



## Roles and Responsibilities – Northern Diabetes Foot Care Network Multi Disciplinary foot Team and Foot Protection Team

### Introduction.

Diabetes is one of the biggest health challenges of our times. 2.9 million people in the UK are currently living with diabetes. This figure is on the increase and set to rise to five million by 2025. In England alone, 6,000 people with diabetes had leg, foot or toe amputations in 2009/10, and this is set to rise to 7,000 in the next few years if the current trend continues.

Amputation is not only devastating; it increases likelihood of death by 80%. The NHS currently spends between £600 and £700m each year on foot ulcers and amputations. Yet **80% of these amputations are potentially preventable** and this cost can be significantly reduced with better care.

Defining the Roles and Responsibilities across the ENTIRE foot screening pathway for all Health Care professionals and how this:

- Links in with the Diabetes UK campaign of Putting Feet First
- Aims to promote better foot care for our patients

This will give people with diabetes a better quality of life and an enhanced life expectancy can be achieved.

### Our Goal for the Northern Region;

**“Is to reduce amputation rates by 50% in the next 5 years”**. 2012

**Note: refer to Northern Diabetes Footcare Network Active Foot Disease Pathway**

### **The Multidisciplinary foot Team (MDfT) – Tier 3**

**Definition:** “Combining or involving several academic disciplines or professional specialisations in an approach to a topic or problem”.

Patients with active diabetes foot disease (In – or out-patients) need to be seen by a member of the MDfT within 24 hours of presentation and an agreed tailored management/treatment plan produced according to patient needs.

Active Foot disease is defined as the presence of active ulceration, spreading infection, critical ischaemia, gangrene or an unexplained hot, red, swollen foot with or without the presence of pain, or an acute Charcot foot.

This MDfT is described as a team of highly trained specialist diabetic foot personnel with expertise in lower limb complications.

## **Key Personnel of the MDfT:**

### Minimal Personal for a Functioning MDfT:

- (1) Consultant Diabetologist
- (2) Specialist Diabetes Podiatrist
- (3) Surgical Specialist (Vascular or Orthopaedics)

## **Defining Roles and Responsibilities for the entire MDfT:**

### **Clinical Specialist Podiatrist:**

A senior podiatrist with a specialist interest in diabetic foot care should be the first point of contact for any patient with diabetes and foot ulceration. At first contact a complete evaluation can take place to address the ulcer, treat infection, and identify the presence of peripheral arterial disease or neuropathy.

Following assessment the MDfT should agree a comprehensive wound healing management plan with regularly re-evaluation engaging other members of the team as and when necessary to promote recovery and prevent reoccurrence.

### **Diabetes Foot Screeners:**

Are responsible for assessing the condition of a patients feet for signs and symptoms of complications related to diabetes, determining their Risk status. Screener take into account all information relating to risk e.g. deformity, footwear, and ability to self-care taking the appropriate action as indicated by the screening. This may include referral to the Foot Protection Team or Multidisciplinary Foot Team for further examination or treatment, with appropriate speed in line with Local, Regional and National Guidelines.

The Foot Screener determines through discussion the individuals understanding of the risks to their feet, and reinforces the benefits of self-care and monitoring. This includes verbal and written advice to help the individual understand what **specific actions** they can take to maintain the health of their feet and address any particular problems and risks revealed by the examination.

### **Surgical Specialities:**

The care of all patients with diabetes and a significant foot ulcer should be co-ordinated by the primary specialist (commonly the Consultant Diabetologist and Specialist Diabetes Podiatrist) with key surgical speciality members depending on their expertise and availability across any organisation. The key surgical specialities called upon for management of acute and chronic diabetes foot problems are Vascular Surgery, Orthopaedics and Plastic/Reconstructive Surgery.

### **Foot Surgeon:**

Ulceration in patients with diabetes is frequently complex and multi-factorial and may require surgical debridement and/ or revascularisation. A diabetes foot care team should have good links with an appropriate surgeon who has an interest in diabetes foot problems. This could include a vascular, orthopaedic, or plastic surgeon. A surgeon should be involved early in the management of people with foot ischaemia, deep or complex tissue infection, collections or osteomyelitis/ septic arthritis.

The presence or absence of Peripheral Arterial Disease (PAD) should be established at initial presentation; if present this can contribute to ulceration and failure of healing. A specialist vascular surgeon and/or specialist vascular nurse should be involved at the point of a patients' presentation (either admission to hospital or at an out-patient MDfT service) to guide management and facilitate timely investigation & intervention in people with ulceration and clinical evidence of PAD.

Close liaison with interventional radiological specialist in interpreting invasive and non-invasive vascular studies, diagnostic angiograms, depending on risk factors and patient assessment will aid acute care. To prevent major amputation further endovascular interventions or distal bypass procedures maybe required.

