

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

SCOPE**1 Guideline title**

Diarrhoea and vomiting: management of acute diarrhoea with or without vomiting in the under 5s

1.1 Short title

Diarrhoea with or without vomiting in the under 5s

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 acute diarrhoea with or without vomiting in children for use in the NHS in England and Wales. This follows referral of the topic by the Department of Health (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) Diarrhoea is defined as a change in bowel habit for the individual child resulting in substantially more frequent and/or very loose or watery stools. Acute diarrhoea due to gastroenteritis comes on suddenly and is usually short lived (lasting 14 days or fewer). In children, acute diarrhoea due to gastroenteritis can occur with or without vomiting.
- b) Acute diarrhoea with or without vomiting most commonly presents in primary care, accounting for 20% of GP consultations and more than 12% of emergency department presentation each year in infants and children younger than 5 years. It is also a very common reason for requests to NHS Direct for advice. The majority of children are managed out of hospital.
- c) The most common cause of acute diarrhoea is infection, 87% of which are viral with rotavirus making up the majority of these. The remaining causes are generally of bacterial origin (commonly *Campylobacter*, *Salmonella* or *Shigella* species or *Escherichia coli*) or parasitic origin, mainly *Cryptosporidium*. Infections are acquired by person-to-person transmission within families or nursery/school environments, or less commonly by food poisoning.
- d) Acute diarrhoea is usually self-limiting, but if untreated may result in morbidity and mortality secondary to water and electrolyte losses. Acute diarrhoea with or without vomiting in infants and young children can be more serious than in adults because it can cause dehydration. Young babies especially can become dehydrated very quickly. In the early stages of dehydration there are no signs or symptoms – these develop as dehydration increases and it is important to be able to recognise them so that appropriate interventions can be started in a timely manner
- e) The incidence of acute diarrhoea in children is likely to remain high because it is easily and quickly transmitted though the nursery, preschool and home environments. It is therefore important to develop

guidance on the management of acute diarrhoea with or without vomiting.

- f) According to clinical opinion, there is wide variation in current practice in both primary and secondary care. In particular there is a need for clear guidance on which method of rehydration therapy to use, when to use antibiotics, and which children need referral and at what stage

4 The guideline

- a) The guideline development process is described in detail in two publications that 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. 'The guidelines manual' 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 (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) Infants and young children from birth up to their fifth birthday presenting to primary or secondary care with acute diarrhoea (lasting 7 days or fewer) due to gastroenteritis, on its own or with vomiting.
- b) Within this population, no additional patient subgroups have been identified at this stage but any that are shown by the evidence to have particular clinical needs will be given special consideration.

4.1.2 Groups that will not be covered

- a) Children who have passed their fifth birthday.
- b) Infants and young children with chronic diarrhoea and vomiting (lasting more than 7 days).
- c) Infants and young children presenting with vomiting alone.
- d) Infants and young children with acute diarrhoea and/or vomiting due to already diagnosed comorbidities that may cause acute diarrhoea and vomiting (for example lactose intolerance, cystic fibrosis or inflammatory bowel syndrome) or other comorbidities such as:
 - surgical causes, for example appendicitis or short bowel syndrome
 - immunosuppression, for example because of HIV or AIDS.
- e) Infants and young children who have already been admitted to hospital with a diagnosis other than gastroenteritis and who then develop diarrhoea, for example a child who is admitted with pneumonia and then develops diarrhoea while in hospital.
- f) Neonates who are admitted to the neonatal unit or are on the postnatal wards.
- g) Public health issues such as the contamination of food products and factors that may prevent acute diarrhoea and vomiting, for example breastfeeding.
- h) Immunisations to prevent diarrhoea and vomiting.

4.2 Healthcare setting

- a) The guideline will cover management in community, primary and secondary care, and indications for referral to secondary care.

4.3 Clinical management

- a) The immediate management in infants and young children of diarrhoea (on its own or with vomiting) caused by an acute infection.

- b) When to consider the management of acute diarrhoea and vomiting in infants and young children who were previously healthy.
- c) How to identify infants and young children with acute diarrhoea and vomiting who are at risk of dehydration and whose condition needs immediate management.
- d) How to differentiate between acute infective diarrhoea and other causes of diarrhoea.
- e) How to treat symptomatic infants and young children, including:
- when to start rehydration
 - what type of rehydration fluids to use
 - what route of administration to use
 - what additional treatment to consider
 - when and what investigations should be performed.
- f) Threshold of referral:
- what clinical signs or symptoms can be used to identify infants and young children who should be referred
 - what additional factors should be taken into consideration when deciding whether or not to admit an infant or young child to hospital.
- g) Following the infant or young child's initial assessment by the healthcare professional, what advice should be given to parents and carers – for example regarding signs of dehydration and replacement of fluids at home.
- h) Note that guideline recommendations will normally fall within licensed indications; exceptionally, and only where clearly supported by evidence, use outside a licensed indication may be recommended. The guideline will assume that prescribers will use the summary of product characteristics to inform their decisions for individual patients.

- i) The guideline development group will consider making recommendations on the principal complementary and alternative interventions or approaches to care relevant to the guideline topic.
- j) The guideline development group will take reasonable steps to identify ineffective interventions and approaches to care. If robust and credible recommendations for repositioning the intervention for optimal use, or changing the approach to care to make more efficient use of resources, can be made, they will be clearly stated. If the resources released are substantial, consideration will be given to listing such recommendations in the 'key priorities for implementation' section of the guideline.

4.4 Status

4.4.1 Scope

This is the consultation draft of the scope. The consultation period is 10 January to 6 February 2007.

The guideline will link to the NICE clinical guideline on feverish illness in children, which is in development.

4.4.2 Guideline

The development of the guideline recommendations will begin in June 2007.

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'
- 'The guidelines manual'.

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

The Department of Health asked the Institute:

‘To prepare a clinical guideline on the assessment and management of acute diarrhoea and/or vomiting in children.’