Delayed Prescribing for Minor Infections
Resource Pack for Prescribers

Background:
Antibiotic resistance is an alarming threat to modern healthcare, and infectious illness remains a major global threat to health. Antibiotic resistance rates are strongly related to antibiotic use in primary care. This is potentially a major public health problem; unless there is clear evidence of benefit, we need to maintain the efficacy of antibiotics by more judicious antibiotic prescribing.

Respiratory tract infections account for 60% of antibiotic prescribing, many of these are self-limiting – we all have a part to play in ensuring the prudent use of antibiotics to protect their benefits for future generations.

There are a number of common self-limiting infections for which there is still a level of prescribing of antibiotics in primary care which is not justified by the evidence base. These are: acute otitis media; acute sore throat/acute pharyngitis/acute tonsillitis; common cold; acute rhinosinusitis and acute cough/bronchitis, conjunctivitis and uncomplicated urinary tract infections. There is good evidence that using a delayed antibiotic prescribing strategy reduces the use of antibiotics for these conditions.

Aim:
The aim of this initiative is for Kingston CCG practices to implement a no or delayed prescribing strategy for a range of common self-limiting infections. This resource pack, face to face visits and assistance from the medicines team aims to support GPs and practices to implement this initiative.

It is anticipated that this will minimise inappropriate prescribing and use of antibiotics in order to delay the development and spread of antibiotic resistance and promote evidence based appropriate antibiotic prescribing in Kingston CCG.

What is Delayed Prescribing?
Delayed prescriptions are issued with advice to patients or carers to delay their use for several days and then only to use if symptoms persist or worsen. A Cochrane review found that delayed prescribing resulted in 32% of patients using antibiotics compared to 93% of patients in the immediate prescription group over a range of studies on acute respiratory tract infections.

Delayed prescribing has been advocated as an important management strategy to reduce inappropriate antibiotic prescribing. Delayed prescribing as a strategy over no prescribing offers a useful safety net for the small proportion of patients whose symptoms do not begin to settle with the expected illness course or if a significant worsening of symptoms occurs. A patient expecting antibiotics may also be more likely to agree with this course of action rather than with no prescribing.

When a delayed antibiotic prescribing strategy is adopted, patients should be offered:

- **Reassurance** that antibiotics are not needed immediately because they are likely to make little difference to symptoms and may have side effects, for example, diarrhoea, vomiting and rash
- **Advice about using the delayed prescription** if symptoms are not starting to settle in accordance with the expected course of the illness or if a significant worsening of symptoms occurs
- **Advice about re-consulting** if there is a significant worsening of symptoms despite using the delayed prescription.
A delayed antibiotic prescribing strategy may be delivered in primary care settings in a number of ways:

1. Prescription is written but held at the surgery for 3 days and the patient asked to return to collect the prescription if their condition has not resolved. On Thursday, Friday or at weekends the patient could nominate a pharmacy for the script to be sent to or be given the prescription as in option 2, to avoid delaying access if the 3 day period falls on a Saturday or a Sunday.
2. Prescription is marked as delayed and given to the patient, who is instructed to wait 3 days before having the script dispensed. With this option, there is a higher risk of the patient having the prescription dispensed before waiting the recommended time.

Antibiotic Prescribing Overview - Self-Limiting Respiratory Tract Infections (a NICE pathway⁴, see below)

NICE Pathways is an online tool that brings together all related NICE guidance and associated products in a set of interactive topic-based diagrams. Visually representing everything NICE has recommended on a particular topic, the pathways enable you to see at a glance all NICE recommendations on a specific clinical or health topic. The NICE pathway on self-limiting respiratory tract infections is available at https://pathways.nice.org.uk/pathways/self-limiting-respiratory-tract-infections---antibiotic-prescribing.

Evidence Base and Key Messages for Prescribers
See table on page 4.
Kingston CCG’s Current Position for Antibacterial Prescribing Locally

Table: Evidence Base and Key Messages for Prescribers\(^{1,2,4}\)

For all antibiotic prescribing strategies, patients should be given\(^{1,4}\):
- Advice about average duration of illness
- Advice about managing symptoms, including fever (particularly analgesics and antipyretics).
- Advice on other sources of help for self-limiting infections, such as community pharmacies, NHS Choices website.

