The Cold Standard

How to Care for Ambulatory Patients with Respiratory Tract Infections:

A Toolkit for Using Antibiotics Wisely in the Era of COVID-19 and Virtual Care

2020 I VERSION 2.0

Choosing Wisely Canada™

THE COLLEGE OF FAMILY PHYSICIANS OF CANADA

LE COLLÈGE DES MÉDECINS DE FAMILLE DU CANADA

What's new?

In the era of COVID-19, many primary care outpatient clinics have increased adoption of virtual care due to the inability of providing in-person assessment. Going into the 2020–21 viral respiratory season, we are expecting challenges regarding how to manage respiratory tract infections (RTI) including when to test, when to prescribe antibiotics, and when to see a patient in-person.

The majority of acute RTIs are viral and can be managed via virtual visits.

Patients with compatible symptoms should be referred for COVID-19 testing based on regional recommendations. For those with RTI symptoms who are COVID-19 negative, a viral RTI often remains the most likely diagnosis and supportive management can be offered using a viral prescription.

If you are frequently prescribing antibiotics after virtual assessments alone, you may be overprescribing.

Some research shows that the switch to virtual care can result in less diagnostic testing and more empiric antibiotic prescribing, which carries the potential to drive antimicrobial resistance.[1,2] For those RTIs that may be bacterial, an in-person assessment is required to make the diagnosis (e.g. to assess the tympanic membrane, to perform a Strep test, or obtain a chest x-ray).

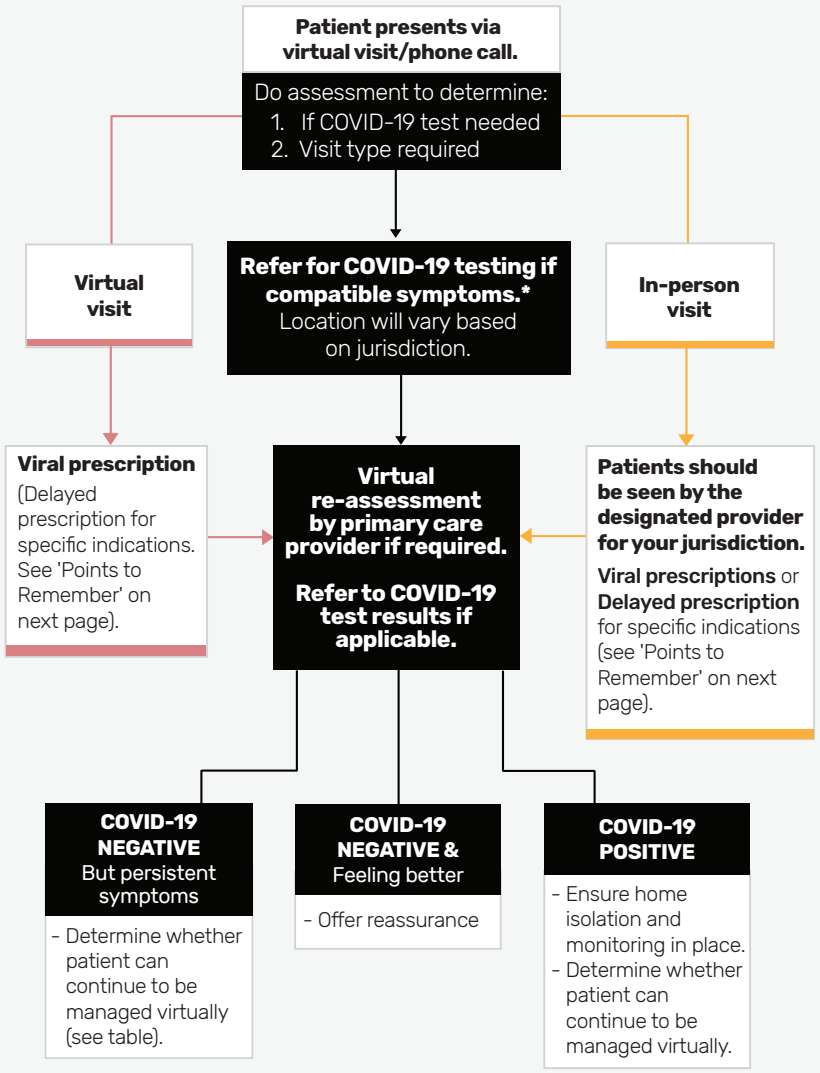
Choosing Wisely Canada and the College of Family Physicians of Canada, recommends the following:

> **Don't routinely prescribe antibiotics for acute RTIs following a virtual assessment alone. Do recommend an in-person visit if antibiotics are being considered.***
>
> *To be performed by the designated provider for your jurisdiction.

How can the cold standard help?

