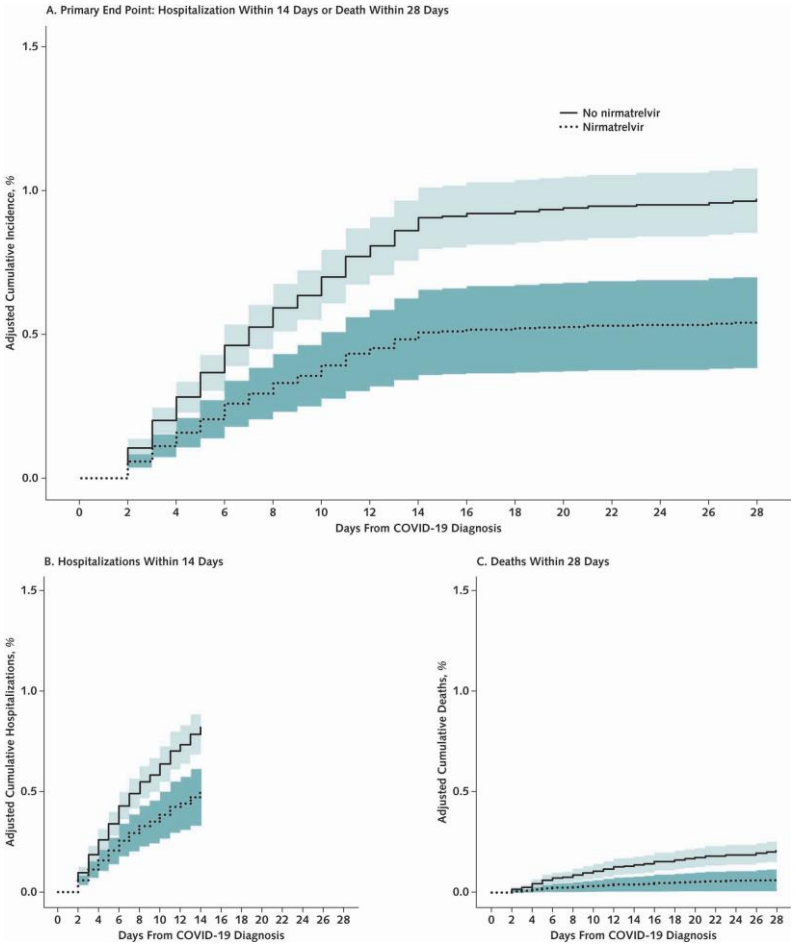
- Hospitalization or death within 30 days was lower in the nirmatrelvir/ritonavir treated group compared to unexposed individuals (2.1% vs 3.7%, wOR 0.56; 95%CI, 0.47-0.67).

- In the secondary analysis, the relative odds of death was also significantly reduced (1.6% vs 3.3%, wOR 0.49; 95%CI, 0.39-0.62).

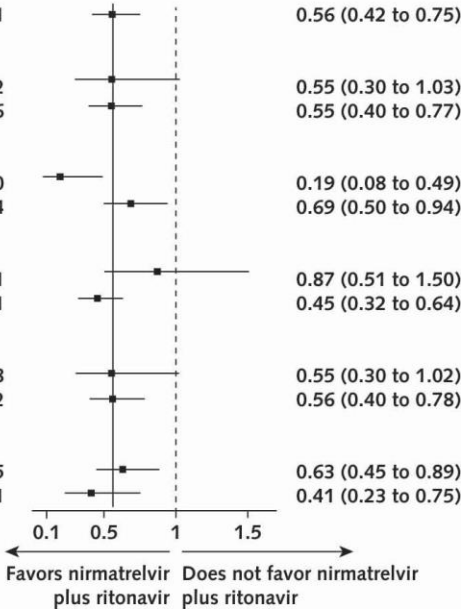
- The number needed to treat to prevent one case of severe COVID-19 was 62 (95%CI 43 to 80).
-
- Findings were similar across strata of age, DDIs, vaccination status, and comorbidities.

1. Schwartz, K. *et al. Real-world effectiveness of nirmatrelvir/ritonavir use for COVID-19: A population-based cohort study in Ontario, Canada*. http://medrxiv.org/lookup/doi/10.1101/2022.11.03.22281881 (2022) doi:10.1101/2022.11.03.22281881.

Real World Experience - USA



Subgroup	Nirmatrelvir Plus Ritonavir	No Nirmatrelvir Plus Ritonavir	Hospitalization or Death, %		Risk Difference, %	Relative Risk (95% CI)
			Nirmatrelvir Plus Ritonavir	No Nirmatrelvir Plus Ritonavir		
All	12 541	32 010	0.52	0.93	−0.41	0.56 (0.42 to 0.75)
Age						
50–64y	5885	18 931	0.27	0.49	−0.22	0.55 (0.30 to 1.03)
≥65 y	6656	13 079	0.82	1.48	−0.66	0.55 (0.40 to 0.77)
Vaccination status						
Not fully vaccinated	682	3633	0.48	2.48	−2.00	0.19 (0.08 to 0.49)
Vaccinated	11 859	28 377	0.53	0.77	−0.24	0.69 (0.50 to 0.94)
Vaccination timing						
Last vaccine <20 wk prior	2621	10 517	0.79	0.91	−0.11	0.87 (0.51 to 1.50)
Last vaccine >20 wk prior	9920	21 493	0.43	0.94	−0.51	0.45 (0.32 to 0.64)
Monoclonal Antibody Screening Score						
≤3	6608	18 944	0.23	0.41	−0.18	0.55 (0.30 to 1.02)
≥4	5933	13 066	0.92	1.63	−0.72	0.56 (0.40 to 0.78)
Obesity status						
No obesity (BMI <30 kg/m²)	8368	21 215	0.60	0.96	−0.35	0.63 (0.45 to 0.89)
Obesity (BMI ≥30 kg/m²)	4173	10 795	0.36	0.88	−0.51	0.41 (0.23 to 0.75)



1. Dryden-Peterson, S. *et al.* Nirmatrelvir Plus Ritonavir for Early COVID-19 in a Large U.S. Health System: A Population-Based Cohort Study. *Ann Intern Med* M22-2141 (2022) doi:10.7326/M22-2141.

