

4 GENERAL MANAGEMENT IN PRIMARY CARE

4.1 Overview

Management decisions should be based primarily on:

- an assessment of illness severity
- identification of whether the individual is in an 'at risk' group
- current advice from DOH/local public health officials based on the epidemiology of the pandemic

Patients who are not considered to be at high risk and who have no features suggesting severe disease or complications may not need to be seen in face to face consultations by a primary care clinician.

Patients with features of severe disease or serious complications will need assessment and may need admission to hospital.

4.2 Triage.

A significantly increased demand for advice and consultation should be anticipated. Practices may make a number of arrangements to deal with this, including:

- Telephone triage and advice, which may be nurse-led
- Triage and advice immediately after reception at the practice
- Nurse-led prescribing of antiviral medication or antibiotics, according to patient group directives (PGDs)
- Making arrangements to provide domiciliary services for some patients who are unwell at home, but who may be able to avoid hospital admission
- Possibly making arrangements for patient care in intermediate-level community facilities, again to avoid hospital admission

It may be useful for the triage system to include criteria for suspecting that a patient does NOT have influenza features (such as large, tender lymph nodes in the neck, white spots on the tonsils, or non-respiratory symptoms eg urinary tract symptoms).

4.2.1 *Patients without influenza-like illnesses*

With widespread concern during a pandemic, there are likely to be significantly higher consultation rates for all respiratory tract infections (e.g. febrile colds, sore throat with temperatures) which are normally managed well at home using over the counter remedies. Demand management in both the practice and the PCT will be crucial to avoid the service's capacity to triage care being overwhelmed.

Patients with non-ILIs who would normally self-medicate should be advised not to seek medical care where possible to minimise the chance of contracting influenza during a visit to the surgery reception room. (see UK Infection Control Guidance for Pandemic Influenza) This will also enable patients with ILI to be appropriately recognised and treated.

A sensible use of GP practice time will be to manage patients in the high risk groups (see Appendix 2) and those with complications. The PCT should make other arrangements for treating those with clinical influenza who are previously well, in addition to making it clear that antivirals will only be available for those fitting a strict clinical definition of influenza (see Section 9).

Recommendations

- Health professionals should use a nationally agreed clinical definition when diagnosing influenza (see Box 3.1)
- PCTs and practices should formulate triage arrangements in advance of a pandemic to allow GPs to predominantly assess high risk patients and those developing complications.
- PCTs and practices should formulate plans according to UK Infection Control Guidance for Pandemic Influenza (*to be published*) to minimise the contact of patients without ILI with patients suffering from ILI in practice waiting rooms.

4.3 General advice and symptomatic treatment

All patients presenting in general practice with symptoms suggestive of influenza (except perhaps those in whom urgent admission is required) should be given general advice and advice on symptomatic treatment. It is important that clinicians identify and address individual concerns and expectations, provide information about the illness, and provide information about what patients can do to help themselves and when they should seek further help.

4.3.1 Addressing the patients agenda

Influenza can present with quite severe symptoms which may result in considerable anxiety or expectations of treatment to 'cure' the illness. These *concerns* and *expectations* are likely to be heightened in the event of a pandemic. Furthermore, in a pandemic situation, patient's *ideas* about their illness are likely to be affected by the experiences of others they know or even the stories they have heard through friends, neighbours or the media. Failure to identify and address the patients unique ideas about their illness, and their main concerns, is likely to lead to dissatisfaction, and may result in increased rates of re-consultation, leading to an increased drain on primary care resources at a time when they are likely to be stretched.

In order to effectively deal with these issues, it will be necessary for primary care clinicians to use all of their skills in identifying the patient's agenda. Developing an interested, concerned manner is as important as the specific questions asked.

4.3.2 Providing information about the illness

Like addressing the patients agenda, providing the patient with accurate information about the nature of the illness, symptoms to expect, and the likely course of the illness, is extremely important in conditions, such as Influenza, that are for the most part self limiting. Some useful facts that can be provided to the patient are included in Box 4.1.

