

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

SCOPE

1 Guideline title

Infection: prevention and control of healthcare-associated infections in primary and community care (update of NICE clinical guideline 2)

1.1 Short title

Infection prevention and control (update)

2 The remit

NICE has commissioned the National Clinical Guidelines Centre for Acute and Chronic Conditions to partially update 'Infection control: prevention of healthcare-associated infection in primary and community care' (NICE clinical guideline 2 [2003]).

3 Clinical need for the guideline

3.1 Epidemiology

- a) In 2004, the Department of Health reported that approximately 300,000 healthcare-associated infections occurred per year in hospital and primary care in the UK. In 2007, infectious diseases accounted for 70,000 deaths, 150,000 hospital admissions and 40 per cent of GP consultations in the UK. In the same year, meticillin resistant *Staphylococcus aureus* (MRSA) bloodstream infections and *Clostridium difficile* infections were recorded as the underlying cause of, or a contributory factor to, approximately 9000 deaths in hospital and primary care.

- b) Healthcare-associated infections are estimated to cost the NHS approximately £1 billion a year; £56 million of this is estimated to be incurred following discharge of patients from hospital.

3.2 *Current practice*

- a) Advances in healthcare mean that many more people now survive serious illness. Although infection is still one of the many risks associated with treatment and/or care, this risk can be minimised if preventive measures are in place.
- b) The risk of patients acquiring a healthcare-associated infection is increased by the rapid turnover of patients from acute care settings to community care, and by the increasing number of complex procedures performed in primary and community care. Healthcare-associated infections can exacerbate existing or underlying conditions, delay recovery and adversely affect quality of life.
- c) Healthcare associated infections arise across a wide range of clinical conditions and can affect patients of all ages. Healthcare workers, families and carers are also at risk of acquiring an infection as a result of exposure to infections when caring for patients.
- d) Healthcare-associated infections are commonly linked with invasive procedures or devices. For example:
- indwelling urinary catheters are the most common cause of urinary tract infections
 - bloodstream infections are often associated with vascular-access devices.
- e) Healthcare-associated infections are caused by a wide range of microorganisms. These are often carried by the patients themselves, but have taken advantage of a route into the body provided by an invasive device or procedure.

- f) In certain circumstances asepsis is very important, particularly when dealing with invasive devices. Yet the principles of asepsis are poorly understood.
- g) This clinical guideline is a partial update of 'Infection control: prevention of healthcare-associated infection in primary and community care', NICE clinical guideline 2 (2003), and will address areas in which clinical practice for preventing healthcare-associated infections in primary and community care has changed. The aspects that will be updated are identified in section 4.3.1. Any recommendations from the previous guideline not mentioned below will be incorporated into this updated guideline to form an up-to-date guideline on infection prevention and control in primary and community care. This guideline will not cover aspects of infectious diseases addressed by related NICE guidance, but will refer to them as appropriate.

4 The guideline

The guideline development process is described in detail on the NICE website (see section 6, 'Further information').

This scope defines what the 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.

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) All adults and children receiving healthcare where standard infection control precautions apply in primary and community care.

- b) Healthcare professionals, family members and carers who provide healthcare in primary and community settings.
- c) Guideline developers will pay particular attention to the needs of different age groups, different genders, people with disabilities and minority ethnic groups.

4.1.2 Groups that will not be covered

- a) People receiving healthcare in secondary care settings.

4.2 *Healthcare setting*

- a) Primary-care settings, such as general practices, dental clinics, health centres and polyclinics. This also includes care delivered by the ambulance service.
- b) Community-care settings (such as care homes, patient's own home, schools and prisons) where NHS healthcare is provided or commissioned.
- c) This guideline is commissioned for the NHS, but people providing healthcare in other settings, such as private settings, may find the guidance relevant.

4.3 *Clinical management*

4.3.1 Key clinical issues that will be covered

- a) Standard infection control precautions:
 - Hand hygiene:
 - When to decontaminate hands in relation to patient care in different healthcare settings, including after the removal of gloves.
 - Choice of hand-cleaning preparation (alcohol-based decontamination products, non-alcohol based decontamination products, antimicrobial/antiseptic hand-washes or agents, or liquid soap and water).

