Current support for reducing antimicrobial prescribing and simple collaborative approaches for research

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Topics

Pathways to prescribing
Opportunities to intervene
Disruptors
ResearchOne
Antibiotic prescribing

- Presentation
  - Face to Face
- On Line request
- Remote consultation
- Other professional request
- Clinical assessment
- Decision support
- Prescription – now or deferred
- EHR
General Practice Sepsis Screening & Action Tool

The General Practice Sepsis Screening & Action Tool has been triggered by information recorded in this patient's record.

Sepsis is a time critical condition. Screening, early intervention and immediate treatment saves lives.

This tool should help you follow the clinical algorithm designed by The UK Sepsis Trust to screen non-pregnant adults for features suggestive of sepsis. It is intended to support but not replace clinical judgement.

For more information & supporting documents:
http://sepsistrust.org/info-for-professionals/clinical-toolkits/
**Assessment**

**Sepsis Screening**

The patient is showing signs of possible Sepsis. Sepsis is a time critical condition. Screening, early intervention and immediate treatment saves lives. You should consider performing the full set of observations below.

**Initial Observations:**

- **O/E - temperature**
- **O/E - rate of respiration**
- **Pulse rate**

Is the patient presenting with any of the following:

- Reduced conscious level
- Disorientation
- Acute confusion

Consider blood glucose test for non-diabetics:

- **Blood glucose level**

Are any 2 of the following present?

- Temperature $> 38.3^\circ C$ or $< 36^\circ C$
- Respiratory rate $> 20$ per minute
- Heart rate $> 90$ per minute
- Acute confusion, disorientation, reduced conscious level
- Consider blood glucose: $> 7.7$ relevant in non-diabetics

These features may indicate severe (Red Flag) Sepsis:

- Systolic BP $< 90$ mmHg
- Respiratory rate $> 25$ per minute
- Heart rate $> 130$ per minute
- Responds only to voice or pain/unresponsive
- Petechial rash
- Oxygen Saturation $< 91$

*Values are guides. Interpret observations in the context of the normal physiology for the patient.*

Is any red flag present?

If 2 or more features suggest Sepsis look for other features of severe (Red Flag) Sepsis.

- **Systolic BP**
- Oxygen saturation at periphery
- Purpuric rash

For more information & supporting documents: [The UK Sepsis Trust - Clinical Toolkits](#)
The Protocol has identified that 2 or more clinical observations are outside of normal limits.

The Protocol will now check to see if any of the below Red Flags are present.

- Systolic BP < 90 mmHg
- Respiratory rate > 25 per minute
- Heart rate > 130 per minute
- Responds only to voice or pain/unresponsive
- Purpuric Rash
- Oxygen Saturations < 91%

(may be appropriate to accept SpO2 < 91% in patients with known smoking history)

RED FLAG SEPSIS

The Protocol has identified one or more Sepsis Red Flags are present. However, this Protocol is only intended to aid and supplement, not substitute for, the expertise and judgement of physicians, pharmacists or other healthcare professionals.

Sepsis is a time critical condition, and if suspected the following immediate actions are required:

- Dial 999
- Arrange a blue light transfer.
- Write a brief clear handover including observations and antibiotic allergies where present.

Administer Oxygen and other appropriate immediate care as available.
# Treating your infection

- **Patient Name:** Jean Brown

## How to treat yourself better for these infections, now and next time

<table>
<thead>
<tr>
<th>Infection</th>
<th>Usually lasts</th>
<th>How to treat yourself better</th>
<th>When should you get help:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle-ear infection</td>
<td>4 days</td>
<td>• Have plenty of rest.</td>
<td>Contact your GP practice or contact NHS 111 (England), NHS 24 (Scotland dial 111), or NHS Direct (Wales dial 0845 4647)</td>
</tr>
<tr>
<td>Sore throat</td>
<td>7 days</td>
<td>• Drink enough fluids to avoid feeling thirsty.</td>
<td>1. to 8. are possible signs of serious illness and should be assessed urgently. Phone for advice if you are not sure how urgent the symptoms are.</td>
</tr>
<tr>
<td>Common cold</td>
<td>10 days</td>
<td>• Ask your local pharmacist to recommend medicines to help your symptoms or pain (or both).</td>
<td>1. If you develop a severe headache and are sick.</td>
</tr>
<tr>
<td>Sinusitis</td>
<td>18 days</td>
<td>• Fever is a sign the body is fighting the infection and usually gets better by itself in most cases. You can use paracetamol (or ibuprofen) if you or your child are uncomfortable as a result of a fever.</td>
<td>2. If your skin is very cold or has a strange colour, or you develop an unusual rash.</td>
</tr>
<tr>
<td>Cough or bronchitis</td>
<td>3 weeks</td>
<td>• Use a tissue and wash your hands well to help prevent spread of your infection to your family, friends and others you meet.</td>
<td>3. If you feel confused or have slurred speech or are very drowsy.</td>
</tr>
<tr>
<td>Other infection(s)</td>
<td>D---days</td>
<td>• Other things you can do suggested by GP or nurse:</td>
<td>4. If you have difficulty breathing. Signs that suggest breathing problems can include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>o breathing quickly</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>o turning blue around the lips and the skin below the mouth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>o skin between or above the ribs getting sucked or pulled in with every breath.</td>
</tr>
</tbody>
</table>

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## Back-up antibiotic prescription to be collected after _______ days only if you do not feel better or you feel worse.

- Colds, most coughs, sinusitis, ear infections, sore throats, and other infections often get better without antibiotics, as your body can usually fight these infections on its own.
- If you take antibiotics when you don’t need them, it allows bacteria to build up resistance. This means, they’re less likely to work in the future, when you really might need them.
- Antibiotics can cause side effects such as rashes, thrush, stomach pains, diarrhoea, reactions to sunlight, other symptoms, or being sick if you drink alcohol with metronidazole.

Never share antibiotics and always return any unused antibiotics to a pharmacy for safe disposal.

Leaflet developed in collaboration with these professional societies.
Interventions

IoT

Algorithms

Disruptors

Point of care diagnostics

EHR

Outcomes

Remote GP