An immediate antibiotic prescription and/or further investigation and management should only be offered to patients (both adults and children) in the following situations if the patient is\(^{1,2}\):
- Systemically very unwell.
- Symptoms and signs suggestive of serious illness and/or complications (particularly pneumonia, mastoiditis, peritonsillar abscess, peritonsillar cellulitis, intraorbital and intracranial complications).
- High risk of serious complications because of pre-existing comorbidity. This includes patients with significant heart, lung, renal, liver or neuromuscular disease, immunosuppression, cystic fibrosis, and young children who were born prematurely.

For these patients, the no antibiotic prescribing strategy and the delayed antibiotic prescribing strategy should not be considered.

For guidance on how to post-date prescriptions on EMIS Web, see Appendix 1 or EMIS User Guide.

<table>
<thead>
<tr>
<th>Clinical Area</th>
<th>Suitable Patients for no antibiotic treatment or Delayed Prescribing</th>
<th>Alarm Symptoms</th>
<th>Key Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sore throat</td>
<td>A no-antibiotic or a delayed-antibiotic prescribing strategy should be agreed in most patients. Use FEVERPAIN score: Fever in last 24h, purulence, attends rapidly within 3 days, severely inflamed tonsils, no cough or coryza, click here for online FEVERPAIN calculator(^{1}).</td>
<td>Immediate antibiotics and/or further appropriate investigation and management should be offered in patients who are: • Appear unwell and have symptoms and signs suggestive of peritonsillar abscess or cellulitis. • Systemically very unwell. • High risk of serious complications because of pre-existing comorbidity. • Have FEVERPAIN score &gt;4.</td>
<td>Avoid antibiotics: 90% resolve in 7 days without antibiotics and pain is only reduced by 16 hours.</td>
</tr>
<tr>
<td>Clinical Area</td>
<td>Suitable Patients for no antibiotic treatment or Delayed Prescribing</td>
<td>Alarm Symptoms</td>
<td>Key Message</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Acute Otitis Media (AOM)</strong></td>
<td>A no-antibiotic or a delayed-antibiotic prescribing strategy should be agreed in most patients.</td>
<td>Immediate antibiotics and/or further investigation and management should be offered to patients who:</td>
<td><strong>Avoid antibiotics:</strong> 60% are better in 24 hours without antibiotics and pain is only reduced at 2 days. Antibiotics do not prevent deafness.</td>
</tr>
</tbody>
</table>
|                                      | Consider 2 or 3-day delayed or immediate antibiotics for pain relief if:<br>• < 2yrs with bilateral AOM<br>• Bulging membrane & ≥ 4 marked symptoms<br>• All ages with otorrhoea.                       | • Appear unwell and have symptoms and signs suggestive of mastoiditis.  
• Systemically very unwell.  
• High risk of serious complications because of pre-existing comorbidity.                                                                                                                     | Optimise analgesia  
Advise patients on the usual natural history of the illness, including the average total length of the illness:  
For acute otitis media: 4 days                                                                                                                   |
| **Acute Rhinosinusitis**              | A no-antibiotic or a delayed-antibiotic prescribing strategy should be agreed in most patients.                                                                                           | Immediate antibiotics and/or further investigation and management should be offered to patients who:                                                                                                                                                          | **Avoid antibiotics:** 80% resolve in 14 days without, and they only offer marginal benefit after 7 days NNT15                                                |
|                                      | Consider 7-day delayed or immediate antibiotic when purulent nasal discharge                                                                                                               | • Systemically very unwell with symptoms and signs suggestive of serious illness and/or complications e.g. intraorbital and intracranial complications.  
• High risk of serious complications because of pre-existing comorbidity.                                                                                                                                | Offer patients advice, reassurance that sinusitis lasts, on average, 2½ weeks, and analgesics for symptom relief                                             |
