

Diabetic foot disease and inpatient services: The Diabetes Footcare Activity Profiles



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Historically, the only robust, nationally collated data on the impact of diabetic foot disease was the number of amputations undertaken in people with diabetes. While these data are valuable, they have significant limitations. An amputation is not an outcome in itself; rather, it is a treatment for a variety of severe lower-limb complications of diabetes. As a result, data on amputation alone provides only a partial insight into the true burden of diabetic foot disease.

To give a more holistic picture of the diabetic foot disease, the Yorkshire and Humber Public Health Observatory undertook a project to develop the Diabetes Footcare Activity Profiles series. The Profiles present clear, concise information – in graphics and text – on the number of people with diabetes registered at GP practices in each of England's 151 primary care trusts (PCTs) admitted to hospital for foot complications over a 3-year period (*Figure 1*).

A range of data are provided in each Profile, including the number of episodes of inpatient care per person with diabetes, the average length of hospital stay for diabetic foot disease and the number of episodes of inpatient care where one or more major or

minor amputation occurred. The Profiles allow those involved in provision of care to appreciate the scale of diabetic foot disease in their region, and reveal how individual trusts are performing in relation to populations similar to their own, and against the national average.

Data collection and findings

The Profiles were compiled using data from the Hospital Episodes Statistics database, which contains information on episodes of care undertaken in NHS hospitals in England. An experienced clinical coder drew up a list of hospital codes relating to diabetic foot disease, comprising diagnostic (e.g. foot/leg ulcer, cellulitis, osteomyelitis, gangrene) and procedural (e.g. lower-limb amputation, debridement of a foot/leg wound) codes. Anonymised data on diagnosis and procedure codes used in their last ten admissions for diabetic foot disease was supplied by clinicians at six hospitals. These data allowed for the refinement and validation of the original list of codes, giving a code list to identify episodes of inpatient diabetic foot disease and its care. Further details on the methodology can be found at <http://tinyurl.com/cyfpfyb>

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“The complete Profiles and supporting information are now freely available from the Yorkshire and Humber Public Health Observatory website ...”

Applying these criteria to the period 1 April 2007–31 March 2010 revealed 116 884 episodes of inpatient care due to diabetic foot disease in England, generating 1 222 201 nights in hospital. This is equivalent to 17.6 episodes and 184.1 nights in hospital per 1000 people with diabetes per year. Among those admitted to hospital for diabetic foot disease, 47.1% had only one episode of inpatient care, while 15.3% had four or more episodes in the 3-year period (see <http://tinyurl.com/bt68dlo>).

The complete Profiles and supporting information are now available from the Yorkshire and Humber Public Health Observatory website (visit <http://bit.ly/r2yaks>) and have been downloaded more than 1100 times at the time of writing.

Using the Profiles

The Profiles provide a platform for benchmarking care. Diabetes Area Classification (DAC) groups are sets of PCTs whose populations have similar diabetes demographics and risk factors (visit <http://bit.ly/uD8XZg> for further details on the DAC groups) and comparisons of

trusts within the same DAC are shown in the Profiles. This makes the Profiles a starting point for understanding variation in inpatient care in diabetic foot disease across England. A local understanding of the patient population and delivery of services is required to assess the implications of the data and to identify strategies for service improvement.

Conclusion

The publication of the Diabetes Footcare Activity Profiles has raised awareness of the extent of inpatient activity relating to diabetic foot disease, and the variation across health economies. Personal correspondence indicates that the Profiles are being used to review services in a large number of health economies across England. It is hoped that the Profiles will drive service improvements that will ultimately lead to better outcomes for people with diabetic foot disease around England. ■

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Figure 1. One of the Diabetes Footcare Activity Profiles produced by Yorkshire and Humber Public Health Observatory. All the Diabetes Footcare Activity Profiles are available at <http://bit.ly/t2yaks>

