

Changing the Way We Work

July 7, 2023: COVID-19 Updates and AI to alleviate admin burden

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Curated answers from CoP guests, panelists and co-hosts to in-session questions posed by participants, based on current guidance and information available at the time.

Rapid Antigen Tests (RATs) and PCR Tests

For patients with upper respiratory tract infections, who should we prioritize testing with a RAT?

As clinically indicated by a formal assessment, older or at-risk persons would derive the most benefit from knowing if a RAT is positive. I would not recommend testing most people over the age of 12.

Now that RATs are no longer being provided in stores and pharmacies for free, what should we advise patients to do? Buy them on Amazon?

You can let your patients know that, starting July 1, our local public health units will have RATs available for patients at no charge.

Where can we send patients for a PCR test?

Local hospitals.

When you talk about RAT effectiveness are the people performing the studies swabbing the nose only?

The recommendation to do more than just a nasal swab has been out there for over a year. It helps to improve sensitivity.

Long COVID

We don't know who will get long COVID, so, wouldn't it be better to recommend vaccinations for anyone over six months, regardless of their health?

This is currently being studied, but yes. Vaccines remain the best preventive measure to reduce the likelihood of developing long COVID.

COVID-19 Data

If no one is testing, how accurate is this data?

Wastewater RNA detection and outbreaks are not affected by test numbers. Test positivity is less reliable with lower testing numbers of a higher pre-test probability population.

Prevalence of COVID-19 variants varies around the world; do you have any comments about patients returning from holiday with COVID-19?

Worldwide, XBB is dominating.

Seasonal Surge of COVID-19, Influenza and RSV

Has it been established that there is a seasonal pattern to COVID-19?

It looks like it, but we need a few more years of data to confirm it. Most human Coronaviruses exhibit seasonality.

Are we able to predict when the fall surge may happen?

It's not reliable yet for most viruses including influenza and RSV. Although the latter predictably appear each year, but predicting the exact timing of seasonal surges is less precise. Australia is currently experiencing an early influenza season much as they did last year.

Spreading COVID-19

Is it possible to spread COVID-19 while asymptomatic?

It can happen, but even in the early days of the pandemic it was considered a minor contributor compared to transmission from those who are symptomatic.

Paxlovid and Remdesivir

Can you not give Paxlovid past day 5?

It can be given beyond 5 days, and I would consider doing with a patient who is at high-risk for severe outcomes. However, the impact on reducing severe outcomes after 5 days has not been studied.

Are Paxlovid and remdesivir still effective against new COVID-19 variants?

According to published clinical data, they appear to be.

COVID-19 Vaccinations and Boosters

What occurs if you get a COVID-19 booster after four or five months instead of six?

Lower immunogenicity.

What is the current recommendation for children or adults who haven't had a primary series of the COVID-19 vaccine? Should they wait for the one that protects against XBB variants?

NACI recommends that unvaccinated people receive a primary series with the current bivalent vaccines rather than a yet-to-be released XBB vaccine. However, this may change in the future.

Is there evidence of adverse effects of vaccination with the newer vaccines for the latest variants?

No.

What is the effectiveness of the COVID-19 Moderna or Pfizer bivalent vaccine at two weeks, three months and 6 months against infection and severe illness or hospitalization.

Both the Moderna and Pfizer bivalent vaccines provide reduced infection risk for two to three months after the booster. The reduction in hospitalization and death lasts for nine to 12 months, which shorter in elderly persons and longer in younger individuals.

For kids and teachers, would it be advisable to get a booster dose a couple weeks prior to the start of school?

The timing of any seasonal surge is difficult to predict. With the fall return to school, rhinoviruses tend to dominate it is suggested that viral interference may prevent an early return of COVID-19 in the school-age population.

Is it true that the Moderna vaccine is more effective than the Pfizer vaccine by 15 per cent for infection and severe illness (according to the Ontario Health study)?

The two mRNA vaccines are essentially equivalent in vaccine effectiveness across most populations. Moderna has data to show it is more immunogenic in immunocompromised hosts, which could result in higher vaccine effectiveness, but I would say it is still uncertain.

After getting a bivalent booster, at what time point do you have the most protection against COVID-19?

We think optimal levels are seen at 4 weeks post vaccine.

What variants will the fall vaccines protect against? XBB?

Yes, XBB recombinants.

Masking Mandates and PPE

Some hospitals, like Lakeridge Health are still requiring universal masking for staff and patients. Why is this?

These are decisions made by different hospital leadership teams who may have other reasons to not de-escalate measures or based on the regional data they are seeing.

I'm worried that dropping the masking mandates we still have in our office, means that we'll just struggle in the fall when we tell them to mask up again.

You are right. Re-escalation can be challenging due to the vagaries of human behaviour.

Funding for AI Scribes

Without the Ministry of Health funding these AI advances most of us won't be able to use this as the costs are just too prohibitive. Since these tools do not save me money, just my time, it's a hard sell at this point with all the rising costs unless the government starts covering our EMR costs.

The OCFP is advocating for increased funding for digital tools to help us to manage these additional costs in practice while also reducing our administrative burden.

Would OntarioMD consider funding these AI tools?

The OCFP is advocating for increasing funding for digital tools (including AI) that family physicians use in practice given the costs that we're often having to absorb in our practices.

Chandi (OMD) has also noted the following:

OMD is doing two projects with AI. Based in these, we are asking the ministry to provide possible ongoing funding.