Bottom Line

- Available broadly – and does benefit
- Still need to think NNT esp for resources – aim for higher risk folks
- If lower risk and can't take - it's ok (risk is still very low)
- Remdesivir is available – although most centers will reserve only for high risk and major DDI

Evusheld

- 2 component monoclonal antibody to COVID-19
- Long acting – given as pre-exposure or early treatment intramuscularly
- Being given in highest risk for vaccine failure (malignant hematology, solid organ transplant)

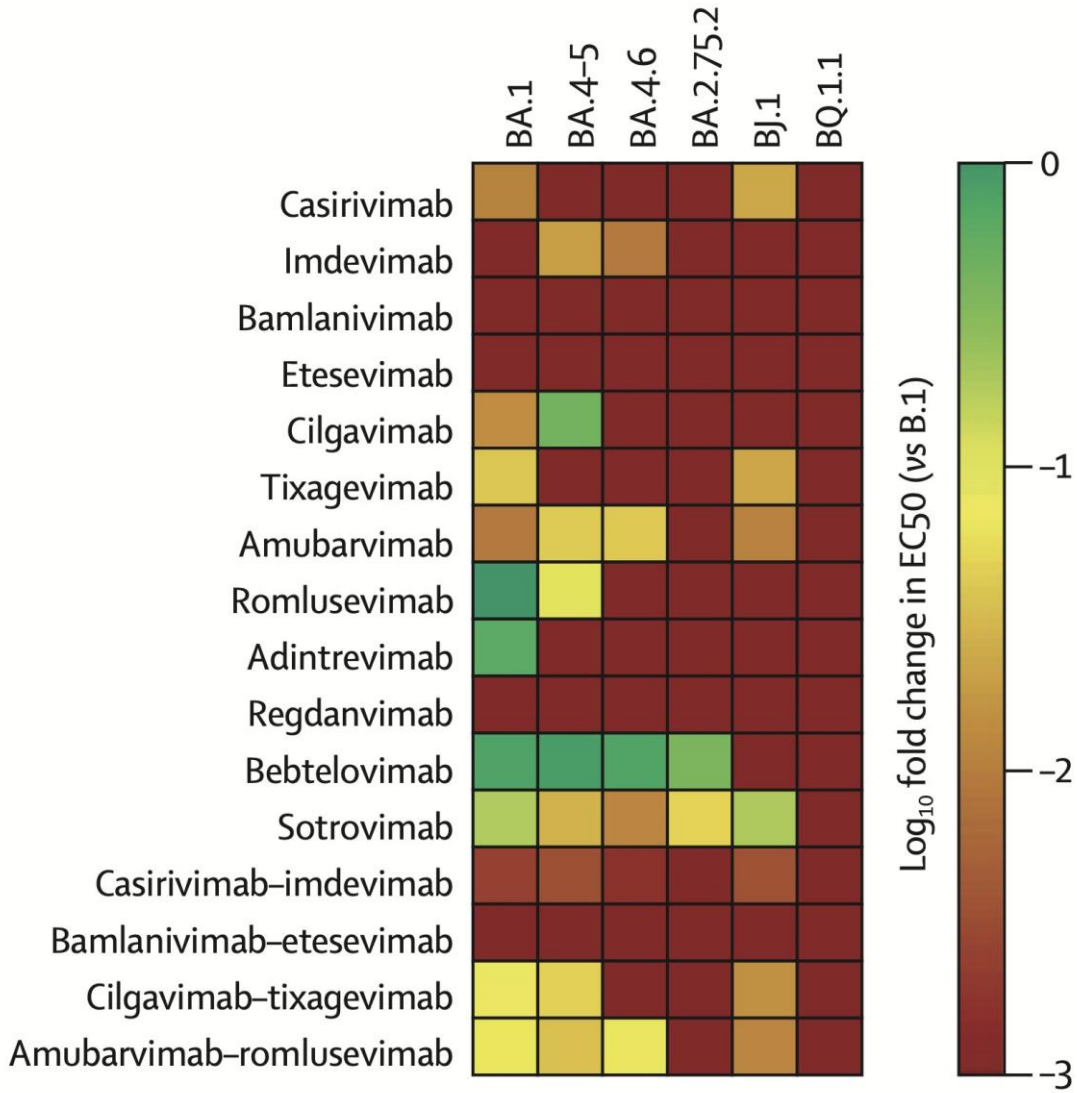
RWE - Metanalysis

- 17 studies, 16 during Omicron – retrospective, other therapies offered, different doses, matched propensity cohorts mainly

- Global cohort of 27000 IC patients

- 40% reduction in infection
- 69.23% reduction in hospitalization
- 87.89% reduction in ICU
- 81.29% reduction in all cause mortality
- 86.36% reduction COVID mortality

1. Suribhatla, R. *et al. Systematic review of the clinical effectiveness of Tixagevimab/Cilgavimab for prophylaxis of COVID-19 in immunocompromised patients*. http://medrxiv.org/lookup/doi/10.1101/2022.11.07.22281786 (2022) doi:10.1101/2022.11.07.22281786.