| **Lower Respiratory Tract Infection: Acute Bronchitis** | A no-antibiotic or a delayed-antibiotic prescribing strategy should be agreed in most patients.                                                                                           | Immediate antibiotics and/or further investigation and management should be offered to patients who:                                                                                                                                                          | **Avoid antibiotics:** Antibiotic little benefit if no co-morbidity present.                                                                                                                                  |
|                                      | Consider using CRP if pneumonia is suspected:<br>• CRP<20mg/L no antibiotics<br>• CRP 20-100mg/L delayed antibiotics<br>• CRP>100mg/L immediate antibiotics.                  | • Appear unwell with symptoms and signs suggestive of pneumonia  
• Systemically very unwell  
• High risk of serious complications because of pre-existing comorbidity.                                                                                                                            | Advise patients that symptoms can take 3 weeks to resolve.                                                                                                                                             |
|                                      | Consider using CRP if pneumonia is suspected:<br>• CRP<20mg/L no antibiotics<br>• CRP 20-100mg/L delayed antibiotics<br>• CRP>100mg/L immediate antibiotics.                  | • If >80 years old and ONE of the following OR >65 years old and TWO of the following:<br>  
  → Hospitalisation in the past year                                                                                                                                                    | Advise patients on the usual natural history of the illness, including the average total length of the illness:  
For acute cough/acute bronchitis: 3 weeks.                                                                                                          |
<p>|                                      |                                                                                                                                                                                            |                                                                                                                                                                                                             | Patient leaflets can reduce antibiotic use.                                                                                                                                                               |</p>
<table>
<thead>
<tr>
<th>Clinical Area</th>
<th>Suitable Patients for no antibiotic treatment or Delayed Prescribing</th>
<th>Alarm Symptoms</th>
<th>Key Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Cold</td>
<td>A no-antibiotic or a delayed-antibiotic prescribing strategy should be agreed in most patients.</td>
<td>Immediate antibiotics should be offered in patients who are: • Systemically unwell. • Symptoms and signs suggestive of serious illness and/or complications. • High risk of serious complications because of pre-existing comorbidity.</td>
<td>Antibiotics have no beneficial effect on the common cold. It is a self-limiting condition and a no-antibiotic or a delayed-antibiotic prescribing strategy should be agreed for most patients. Advise patients on the usual natural history of the illness, including the average total length of the illness: For common cold: 1.5 weeks.</td>
</tr>
<tr>
<td>Urinary Tract Infection (UTI)</td>
<td>Simple or uncomplicated UTI in: • Female patients • Mild UTI ≤2 symptoms* AND urine NOT cloudy: NO antibiotics unless other risk factors for infection. • Mild/ ≤2 symptoms* and urine CLOUDY: use dipstick** to guide treatment and consider a back-up or delayed antibiotic option.</td>
<td>Complicated or severe symptoms • Pregnant • Men • Children • Recurrent • Failed treatment/persistent symptoms • Pyelonephritis • Elderly • Women with severe UTI ≥3 symptoms: treat.</td>
<td>Uncomplicated UTI often resolves in a few days without treatment and is rarely associated with any serious consequences.</td>
</tr>
<tr>
<td>Conjunctivitis</td>
<td>Uncomplicated cases.</td>
<td>Treat if severe or alarm symptoms: • Moderate to severe eye pain • Marked redness of the eye • Reduced visual acuity</td>
<td>• Bacterial conjunctivitis: • Mostly self-limiting. • 65% resolve on placebo by day five. • Red eye with mucopurulent, not</td>
</tr>
</tbody>
</table>
### Clinical Area

<table>
<thead>
<tr>
<th>Suitable Patients for no antibiotic treatment or Delayed Prescribing</th>
<th>Alarm Symptoms</th>
<th>Key Message</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Photophobia.</td>
<td>watery discharge. Usually unilateral but may spread.</td>
</tr>
</tbody>
</table>

### Practice Policy Template for Delayed Prescribing in Minor Infections

The following is a suggested template policy to which practices can add their practice logo and locally adopt according to requirements.