**Microbiologist/ Clinical Infection Specialist:**

Foot infections in patients with diabetes can be complex and potentially life threatening. Culture specific and patient appropriate antibiotics are required. Current and locally approved guidelines should be established and implemented. Empirical antibiotics are frequently required in the acute setting prior to the availability of culture sensitivities, hence policies, which address this, and the potentially drug-resistant organisms (MRSA and Clostr. Diff risk) should be established in conjunction with a consultant microbiologist and/or a Clinical Infection Specialist.

**Diabetologist:**

The MDfT and clinic is frequently led by the Diabetes consultant, and in close discussion with a specialist podiatrist. The Diabetologist should co-ordinate a patients care with the various other members of the team and establish and regularly update a patients' management plan.

Since any foot ulceration in a patient with diabetes is strongly associated with a high cardiovascular risk and high morbidity and mortality. A diabetes specialist should educate and empower patients and address each risk factor to reduce this with Lifestyle management e.g. Smoking, weight, healthy eating plan, establish the presence of any Micro and Macro Vascular complication and treat to target these factors. (Blood Pressure, Blood lipids, Nephropathy, Cardio & Cerbro - vascular health).

Close liaison with a **Diabetes Specialist Nurse (DSN)** is frequently required to attain patient specific glucose targets to ensure timely ulcer healing. Peri-operative glucose management is vital to reduce in-patient stay and post-operative wound infection. A specialist nurse should provide education, support and advice with regards to the practical management of blood glucose control, and more complex aspects of diabetes care.

**Orthotist:**

Prevention of ulceration and reducing the risk of ulcer reoccurrence is dependant upon adequate patient education and provision of appropriate modified or specialist footwear. Effective communication via the Senior Diabetes Podiatrist is key in deciding when to engage the services of the orthotics department.

The Orthotist provides advice on pressure relieving materials, shoe modifications and shoe (both modular and bespoke) provision to prevent re occurrence of ulcers once healed by the podiatry team. This is done either through their own clinics or more importantly, in joint assessment and treatment clinics with the specialist podiatry teams.

**Plaster Room Technician:**

The plaster technician should work in collaboration with the multi - disciplinary foot team they have expertise in applying the most appropriate 'cast' to facilitate offloading to high pressure areas in the treatment of diabetic foot ulceration. Indications include treatment of (I) Plantar Ulceration (II) Osteomyelitis (III) Diabetic Charcot Arthropathy.

Casting is not without its risks and hence all plaster technicians must have a heightened awareness of Diabetic Neuropathy, its potential consequences and be in a position to recognise and advise patients how to seek help accordingly if there are any concerns.

## **THE FOOT PROTECTION TEAM**

The Foot Protection Team (FPT) comprises a team of healthcare professionals (HCPs) with specialist expertise in the assessment and management of disease of the foot in diabetes and can be considered at two levels:

### **Foot Protection Team Tier 3 (FPT3)**

The FPT3 will usually be hospital based working closely with the Multidisciplinary Footcare Team (MDfT). The Foot Protection Team Tier 3 will be led by a Clinical Specialist Podiatrist who will also be a member of the MDfT.

The role of the FPT 3 service includes:

- Specialist surveillance of people at high risk with successfully treated disease discharged from the care of the MDfT
- Close liaison with the MDfT
- Sharing care with the MDfT of selected cases of foot disease in accordance with the MDfT agreed management / treatment plan
- Sharing long-term management with other HCPs of people with successfully treated disease
- Providing care to complex patients who are at high risk or who have successfully healed foot ulcers
- Providing advice and support to the FPT Tier 2 Service

### **Foot Protection Team Tier (FPT2)**

The FPT2 Service will usually be community based working closely with the FPT 3. The FPT 2 will be clinically led by a Clinical Specialist Podiatrist and consist of podiatrists who have specialist experience in the management of the foot in diabetes.

#### **The Role of the FPT2 includes:**

- Education / training of other HCPs who provide routine examination and definition of the at risk foot (Diabetes Foot Screening and ongoing annual surveillance – low risk)
- Education / training of other HCPs who provide Diabetes Foot Screening Tier 1 and ongoing annual surveillance of the low risk stratified patients– low risk)
- Discussion and agreement of plans to support the at increased / moderate and high risk stratified patients in managing their condition including:
  - (a) Provision of specialist education for the patient and their usual carers.
  - (b) Advising on treatments that may be available for neuropathy (including painful neuropathy)
  - (c) Advising on footwear (including the provision of orthoses).

- (d) Taking steps to reduce the risk imposed by peripheral neuropathy, including debridement of callus.
- (e) Taking steps to reduce the risk imposed by peripheral arterial disease (including referral for further investigation and treatment when appropriate).
- (f) Taking steps to reduce the risk imposed by deformity or other problems of the foot (including referral for further investigation and treatment when appropriate)

The FPT2 Service will arrange for continued surveillance and treatment as determined by the risk status of the individual and podiatry need.

#### **Care of people at Increased/moderate Risk of foot ulcers.**

- **Arrange regular review (3 – 6 monthly) according to need.**

#### **Care of people at High Risk of foot ulcers.**

- **Arrange frequent review (1 – 3 monthly)**

**Northern Diabetes Foot Care Network updated - 2017**