BA.1
BA.4–5
BA.4.6
BA.2.75.2
BJ.1
BQ.1.1
Casirivimab
Imdevimab
Bamlanivimab
Etesevimab
Cilgavimab
Tixagevimab
Amubarvimab
Romlusevimab
Adintrevimab
Regdanvimab
Bebtelovimab
Sotrovimab
Casirivimab–imdevimab
Bamlanivimab–etesevimab
Cilgavimab–tixagevimab
Amubarvimab–romlusevimab
Log10 fold change in EC50 (vs B.1)
0
–1
–2
–3

Evusheld guidance

- Not recommended for routine administration in Ontario

- Can be given at clinician discretion to individual patients that may benefit but:
  - 300/300 needs to be given (higher dose)
  - Follow public health protective measures
  - Warn that this may not be useful therapy
  - Get every available vaccine (and prioritize prior to evusheld)
  - Immediately seek care when symptomatic, and prioritize treatment

My take

- Neutralization isn't a perfect measure
  - Sotrovimab was withdrawn during BA2 – but emerging RWE suggests no loss of effect (even though minimal neutralizing activity)
- These patients are super high risk
- Not many side effects
- Why not? For the highest risk

Appendix C: Flow Diagram for COVID-19 Fall Booster Vaccination

When to get a fall COVID-19 booster

Use the chart below if you have completed your primary series and are aged 5 and older.

Start

Has it been at least 6 months since:

- your last COVID-19 vaccine dose, or
- you tested positive for COVID-19?

Yes → **Get your booster now**

Protect yourself during respiratory illness season and before cool weather leads to more time indoors.

No

Do any of the following apply to you?

- Aged 65 or older
- Resident of long term care, retirement home, or other congregate care setting
- Aged 12 or older and moderately to severely immunocompromised[1] **or** with an underlying medical condition[2]
- Health care worker
- Pregnant
- Adult First Nations, Inuit, or Métis individual or household member
- Adult in racialized and/or marginalized community disproportionately affected by COVID-19

Yes → **Get your booster 3 months after your last dose or last COVID-19 infection**

You are at high risk of severe outcomes and are **strongly recommended to get your booster dose at a shorter interval** to protect yourself during respiratory illness season and before cool weather leads to more time indoors.

No → **Get your booster 6 months after your last dose or last COVID-19 infection**

You are not at high risk of severe outcomes. Longer intervals between vaccines may result in a better immune response and higher vaccine effectiveness.

Notes

1. If you are immunocompromised, talk to your health care provider about the timing of your booster.
2. May include: heart, kidney, or lung conditions, diabetes and other metabolic conditions, cancer, anemia or hemoglobinopathy, neurologic or neurodevelopmental conditions, a Body Mass Index (BMI) of 40 and over.

All vaccines available in Ontario are approved by Health Canada and are safe, effective, and are the best way to stay protected from COVID-19 and its variants.

November 2022 Ontario

COVID-19 Vaccine Guidance (Version 3.1, November 7, 2022, pg 25)
https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_administration.pdf

Decision Aid only pdf :
https://www.ontariofamilyphysicians.ca/tools-resources/covid-19-resources/covid-19-vaccines/when-you-should-get-a-booster-dose-flowchart.pdf

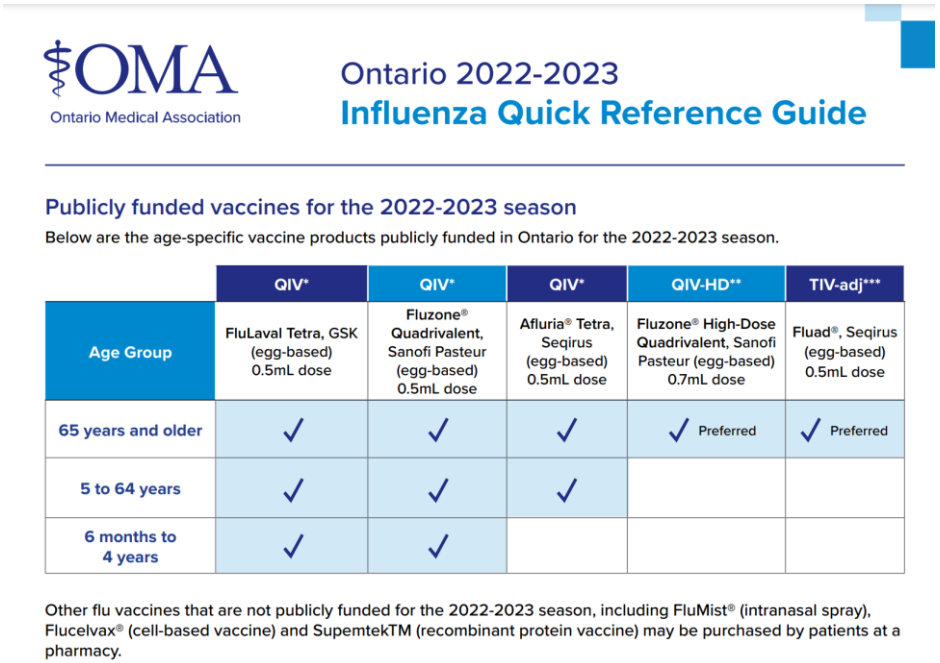
Booster dose eligibility checker – online tool:
https://www.ontario.ca/vaccine-eligibility/

OMA Tools

Influenza Quick Reference Guide

Information on which of the six publicly funded vaccine products to administer based on the patient's age.

- https://www.oma.org/uploadedfiles/oma/media/member/oma-influenza-quick-reference-guide.pdf/



OMA
Ontario Medical Association

Ontario 2022-2023
Influenza Quick Reference Guide

Publicly funded vaccines for the 2022-2023 season

Below are the age-specific vaccine products publicly funded in Ontario for the 2022-2023 season.

