Commissioning/planning a care pathway for foot care services for people with diabetes

**BACKGROUND**

- The consequences of poor management of the foot in diabetes are considerable: prolonged ulceration, infection, gangrene and amputation, depression and death. The annual costs to health care agencies in the UK are estimated to exceed £1 billion.
- Good management requires close coordination between different groups of health care professionals. Such coordinated management is not yet widespread.
- Four UK centres have shown that by changing the structure of care, it is possible to reduce the incidence of limb loss by amputation to as little as 20 per cent of its baseline level.
- It is imperative that such re-organisation is implemented in order to improve health outcome and reduce costs.

**THE STRUCTURE OF AN EFFECTIVE FOOT CARE PATHWAY**

The essential elements of an effective foot care service have been described in Putting Feet First (2009), and Putting Feet First National Minimum Skills Framework (2011), both released jointly by Diabetes UK and NHS Diabetes. These documents define the services to which each person with diabetes should have access – for both prevention and treatment of foot disease. The National Minimum Skills Framework also defines the constitution and responsibilities of the teams necessary to provide these services; the Foot Protection Team (FPT) with a primary responsibility for prevention, and the Multidisciplinary Team (MDT) which should coordinate the management of all new disease. The FPT and MDT must work closely together.

Pathways of care must ensure prompt and effective transition of care across health care boundaries, including traditional boundaries that exist within the community, between community and hospital, and between different specialist groups in hospitals. The publication in April 2011 of new QOF indicators for general practice, together with the NICE Guidelines CG 119, SIGN Guidelines 116 and the NICE Quality Standard 10 completes the picture for the minimum expectations for people with diabetes. The present document demonstrates the way in which these requirements can be brought together in an integrated pathway of care.

**COMMISSIONING/PLANNING**

The central roles of the FPT and the MDT have been emphasised in NICE clinical guidelines CG 10 (2004) and CG 119 (2011), SIGN guidelines 116 (2010), as well as in the NICE Quality Standard 10 (2011). The provision of effective ulcer prevention and wound management by such teams should be the basis of the commissioning/planning of foot care services in diabetes.

**REFERENCES**

Putting Feet First: www.diabetes.org.uk/Documents/Reports/Putting_Feet_first_010709.pdf
NICE CG10: www.nice.org.uk/GC10

**TRANSFORMING FOOT CARE SERVICES IN DIABETES**

**PREVENTION OF ACTIVE DISEASE OF THE FOOT IN THOSE AT INCREASED RISK**

Referral of those at increased risk to the Foot Protection Team (FPT)* Foot risk status correlates closely with outcome. The need to document risk of each individual with diabetes was incorporated in QOF targets in April 2011. The 2011 NICE Quality Standard 10 and the Diabetic Foot Risk Stratification and Triage (SIGN 116) also states that all people at increased risk will receive regular review by a member of a FPT. People with diabetes should be aware of their risk status and this entitlement. All people at increased risk should be referred promptly to a member of the FPT.

**Education of specialist staff and patients** It is necessary that those who examine the feet to determine risk status have the necessary training and competence. Training will be a role which can be provided by the FPT. An essential part of the annual review of feet is patient education. The person with diabetes should be aware of the reason for the examination being undertaken, the results of the examination, the services to which they should have access if they require specific preventive measures and action to be taken if they develop a foot problem.

A free online training programme is available at www.diabetesframe.org

* Sometimes referred to as the Foot Care Team

**TREATMENT OF ACTIVE DISEASE OF THE FOOT**

Active disease of the foot includes:
- Ulceration, with or without infection and peripheral arterial disease
- Peripheral arterial disease without ulceration
- Acute Charcot foot
- Painful peripheral neuropathy
- Disease of the foot unrelated to diabetes.

**Ulceration** All ulcers should be referred to the MDT within 24 hours.

**Peripheral arterial disease without ulceration** People thought to have symptomatic arterial disease should be referred either to a vascular surgical unit for assessment, or to the MDT.

**Acute Charcot foot** People with diabetes and neuropathy who develop unexplained inflammation of the foot should be assumed to have an acute Charcot foot and referred by phone for urgent assessment by the MDT. They should be told not to take weight on the foot until they have been seen.

**Painful peripheral neuropathy** Guidelines for the management of painful neuropathy have been published (NICE CG 96 and SIGN 116) and this can be supervised in general practice, provided that the GP is confident that the neuropathy is the cause of the pain. Referral to an MDT may be necessary for assessment.

**Disease of the foot unrelated to diabetes** Symptoms or signs of other diseases should be managed appropriately.

**MANAGEMENT OF THE PERSON WHOSE FOOT DISEASE HAS BEEN TREATED**

**Prevention of new foot disease** The person who has had an episode of foot disease has a 40 per cent risk of a second episode within 12 months. This group is at highest risk and they should:
- remain under regular review by a member of the FPT or the MDT
- understand the importance of prompt assessment by the MDT of any newly occurring problem.

**Reduction of cardiovascular risk** The average survival rate at five years is just 50 per cent for people who present with active disease of the foot. Average life expectancy is reduced by 14 years – even in those with predominantly neuropathic disease. As the main cause of increased mortality is cardiovascular, it is essential that all necessary steps are taken to reduce cardiovascular risk.
A footcare pathway for people with diabetes

Advise the patient to:
- Check their feet every day
- Be aware of loss of sensation
- Look for changes in the shape of their foot
- Not use corn removing plasters or blades
- Know how to look after their toenails
- Wear shoes that fit properly
- Maintain good blood glucose control
- Attend their annual foot review

Foot examination with shoes and socks/stockings removed:
- Annual screening by a suitably trained healthcare professional
- Inspection for any deformity
- Inspection for significant callus
- Check for signs of ulceration
- Ask about any previous ulceration
- Inspect footwear
- Ask about any pain
- Test foot sensation using 10g monofilament or vibration
- Palpate foot pulses
- Test foot temperature

These risk categories relate to the use of the SCI-DC foot risk stratification tool.

**Active**
- Presence of active ulceration, spreading infection, critical ischaemia, gangrene or unexplained hot, red, swollen foot with or without the presence of pain, painful peripheral neuropathy, acute Charcot foot*
- Previous ulceration or amputation or more than one risk factor present e.g. loss of sensation or signs of peripheral vascular disease with callus or deformity.
- Rapid referral to and management by a member of a Multidisciplinary Foot Team (see below). Agreed and tailored management/treatment plan according to patient needs. Provide written and verbal education with emergency contact numbers. Referral for specialist intervention when required.

**High**
- One risk factor present e.g. loss of sensation or signs of peripheral vascular disease without callus or deformity.
- Annual assessment or 3–6 monthly according to need* by a podiatrist or member of a foot protection team*. Agreed and tailored management/treatment plan by a podiatrist or the FPT* according to patient needs. Provide written and verbal education with emergency contact numbers. Referral for specialist intervention if/when required.

**Moderate**
- No risk factors present e.g. no loss of sensation, no signs of peripheral vascular disease and no other risk factors.
- Annual assessment or 6–12 monthly according to need* by a specialist podiatrist or member of a foot protection team*. Agreed and tailored management/treatment plan by a specialist podiatrist or the FPT* according to patient needs. Provide written and verbal education with emergency contact numbers. Referral for specialist intervention if/when required.

**Low**
- Risk factors present but no signs of ulcersation in skin.
- Annual screening by a specialist podiatrist or member of a foot protection team*. Provide written and verbal education with emergency contact numbers.

* NICE Guidance

Risk status should be documented and the patient informed.