Box 4.1 Information about Influenza to provide to patients

- Influenza is caused by a number different types of 'influenza' viruses.
- The incubation period is 1-4 days and infected adults are usually contagious from the day before to 5 days after illness onset.
- Fever usually declines after 2-3 days and normally disappears by the 6th day.
- Cough, weakness and fatigue can persist for 1-2 weeks and up to 6 weeks.
- Antibiotics do not benefit most people with influenza but are sometimes needed to treat secondary infections.

4.3.3 Providing information about symptomatic treatment

There is little scientific evidence for most symptomatic and self-help treatment, but experience suggests that some of the following may help, and are unlikely to cause harm.

- Treatment of fever, myalgias and headache with Paracetamol or Ibuprofen
- Rest
- Drink plenty of fluids
- void smoking
- Consider: steam inhalation, short course of topical decongestants, throat lozenges, saline nose drops

4.3.4 Providing information about when patients should seek further help, and modify help-seeking behaviour

GPs should share information with patients about best use of medical services and specific advice should be given about when they should seek further help. Possible examples of what should prompt a patient to re-consult are given in Box 4.2.

Box 4.2 Examples of what should prompt patients to re-consult

- Shortness of breath at rest or while doing very little
- Painful or difficult breathing
- Coughing up bloody sputum
- Fever for four to five days and not starting to get better (or getting worse)
- Started to feel better then developing high fever and feeling unwell again
- Drowsiness, disorientation or confusion.

5 SEVERITY ASSESSMENT AND CRITERIA FOR HOSPITAL REFERRAL

5.1 Which patients require hospital referral?

Patients with uncomplicated influenza infection usually do not require hospital referral. Patients who might require hospital admission fall into two main groups; those with worsening of a pre-existing medical condition and those with an influenza-related complication.

5.1.1 Worsening of pre-existing medical condition

Patients who experience a worsening or clinical deterioration of pre-existing medical problems due to influenza infection should be managed according to recommended best practice for the medical condition in question. For instance, a patient with an acute exacerbation of COPD triggered by influenza infection should be managed according to current NICE Guidelines for COPD.(58)

Those with a worsening of a pre-existing condition are likely to be in a group at 'high risk' of influenza-related respiratory complications and consequently at risk of hospitalisation or death (Appendix 2). This group should be promptly reassessed if the illness is getting worse to consider hospital referral.

5.1.2 Influenza-related pneumonia

Pneumonia is the commonest influenza-related complication requiring hospital admission. Patients complaining of new or worsening dyspnoea should be carefully assessed for signs of pneumonia. If pneumonia is diagnosed, disease severity assessment according to the BTS CAP Guidelines 2004 (CRB-65 score) is recommended and hospital referral made accordingly.(59) (Table 5.1) The CRB-65 score is offered as a clinical assessment tool and does not replace clinical judgement.

In addition, in view of the rapid and fulminant course of primary viral pneumonia, patients with pneumonia who have bilateral chest signs (crackles or wheeze) should be referred to hospital for further assessment, including a chest x-ray.

5.1.3 Other complications

Other influenza-related complications are uncommon. There are no specific recommendations relating to criteria for hospital admission or disease severity assessment in these cases.

Recommendations

- **Patients with clinically defined uncomplicated influenza infection would be expected to make a full recovery. They require good symptomatic management, access to antiviral treatment, information about the natural history, and advice as to when to re-consult.**
- **Patients with new or worsening symptoms - particularly shortness of breath or recrudescence of fever not responding to treatment - should be examined to assess the presence and severity of influenza-related pneumonia.**

- Patients with worsening of pre-existing comorbid medical conditions should be managed according to best practice for that condition with reference to published disease-specific guidelines, if available.
- In patients with influenza-related pneumonia clinically, hospital referral and assessment should be considered for patients with a CRB-65 score of 1 or 2 (particularly score 2) and urgent admission for those with CRB-65 score of 3 or more.
- Patients with bilateral chest signs of pneumonia should be referred to hospital for further assessment regardless of CRB-65 score.

