Diabetic foot problems

Inpatient management of diabetic foot problems

Issued: March 2011

NICE clinical guideline 119
guidance.nice.org.uk/cg119
## Contents

- Introduction .................................................................................................................................. 4
  - Topic ........................................................................................................................................ 4
  - Who this guideline is for .................................................................................................................. 5
- Patient-centred care ....................................................................................................................... 6
- Key priorities for implementation ..................................................................................................... 7
  - Multidisciplinary foot care team .................................................................................................... 7
  - Patient information and support ..................................................................................................... 8
  - Initial examination and assessment ................................................................................................. 8
- Care: within 24 hours of a patient with diabetic foot problems being admitted to hospital, or the detection of diabetic foot problems (if the patient is already in hospital) ......................................................... 9
  - Investigation of suspected diabetic foot infection ........................................................................... 9
  - Management of diabetic foot infection ............................................................................................ 9
  - Management of diabetic foot ulcers ............................................................................................... 9
- 1 Guidance ................................................................................................................................... 11
  - 1.1 List of all recommendations ...................................................................................................... 11
- 2 Notes on the scope of the guidance ............................................................................................... 19
- 3 Implementation ............................................................................................................................ 20
- 4 Other versions of this guideline ..................................................................................................... 21
  - 4.1 Full guideline ............................................................................................................................. 21
  - 4.2 NICE Pathways ........................................................................................................................ 21
  - 4.3 Information for the public .......................................................................................................... 21
- 5 Related NICE guidance ................................................................................................................ 22
  - Published ...................................................................................................................................... 22
  - Under development ......................................................................................................................... 22
- 6 Updating the guideline .................................................................................................................. 24
Appendix A: The Guideline Development Group and the Short Clinical Guidelines Technical Team

Guideline Development Group

Short Clinical Guidelines Technical Team

Appendix B: The Guideline Review Panel

Appendix C: NICE Centre for Clinical Practice

About this guideline
Introduction

This guidance has been incorporated into the diabetes NICE Pathway, along with other related guidance and products.

Topic

Diabetes is one of the biggest health challenges facing the UK today. In 2010, 2.3 million people in the UK were registered as having diabetes, while the number of people estimated as having either type 1 or type 2 diabetes was 3.1 million. By 2030 it is estimated that more than 4.6 million people will have diabetes (Diabetes UK 2010).

As the longevity of the population increases, the incidence of diabetes-related complications also increases (Anderson and Roukis 2007). Among the complications of diabetes are foot problems, the most common cause of non traumatic limb amputation (Boulton et al. 2005). The feet of people with diabetes can be affected by neuropathy, peripheral arterial disease, foot deformity, infections, ulcers and gangrene.

Diabetic foot problems have a significant financial impact on the NHS through outpatient costs, increased bed occupancy and prolonged stays in hospital. In addition, diabetic foot problems have a significant impact on patients' quality of life; for example, reduced mobility that may lead to loss of employment, depression and damage to or loss of limbs. Diabetic foot problems require urgent attention. A delay in diagnosis and management increases morbidity and mortality and contributes to a higher amputation rate (Reiber et al. 1999).

The common clinical features of diabetic foot problems include infection, osteomyelitis, neuropathy, peripheral arterial disease and Charcot arthropathy.

Laboratory evaluations include blood tests, different imaging techniques, microbiological and histological investigations, but currently there is no guidance on which tests are the most accurate and cost effective.

The primary objective in managing diabetic foot problems is to promote mobilisation. This involves managing both medical and surgical problems and involving a range of medical experts in related fields (Bridges et al. 1994).
Despite the publication of strategies on commissioning specialist services for the management and prevention of diabetic foot problems in hospital ('Putting feet first', Diabetes UK 2009; 'Improving emergency and inpatient care for people with diabetes', Department of Health 2008), there is variation in practice in the inpatient management of diabetic foot problems. This variation is due to a range of factors, including differences in the organisation of care between patients' admission to an acute care setting and discharge. This variability depends on geography, individual trusts, individual specialties (such as whether the service is managed by vascular surgery, general surgery, orthopaedics, diabetologists or general physicians) and the availability of podiatrists with expertise in diabetic foot disease.