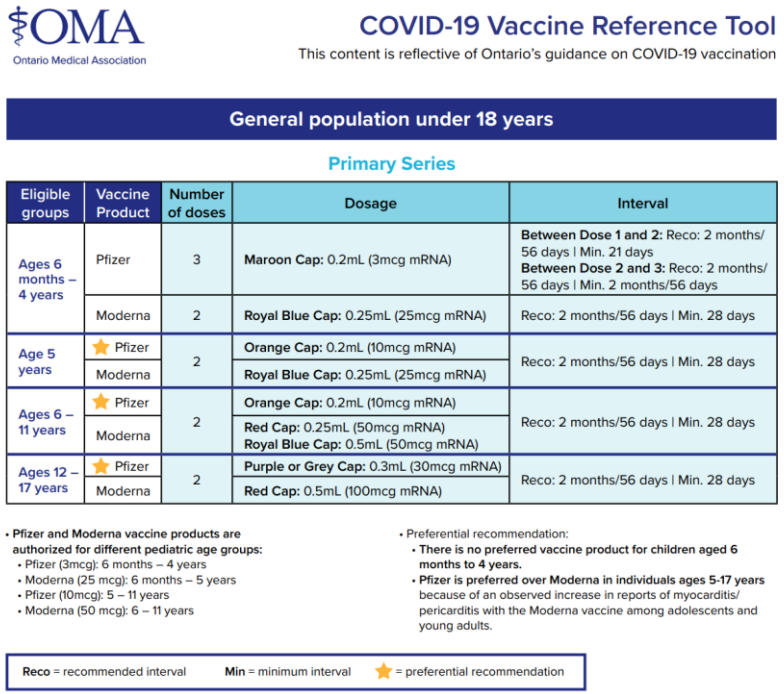
Age Group	QIV*	QIV*	QIV*	QIV-HD**	TIV-adj***
	FluLaval Tetra, GSK (egg-based) 0.5mL dose	Fluzone® Quadrivalent, Sanofi Pasteur (egg-based) 0.5mL dose	Afluria® Tetra, Seqirus (egg-based) 0.5mL dose	Fluzone® High-Dose Quadrivalent, Sanofi Pasteur (egg-based) 0.7mL dose	Fluad®, Seqirus (egg-based) 0.5mL dose
65 years and older	✓	✓	✓	✓ Preferred	✓ Preferred
5 to 64 years	✓	✓	✓		
6 months to 4 years	✓	✓			

Other flu vaccines that are not publicly funded for the 2022-2023 season, including FluMist® (intranasal spray), Flucelvax® (cell-based vaccine) and SupemtekTM (recombinant protein vaccine) may be purchased by patients at a pharmacy.

COVID-19 Vaccine Reference Tool

Reference tool on COVID-19 vaccines to help physicians determine the right vaccine dose and interval for patients based on age and immune status.

- https://www.oma.org/uploadedfiles/oma/media/member/membermappedpdfs/practice-professional-support/coronavirus/oma-covid-19-vaccine-reference-tool.pdf/



OMA
Ontario Medical Association

COVID-19 Vaccine Reference Tool
This content is reflective of Ontario's guidance on COVID-19 vaccination

General population under 18 years

Primary Series

Eligible groups	Vaccine Product	Number of doses	Dosage	Interval
Ages 6 months – 4 years	Pfizer	3	**Maroon Cap:** 0.2mL (3mcg mRNA)	**Between Dose 1 and 2:** Reco: 2 months/ 56 days | Min. 21 days **Between Dose 2 and 3:** Reco: 2 months/ 56 days | Min. 2 months/56 days
	Moderna	2	**Royal Blue Cap:** 0.25mL (25mcg mRNA)	Reco: 2 months/56 days | Min. 28 days
Age 5 years	★ Pfizer	2	**Orange Cap:** 0.2mL (10mcg mRNA)	Reco: 2 months/56 days | Min. 28 days
	Moderna		**Royal Blue Cap:** 0.25mL (25mcg mRNA)	
Ages 6 – 11 years	★ Pfizer	2	**Orange Cap:** 0.2mL (10mcg mRNA)	Reco: 2 months/56 days | Min. 28 days
	Moderna		**Red Cap:** 0.25mL (50mcg mRNA) **Royal Blue Cap:** 0.5mL (50mcg mRNA)	
Ages 12 – 17 years	★ Pfizer	2	**Purple or Grey Cap:** 0.3mL (30mcg mRNA)	Reco: 2 months/56 days | Min. 28 days
	Moderna		**Red Cap:** 0.5mL (100mcg mRNA)	

- **Pfizer and Moderna vaccine products are authorized for different pediatric age groups:**
  - Pfizer (3mcg): 6 months – 4 years
  - Moderna (25 mcg): 6 months – 5 years
  - Pfizer (10mcg): 5 – 11 years
  - Moderna (50 mcg): 6 – 11 years
- Preferential recommendation:
  - **There is no preferred vaccine product for children aged 6 months to 4 years.**
  - **Pfizer is preferred over Moderna in individuals ages 5-17 years** because of an observed increase in reports of myocarditis/ pericarditis with the Moderna vaccine among adolescents and young adults.

Reco = recommended interval **Min** = minimum interval ★ = preferential recommendation

FocusedCovid Communication

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Updated: December 13, 2022

ARE COVID-19 TREATMENTS RIGHT FOR YOU?

YOU MAY BE AT RISK FOR HOSPITALIZATION FROM COVID-19 IF YOU...

- **Are not up-to-date on your vaccines.**

  People who may benefit from treatment:
  - ✓ *Not vaccinated*
  - ✓ *Only have 1 or 2 doses*
  - ✓ *Last booster dose was 6+ months ago*
  - ✓ *Last confirmed COVID-19 infection was 6+ months ago*

- **Are over 60 years old.**
- **Have a weakened immune system.**
  This includes people who have specific health conditions (e.g., Common variable immunodeficiency [CVID]) or who take certain drugs that affect the immune system (e.g., chemotherapy).
- **Have other health risks.**
  Examples include obesity, diabetes, lung disease, heart disease, liver disease, kidney disease, cerebral palsy, intellectual disability (e.g., Down syndrome), and sickle cell disease.
- **Are pregnant.**

⚠ **Your risk increases with more risk factors** ⚠

If one or more of these describe you

+

You have symptoms of COVID-19 that started in the last 5-7 days

(e.g., fever, cough, change in sense of taste/smell, sore throat, stuffed nose, headache, tiredness, vomiting or diarrhea)

If symptoms are improving, treatment may not be needed.