<table>
<thead>
<tr>
<th>Sections to be included in Practice Policy</th>
<th>Suggestions (please tick)</th>
<th>Details</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 1. Conditions | □ acute otitis media  
□ acute sore throat  
□ acute rhinosinusitis  
□ acute lower respiratory tract infection  
□ acute sinusitis  
□ common cold  
□ conjunctivitis  
□ uncomplicated urinary tract infection | Please list the clinical areas which are to be considered for Delayed Prescribing in your practice. Exclusion criteria should be defined. | |
| 2. Practical Points | □ Option 1. Prescription given to patient to be dispensed after 3 days only if symptoms worsen  
□ Option 2. Prescription kept in a designated place, marked as “delayed script” and held at the surgery for 3 days. Note an amendment to this option may be needed for Thursday and Friday depending on opening hours of the surgery. In this case, the patient could nominate a pharmacy for the script to be sent to or be given the prescription as in option 1, to avoid delaying access if the 3 day period falls on a Saturday or a Sunday. | Please state options for each condition selected. | Note alarm symptoms for worsening conditions – patient must be informed of these when the delayed prescribing route is used.  
There is evidence that delayed prescribing is more effective if, in the majority of cases, the script is held at the surgery. |
| 3. Documentation of delayed prescribing | Read code **8BP0** – deferred antibiotic therapy should be entered when patients are given a delayed script. Consider use of a “no antibiotic given” read code also. |  |
| 4. Communication with Patients | □ Use of patient information leaflets and posters.  
□ Advise patients on other sources of advice for self-limiting infections e.g. NHS Choices, Community Pharmacies.  
□ Use Patient Decision Aids. | Please list leaflets to be used and their locations in the practice. Poster in surgery or leaflet available at reception.  
Patient decision aids are available from NHS Shared Decision Making website [http://sdm.rightcare.nhs.uk/](http://sdm.rightcare.nhs.uk/). |
| 5. Communication with other healthcare professionals | □ Practice meeting to finalise and discuss implementation of the policy.  
□ Discussion and information given to local community pharmacists.  
□ Training and information on implementing this policy given to receptionists.  
□ Communication with Out of Hours services. | Practice meeting scheduled annually. Copy of policy in locum information pack, GP and nurse induction pack. Training for receptionists annually and in receptionist induction pack. Copy of policy and information leaflets given to local community pharmacists with a discussion. |
Post-dating prescriptions

On the issue screen, you have the option to post-date prescriptions. This is for those circumstances where you need to limit the quantity of medication you give to a patient in one go, or if you want to delay a prescription e.g. for antibiotics. This page tells you how to use the Postdate option.

We don’t recommend post-dating EPS prescriptions.

Where can I find the Postdate option?

The Postdate option is displayed at the bottom right of the Issue screen.

Issue screen with Postdate option highlighted

How do I post-date a prescription?

When you have added the number of prescriptions you want to post-date, click the calendar icons to select your required dates.

When you select a date from the calendar, the remaining dates are automatically created for you.
Selecting the number of prescriptions Remember this is the number of prescriptions, not the number of days. Instead of selecting a number of prescriptions from the list, you can enter a shortcut. For example, +4.

Save time by entering a shortcut. For example, 1D = one day, 1W = one week, 1M = one month.

OK to return to the Issue screen.

The number of prescriptions and your selected dates are displayed at the bottom right of the Issue screen.

Number of prescriptions and dates selected: If you hover your mouse over the box displaying the post-dated prescription dates, you can see all of the dates you selected.

Approve and Complete.

Now your patient can’t collect the medication until the date on the prescriptions.

How can I identify post-dated prescriptions?

A different date is displayed on each of the post-dated prescriptions.
Medication History screen to identify your post-dated prescriptions.

Medication History screen displaying post-dated prescriptions.

Medication screen, the last issue date and the last issue number are displayed on the same row as the item of medication. This means that the date displayed on the medication screen is the same as the date on the last prescription.
Post-dated medication highlighted on Medication screen

Good to know

If you try to post-date an item of medication too far in advance, and there are not enough issues remaining, an error message will be displayed.

**Error message**

At least one of the repeat medications within this prescription doesn’t have enough authorised issues remaining to satisfy that number of times.