This toolkit is intended to support this best practice through practical recommendations about when a patient with a RTI should be assessed in-person and when they should be prescribed antibiotics. It also includes 3 clinical tools that can support both virtual and in-person management of patients with RTIs after an initial virtual assessment.

MANAGING RTIs: VIRTUAL CARE AND COVID-19



	INDICATIONS FOR VIRTUAL VISIT	INDICATIONS FOR IN-PERSON VISIT
SUSPECTED OR CONFIRMED COVID-19	• Fever • Respiratory symptoms • No shortness of breath	• Shortness of breath or hypoxia (if monitoring available) • Concerns of dehydration • Suspicion of secondary bacterial infection • Any red flags**
EAR PAIN (In children over 6 months of age)	• Symptoms <48 hours • Fever <39°C • Pain controlled with oral pain medication • Otherwise feels well	• Symptoms >48 hours despite adequate pain medications • Fever ≥39°C • Feels unwell
SORE THROAT	• Mild symptoms <48 hours • Low suspicion for bacterial pharyngitis, e.g.: ○ Over 15 years of age ○ No fever ○ Presence of cough or runny nose	• Persistent or worsening symptoms >48 hours, or • High suspicion of bacterial pharyngitis, e.g.: ○ Severe pain ○ No cough or runny nose ○ Fever without alternate cause
SINUS CONGESTION	• Mild symptoms <7 days • No red flags***	• Presence of red flags***
COPD EXACERBATION	• Patient able to do their activities of daily living • Patient known to provider and reliable for virtual follow-up	• Patient is too short of breath to do their activities of daily living
SUSPECTED PNEUMONIA	• Should be assessed in-person	• Assess clinically
INFLUENZA-LIKE ILLNESS, BRONCHITIS, COMMON COLD, ASTHMA	• High fever controllable with antipyretic • Cough • Congestion • Body aches • Mild GI symptoms	• Concerns of dehydration • Suspicion of secondary bacterial infection • Any red flags**

***COVID-19 compatible symptoms:**

- New or worsening cough,shortness of breath or difficulty breathing, temperature equal to or over 38°C, feeling feverish, chills, fatigue or weakness, muscle or body aches, new loss of smell or taste, headache, gastrointestinal symptoms (abdominal pain, diarrhea, vomiting), feeling very unwell

  Source: Health Canada. 2020. Coronavirus Disease (COVID-19): Symptoms and Treatment.

****Red flags for patient with viral infection:**

- For children, may include fast breathing or trouble breathing, bluish lips or face, ribs pulling in with each breath, chest pain, child refuses to walk, signs of dehydration, history of seizure, any fever in child <12 weeks.
- In adults, may include difficulty breathing or shortness of breath, acute chest pain or abdominal pain, dizziness, confusion, signs of dehydration.

*****Red flags for patient with sinusitis:**

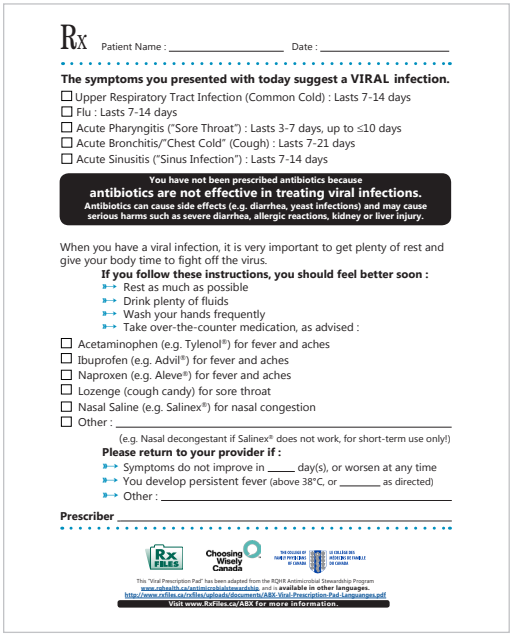
- Altered mental status, headache, systemic toxicity, swelling of the orbit, change in visual acuity, neurologic deficits.

POINTS TO REMEMBER: THE ROLE OF ANTIBIOTICS

COVID-19, INFLUENZA, OR OTHER INFLUENZA-LIKE ILLNESS	• No role in outpatient setting.
EAR PAIN In children over 6 months of age	• In-person visit generally required for otoscopic examination. Immediate antibiotic only if bulging tympanic membrane with one of the three following criteria; 1. Fever (≥39°C), 2. Moderately or severely ill, or 3. Significant symptoms lasting >48 hours • A delayed prescription can be used for symptoms >48 hours despite adequate pain medication or sooner if fever ≥39°C develops.
SORE THROAT	• In-person visit required to apply predictive score to determine need for throat swab. Antibiotics only if positive culture or rapid test for Group A Strep in a patient with moderate to high likelihood based on validated predictive score.
SINUS CONGESTION	• Generally in-person visit required to assess. • Antibiotics for patient with symptoms for at least 7 days AND • Symptoms are severe OR there is no amelioration with nasal corticosteroids. • Delayed prescription can be used in a virtual visit of symptoms >7 days with no amelioration following 72 hour trial of nasal corticosteroids.
COPD EXACERBATION	• Antibiotics only if there is a clear increase in sputum purulence with either increase in sputum volume and/or increased dyspnea.
SUSPECTED PNEUMONIA	• Antibiotics only for patient with compatible presentation and pneumonia present on chest x-ray. • Patients with no vital sign abnormalities and a normal respiratory examination are unlikely to have pneumonia and often don't need a chest x-ray.
COMMON COLD	• No role for antibiotics.