This short clinical guideline aims to provide guidance on the key components of inpatient care of people with diabetic foot problems from hospital admission onwards.

Who this guideline is for

This document is intended to be relevant to hospital staff who care for patients with diabetic foot problems.
Patient-centred care

This guideline offers best practice advice on the hospital-based care of people with diabetic foot problems.

Treatment and care should take into account patients' needs and preferences. People with diabetic foot problems should have the opportunity to make informed decisions about their care and treatment, in partnership with their healthcare professionals. If patients do not have the capacity to make decisions, healthcare professionals should follow the Department of Health's advice on consent and the code of practice that accompanies the Mental Capacity Act. In Wales, healthcare professionals should follow advice on consent from the Welsh Government.

Good communication between healthcare professionals and patients is essential. It should be supported by evidence-based written information tailored to the patient's needs. Treatment and care, and the information patients are given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English.

If the patient agrees, families and carers should have the opportunity to be involved in decisions about treatment and care.

Families and carers should also be given the information and support they need.
Key priorities for implementation

The following recommendations have been identified as key priorities for implementation.

**Multidisciplinary foot care team**

- Each hospital should have a care pathway for patients with diabetic foot problems who require inpatient care.[1]

- The multidisciplinary foot care team should consist of healthcare professionals with the specialist skills and competencies necessary to deliver inpatient care for patients with diabetic foot problems.

- The multidisciplinary foot care team should normally include a diabetologist, a surgeon with the relevant expertise in managing diabetic foot problems, a diabetes nurse specialist, a podiatrist and a tissue viability nurse, and the team should have access to other specialist services required to deliver the care outlined in this guideline.

- The multidisciplinary foot care team should:

  - assess and treat the patient's diabetes, which should include interventions to minimise the patient's risk of cardiovascular events, and any interventions for pre-existing chronic kidney disease or anaemia (please refer to Chronic kidney disease [NICE clinical guideline 73] and Anaemia management in people with chronic kidney disease [NICE clinical guideline 114])

  - assess, review and evaluate the patient's response to initial medical, surgical and diabetes management

  - assess the foot, and determine the need for specialist wound care, debridement, pressure off-loading and/or other surgical interventions

  - assess the patient's pain and determine the need for treatment and access to specialist pain services

  - perform a vascular assessment to determine the need for further interventions

  - review the treatment of any infection
- determine the need for interventions to prevent the deterioration and development of Achilles tendon contractures and other foot deformities
- perform an orthotic assessment and treat to prevent recurrent disease of the foot
- have access to physiotherapy
- arrange discharge planning, which should include making arrangements for the patient to be assessed and their care managed in primary and/or community care, and followed up by specialist teams. Please refer to Type 2 diabetes: prevention and management of foot problems (NICE clinical guideline 10).

**Patient information and support**

- The patient should have a named contact\(^1\) to follow the inpatient care pathway and be responsible for:
  - offering patients information about their diagnosis and treatment, and the care and support that they can expect
  - communicating relevant clinical information, including documentation prior to discharge, within and between hospitals and to primary and/or community care.

**Initial examination and assessment**

- Remove the patient's shoes, socks, bandages and dressings and examine their feet for evidence of:
  - neuropathy
  - ischaemia
  - ulceration
  - inflammation and/or infection
  - deformity
- Charcot arthropathy.

Document any identified new and/or existing diabetic foot problems.

- Obtain urgent advice from an appropriate specialist if any of the following are present:
  - Fever or any other signs or symptoms of systemic sepsis.
  - Clinical concern that there is a deep-seated infection (for example palpable gas).
  - Limb ischaemia.

**Care: within 24 hours of a patient with diabetic foot problems being admitted to hospital, or the detection of diabetic foot problems (if the patient is already in hospital)**

- Refer the patient to the multidisciplinary foot care team within 24 hours of the initial examination of the patient’s feet. Transfer the responsibility of care to a consultant member of the multidisciplinary foot care team if a diabetic foot problem is the dominant clinical factor for inpatient care.

**Investigation of suspected diabetic foot infection**

- If osteomyelitis is suspected and initial X-ray does not confirm the presence of osteomyelitis, use magnetic resonance imaging (MRI). If MRI is contraindicated, white blood cell (WBC) scanning may be performed instead.

