Why is it important to improve the prevention and treatment of diabetic foot disease?

The numbers of diabetes-related amputations and foot ulcers are still increasing and are very costly to the NHS and local health economies. There are over 7,000 diabetes-related amputations (leg, foot or toe) every year in England. Foot ulcers and amputations cost £1 in every £150 spent in NHS, but CCGs could reduce this by reorganising care to prevent amputations and shorten hospital stays.

Experts estimate that four out of five amputations could be prevented; 80 per cent are preceded by a foot ulcer which are largely preventable. There is evidence on how to prevent amputations, and good guidance on how to do this, but this is not well and consistently implemented. There is still considerable variation in outcomes and processes across the diabetes footcare pathway from foot checks delivered in primary care, and the quality of them, to major and minor amputation rates.

Diabetic foot disease is the most common cause of diabetes-related hospital admission and foot ulcers and amputations impact hugely on morbidity, mortality and quality of life for people with diabetes.

This is why improving footcare for people with diabetes has been identified as a priority by NHS England as part of the mandate objective to improve the management and care of people with diabetes by 2020.

What can CCGs do to improve diabetes footcare?

1. Ensure that the full diabetes footcare pathway is being commissioned
2. Use guidance and data to inform local footcare commissioning and performance
3. Ensure all inpatients with diabetes receive foot checks and appropriate care
4. Conduct a root cause analysis for all major amputations
5. Ensure local participation in the National Diabetes Foot Care Audit
6. Network and share learning with others
THE KEY FEATURES OF A DIABETES FOOTCARE SERVICE ARE:

- Everyone with diabetes should receive at least an annual quality foot check, this should include advice on how to look after their feet and information about their risk of developing a foot problem.
- Those at increased risk of foot problems should be referred for assessment by a foot protection service, usually led by a podiatrist with specialist training in diabetic foot problems. In this service people with diabetes should be given advice about caring for the skin and nails, an assessment of the biomechanical status of their feet, including whether they need specialist footwear and orthoses, and an assessment of the vascular status of the lower limbs. The GP should be informed about the outcome of the assessment and care plan.
- A multidisciplinary footcare team (MDT) should be established for managing diabetic foot problems in hospital, and for complex and acute foot problems that cannot be managed by the foot protection service.

There should be robust protocols and clear local pathways for the continued and integrated care of people across all settings, including inpatient care, emergency care and general practice. These pathways should set out the relationship between the foot protection service and the multidisciplinary footcare service.

WHAT CAN GO WRONG? VARIATIONS TO LOOK OUT FOR

Communication
You can have good local footcare services, but people with diabetes, GPs or emergency services may not know what services are in place and how to access them in a timely way. We know that there are significant associations between time to assessment of an ulcer and the 12 week outcome (whether it has healed).

Insufficient capacity
Low capacity in foot protection services or specialist podiatry can lead to GPs not referring those at increased risk for assessment, or people with diabetes not attending appointments as the service is too distant from home or at an inconvenient time. Not all hospitals have MDTs with the capacity to accept a referral for expert assessment within 24 hours for all cases of new or deteriorating foot disease.

Foot checks – quality and access
Good performance in the numbers of foot checks delivered at national or regional level can mask large variation at CCG and GP level. Data on the number of foot checks being delivered can also mask poor quality foot checks delivered by staff who are not adequately trained. We know that people with diabetes do not always get information about how to look after their feet, their risk of developing foot problems and where to go if they have a problem. Less than 60% of CCGs can confidently say that there is training provided locally for those performing foot checks.

STEP 2

Use guidance and data to inform local footcare commissioning and performance

NICE Guidance NG19 brings together and sets out what should be commissioned and provided to prevent and treat diabetic foot problems:

www.nice.org.uk/guidance/ng19

Joint speciality guidance provides a framework for the operational delivery of hospital trust based diabetic foot services, ensuring that patients with acute diabetic foot disease receive high quality care irrespective of where they present:

www.diabetes.org.uk/foot-care-pathway

Diabetes Footcare Activity Profiles provide information, by CCG, on the inpatient care of people with diabetes who are admitted to hospital for a range of foot problems and the local amputation rates. They help those involved in the provision of this care to understand the scale of activity and relate this to similar CCGs across England:

www.yhpho.org.uk/diabetesprofilesfoot/default.aspx

The National Diabetes Audit (care processes and treatment targets) records the percentage of people with diabetes, by CCG and GP, accessing an annual foot check:

www.hscic.gov.uk/nda

The National Diabetes Footcare Audit (NDFA) enables all diabetes footcare services to measure their
performance against NICE clinical guidelines and peer units, and to monitor adverse outcomes for people with diabetes who develop diabetic foot disease. It also has a structures audit for CCGs: www.hscic.gov.uk/footcare