YOU MAY BENEFIT FROM TREATMENT

Even if symptoms are mild.

Treatment may include:
Paxlovid™, remdesivir, or budesonide.

Do a test now

A rapid antigen test (RAT) or PCR test.

If you have a negative RAT and symptoms, call to get a PCR test.

If positive >

Make a call

Call your primary care provider, pharmacy, or provincial tele-health.

https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/symptoms/provincial-territorial-resources-covid-19.html

Ask about treatment

No matter where you live, you should be able to access treatment.

Treatment must be started as soon as possible to work.

Updated: December 12, 2022

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UNIVERSITY OF TORONTO LESLIE DAN FACULTY OF PHARMACY

Nirmatrelvir/ Ritonavir (Paxlovid™)

What Prescribers and Pharmacists Need to Know

Why is nirmatrelvir/ritonavir used to treat COVID-19?

COVID-19 has an initial phase of viral replication and a significant inflammatory response in moderate illness. This inflammation can lead to poor outcomes, including hospitalization, invasive ventilation, and death. However, treatments that target SARS-CoV-2 replication, if administered before the inflammatory phase of COVID-19, can improve outcomes.

Nirmatrelvir works by binding to the SARS-CoV-2 3CL protease, which ultimately causes viral replication to stop. Ritonavir is a potent CYP3A4 inhibitor. It is not active against SARS-CoV-2 but is administered as a "boosting agent" to slow the metabolism of nirmatrelvir, thus increasing concentrations of nirmatrelvir.

Nirmatrelvir/ritonavir is a highly effective outpatient therapy based on available data, but there is uncertainty about effect magnitude in target populations and high certainty for harm with ritonavir if drug interactions are not mitigated.

What is the benefit of nirmatrelvir/ritonavir for COVID-19?

The EPIC-HR study[1] has shown a benefit from treatment of adult outpatients with laboratory-proven SARS-CoV-2 infection who were not on supplemental oxygen and were within 5 days of symptom onset. The study suggests that nirmatrelvir/ritonavir may reduce the risk of hospitalization in these patients by 88%.

The initial research on nirmatrelvir/ritonavir was done in unvaccinated patients and prior to circulation of the Omicron variant. However, nirmatrelvir/ritonavir appears to retain activity against the Omicron variant in vitro.[2] Emerging real-world evidence also shows there may be benefit in using nirmatrelvir/ritonavir in a broader population of people at high risk of severe COVID-19.[3]

Who should be considered for nirmatrelvir/ritonavir?

Nirmatrelvir/ritonavir should be considered for patients at higher risk of severe COVID-19 *(confirmed positive by PCR or rapid test)*, and who are within 5 days of symptom onset. PCR= polymerase chain reaction

- **People 60 years or older;**
- **People 18–59 years old who are immunocompromised;**
- **People 18–59 years old who are at higher risk of severe COVID-19.**

Who should programs focus on reaching?

Indigenous persons (First Nations, Inuit, or Métis), Black persons, and members of other racialized communities may be at high risk of disease progression due to disparate rates of comorbidity, increased vaccination barriers, and social determinants of health, and should be considered priority populations for access to COVID-19 therapeutics. Nirmatrelvir/ritonavir may be considered in pregnant or lactating patients on an individual basis if the benefits of treatment outweigh the potential risks.

People at higher risk of severe COVID-19 include:

- Those who have at least one comorbidity* that puts them at higher risk of severe COVID-19 disease

*https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/guidance-documents/signs-symptoms-severity.html#a3

- Those with inadequate protection:
  - *Unvaccinated or incomplete primary series*
  - *Completed primary series AND last COVID-19 vaccine dose was more than 6 months ago or last COVID-19 infection was more than 6 months ago*

https://uwaterloo.ca/pharmacy/resources-services-and-initiatives/health-resources/covid-19-health-resources

Primary care in Ontario during the Pandemic: Strengths, Challenges and Lessons Learned

COVID-19 Community of Practice
Dec. 16, 2022

Danielle Martin, MD, MPP, DSc
Professor & Chair, Dept of Family & Community Medicine
Temerty Faculty of Medicine
University of Toronto

NEWSCHOOL THINKING

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Evidence Brief on Primary Care in the Pandemic – 3 parts