Implementing 3 Simple Tools to Support Using Antibiotics Wisely in the Era of COVID-19 and Virtual Care

The tools below support using antibiotics wisely in the era of COVID-19 and virtual care. More information about the tools and how to download them can be found at: www.choosingwiselycanada.org/campaign/antibiotics-primary-care.



Rx Patient Name : _____ Date : _____

The symptoms you presented with today suggest a VIRAL infection.

- ☐ Upper Respiratory Tract Infection (Common Cold) : Lasts 7-14 days
- ☐ Flu : Lasts 7-14 days
- ☐ Acute Pharyngitis ("Sore Throat") : Lasts 3-7 days, up to ≤10 days
- ☐ Acute Bronchitis/"Chest Cold" (Cough) : Lasts 7-21 days
- ☐ Acute Sinusitis ("Sinus Infection") : Lasts 7-14 days

You have not been prescribed antibiotics because antibiotics are not effective in treating viral infections.
Antibiotics can cause side effects (e.g. diarrhea, yeast infections) and may cause serious harms such as severe diarrhea, allergic reactions, kidney or liver injury.

When you have a viral infection, it is very important to get plenty of rest and give your body time to fight off the virus.

If you follow these instructions, you should feel better soon :

- ⇢ Rest as much as possible
- ⇢ Drink plenty of fluids
- ⇢ Wash your hands frequently
- ⇢ Take over-the-counter medication, as advised :

- ☐ Acetaminophen (e.g. Tylenol®) for fever and aches
- ☐ Ibuprofen (e.g. Advil®) for fever and aches
- ☐ Naproxen (e.g. Aleve®) for fever and aches
- ☐ Lozenge (cough candy) for sore throat
- ☐ Nasal Saline (e.g. Salinex®) for nasal congestion
- ☐ Other : _____

(e.g. Nasal decongestant if Salinex® does not work, for short-term use only!)

Please return to your provider if :

- ⇢ Symptoms do not improve in ____ day(s), or worsen at any time
- ⇢ You develop persistent fever (above 38°C, or _____ as directed)
- ⇢ Other : _____

Prescriber _____

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This "Viral Prescription Pad" has been adapted from the RQHR Antimicrobial Stewardship Program www.rqhealth.ca/antimicrobialstewardship, and is **available in other languages.** http://www.rxfiles.ca/rxfiles/uploads/documents/ABX-Viral-Prescription-Pad-Languages.pdf

Visit www.RxFiles.ca/ABX for more information.

1. VIRAL PRESCRIPTION

How does it work?

Patients with viral infections are seeking relief from their symptoms, and antibiotics do not help them recover. However, there are some supportive treatments that can improve their symptoms.

Because patients have come to expect a prescription as part of their treatment plan for bacterial infections, you can use the same approach for viral infections (minus the antibiotic, of course!). Download the viral prescription here.

How do you implement it?

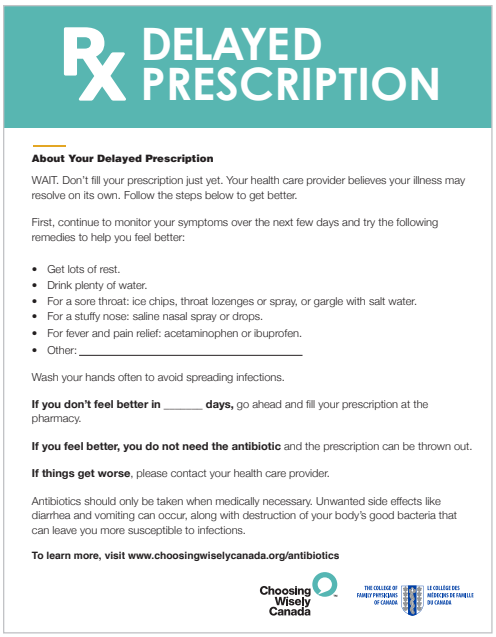
VIRTUAL VISIT

There are a number of ways to provide a patient with a viral prescription, depending on the technology available to you and your patient:

- Verbally review the viral prescription with your patient.
- If the viral prescription is incorporated into your EMR system, fill it in and email it directly to your patient.
- Fill out the viral prescription electronically or by hand and either scan or take a photo of it and email it to your patient using secure approved methods.
- If you are on a video call, fill out the viral prescription by hand, and let the patient take a screen shot or photo of it.
- You can refer them to the Using Antibiotics Wisely website to review the viral prescription.

