

DiABETES UK
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NDFA

2014-21




National Diabetes Foot Care Audit:
**Are services providing effective
diabetes foot care?**

nda
NATIONAL DIABETES AUDIT

Summary report 2014–21

The National Diabetes Foot Care Audit (NDFA) measures the effectiveness of foot care provided to people with diabetes. The information in the audit is collected and submitted by services who provide diabetes foot care in England and Wales.

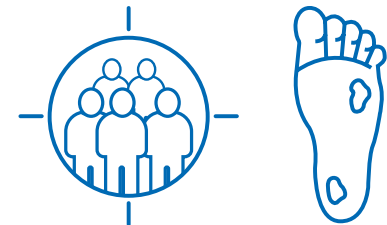
The NDFA looks at:

-  **Structures:** are the recommended services and teams provided for managing foot ulcers?
-  **Processes:** do people receive treatment in line with national guidance?
-  **Outcomes:** are the outcomes for people with foot ulcers as good as they can be?

This audit report looks at trends in foot care processes and outcomes over a seven year period from 2014–2021.

This report includes information on over 108,000 foot ulcers in people with diabetes.

108,000
diabetes and
foot ulcers

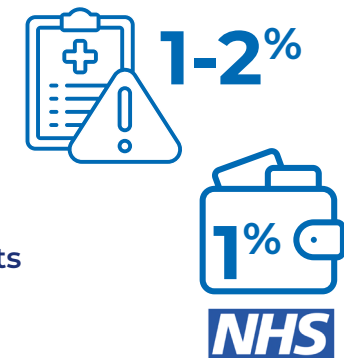


Foot ulcers are very challenging to people with diabetes, including **emotional, physical and financial** costs.



Foot ulcers can lead to increased risk of both **amputation** and of **death**.

It affects between **1 and 2%** of all people with diabetes each year. Treating foot ulcers accounts for approximately **1%** of the total NHS budget.



Introduction

What foot care should people with diabetes receive?

It is very important to take good care of your feet because having diabetes puts you at risk of foot problems. Although foot ulcers can be very serious, they usually respond well to treatment. Poor circulation and severe infection may delay or prevent healing.

What is a foot ulcer?

A foot ulcer often starts as a small break in the skin which does not heal as quickly as expected. It can start from something as small as a blister that forms because you didn't feel your shoe rubbing. It could also start with a small cut or a wound from standing on a sharp object. You may not have felt the pain because you have lost sensation in your feet.

SINBAD Scoring System

When ulcers are assessed by a healthcare professional they use a scoring system called **SINBAD** to assess how severe the ulcer is.

Site – whether the ulcer is on the front or rear of the foot

Ischaemia – problems with blood circulation due to damaged blood vessels. This can make the skin more fragile

Neuropathy – damage to the nerves that results in a loss of sensation

Bacterial infection – whether or not there is an infection in the ulcer

Area – the size and shape of the ulcer

Depth – how deep the wound is

In the SINBAD system an ulcer can be scored between **0 (least severe)** and **6 (most severe)**. A less severe ulcer is one that is scored **less than 3**. A severe ulcer is one that is scored **more than 3**.

What care should I expect?

The [NICE guidelines](#) should be followed by all healthcare professionals. They are summarised below:

Annual foot check

Everyone with diabetes should have their feet checked by a qualified healthcare professional once a year. During the foot check appointment, your healthcare professional should explain how to look after your feet and talk with you about your risk of developing foot problems in the future. If you are found to be at increased risk you should be referred to a specialist to be assessed.

Diabetes UK provides a useful leaflet about [what to expect at your annual foot check](#).

Treatment for foot problems

Foot ulcers

If you have a foot ulcer it is important to be seen by a foot care specialist as soon as possible. Your healthcare professional should check the size and depth of the ulcer and look for signs of infection or other problems. The treatment will depend on how severe the ulcer is, where it is and what you would prefer. The treatment will almost always include dressing and pressure relief to reduce the pressure put through the foot.

Foot infection

If your healthcare professional thinks you have a foot infection and you have a wound on your foot, a small sample may be sent for testing. You should be offered antibiotics.

Charcot arthropathy

Charcot arthropathy occurs in some people who lose feeling in their feet. The bones in the foot can become weak and lead to dislocations, fractures and changes in the shape of the foot or ankle. The treatment for Charcot foot usually involves having a plaster cast fitted to reduce the pressure put through the foot.

Referral




If any doctor or nurse thinks you may have an active foot problem, they should refer you to a specialist foot care service within 1 working day. The specialist foot care service should triage the referral within another working day. Triage is the process of deciding on the urgency and type of treatment that a patient needs, based on their symptoms and the severity of their condition.

Early referral and treatment is really important as it can prevent foot problems becoming worse.

Key findings

Early expert assessment of all new foot ulcers is really important

12 weeks after the first expert assessment, foot care services record whether:

-  The person is alive.
-  The ulcer is healed.
-  The person does not have new foot ulcers.

The NDFA has shown that faster referral to specialist foot care services leads to fewer severe ulcers and better outcomes.

