The first report of the National Diabetes Foot Care Audit tests every aspect of the diabetes footcare pathway. The hope is that the findings will drive improvements and reduce amputations, as Professor William Jeffcoate, Consultant Diabetologist at Nottingham University Hospitals Trust, explains.

The National Diabetes Foot Care Audit of England and Wales (NDFA) is the latest of the National Diabetes Audit family of audit projects. It was launched in July 2014, after four years of planning and trials. The first period of data collection was for the nine months up to April 2015 and the provisional results (including 12-week outcomes) were published in March 2016 (http://digital.nhs.uk/footcare). Still awaited is the incorporation of the data on hospital activity – admissions, length of stay and amputation. The NDFA is a continuing, year-on-year process and the second phase of data collection (presentations up to April 2016 and 12-week follow-up to July 2016) has been completed, and the early phase of data analysis is currently being undertaken.

The NDFA was designed to test every part of the footcare pathway, with a small number of simple questions.
being directed at clinical commissioning groups (CCGs in England) and local health boards (LHBs in Wales) and at specialist clinicians. The CCGs and LHBs are asked about the provision of training for risk assessment and the existence of foot protection and multidisciplinary services, while specialist clinicians are asked about the time which elapses before the first specialist assessment of every new ulcer, as well as its severity and eventual outcome.

Despite the broad aims of the NDFA, it was planned to make sure that participation was as easy as possible – especially for clinicians working in foot clinics, which are often very busy. Even so, participation has not been as easy as it might have been for clinical teams – with the need to obtain informed consent posing particular barriers. Participation was also delayed by the need for each centre to get approval from the local Caldicott guardian.

Audit findings

A total of 129 centres providing specialist care for diabetic foot ulcers took part in the first nine months of the audit and they registered a total of 5,215 new ulcers (in 5,015 people). From this cohort, it was possible to establish three statistically significant findings:

1. The longer the time that elapsed from first presentation to any healthcare professional to first specialist assessment, the more severe the condition of the ulcer, on average.

2. The more severe the condition of the ulcer at first specialist assessment, the worse the principal outcome (which was that the person was alive and free from any foot ulcer at 12 weeks).

3. The longer the time that elapsed from first presentation to any healthcare professional to first specialist assessment, the worse was the 12-week outcome.

These data do not conclusively prove that it was delay to expert assessment which caused the deterioration in the condition of the ulcer (or, put differently, that ulcers which were severe at first specialist assessment would not have become just as severe even if they had been referred earlier). However, the suggestive evidence does confirm expert opinion. The observations thus reinforce the need for any new ulcer to be referred promptly for specialist assessment – which is the essence of guidance in force, both in the UK and worldwide. It is significant that these findings have attracted widespread international attention and an abstract on the results has been shortlisted for an award at the forthcoming specialist European meeting.

It is interesting to note, however, that these early results do not confirm the need for all ulcers to be seen within one or two working days, as was previously suggested – and, while it is clearly imperative that ulcers that threaten both limb and life are treated as emergencies, the pressing need for the majority seems to be that they are assessed – like newly suspected cancers – within two weeks. The comparison with cancer is not an accidental one, because it is now clearly established that the life expectancy for any person presenting with a new foot ulcer is only 50 per cent at five years: the same as carcinoma of the colon and 3–4 times worse than breast cancer1.

NICE guidance & the NDFA

The need for prompt expert assessment of all new foot ulcers is highlighted in the latest NICE guidance – the need for urgent referral is reinforced by the new footcare-related measures incorporated in the list of Quality Standards released by NICE in August 2016 (www.nice.org.uk/guidance/qp59). These stipulate that ‘Adults with a limb-threatening or life-threatening diabetic foot problem are referred immediately for specialist assessment and treatment’.

However, the new Quality Standards document also lists the need for regular risk assessment of the foot of each person with diabetes, as well as the requirement that ‘Adults at moderate or high risk of developing a diabetic foot problem are referred to the foot protection service’. This crucial requirement fills the hole that was implicit in the Quality and Outcomes Framework requirement for GPs: the hole that resulted from GPs being asked to undertake regular annual assessment of foot risk, but without this being linked to the need to take any action. But this link is now implicit in the NDFA questions that are posed to CCGs and LHBs. Thus, these organisations – which are responsible for ensuring that the appropriate structures exist for delivery of all aspects of diabetes footcare – are each asked three questions every year. These are:

1. Is there a training programme designed to ensure that all healthcare professionals are competent to undertake annual foot checks?

2. Is there a pathway for referral of all people at increased risk of foot disease to a designated foot protection service?

3. Is there a pathway for all new/deteriorating foot disease to allow referral for expert assessment within 24 hours if required?

In order for a local footcare pathway to fulfil the requirements of both the 2016 Quality Standard measures described above, it is apparent that the group which commissions the pathway should be able to answer ‘Yes’ to all three of these questions. If, and when,
CCGs and LHBs can answer in this way, it will be a major breakthrough for management of the foot in diabetes in England and Wales.

It has to be mentioned, though, that only 60 per cent of CCGs/LHBs replied at all to the request for information from the NDFA in its first year and, of those that replied, only 60 per cent answered all three questions. It is really hoped that the newly published Quality Standards will result in greater focus on the problem and greater determination to ensure that the necessary foot protection services and specialist multidisciplinary care services are commissioned. It is well known that there is considerable variation in the outcome of management of foot care in the UK but it is not possible, at the moment, to determine the reasons underlying it. These can be identified only by examining the whole pathway.

**Audit analysis**

When, however, the full outcome measures are available from hospital episode statistics and analysed, it will also be possible to examine the effectiveness of specialist care and compare it between different communities. To do this, it will be necessary to undertake comparisons using case-mix adjusted populations. Thus, it is well known that ulcer incidence is dependent on age, gender, social deprivation and, most important, race (the incidences being higher in White Caucasians than in Blacks and South Asians). It is also clear that the outcome of an ulcer is dependent on its severity.

It is not sufficient, therefore, to make crude comparisons in, for example, the incidence of major amputation between different areas or services, because the data must be adjusted to make comparisons between like populations. The results of these case-mix adjusted analyses are eagerly awaited. The intention is not to point the finger of blame and impose sanctions on those that do not seem to perform well. Rather, these results will indicate, for the first time, just which aspects of care – throughout the whole footcare pathway – are most closely linked to the best outcome for people with diabetes.

It is fervently hoped that the data generated by this audit will mean that both those who organise care services and healthcare professionals will, finally, have hard evidence on which to base the structure and conduct of footcare services. This should remove the inequality which currently exists between people with different postcodes.

**REFERENCES**


See also:


*FIGURE 1*

The spectrum of days elapsing between first presentation to a healthcare professional and first expert assessment. Data from 5,215 newly presenting ulcers in the first report of the NDFA

*FIGURE 2*

The relationship between time elapsed before first expert assessment and wound severity (graded using the SINBAD classification). Less score <3; Severe score ≥3

*FIGURE 3*

The relationship between time elasped before first expert assessment and the primary outcome of the audit: being alive and free from all ulcers at 12 weeks