IN-PERSON VISIT

- At an in-person visit, print the handout, review it with, and give it to, the patient.
- Offices using electronic health records (EHRs) can incorporate this tool into a patient's electronic medical record (EMR) by following the instructions included in the downloadable file.



Rx DELAYED PRESCRIPTION

About Your Delayed Prescription

WAIT. Don't fill your prescription just yet. Your health care provider believes your illness may resolve on its own. Follow the steps below to get better.

First, continue to monitor your symptoms over the next few days and try the following remedies to help you feel better:

- Get lots of rest.
- Drink plenty of water.
- For a sore throat: ice chips, throat lozenges or spray, or gargle with salt water.
- For a stuffy nose: saline nasal spray or drops.
- For fever and pain relief: acetaminophen or ibuprofen.
- Other: _____

Wash your hands often to avoid spreading infections.

If you don't feel better in _____ days, go ahead and fill your prescription at the pharmacy.

If you feel better, you do not need the antibiotic and the prescription can be thrown out.

If things get worse, please contact your health care provider.

Antibiotics should only be taken when medically necessary. Unwanted side effects like diarrhea and vomiting can occur, along with destruction of your body's good bacteria that can leave you more susceptible to infections.

To learn more, visit www.choosingwiselycanada.org/antibiotics

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2. DELAYED PRESCRIPTION

How does it work?

You can use delayed prescriptions for select patients following an in-person visit or in some cases, following a virtual visit (e.g. otitis media, uncomplicated sinusitis). Contrary to what many clinicians think, delayed prescriptions only get filled one third of the time and there is no difference in satisfaction between receiving an immediate prescription and a delayed prescription.[3]

To accompany a delayed prescription, Choosing Wisely Canada developed a delayed prescription handout that can be provided to patients. Note that this tool should not be used for all patients with RTIs since the majority should receive no antibiotics at all.

How do you implement it?

VIRTUAL VISIT

Delayed prescriptions should not routinely be used for virtual visits, with the following exceptions:

- Otitis media in cases of symptoms >48 hours, and fever ≥39°C despite adequate pain medication.
- Sinusitis for symptoms >7 days with no amelioration following 72 hour trial of nasal corticosteroids.

If you need to provide a patient with a delayed prescription, there are a number of ways to do so based on the technology available to you and your patient:

- Hand write a prescription for antibiotics that is post-dated 2–3 days and have the patient pick it up from the clinic.
- Email a post-dated prescription to your patient.
- Fax the prescription directly to the pharmacy.
- If it is not possible to post-date the prescription advise patient to wait to fill it.

IN-PERSON VISIT

- Hand write a prescription for antibiotics that is post-dated 2–3 days so that it cannot be filled until the date indicated. You may also want to include an "expiration date" when the prescription becomes invalid.
- To accompany the prescription, print the Choosing Wisely Canada delayed prescription handout for the patient.
- Offices using EHRs can incorporate Choosing Wisely Canada delayed prescription handout into a patient's EMR by following the instructions included in the downloadable file. Note that prescription to accompany this handout must be handwritten (see above).

The Delayed Prescription is available in:
English, French, Simplified Chinese, Spanish, Arabic, Punjabi and Tagalog.

3. POSTERS

How does it work?

A poster can educate patients and act as a behavioural 'nudge' by setting expectations.

Posters have been shown to be effective as part of an outpatient antimicrobial stewardship intervention for reducing inappropriate prescriptions.[4,5]

How do you implement it?

- Print the poster and hang it in the waiting area or examination rooms in your practice.
- Use it as a screen saver on your clinic computers or include it in the information broadcast on your waiting room televisions.
- If you do telemedicine, you can hang the poster in a visible space behind you.
- Given that many visits may be virtual, the poster can be included in your clinic's e-newsletter.

'Sorry' posters are available in:
English, French, Simplified Chinese, Spanish, Arabic, Punjabi and Tagalog.

'Three Questions' posters are available in:
English, French, Simplified Chinese, Spanish, Arabic, Punjabi and Tagalog.

Quality Improvement in Your Practice

- Quality improvement is a great way to obtain CME credits.
- Earn up to five Mainpro+® credits using a Linking Learning to Practice exercise to document how this tool has affected your practice.
- Measurement indicators can be found in Version 1.0 of The Cold Standard.

Visit www.cfpc.ca/en/education-professional-development/cpd-at-cfpc/linking-learning-exercises to learn more.

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