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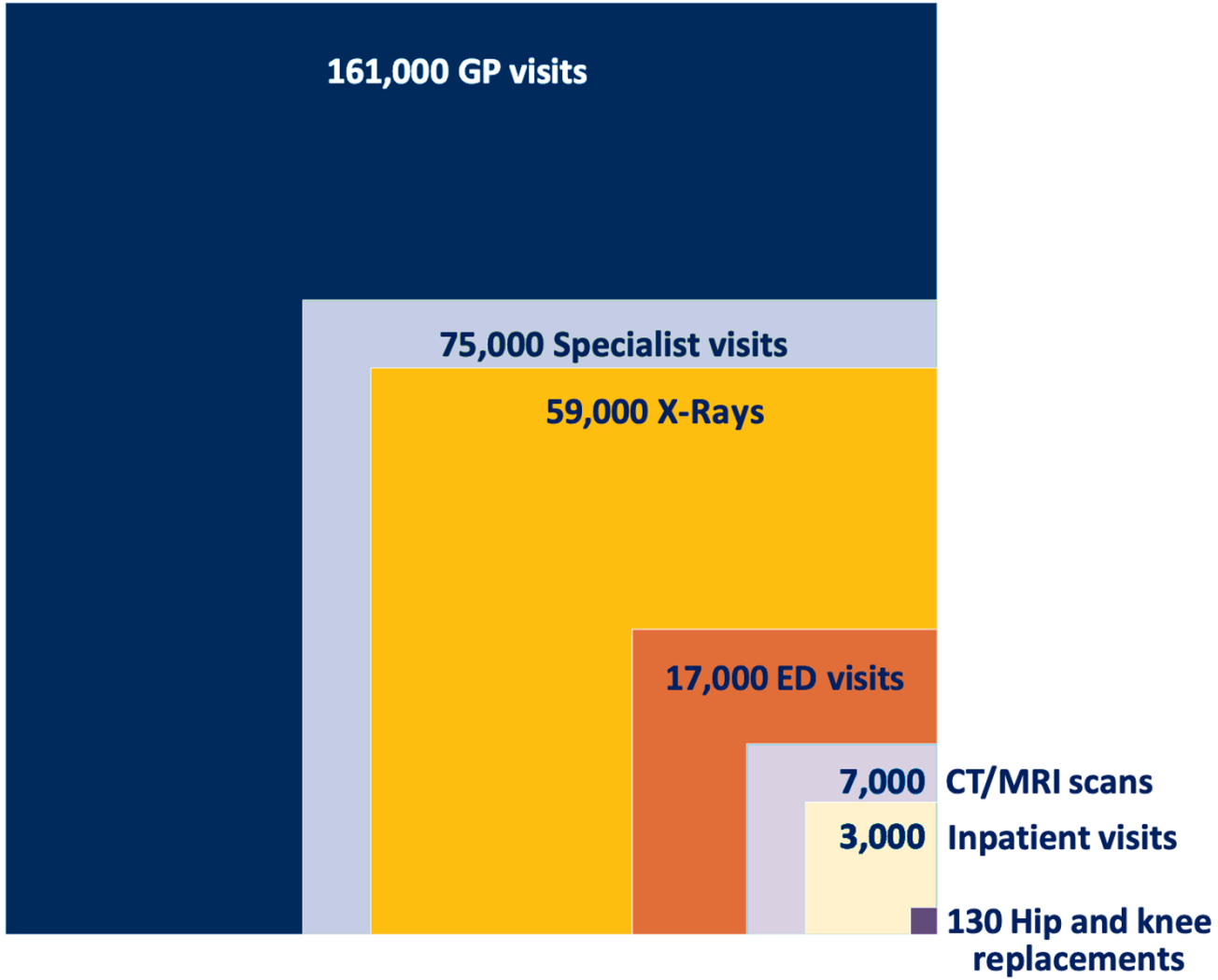
Brief on Primary Care Part 1: The Roles of Primary Care Clinicians and Practices in the First Two Years of the COVID-19 Pandemic in Ontario (https://covid19-sciencetable.ca/sciencebrief/brief-on-primary-care-part-1-the-roles-of-primary-care-clinicians-and-practices-in-the-first-two-years-of-the-covid-19-pandemic-in-ontario/)

Brief on Primary Care Part 2: Factors Affecting Primary Care Capacity in Ontario for Pandemic Response and Recovery (https://covid19-sciencetable.ca/sciencebrief/brief-on-primary-care-part-2-factors-affecting-primary-care-capacity-in-ontario-for-pandemic-response-and-recovery/)

Brief on Primary Care Part 3: Lessons Learned for Strengthened Primary Care in the Next Phase of the COVID-19 Pandemic (https://covid19-sciencetable.ca/sciencebrief/brief-on-primary-care-part-3-lessons-learned-for-strengthened-primary-care-in-the-next-phase-of-the-covid-19-pandemic/)