Cost of AI Scribes

How much is this AI going to cost?

Consult with each vendor, there is a large variation.

Is the cost per month for unlimited users in the clinic or is it per user?

It depends on the vendor. The fees for AutoScribe are per user in a clinic.

Do you need EMR in addition to the AI Scribe? Both costs about \$2000 to \$3000 a month for maintenance and the software. Will the cost come down?

Cost varies between vendors. However, we do expect costs to come down over time.

AI Scribe Functionality

Does AutoScribe work with other languages or accents?

Yes, certain vendors are working on that, including our own AutoScribe, which currently works with French. There is a sliding scale in terms of speech recognition accuracy depending on the strength of a particular accent.

What type of microphones do AI scribes use? I've tried using Apple's SIRI to dictate and put it into ChatGPT with various results (i.e., with different accents)

It's best to use a conferencing microphone, so it picks up the voices coming from different directions. Be careful about putting patient's personal health information into ChatGPT.

I use Dragon dictation, are the products that are available in Canada compatible with that?

No

I can see many AI Scribes are not currently sold in Canada (e.g., Nuance DAX and Suki) Should we wait? Why? Can I buy a new system?

There are Canadian companies that sell these programs.

Can you use AI scribes during virtual visits?

Yes, you can.

Will it answer patient questions and make referrals?

Please speak to the AI Scribe vendors, we have exciting research on this underway.

How would this technology help with entering data in discreet fields within the EMR? Or is it just note based?

Depends on the AI Scribes level of integration with the EMR. Certainly, the technology can predict the content of the other discrete fields.

How would it document our observations (e.g., well-groomed, dressed appropriately) and for mental health visits, things like speech/content/thought as we don't usually voice that out loud in front of the patient.

Great point. Speak to the different vendors about that. AutoScribe has a tool for similar cases called the scratchpad. So, when you write in it, the content will be included by the AI in the final generated note.

Confidentiality While Using AI Scribes

Given AI is learning from one recording to the next, what does that mean for confidentiality?

It's only the AI internal to the vendor that is being retrained – no human is seeing that data. So, confidentiality is maintained.

What if the patient agrees at onset of the interview and then realizes they don't want certain things recorded?

Speak to your vendor. There is a pause button in AutoScribe, and then you can make a request for tech support to delete that recording.

Does the AI vendor store the conversation afterwards on a server or is it destroyed after the patient encounter, once it has been reviewed by the attending MD?

It depends on the vendor. In AutoScribe we destroy the audio within 28 days of the encounter.

AI and Electronic Medical Records (EMRs)

Does Microsoft Dragon Dictation use AI? Will it or EMRs use AI soon?

Nuance is the company behind that, and they are operational in the US. It's unclear when they are coming to Canada. I understand that certain EMRs are working to incorporate AI.

Are there differences in compatibility between the various AI vendors and the "big three" EMRs (i.e., PS Suite, QHR-Accuro and OSCAR) in Ontario?

Yes, there are. I would recommend you spend time researching and trialing the free versions of each.

Do these AI solutions run EMR queries differently or more efficiently than the functionalities already embedded in the EMR?

Currently it's only on what's voiced in the encounter. Some EMRs allow deeper integrations to pull in relevant past EMR data for a current medical note.

As we know in Ontario there are too many licensed EMR solutions to choose from, this makes creating central repositories of data difficult. Would it be beneficial for OntarioMD to consider limiting the vendors for AI?

Yes, there are tradeoffs with an open vs semi-closed marketplace. Your perspective is important, so please send a note of advocacy on that to your representatives.

Recordings (photos, videos, audio) should be part of the medical record. Where are AI scribe recordings kept and what are your retention principles?

Can physicians access them in the future? There is a good article on [audio here](#). Each AI scribe vendor is approaching this differently. Our tool AutoScribe does not replace your official EMR record, it's just a tool to obtain clinical documentation (just like your smartphone with photos on it is not considered the official record, only once photos are in the EMR is it considered official documentation).

AI Biases

What steps are being taken to ensure that the AI reduces the inherent human biases such as gender or racially based stereotypes?

Co-designing and labeling the datasets powering the AI algorithms are the key steps here. Please check with your AI vendor on how they are doing that.

These additional questions and comments were answered live during the session. To view responses, please refer to the session recording.

- What is the true estimate of number of COVID-19 cases per week in Ontario?
- Do the RATs that were available at drugstores in Ontario until last week actually work in detecting the latest variant(s) of COVID-19?
- Is it currently safe to go maskless indoors with a crowd of people in Ontario?
- Without testing how do we know cases are decreasing or the actual case count?
- What do you think about RATs not being available to the public for free from pharmacies after June 30? Is this good or will it lead to more spread, less access to Paxlovid?
- Are there any areas of Ontario where COVID-19 is prevalent (e.g., Scarborough)?
- What would be the harm in wearing full PPE as a universal precaution?
- Is there danger in travelling? The couple of recent COVID-19 cases I have seen in the past two weeks came from patients who travelled to the US.
- For seniors who had their last booster in October, If they have not had a booster since, or COVID-19, should they get the booster now, or wait until the fall? Considering the current recommendation is to receive a booster every six months.
- Will the new COVID-19 vaccine be in combination with the fall flu vaccine?
- Do you recommend that we wear N95 masks on a plane?