**Management of diabetic foot infection**

- Each hospital should have antibiotic guidelines for the management of diabetic foot infections.

**Management of diabetic foot ulcers**

- When choosing wound dressings, healthcare professionals from the multidisciplinary foot care team should take into account their clinical assessment of the wound, patient
preference and the clinical circumstances, and should use wound dressings with the lowest acquisition cost.

[1] The term 'diabetic foot problems requiring inpatient care' refers to people with diabetes who have i) an ulcer, blister or break in the skin of the foot; ii) inflammation or swelling of any part of the foot, or any sign of infection; iii) unexplained pain in the foot; iv) fracture or dislocation in the foot with no preceding history of significant trauma; v) gangrene of all or part of the foot. Diabetes UK (2009): 'Putting feet first: commissioning specialist services for the management and prevention of diabetic foot disease in hospitals'.

[2] This may be a member of the multidisciplinary foot care team or someone with a specific role as an inpatient pathway coordinator.
1 Guidance

The following guidance is based on the best available evidence. The full guideline gives details of the methods and the evidence used to develop the guidance.

1.1 List of all recommendations

Multidisciplinary foot care team

1.1.1 Each hospital should have a care pathway for patients with diabetic foot problems who require inpatient care.[3]

1.1.2 A multidisciplinary foot care team should manage the care pathway of patients with diabetic foot problems who require inpatient care.

1.1.3 The multidisciplinary foot care team should consist of healthcare professionals with the specialist skills and competencies necessary to deliver inpatient care for patients with diabetic foot problems.

1.1.4 The multidisciplinary foot care team should normally include a diabetologist, a surgeon with the relevant expertise in managing diabetic foot problems, a diabetes nurse specialist, a podiatrist and a tissue viability nurse, and the team should have access to other specialist services required to deliver the care outlined in this guideline.

1.1.5 The multidisciplinary foot care team should:

- assess and treat the patient's diabetes, which should include interventions to minimise the patient's risk of cardiovascular events, and any interventions for pre-existing chronic kidney disease or anaemia (please refer to Chronic kidney disease [NICE clinical guideline 73] and Anaemia management in people with chronic kidney disease [NICE clinical guideline 114])
- assess, review and evaluate the patient's response to initial medical, surgical and diabetes management
• assess the foot, and determine the need for specialist wound care, debridement, pressure off-loading and/or other surgical interventions

• assess the patient's pain and determine the need for treatment and access to specialist pain services

• perform a vascular assessment to determine the need for further interventions

• review the treatment of any infection

• determine the need for interventions to prevent the deterioration and development of Achilles tendon contractures and other foot deformities

• perform an orthotic assessment and treat to prevent recurrent disease of the foot

• have access to physiotherapy

• arrange discharge planning, which should include making arrangements for the patient to be assessed and their care managed in primary and/or community care, and followed up by specialist teams. Please refer to Type 2 diabetes: prevention and management of foot problems (NICE clinical guideline 10).

**Patient information and support**

1.1.6 Offer patients consistent, relevant information and clear explanations that support informed decision making, and provide opportunities for them to discuss issues and ask questions.

1.1.7 The patient should have a named contact\(^d\) to follow the inpatient care pathway and be responsible for:

• offering patients information about their diagnosis and treatment, and the care and support that they can expect

• communicating relevant clinical information, including documentation prior to discharge, within and between hospitals and to primary and/or community care.
Care: within 24 hours of a patient with diabetic foot problems being admitted to hospital, or the detection of diabetic foot problems (if the patient is already in hospital)

1.1.8 A named consultant should be accountable for the overall care of the patient and for ensuring that healthcare professionals provide timely care.

1.1.9 Refer the patient to the multidisciplinary foot care team within 24 hours of the initial examination of the patient's feet. Transfer the responsibility of care to a consultant member of the multidisciplinary foot care team if a diabetic foot problem is the dominant clinical factor for inpatient care.

1.1.10 The named consultant and the healthcare professionals from the existing team remain accountable for the care of the patient unless their care is transferred to the multidisciplinary foot care team.