The National Diabetes Inpatient Audit (NaDIA) provides information at hospital level on the percentage of people with diabetes receiving foot checks in hospital and access to the MDT: www.hscic.gov.uk/diabetesinpatientaudit

The Diabetes Watch Online Tool shows you the standard of diabetes care in your area compared to the national average. It uses national data for England, Wales and Scotland, from annually updated publications: https://diabeteswatch.diabetes.org.uk

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**STEP 3**

**Ensure all inpatients with diabetes receive foot checks and appropriate care**

**WHAT SHOULD HAPPEN?**

Everyone with diabetes, whatever the presenting issue or reason for admission, should have their feet checked on admission to hospital.

Those assessed as having increased risk of a foot problem should have their feet protected whilst they are in hospital to avoid the development of pressure ulcers or lesions.

People with active foot problems should be referred to the MDT within 24 hours.

**WHAT CAN GO WRONG? VARIATIONS TO LOOK OUT FOR**

We know that currently the number of people getting foot checks in hospital is inadequate and there is large variation between hospitals. In the 2015 inpatient audit (NaDIA) less than a third (29 per cent) of people with diabetes had their feet checked within 24 hours of admission and only 34 per cent had feet checked at any time during their hospital stay2. The number of people with diabetes recorded as having foot risk assessments whilst in hospital ranged from 5 per cent in some hospitals to over 75 per cent in others.

**HOW CAN THIS BE IMPROVED?**

Visit Diabetes UK’s Shared Practice resource library for examples of how others are improving diabetes footcare in hospitals: www.diabetes.org.uk/Professionals/Resources/shared-practice/Footcare

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**STEP 4**

**Conduct a root cause analysis for all major amputations**

As an estimated 80 per cent of diabetes-related amputations are avoidable, it is important to continually review the factors leading to them. Conducting a root cause analysis (RCA) can help identify ways to improve processes or services to help reduce the number of future amputations. RCAs can also help assess to what extent an amputation was avoidable and whether or not it was a necessary outcome for the person with diabetes. If the amputation was avoidable, completing the review process will help identify what changes are required to reduce the likelihood of the same issue happening again.

An RCA could be commissioned directly by a CCG, or a commitment to conduct RCAs of major amputations could be included in the contract with diabetes footcare providers.

It is important to be clear from the start how the findings and recommendations of an RCA will be communicated to all providers and whose responsibility it is to act on these to improve care.

Diabetes UK has developed a guide based on the experiences of those who have used RCAs to investigate major amputations: www.diabetes.org.uk/Professionals/Resources/shared-practice/Footcare
STEP 5  Ensure local participation in the National Diabetes Foot Care Audit

The National Diabetes Foot Care Audit (NDFA) is an ongoing audit of people with diabetic foot ulcers in England and Wales (about 60,000 are estimated a year). It documents variation in case-mix adjusted outcomes between commissioners, service providers and footcare services. The NDFA also aims to find out how variation in practice links to variation in treatment outcomes.

Full participation in the audit means:

- registering with the audit
- submitting data to the audit
- acting on the results and using local and national findings to improve care.

Best practice would be that commissioners include participation in the NDFA in their contract with diabetes footcare providers and ensure that the CCG itself registers and submits data to the structures audit: www.hscic.gov.uk/footcare

STEP 6  Network and share learning with others

Footcare networks are usually made up of people with diabetes, healthcare professionals and commissioners. They come together to improve the quality of footcare services for people with diabetes across primary, community and acute settings by:

- sharing data, analyses and audit
- sharing the development and provision of training and other initiatives and resources
- some networks have organised and run a useful peer review process.

For contact details of local and regional foot networks see: www.diabetes.org.uk/Professionals/Professional-groups/London-Footcare-Network/

Diabetes UK has produced a guide to provide practical, step-by-step information for starting a new, or improving an existing, local network. The guide includes a network essentials checklist, frequently asked questions and a scorecard for measuring network effectiveness: www.diabetes.org.uk/Professionals/Resources/shared-practice/Networks/

References:
1 Kerr, M (2012) Footcare for people with diabetes: The economic case for change, NHS Diabetes and Kidney Care
2 Health and Social Care Information Centre (June 2016) National Diabetes Inpatient Audit 2015 – National Report
5 Diabetes UK (2015) 15 HCE survey data

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