In 2021 **46%** of new foot ulcers were assessed by a specialist within 13 days of first presentation to a healthcare professional. This has improved from 43% in 2014.

In 2021 **43%** of foot ulcers were assessed as being severe. In 2014 48% of foot ulcers were assessed as severe.

In 2021 **40%** of foot ulcers were not healed after 12 weeks. This is an improvement from 2014, when **49%** of ulcers remained unhealed at 12 weeks.

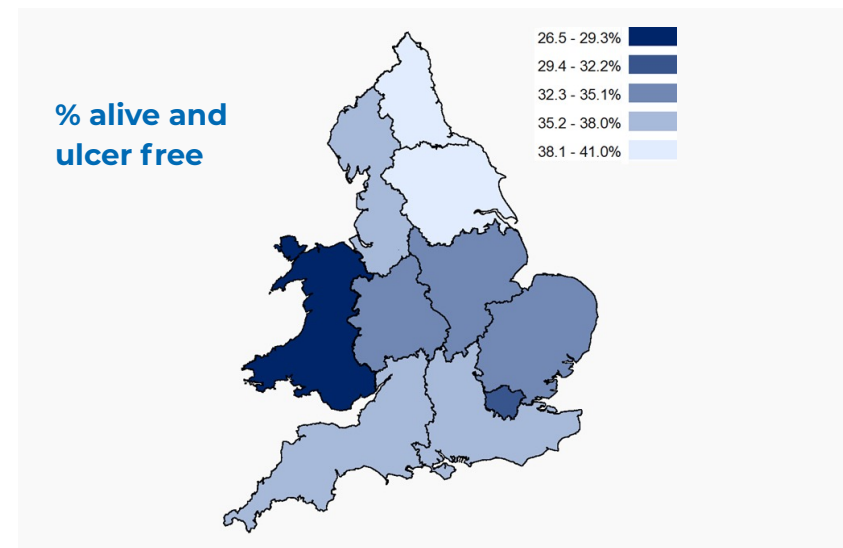
This suggests that the NDFA focus on prompt referral to the specialist team has been effective.

There is too much variation in outcomes across the country

Although there have been improvements in ulcer healing at a national level (England and Wales combined), there is significant variation between regions.

The percentage of ulcers healed by 12 weeks ranges from **48%** to **68%** for less severe ulcers and **27%** to **41%** for severe ulcers.

Percentage of people alive and ulcer-free at 12 weeks after FEA, by region: Severe ulcers, excluding unknown outcomes, England and Wales, 2014-21



To find out more about how the audit results for your local service please click [here](#).

It is very concerning that there are such big differences between services. Every effort should be made to increase the percentage of people seen in less than 2 weeks across all services in England and Wales. This will improve equality of access and lead to better outcomes for people with diabetes.

Longer-term outcomes for people with foot ulcer

Amputation (surgical removal) of part of the foot or leg may be required when a foot ulcer cannot otherwise be successfully treated.

This may be a **minor amputation** (below the ankle) in which toes or part of the foot are removed in an attempt to save the leg. When this is not possible, major amputation (above the ankle) may be required.

Amputation is a life-changing event, with significant physical and psychological effects. Long hospital stays and periods of rehabilitation can result.

Despite the overall improvement in ulcer healing outcomes by **12 weeks**, there has been no change in the incidence of major amputation within **6 months** of being seen by a specialist

0.6% of less severe ulcers result in a major amputation. **2.7%** of severe ulcers result in major amputation. Severe ulcers are four times more likely to lead to major amputation than less severe ulcers.

Between 2014 and 2021, there was an increase in the number of people dying within **12 weeks** of a foot ulcer from **2%** to **6%**. This is likely to reflect the fact that more people also presented with cardiovascular conditions (heart failure, heart attack and stroke) over this time.

Almost 1 in 5 people (**18%**) who present with a severe ulcer are either dead (**15%**) or have undergone major amputation within 1 year (**3%**).




The recommended services and teams provided for managing foot ulcers

Looking at structures is important because if these foot care services are in place they provide improved outcomes for people with foot ulcers. If staff are trained to provide routine foot examinations they are better able to identify people at risk of foot ulcers. If there is a clear pathway for rapid assessment people develop less severe foot ulcers.

The 2014-18 NDFA report showed having these care structures in place led to shorter waits for assessment and improved rates of healing.

The 2014-21 NDFA audit showed that overall service provision as high:

Over **90%** of services have:

-  a multi-disciplinary foot care service
-  a clear pathway for rapid access to specialist assessment
-  a system that ensures that during their first expert assessment, will the patient be provided with what they need for the immediate care of their foot problem (medications and/or dressings)

One area that needs improving is having foot care services that are integrated with renal (kidney) services. People with renal disease in diabetes have a high incidence of foot disease. Only **33%** of foot care services are integrated with renal services.

FIND OUT MORE

For more information on the National Diabetes Foot Care Audit 2014-21, you can download the [full report](#).

To find out more about the audit results for your local service please click [here](#).