Initial examination and assessment

1.1.11 Remove the patient's shoes, socks, bandages and dressings and examine their feet for evidence of:

- neuropathy
- ischaemia
- ulceration
- inflammation and/or infection
- deformity
- Charcot arthropathy.

Document any identified new and/or existing diabetic foot problems.

1.1.12 Consider a diagnosis of Charcot arthropathy if there is deformity, redness or warmth. Refer to an appropriate specialist to confirm the diagnosis.
1.1.13 Examine the patient for signs and symptoms of systemic sepsis (such as fever, tachycardia, hypotension, reduced consciousness or altered cognitive state).

1.1.14 X-ray the patient's affected foot (or feet) to determine the extent of the foot problem.

1.1.15 If the patient has a diabetic foot ulcer, assess and document:

- deformity
- gangrene
- ischaemia
- neuropathy
- signs of infection
- the size and depth of the ulcer.

1.1.16 Obtain urgent advice from an appropriate specialist if any of the following are present:

- Fever or any other signs or symptoms of systemic sepsis.
- Clinical concern that there is a deep-seated infection (for example palpable gas).
- Limb ischaemia.

1.1.17 Use pressure-relieving support surfaces and strategies in line with Pressure ulcers (NICE clinical guideline 29) to minimise the risk of pressure ulcers developing.

**Investigation of suspected diabetic foot infection**

1.1.18 If a moderate to severe soft tissue infection is suspected and a wound is present, send a soft tissue sample from the base of the debrided wound for microbiological examination. If this cannot be obtained, a superficial swab may provide useful information on the choice of antibiotic therapy.
1.1.19 If osteomyelitis is suspected and initial X-ray does not confirm the presence of osteomyelitis, use magnetic resonance imaging (MRI). If MRI is contraindicated, white blood cell (WBC) scanning may be performed instead.

1.1.20 Do not exclude osteomyelitis on the basis of X-rays alone. X-rays should be used for alternative diagnoses, such as Charcot arthropathy.

1.1.21 Do not exclude osteomyelitis on the basis of probe-to-bone testing.

1.1.22 Do not use the following bone scans to diagnose osteomyelitis: 99mTc-MDP-labelled scintigraphy, 99mTc-HMPAO-labelled scintigraphy, antigranulocyte Fab' fragment antibody scintigraphy or 99mTc-labelled monoclonal antigranulocyte antibody scintigraphy.

Management of diabetic foot infection

1.1.23 Each hospital should have antibiotic guidelines for the management of diabetic foot infections.

1.1.24 Do not delay starting antibiotic therapy for suspected osteomyelitis pending the results of the MRI scan.

1.1.25 Start empirical antibiotic therapy based on the severity of the infection, using the antibiotic appropriate for the clinical situation and the severity of the infection, and with the lowest acquisition cost.

1.1.26 For mild infections, offer oral antibiotics with activity against Gram-positive organisms.

1.1.27 For moderate and severe infections, offer antibiotics with activity against Gram-positive and Gram-negative organisms, including anaerobic bacteria. The route of administration is as follows:

- Moderate infection: oral or intravenous antibiotics, based on the clinical situation and the choice of antibiotic (see recommendation 1.1.23).
Severe infection: start with intravenous antibiotics then reassess, based on the clinical situation (see recommendation 1.1.23)

1.1.28 The definitive antibiotic regimen and the duration of treatment should be informed by both the results of the microbiological examination and the clinical response to empiric antibiotic therapy.

1.1.29 Do not use prolonged antibiotic therapy for mild soft tissue infections.

1.1.30 Treat infections with MRSA in line with local and national guidance.

Management of diabetic foot ulcers

Debridement, dressings and off-loading

1.1.31 Debridement should only be done by healthcare professionals from the multidisciplinary foot care team, using the technique that best matches their specialist expertise, clinical experience, patient preference, and the site of the ulcer.

1.1.32 When choosing wound dressings, healthcare professionals from the multidisciplinary foot care team should take into account their clinical assessment of the wound, patient preference and the clinical circumstances, and should use wound dressings with the lowest acquisition cost.

1.1.33 Offer off-loading for patients with diabetic foot ulcers. Healthcare professionals from the multidisciplinary foot care team should take into account their clinical assessment of the wound, patient preference and the clinical circumstances, and should use the technique with the lowest acquisition cost.

