# The development of a model of a foot protection service for people with diabetes



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he need to ensure that everyone with diabetes can be assured of a good standard of foot protection wherever they live has never been more important. Amputation rates in people with diabetes are not decreasing and the variation between different localities in England has recently been increasing. It is also being recognised that the recent rapid rise in the number of people with diabetes, and the costs of treating complications such as foot ulcers and amputations, could overwhelm the NHS. Foot ulcers and amputations have a hugely detrimental impact on quality of life for people with diabetes and lead to early mortality.

We know that we can prevent many amputations by ensuring there is an integrated foot care service in every locality. This pathway of foot care in diabetes is now being described with increasing clarity. Changes in the structure of the NHS in England and the recent introduction of the National Diabetes Footcare Audit in England and Wales have all driven the need to describe the constitution and roles of a foot protection service with greater precision to ensure access to quality care and competent healthcare professionals (HCPs) across each part of the diabetic foot care pathway.

During 2014, a multidisciplinary group of HCPs and people with diabetes, drawn from a number of organisations supporting the Putting Feet First campaign, worked together to produce a model description of a quality foot protection service. Initial work led by diabetologist Professor William Jeffcoate was developed throughout the year and those commenting and providing input on multiple drafts included podiatrists, orthotists, vascular surgeons, diabetologists, people with diabetes and commissioners. The final agreed consensus is intended to provide clarity and also a framework for health economies to best meet the needs of people with diabetes.

# Putting Feet First: a foot protection service for people with diabetes

An integrated diabetic foot service ensures that a person with diabetes can access the best diabetes foot care at the right time, in the right place.

The key components of the service are a foot protection service working with the multidisciplinary footcare team (MDFT). This ensures that patients access integrated seamless care, wherever the service is being provided and by whichever organisation.

## **Foot protection**

People with diabetes who are at risk either of developing disease of the foot, or who already have established foot disease, require preventive care directed by specially trained HCPs. This has been summarised in NICE guidelines (NICE, 2004; 2011).\*

The pathway of foot care in diabetes is now being described with increasing clarity. The need for people at an increased risk of new foot disease to be referred for specialist assessment, potential intervention and advice has recognised implications for commissioning. It is now necessary to describe the constitution and roles of a foot protection service with greater precision to ensure access to quality care and competent HCPs across each part of the diabetic foot care pathway.

#### Foot protection service

The aim of a foot protection service is to prevent first and further ulceration, hospital admission, and reduce the risk of lower extremity amputation in people with diabetes who are at increased risk.

<sup>\*</sup> NICE (2004) states that people defined as being at increased risk should remain under regular review by a member of the foot protection team. The guideline defines this as: "A team with expertise in protecting the foot; typically, members of the team include podiatrists, orthotists and footcare specialists." The structure of such a team was described in more detail in the National Minimum Skills Framework (Diabetes UK, 2011).

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These are people who have been identified as having increased (moderate or high) risk for foot ulceration as a result of neuropathy, peripheral arterial disease, and foot deformity, either in isolation or in combination.

All people with diabetes who have been identified as being at increased risk following foot screening should be referred to a foot protection service. This service will introduce or review a treatment and management plan based on individual needs and formed in partnership with the person with diabetes.

There should be a defined service specification for a foot protection service. The service should be delivered by an identified team (this will be commissioned in England), with appropriate skills in line with the national pathway (Diabetes UK, 2012), and using best practice guidance (NHS Diabetes, 2013).

The service will normally be led and coordinated by a specialist podiatrist and will commonly be based within a community podiatry service. The service should be accessible, with contact details, times and location of clinic sessions widely disseminated.

The following elements should be provided by the foot protection service:

- Education of other HCPs in routine examination and definition of the 'at risk' foot.
- Specialist surveillance of people with diabetes at increased risk of diabetic foot disease, (including those who are housebound, homeless, in residential care, hospital inpatients or prisoners).
- Negotiation of care plans for the management of common foot problems with people at increased risk of diabetic foot disease who are not able to self care.
- Sharing the care of people with advanced/severe diabetes-related foot disease with the MDFT.
- Sharing the long-term management of people with successfully treated foot disease with other HCPs — with particular reference to reducing the incidence of new foot complications.
- Reviewing, educating and signposting people with diabetic foot disease around their modifiable vascular risks (for example, smoking cessation) and offering clear information on potentially modifiable outcomes for life and limb.
- Referring for other support, such as social care services.

The foot protection service should have clear referral pathways to a MDFT in the event of a foot complication, such as an ulcer or suspected Charcot joint.

## Liaison

Members of the foot protection service delivering the foot protection programme need to maintain close liaison with all other HCPs involved in the assessment of foot risk in diabetes, as well as those involved in the management of active disease. Contact details for members of the foot protection service should be readily available to other relevant HCPs, including GPs, district nurses and hospital specialists.

Contact details should also be made available to people with diabetes, for example, via patient-accessed websites and supportive health education literature. There must be clear signposting for patients and members of the foot protection service towards the services of the specialist MDFT when required. In many cases, members of the foot protection service will also be part of the MDFT. Good practice suggests that a named individual responsible for diabetes within the service helps to facilitate more effective liaison and communication between GPs, practice nurses, and specialist diabetes and foot services.

#### Clinical leadership

The service will usually be led by a podiatrist with special training and experience in the field of diabetes. This person will provide information, education and care planning to ensure the coordination of a personalised care plan, agreed by the foot protection service, other specialist services and the person with diabetes themselves. The leader of the service also has responsibility for monitoring and audit.

## Membership

The foot protection service will be delivered by HCPs with specialist expertise in the assessment and management of diabetic foot disease. These HCPs will usually be specialist podiatrists, but may involve other HCPs as required, including orthotists, general practice staff, district nursing and others.

#### Monitoring and audit

The service should be monitored against agreed standards. It should participate in relevant clinical audits, and collect and share information to monitor the effectiveness of the foot protection programmes provided.

# Foot protection for people with diabetes in hospital

One in seven hospital inpatients have diabetes and it is estimated that more than one third of inpatients with diabetes are at increased risk of acquiring a foot ulcer during their admission. It is important to screen all patients with diabetes on admission for existing foot problems and refer to the MDFT if indicated.

For patients with no current foot problems, their risk should be assessed and recorded, and an appropriate prevention programme should be put in place. In a hospital setting, foot protection will usually be provided by a ward nurse.

## **Foot protection in care homes**

About one in five people in care homes have diabetes and it is estimated that more than half of care home residents with diabetes are at increased risk of foot problems. Foot protection is clearly very important in this group.

On a day-to-day basis, this will be provided by care home staff. Foot assessment should be carried out as part of a daily routine, but the foot protection service has an important role in supporting and training staff in care homes to screen, manage, and refer competently and appropriately.

#### Outreach to vulnerable groups

Homeless people, prisoners and others who find it difficult to access preventive health care have particular needs for foot protection and are often at higher risk of problems. The foot protection service has an important role in supporting and training HCPs who are working with these groups.

#### Conclusion

We hope that this model will guide local commissioners and providers of services to deliver the best possible foot protection to people with diabetes and help reduce the misery of both costly ulcers and amputations.

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