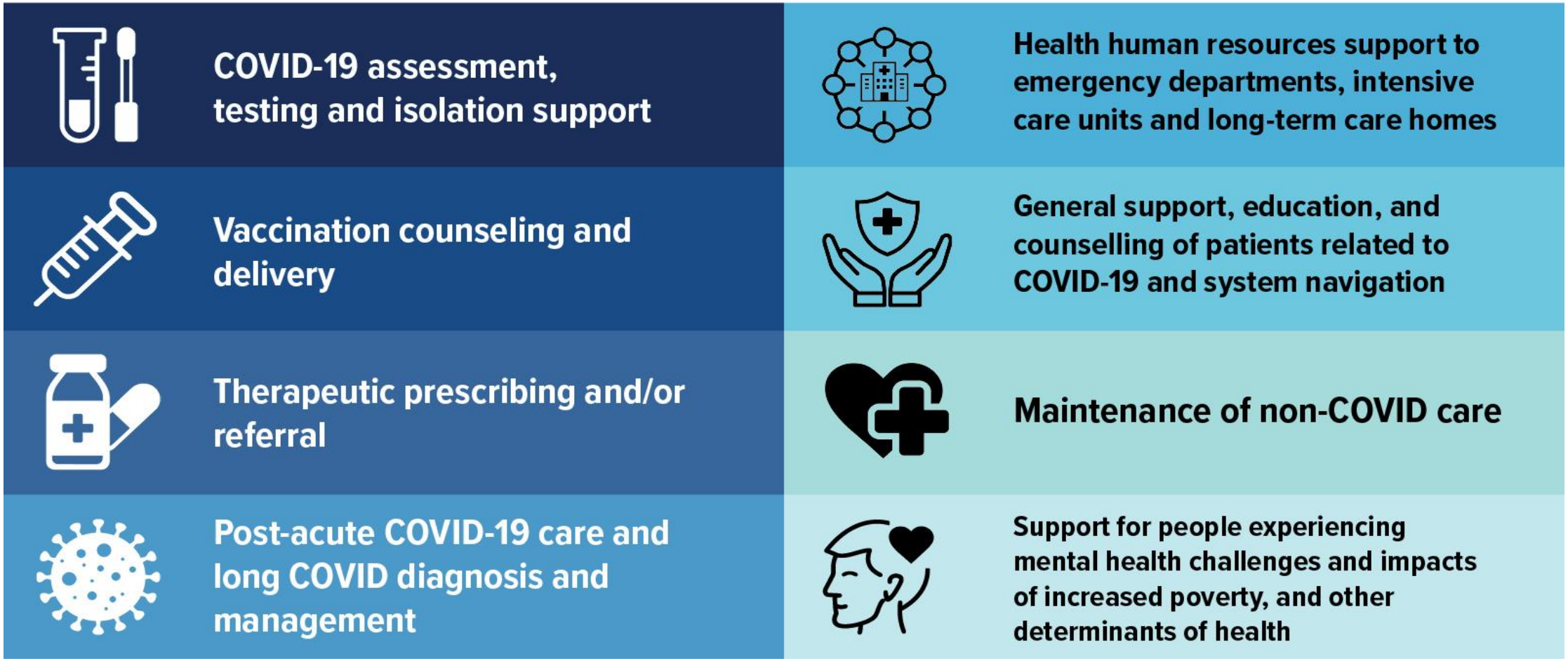
Context



- Most health care in Ontario is delivered by primary care clinicians and teams.
- Health systems with strong primary care yield **better health outcomes and are more cost effective**.
- **Most COVID-19 care will continue to take place in primary care**, as will care for pandemic-related conditions (Long COVID, mental health, fall surge of respiratory illnesses, managing patients waiting for delayed specialist care, etc).

Part 1: Role of primary care in the first two years of the COVID-19 pandemic in Ontario

In Canada and internationally, primary care clinicians have played integral roles in the pandemic response including:



How much were family physicians working?

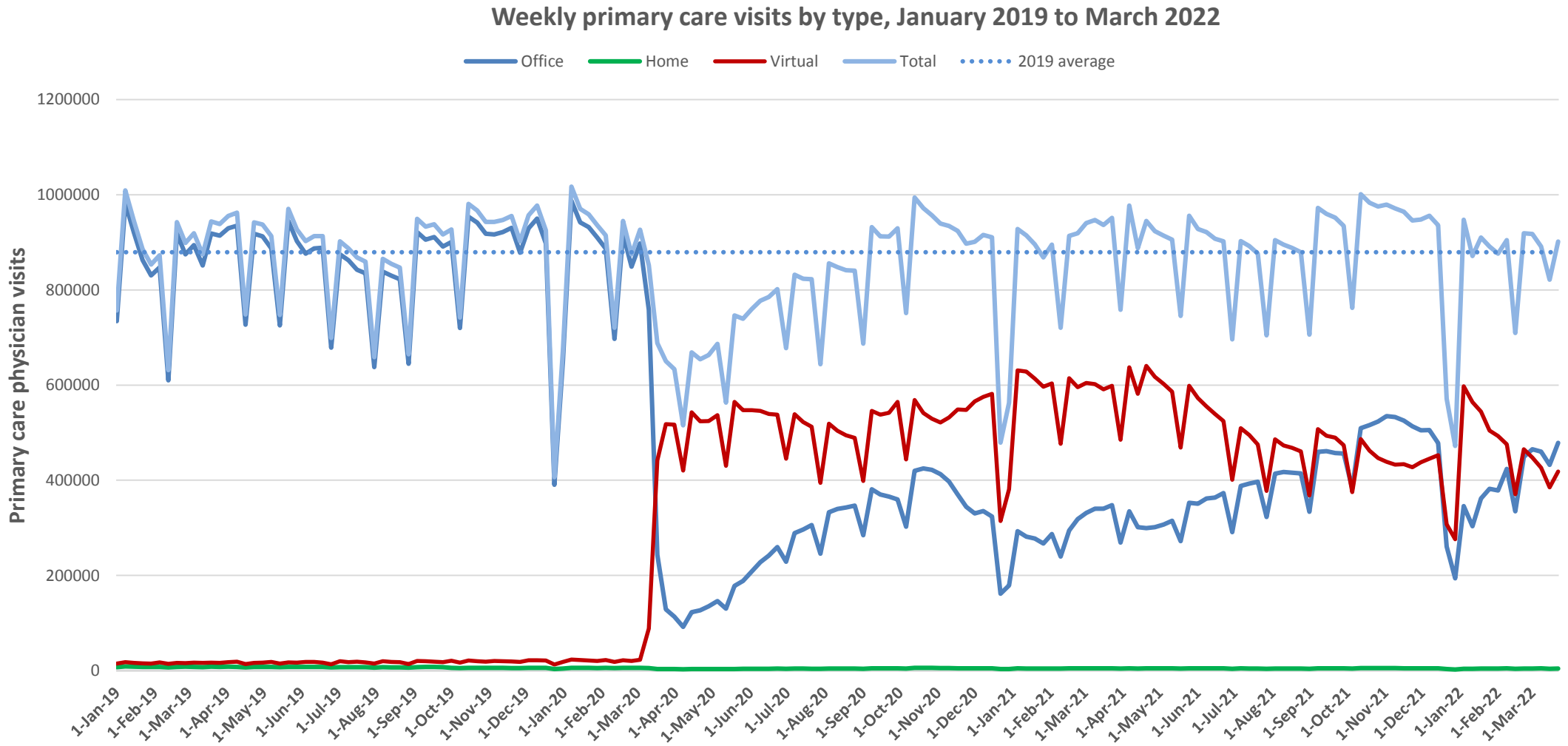
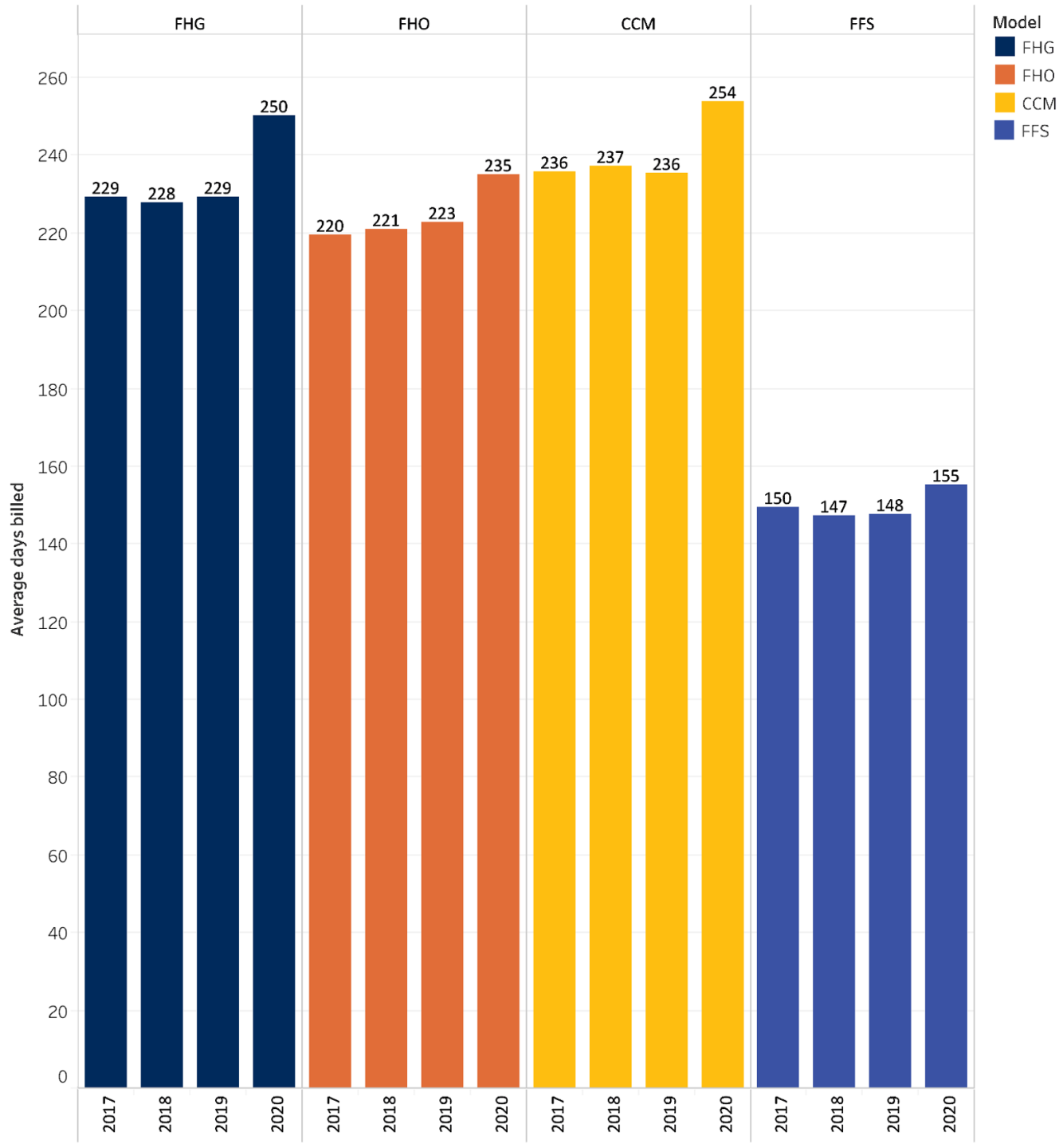