1.1.34 Use pressure-relieving support surfaces and strategies in line with Pressure ulcers (NICE clinical guideline 29) to minimise the risk of pressure ulcers developing.
Adjunctive treatments

1.1.35 Negative pressure wound therapy should not be routinely used to treat diabetic foot problems, but may be considered in the context of a clinical trial or as rescue therapy (when the only other option is amputation).

1.1.36 Do not offer the following treatments for the inpatient management of diabetic foot problems, unless as part of a clinical trial:

- Dermal or skin substitutes.
- Electrical stimulation therapy, autologous platelet-rich plasma gel, regenerative wound matrices and deltaparin.
- Growth factors (granulocyte colony-stimulating factor [G-CSF], platelet-derived growth factor [PDGF], epidermal growth factor [EGF] and transforming growth factor beta [TGF-β]).
- Hyperbaric oxygen therapy.

Assessment of suspected limb ischaemia

1.1.37 Limb ischaemia with redness and pain can be misdiagnosed as soft tissue infection. The new onset of gangrene of a digit or of the forefoot is often precipitated by soft tissue infection, even though the signs of inflammation may be attenuated by coincidental peripheral arterial disease.

1.1.38 If limb ischaemia is suspected, obtain a history of any previous cardiovascular events and symptoms, including previous treatments and/or procedures.

Inspect the limb for the following:

- Colour and temperature.
- Presence of gangrene or tissue loss.
- Presence or absence of a peripheral pulse.
1.1.39  Measure and document the ankle–brachial pressure where clinically possible, ensuring careful interpretation of the results.

1.1.40  Arrange prompt specialist assessment of patients with risk factors, symptoms and signs of limb ischaemia.

[3] The term 'diabetic foot problems requiring inpatient care' refers to people with diabetes who have i) an ulcer, blister or break in the skin of the foot; ii) inflammation or swelling of any part of the foot, or any sign of infection; iii) unexplained pain in the foot; iv) fracture or dislocation in the foot with no preceding history of significant trauma; v) gangrene of all or part of the foot. Diabetes UK (2009): ‘Putting feet first: commissioning specialist services for the management and prevention of diabetic foot disease in hospitals’.

[4] This may be a member of the multidisciplinary foot care team or someone with a specific role as an inpatient pathway coordinator.
2 Notes on the scope of the guidance

NICE guidelines are developed in accordance with a scope that defines what the guideline will and will not cover.
3 Implementation

NICE has developed tools to help organisations implement this guidance.
4 Other versions of this guideline

4.1 Full guideline

The full guideline, 'Diabetic foot problems: Inpatient management of diabetic foot problems', contains details of the methods and evidence used to develop the guideline.

4.2 NICE Pathways

This guidance has been incorporated into the diabetes NICE Pathway, along with other related guidance and products.

4.3 Information for the public

NICE has produced information for the public explaining this guideline.

We encourage NHS and voluntary sector organisations to use text from this information in their own materials about diabetic foot problems.
5 Related NICE guidance

Published

- Venous thromboembolism: reducing the risk. NICE clinical guideline 92 (2010).
- Type 2 diabetes: newer agents. NICE clinical guideline 87 (2009).
- Surgical site infection. NICE clinical guideline 74 (2008).
- Pressure ulcers. NICE clinical guideline 29 (2005).
- Preoperative tests. NICE clinical guideline 3 (2003)
- Preventing type 2 diabetes - population and community interventions. NICE public health guidance 35 (2011)

Under development

NICE is developing the following guidance:

- Preventing type 2 diabetes - risk identification and interventions for individuals at high risk. Publication expected May 2012.
• Lower limb peripheral arterial disease. NICE clinical guideline. Publication expected October 2012.
6 Updating the guideline

NICE clinical guidelines are updated so that recommendations take into account important new information. New evidence is checked 3 years after publication, and healthcare professionals and patients are asked for their views; we use this information to decide whether all or part of a guideline needs updating. If important new evidence is published at other times, we may decide to do a more rapid update of some recommendations. Please see our website for information about updating the guideline.
Appendix A: The Guideline Development Group and the Short Clinical Guidelines Technical Team

