

SCOPE

1 Guideline title

Feverish illness: assessment and initial management in children younger than 5 years of age

1.1 Short title

Feverish illness in children

2 Background

- (a) The National Institute for Health and Clinical Excellence ('NICE' or 'the Institute') has commissioned the National Collaborating Centre for Women's and Children's Health to develop a clinical guideline on Feverish illness: assessment and initial management in children younger than 5 years of age for use in the NHS in England and Wales. This follows referral of the topic by the Department of Health and Welsh Assembly Government (see Appendix). The guideline will provide recommendations for good practice that are based on the best available evidence of clinical and cost effectiveness.
- (b) The Institute's clinical guidelines will support the implementation of National Service Frameworks (NSFs) in those aspects of care where a Framework has been published. The statements in each NSF reflect the evidence that was used at the time the Framework was prepared. The clinical guidelines and technology appraisals published by the Institute after an NSF has been issued will have the effect of updating the Framework.
- (c) NICE clinical guidelines support the role of healthcare professionals in providing care in partnership with patients, taking account of their individual needs and preferences, and ensuring that patients (and their carers and families, where appropriate) can make informed decisions about their care and treatment.

3 Clinical need for the guideline

- a) Feverish illness in young children is a great concern for parents and carers and is a significant diagnostic challenge for healthcare professionals. It is the second most common medical complaint presenting to emergency departments and it is a frequent cause for admission. The assessment of illness severity and clinical signs is most challenging in young children.
- b) Feverish illness in young children is most frequently caused by self-limiting viral infections. However, some viral infections do lead to more serious illnesses requiring support and treatment in hospital. In addition, fever may be a presenting feature of bacterial illnesses such as meningitis, septicaemia, urinary tract infections and pneumonia. Feverish illness may be associated with a variety of more severe symptoms and signs, such as cough, breathlessness, vomiting, diarrhoea, rash or convulsions; many symptoms and signs are non-specific and may offer no specific clue to the cause of the fever. The challenge is to distinguish between mild or moderate illness and more severe illness.
- c) To further complicate the problem of assessment and diagnosis, the clinical picture often changes rapidly and the condition of young children with serious illness may deteriorate within hours of onset. The challenge for healthcare professionals is to determine when to observe the child over a period of hours or when to investigate and begin treatment.
- d) There is a need to inform healthcare professionals in both primary and secondary care how to judge whether a child who presents with a fever is likely to develop a serious illness, and to support their decision on whether to observe the child, to perform diagnostic tests, to start treatment such as antibiotics, and/or to refer.
- e) Healthcare professionals need clear guidelines about symptoms or signs requiring prompt referral. Parental preferences will be taken into

account when considering the various combinations for testing or observation that are in the children's best interest in terms of health outcomes.

4 The guideline

- a) The guideline development process is described in detail in two publications which are available from the NICE website (see 'Further information'). *The guideline development process: an overview for stakeholders, the public and the NHS* describes how organisations can become involved in the development of a guideline. *Guideline development methods: information for National Collaborating Centres and guideline developers* provides advice on the technical aspects of guideline development.
- b) This document is the scope. It defines exactly what this guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health and Welsh Assembly Government (see Appendix).
- c) The areas that will be addressed by the guideline are described in the following sections.

4.1 Population

4.1.1 Groups that will be covered

- a) Children from birth and younger than 5 years of age presenting with a fever which has not been previously diagnosed.
- b) Subgroups (for example by age) will be given special consideration if supported by the evidence.

4.1.2 Groups that will not be covered

- a) Children from birth and younger than 5 years of age already admitted to hospital.

- b) Children with a pre-existing co-morbidity for which the presentation of fever is already covered by an established management plan by their specialist team, for example, those with cystic fibrosis or immunosuppression.
- c) Children presenting with recurring and/or persistent fever.
- d) Children with tropical diseases.

4.2 Healthcare setting

- a) The guideline will cover primary care, emergency departments and other hospital attendances including paediatric assessment units.

4.3 Clinical management

4.3.1 What will be covered

- a) The accuracy of different measurements of body temperature including the methods and sites, and how to interpret the height of fever.
- b) In a child presenting with fever, identification of signs and symptoms that would help to establish the possible diagnoses and focus for infection.
- c) In a child presenting with fever, identification of clinical signs and symptoms that would help to predict the severity of the child's illness.
- d) Identification of which clinical signs and symptoms would direct the healthcare professional to carry out further investigations, what these investigations should include and how to interpret them.
- e) When a child presenting with a fever should be started on treatment (for example antipyretics and/or antibiotics) to try to improve their condition or manage their illness.
- f) Thresholds for referral:

- what clinical signs or symptoms can be used to identify young children who should be referred
 - what additional factors should be taken into consideration when deciding whether or not to admit a young child to hospital
 - which clinical signs or symptoms should be used to identify young children who should be referred directly to intensive care.
- g) What advice should be given to parents and carers following the child's initial assessment by the healthcare professional including the use of antipyretic drugs and other cooling methods.

4.3.2 What will not be covered

- a) Management beyond initial stabilisation.
- b) Management after a specific diagnosis has been made.
- c) Management of febrile convulsions.

4.4 Status

4.4.1 Scope

This is the final scope.

Related guidelines:

- Urinary tract infection in children (publication May 2007).
- Meningococcal disease and meningitis in children and adolescents (publication 2009).

4.4.2 Guideline

The development of the guideline recommendations will begin in July 2005.

5 Further information

Information on the guideline development process is provided in:

- *The guideline development process: an overview for stakeholders, the public and the NHS*
- *Guideline development methods: information for National Collaborating Centres and guideline developers*

These booklets are available as PDF files from the NICE website (www.nice.org.uk). Information on the progress of the guideline will also be available from the website.

Appendix – Referral from the Department of Health and Welsh Assembly Government

The Department of Health and Welsh Assembly Government asked the Institute to develop a clinical guideline:

”For the assessment and initial management of children aged up to 5 years who present to health services with a feverish illness.

The guideline should include:

- assessment of severity of illness including how to measure and interpret height of fever
- clinical management in primary care including investigations, use of antibiotics and when to refer for specialist care.
- initial assessment by A&E and paediatric specialists including appropriate investigation and initial treatment, for example use of empiric antibiotic therapy.”