Figure 4. Weekly Primary Care Visits by Type, January 2019 to March 2022
Source: Unpublished data from INSPIRE-PHC using data from ICES provided by Kiran et al

How much were family physicians working?

Primary care clinicians worked more days, on average, to accommodate COVID care in addition to regular care.



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Challenges facing primary care providers during COVID-19

DEFERRED CARE

LONG WAITS FOR SPECIALTY CARE

NEGLECTED CHRONIC CONDITIONS

WORSENING MENTAL HEALTH & ADDICTIONS

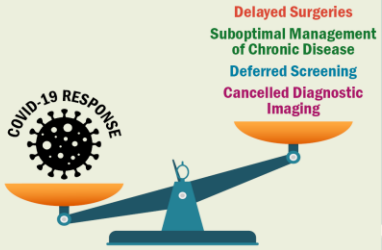
DELAYED TESTS & TREATMENTS

Lessons Learned to Strengthen Primary Care in Ontario

LESSON 1

Care by a regular primary care provider or team provides better support for health issues in the community.

LESSON 2



In the absence of more resources, COVID-19 response results in tradeoffs and unmet needs in other areas.

LESSON 3

Innovative models and new partnerships helped patients get the care they needed, but infrastructure is required for sustainability, spread and scale.

LESSON 4

The absence of an integrated and inclusive data system compromised the pandemic response in primary care.

LESSON 5

Primary care can leverage long-term relationships to improve population health and health system sustainability.

Discussion

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Ontario College of Family Physicians

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Dr. Alika Lafontaine

President, Canadian Medical Association

Dr. Robert Varnam

Leadership coach and ex-national director Primary Care Improvement, NHS England

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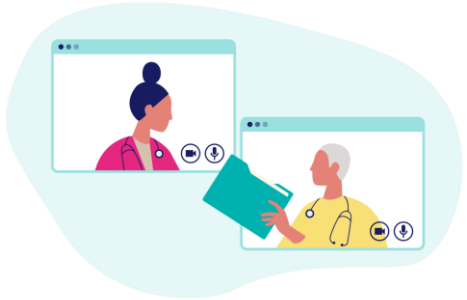
- January 18, 2023 – Physician disability
- February 22, 2023 – Mental health and trauma
- March 22, 2023 – Complexity in medicine



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- Access clinical tools and resources to help you in your practice.
- Find other learning opportunities through OCFP and other organizations.

Questions?

Webinar recording and curated Q&A will be posted soon
https://www.dfcm.utoronto.ca/covid-19-community-practice/past-sessions

Our next Community of Practice: January 20, 2023

Contact us: *ocfpcme@ocfp.on.ca*

Visit: https://www.ontariofamilyphysicians.ca/tools-resources/covid-19-resources

The COVID-19 Community of Practice for Ontario Family Physicians is a one-credit-per-hour Group Learning program that has been certified for up to a total of 32 credits..

Post session survey will be emailed to you. Mainpro+ credits will be entered for you with the information you provided during registration.

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