The National Diabetes Foot Care Audit: New this summer

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On behalf of the development and implementation groups of the National Diabetes Audit Foot Care Audit

With a note on the implications for primary care practitioners by Roger Gadsby

The new foot care module of the National Diabetes Audit (NDA) of England and Wales – the National Diabetes Foot Care Audit (NDFA) – was launched on 14 July this year.

The NDFA is to be managed by the Health and Social Care Information Centre in partnership with Diabetes UK and the National Cardiovascular Intelligence Network of Public Health England, and we are pleased to announce that, following on from confirmation of funding, data collection and the audit proper have begun in the past few months.

Aims of the NDFA

The ultimate aim of the NDFA is to reduce the huge variation in the incidence of major lower-limb amputation in people with diabetes across England and Wales. Data from England published in 2012 show a 10-fold difference between primary care trusts for the rate of major amputations (range 0.22–2.20 per 1000 person-years; Holman et al, 2012). To achieve its aim, the NDFA will determine if:

- Nationally recommended foot care service structures are in place.
- Treatment complies with national recommended guidance.
- The outcomes of treatment are as good as they can be.

Factors known to affect the incidence of major amputation in England and Wales

We already know that in England and Wales there are two factors that are linked to a high rate of limb loss in a particular geographical area: (a) greater social deprivation; and (b) a higher proportion of white Caucasians in the population (amputation is about half as common in Black people and only about a third as common in South Asian people [Abbott et al, 2005]).

We suspect, however, that other factors also contribute, including aspects of the structure of the service (such as the availability of a skilled multidisciplinary team), the process of care (including the speed of referral for expert assessment) and clinical factors (the incidence of major amputation is higher in people with more severe lesions at presentation [Armstrong et al, 1998; Ince et al, 2007; Ince et al, 2008]).

Data collection

The intention of the NDFA is to collect two types of information: the structures of care available to all communities; and the clinical details of people as they are referred to a specialist foot care team.

Auditing existing care structures

Information on existing care structures will be collected from those responsible for the management of care (commissioners and managers) and will be confined to three groups:

- The training of people who undertake routine screening of people with diabetes for risk.
- The existence of a foot protection service.
- The existence of a multidisciplinary service for the management of established foot disease.

Auditing clinical details

Clinical details are to be collected by specialist teams on all people referred to them with foot disease caused by diabetes (*Box 1*). A key requirement of the NDFA is that the collection of new data is kept to a minimum (our hope is that it can be recorded in 60 seconds, with submission taking place online).

Clinicians will be prompted at 12 and 24 weeks after a patient referral to document whether the person is "alive and ulcer-free" (even after any amputation). This will reflect both the speed of ulcer healing and the prevention of short-term occurrence of new ulceration.

Analysis of data

The baseline information collected by clinicians will be linked to data from other parts of the NDA using participants' NHS number (the NDA includes over 87% of all people with diabetes in England and Wales). Data on hospital admissions,

length of stay, and amputations will be available from Hospital Episode Statistics (England) and the Patient Episode Database for Wales; data on death will be obtained from the Office of National Statistics.

Participating clinics will be able to measure and compare outcomes before and after correction for patient characteristics that are potential confounding factors (e.g. age, sex, ethnicity, deprivation, severity at presentation, type of diabetes, weight and glucose control), and this will help clarify associations with both the structure and the process of care.

Benefits of the NDFA

This work will give clinical teams a set of reliable measures on which to base their improvement programmes for clinical management, thereby refining and validating clinical guidance. It will provide invaluable indicators of the relationships between baseline and clinical outcome, and of the impact of disease type and severity. The data will also provide individual communities and teams with information concerning their own practice when compared with others managing comparable populations and will ultimately lead to improvement in the overall outcome for people with disease of the foot in diabetes.

Concluding thoughts

The NDFA is designed to provide a reliable clinical measurement for improvement in foot care for people with diabetes. It will explore how care can be optimised and will reveal best practice by exploring differences between communities. It is not about finding fault or pointing the finger of blame. That is why we all need to embrace the NDFA, because we all need to learn which practice produces the best outcome. And, to be honest, none of us currently knows whether we are any better than anyone else – despite the extent of our commitment. We need to find out.

For very little effort by us all, this new audit scheme will make a real short-term difference to the overall outcome of people with diabetic foot disease. It also offers the potential for a system that could be adopted in other countries, leading ultimately to large-scale improvements in foot care and clinical outcomes.

Acknowledgements

We thank all those who took part in the pilot studies undertaken over the past 3 years and who have thereby helped devise a much-refined dataset. ■

Abbott CA et al (2005) *Diabetes Care* **28**: 1869–75

Armstrong DG et al (1998) *Diabetes Care* **21**: 855–9

Holman N et al (2012) *Diabetologia* **55**: 1919–25

Ince P et al (2007) *Diabet Med* **24**: 977–81

Ince P et al (2008) *Diabetes Care* **31**: 964–7

What the National Diabetes Foot Care Audit means for primary care

Roger Gadsby

GP Lead for the National Diabetes Audit

Foot ulceration is the major cause of amputation and the annual cost to the NHS of foot ulceration and amputation is many hundreds of millions of pounds. The major evidenced-based strategies for reducing ulceration and amputation have been known for at least two decades (Edmonds et al, 1996):

- Screen for foot at risk in primary care.
- Refer those with at-risk feet to the local foot protection service for further assessment, education and follow-up, to reduce the risk of developing a foot ulcer.
- Refer anyone newly presenting with infection and/or ulceration to a multidisciplinary team (MDT) foot service to reduce amputations.

Sadly, in the UK we have not made as much progress in reducing amputation as we could have hoped, and this audit will help us to assess where the gaps in implementing the evidence-based strategy lie.

It will look at the training of those carrying out foot screening and examine whether a local foot protection service and MDT exist, as well as collecting clinical data on foot ulcers and healing.

There are three things that we need from all GPs:

1 To be aware of the audit.
2 To ensure participation of all local foot protection and MDT services, through service commissioning.
3 To encourage audit participation from any person with diabetes and a foot ulcer in the practice.

Edmonds M et al (1996) *Diabet Med* **13**(9 Suppl 4): S27–42.

Box 1. Data to be collected by clinical staff as part of the planned National Diabetes Audit Foot Care Audit.

(a) At presentation

1. Identity

NHS number

2. Case-mix

- SINBAD score
- Is there underlying Charcot disease?

  If "yes", is it acute or chronic?

3. Process

Elapsed time between first assessment by a healthcare professional and first assessment by a member of a specialist multidisciplinary team:

- <2 days
- ≥2 days but <2 weeks
- ≥2 weeks but <2 months
- ≥2 months

(b) Outcome of each episode of active disease

- Is the person alive and ulcer-free (even after any amputation) at 12 weeks?
- Is the person alive and ulcer-free (even after any amputation) at 24 weeks?

SINBAD=classification of the ulcer by **S**ite (forefoot/hindfoot), **I**schaemia (based on pulses), **N**europathy (simple clinical tests), **B**acterial infection (clinical), **A**rea (≥1 cm^2) and **D**epth (not deep [University of Texas Grades 0–I] or deep [University of Texas Grades II–III]).