**Guideline Development Group**

**Peter Barry - GDG Chair**  
Consultant in Paediatric Intensive Care, University Hospitals of Leicester NHS Trust and Honorary Senior Lecturer, Department of Child Health, University of Leicester

**Amanda Adler**  
Consultant Physician, Addenbrooke’s Hospital

**Anthony Berendt**  
Consultant Physician, Nuffield Orthopaedic Centre

**Mark Collier**  
Nurse Consultant - Tissue Viability, United Lincolnshire Hospitals NHS Trust

**Sunil Dhar**  
Consultant Orthopaedic Surgeon, University Hospitals of Nottingham

**Nirupam Goenka**  
Consultant Physician, Countess of Chester NHS Foundation Trust

**Katherine Hill**  
Patient member

**Gerry Rayman**  
Consultant Physician, Ipswich Hospital NHS Trust

**Clifford Shearman**  
Professor of Vascular Surgery/Consultant Vascular Surgeon, University of Southampton, Southampton General Hospital

**Louise Stuart**  
Consultant Podiatrist, NHS Manchester
Gloria Travers
Patient member

**Short Clinical Guidelines Technical Team**

A Short Clinical Guidelines Technical team was responsible for this guideline throughout its development. It prepared information for the Guideline Development Group, drafted the guideline and responded to consultation comments. The following NICE employees made up the technical team for this guideline.

**Lynda Ayiku**
Information Specialist

**Michael Heath**
Programme Manager

**Kim Jeong**
Technical Analyst (Health Economics)

**Prashanth Kandaswamy**
Technical Adviser (Health Economics)

**Victoria Kelly**
Project Manager

**Yaminah Rajput (2009-2010)**
Assistant Technical Analyst (Health Economics)

**Beth Shaw**
Technical Adviser

**Faisal Siddiqui**
Assistant Technical Analyst

**Toni Tan**
Technical Analyst (2009-2010)
Appendix B: The Guideline Review Panel

The Guideline Review Panel is an independent panel that oversees the development of the guideline and takes responsibility for monitoring adherence to NICE guideline development processes. In particular, the panel ensures that stakeholder comments have been adequately considered and responded to. The panel includes members from the following perspectives: primary care, secondary care, lay, public health and industry.

**Mike Drummond – Chair**
Director, Centre for Health Economics, University of York

**Catherine Arkley**
Lay member

**Sarah Fishburn**
Lay member

**Ruth Stephenson**
Consultant in Anaesthetics Clinical Ethics Lead, NHS Grampian
Appendix C: NICE Centre for Clinical Practice

Sharon Summers-Ma
Associate Director

Rachel Ryle
Guideline Commissioning Manager (from September 2010)

Claire Turner
Guidelines Commissioning Manager (until August 2010)

Emma Banks
Guideline Coordinator
About this guideline

NICE clinical guidelines are recommendations about the treatment and care of people with specific diseases and conditions in the NHS in England and Wales.

The guideline was developed by the Short Clinical Guidelines Technical Team. The team worked with a group of healthcare professionals (including consultants, GPs and nurses), patients and carers, and technical staff, who reviewed the evidence and drafted the recommendations. The recommendations were finalised after public consultation.

The methods and processes for developing NICE clinical guidelines are described in The guidelines manual. This guideline was developed using the short clinical guideline process.

The recommendations from this guideline have been incorporated into a NICE Pathway. We have produced information for the public explaining this guideline. Tools to help you put the guideline into practice and information about the evidence it is based on are also available.

Changes after publication

December 2011: minor maintenance.

March 2013: minor maintenance.

Your responsibility

This guidance represents the view of NICE, which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer, and informed by the summary of product characteristics of any drugs they are considering.

Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have
regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties.

Copyright

© National Institute for Health and Clinical Excellence 2011. All rights reserved. NICE copyright material can be downloaded for private research and study, and may be reproduced for educational and not-for-profit purposes. No reproduction by or for commercial organisations, or for commercial purposes, is allowed without the written permission of NICE.

Contact NICE

National Institute for Health and Clinical Excellence
Level 1A, City Tower, Piccadilly Plaza, Manchester M1 4BT

www.nice.org.uk
nice@nice.org.uk
0845 033 7780