The Cold Standard

A Toolkit for Using Antibiotics Wisely for the Management of Respiratory Tract Infections in Primary Care

FIFTH EDITION | 2023

LAST UPDATED: NOVEMBER 2023
1. In the coming respiratory season, vaccines, including COVID-19 and flu shots, will continue to play an important role in preventing and reducing illness severity for respiratory tract infections.

2. Most viral respiratory infections are diagnosed and managed clinically with use of rapid antigen testing for COVID-19 when available.

3. Continued use of virtual care offers benefits for patients and their providers in some circumstances.

4. The majority of acute respiratory tract infections (RTIs) are viral and can be managed with supportive care, whether virtual or in person. Supportive management can be offered using a pediatric or adult viral prescription.
The majority of overprescribing is not due to lack of knowledge. This toolkit is intended to support judicious use of antibiotics in the following ways:

- De-emphasize the role of antibiotics for RTI through public-facing campaign.
- Standardize the clinical definition of viral RTIs and when testing (e.g., throat swab, chest radiograph etc.) is needed to determine need for antibiotics.
- Increase adoption of the viral prescription that can address patient concerns through structured communication regarding RTI diagnosis, symptom management, expected clinical course, and safety net planning.
- Incorporate delayed prescriptions for cases with diagnostic uncertainty regarding bacterial infection (e.g. acute otitis media).
- Ensure that, when antibiotics are deemed necessary, the duration does not exceed maximum recommendations.
**Points to Remember:** Matching the Respiratory Syndrome with the Most Appropriate Approach

<table>
<thead>
<tr>
<th>SYNDROME</th>
<th>SPECIFIC SITUATIONS WHERE ANTIBIOTICS ARE RECOMMENDED</th>
<th>RECOMMENDED ANTIBiotic DURATION</th>
<th>TOOLS TO SUPPORT MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPPER RESPIRATORY TRACT INFECTION</td>
<td>• Not indicated</td>
<td>• Antibiotics never indicated</td>
<td>• Adult or pediatric viral prescription</td>
</tr>
<tr>
<td>(COMMON COLD)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>BRONCHITIS/ASTHMA</td>
<td>• Not indicated</td>
<td>• Antibiotics never indicated</td>
<td>• Adult or pediatric viral prescription</td>
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<tr>
<td>OTITIS MEDIA*</td>
<td>• Perforated tympanic membrane with purulent discharge or a bulging tympanic membrane with either:</td>
<td>• <strong>Age 6 months to 2 years:</strong> 10 days</td>
<td>• Adult or pediatric viral prescription in most cases, antibiotics may be needed based on criteria in table</td>
</tr>
<tr>
<td></td>
<td>○ Fever ≥ 39°C OR</td>
<td>• <strong>Age greater than 2 years:</strong> 5 days</td>
<td>• Delayed prescription</td>
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<tr>
<td></td>
<td>○ Moderately or severely ill OR</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>○ Symptoms lasting &gt; 48 hours</td>
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<tr>
<td>PHARYNGITIS</td>
<td>• Centor score is ≥ 2 AND throat swab culture (or rapid antigen test if available) confirms presence of Group A Streptococcus</td>
<td>• 10 days</td>
<td>• Adult or pediatric viral prescription in most cases, throat swab only if Centor 2 or greater, and only antibiotics if GAS isolated</td>
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<td></td>
<td>• Don’t perform throat swabs at all for patients with Centor score ≤ 1 OR if there are accompanying symptoms of a viral infection such as rhinorrhea, oral ulcers or hoarseness (since a positive swab in that circumstance would only represent colonization).</td>
<td></td>
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<tr>
<td>SINUSITIS</td>
<td>• Patient has at least 2 of the below PODS symptoms, one of those being <strong>0</strong> or <strong>D AND:</strong></td>
<td>• 5 days</td>
<td>• Adult or pediatric viral prescription and antibiotics are very rarely indicated, only for criteria in table</td>
</tr>
<tr>
<td></td>
<td>○ Symptoms lasting greater than 7–10 days OR</td>
<td></td>
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<td>○ The symptoms are severe OR</td>
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<td></td>
<td>○ There is no response after a 72-hour trial with nasal corticosteroids</td>
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<tr>
<td></td>
<td><strong>P</strong> = Facial <strong>P</strong>ain/pressure/fullness <strong>O</strong> = Nasal <strong>Obstruction</strong> <strong>D</strong> = Purulent nasal or postnasal <strong>Discharge</strong></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td><strong>S</strong> = Hyposmia/anosmia (<strong>Smell</strong>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNEUMONIA</td>
<td>• If the patient has compatible symptoms AND radiographic confirmation of pneumonia</td>
<td>• 5 days</td>
<td>• Immediate antibiotics, no adult or pediatric viral prescription</td>
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<td></td>
<td>• Chest x-ray should not be performed routinely unless there are abnormal vital signs and/or physical exam findings</td>
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<td></td>
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<tr>
<td>ACUTE EXACERBATION OF COPD</td>
<td>• Increase in sputum purulence with either increase in sputum volume and/or increased dyspnea</td>
<td>• 5 days</td>
<td>• Inhalers and steroids, only antibiotics if meets criteria</td>
</tr>
</tbody>
</table>

*In patients with childhood immunizations.

These recommendations are for outpatient/ambulatory patients (not hospitalized or unwell).
These recommendations only apply to individuals 6 months of age or older (excludes neonates and young infants).
1. VIRAL PRESCRIPTION

Patients with viral infections are seeking relief from their symptoms, and antibiotics do not help them recover. There are some supportive treatments, however, 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!).

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.

HOW TO IMPLEMENT: 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:

- 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.
2. DELAYED PRESCRIPTION

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 patient satisfaction between receiving an immediate prescription and a delayed prescription.¹

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 TO IMPLEMENT: VIRTUAL VISIT

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

• Suspected otitis media with symptoms >48 hours, and fever ≥39°C despite adequate pain medication.

• Sinusitis for symptoms >7 days without red flags, 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:

• Provide a prescription for antibiotics that is post-dated 2–3 days and have the patient pick it up from your 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.

HOW TO IMPLEMENT: IN-PERSON VISIT

• Provide 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 the Choosing Wisely Canada delayed prescription handout into a patient’s EMR by following the instructions included in the downloadable file. Note that a prescription to accompany this handout must be provided (see above).

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

Sorry, but no amount of antibiotics will get rid of your cold. The best way to treat most colds, coughs or sore throats is with plenty of fluids and rest. Talk to your health care provider. To learn more, visit: www.choosingwiselycanada.org/antibiotics

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.2,3

3. POSTERS

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.2,3

HOW TO IMPLEMENT

- 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 5 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*.

References


Additional References


King LM, Fleming-Dutra KE, Hicks LA. Advances in Optimizing the Prescription of Antibiotics in Outpatient Settings. BMJ. 2018;363:k3047. PMID: 30420401


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