Table 5.1 Severity assessment used to determine the management of influenza-related pneumonia in patients in the community (CRB-65 score)

Score 1 point for each feature present:

- Confusion (Mental Test Score of ≤ 8 , or new disorientation in person, place or time.)
- Respiratory rate ≥ 30 /min
- Blood pressure (SBP < 90 mmHg or DBP ≤ 60 mmHg)
- Age ≥ 65 years

CRB-65 score	Recommended action
0	Likely suitable for home treatment
1 or 2	Consider hospital referral, particularly with score 2
3 or 4	Urgent hospital referral

5.2 What severity assessment strategy is recommended for patients referred to hospital with influenza-related pneumonia?

The CURB-65 severity assessment tool as described in the BTS CAP Guidelines 2004 is recommended for the stratification of hospitalised patients with influenza-related pneumonia into disease severity groups.(59) (Table 5.2) In addition, the presence of diffuse bilateral lung infiltrates on chest radiography consistent with primary viral pneumonia is an adverse prognostic feature. Such patients should be treated as for severe pneumonia. In all instances, clinical judgement is essential when assessing disease severity.

Recommendations

- Patients with bilateral lung infiltrates on chest radiography consistent with primary viral pneumonia should be managed as having severe pneumonia regardless of CURB-65 score.
- In hospital, patients with influenza-related pneumonia and who have a CURB-65 score of 3 or more are at high risk of death and should be managed as having severe pneumonia.
- Patients who have a CURB-65 score of 2 are at increased risk of death. They should be considered for short stay inpatient treatment or hospital supervised outpatient treatment. This decision is a matter of clinical judgement.

- Patients who have a CURB-65 score of 0 or 1 are at low risk of death. They can be treated as having non-severe pneumonia and may be suitable for home treatment.

5.3 When should transfer to a High Dependency Unit (HDU) or Intensive Care Unit (ICU) be considered?

The indications for transfer to HDU or ICU are no different in patients with influenza infection compared to other patients. Most patients who might require HDU/ICU care will have influenza-related pneumonia or a severe exacerbation of underlying comorbid illness eg. exacerbation of COPD. In a pandemic situation when HDU/ICU beds may not be readily available, prioritisation of patients on an individual basis matched against available resources will be expected.

Recommendations

- Patients with primary viral pneumonia or a CURB-65 score of 4 or 5 should be considered for HDU/ICU transfer.
- General indications for HDU/ICU transfer include:
 - a. persisting hypoxia with PaO₂ <8Kpa despite maximal oxygen administration
 - b. progressive hypercapnia
 - c. severe acidosis (pH<7.26)
 - d. septic shock
- Patients with influenza admitted to Intensive Care Unit should be managed by specialists with appropriate training in Intensive Care, Respiratory Medicine and Infectious Diseases.

Table 5.2 Severity assessment used to determine the management of influenza-related pneumonia in patients admitted to hospital (CURB-65 score)

Score 1 point for each feature present:

- Confusion (Mental Test Score of ≤ 8, or new disorientation in person, place or time)
- Urea > 7 mmol/l
- Respiratory rate ≥ 30/min
- Blood pressure (SBP < 90mmHg or DBP ≤ 60mmHg)
- Age ≥ 65 years

CURB-65 score*	Recommended action
0 or 1	Likely suitable for home treatment
2	Consider short in-patient stay or hospital supervised out-patient treatment
3 or more	Manage in hospital as severe pneumonia

***NOTE: New bilateral lung shadowing on CXR consistent with primary viral pneumonia should be taken as a feature of severe pneumonia regardless of CURB-65 score.**