- What is the most effective hand decontamination technique?
 - Personal protective equipment:
 - Safe disposal of personal protective equipment in line with European Union (EU) legislation.
 - Appropriate use of plastic aprons and fluid-repellent gowns.
 - Which gloves provide the best protection against infections?
 - Safe use and disposal of sharps:
 - Choice of sharps equipment.
 - Safe disposal of sharp instruments and needles in relation to patient care in different healthcare settings, in line with current EU legislation.
- b) Long-term (more than 28 days) urinary catheters:
- Use of antibiotics when changing urinary catheters.
 - Does bladder irrigation, instillation or washout reduce encrustations/blockages?
 - Does bladder irrigation, instillation or washout reduce symptomatic urinary tract infections?
 - Which catheters provide the best protection against urinary tract infections (impregnated catheters, silicon catheters or latex catheters)?
- c) Percutaneous gastrostomy feeding:
- Use of syringes in enteral feeding systems.
- d) Vascular-access devices:
- Which dressings provide the best protection against centrally and peripherally inserted catheter-related bloodstream infection (impregnated dressings, patch, patch plus plain dressings or plain dressings)?

- What is the most clinically- and cost-effective solution for:
 - Decontaminating peripheral and centrally inserted catheter ports and hubs before access?
 - Decontaminating skin when changing dressings?
 - What are the most clinically- and cost-effective methods for administering infusions or drugs in order to prevent contamination?
- e) Asepsis:
- What are the most clinically- and cost-effective principles of asepsis when handling long-term urinary catheters and vascular access devices?
- f) Information and support for healthcare professionals, patients and carers:
- What information do patients, carers and healthcare personnel require to prevent healthcare-associated infections in primary and community care settings?

4.3.2 Clinical issues that will not be covered

- a) Advice on the diagnosis, treatment or management of specific infections.
- b) Procedures for the insertion of urinary catheters, percutaneous gastrostomies or vascular-access devices.
- c) Infection prevention measures for invasive procedures carried out by paramedic services, such as at a major trauma, other than in the clinical areas listed in 4.3.1.
- d) Decontamination or cleaning of the healthcare environment and equipment, other than the clinical devices listed in 4.3.1.

4.4 Main outcomes

- a) All cause mortality.

- b) Short- and long-term infection-related mortality.
- c) Short- and long-term infection-related morbidity.
- d) Rates of patients presenting with a healthcare-associated infection or colonisation, such as MRSA.
- e) Length of time to treat infection.
- f) Infection related hospital admittance rates.
- g) Short-, medium- and long-term quality of life.
- h) Rates of needle stick injuries.
- i) Costs (prevention costs net of treatment cost savings).

4.5 *Economic aspects*

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative interventions. A review of the economic evidence will be conducted and analyses will be carried out as appropriate. The preferred unit of effectiveness is the quality-adjusted life year (QALY), and the costs considered will usually be only from an NHS and personal social services (PSS) perspective. Further detail on the methods can be found in 'The guidelines manual' (see 'Further information').

4.6 *Status*

4.6.1 *Scope*

This is the final scope.

4.6.2 *Timing*

The development of the guideline recommendations will begin in March 2010.

5 Related NICE guidance

5.1 *Published guidance*

5.1.1 NICE guidance to be updated

This guideline will update and replace the following NICE guidance:

- Infection control. NICE clinical guideline 2 (2003). Available from www.nice.org.uk/guidance/CG2

5.1.2 Other related NICE guidance

- Needle and syringe programmes. NICE public health guidance 18 (2009). Available from www.nice.org.uk/guidance/PH18
- Surgical site infection. NICE clinical guideline 74 (2008). Available from www.nice.org.uk/guidance/CG74
- Antimicrobial prophylaxis against infective endocarditis in adults and children undergoing interventional procedures. NICE clinical guideline 64 (2008). Available from www.nice.org.uk/guidance/CG64
- Urinary tract infection in children. NICE clinical guideline 54 (2007). Available from www.nice.org.uk/guidance/CG54
- Urinary incontinence. NICE clinical guideline 40 (2006). Available from www.nice.org.uk/guidance/CG40
- Tuberculosis. NICE clinical guideline 33 (2006). Available from www.nice.org.uk/guidance/CG33
- Nutrition support in adults. NICE clinical guideline 32 (2006). Available from www.nice.org.uk/guidance/CG32

6 Further information

Information on the guideline development process is provided in:

- ‘How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS’
- ‘The guidelines manual’.

These are available from the NICE website (www.nice.org.uk/GuidelinesManual). Information on the progress of the guideline will also be available from the NICE website (www.nice.org.uk).