

P294

The West of Ireland Diabetes Foot Study: the incremental costs of diabetic foot ulceration in Ireland

P Gillespie¹, L Kelly², L Hurley², AP Garrow³, LG Glynn⁴, SF Dinneen^{1,5} and C McIntosh⁶

¹Irish Centre for Social Gerontology, School of Business and Economics, National University of Ireland Galway, Galway, Ireland, ²Diabetes Centre, Galway University Hospitals, Health Service Executive (HSE) West, Galway, Ireland, ³The School of Health Sciences, University of Salford, Salford, UK, ⁴Department of General Practice, National University of Ireland Galway, Galway, Ireland, ⁵Department of Medicine, National University of Ireland Galway, Galway, Ireland, ⁶Discipline of Podiatry, School of Health Sciences, National University of Ireland Galway, Galway, Ireland

Aim: To explore the incremental costs of diabetic foot ulceration in Ireland.

Methods: Data from the West of Ireland Diabetes Foot Study were used for the analysis. In the study, patients on the diabetes registers of 12 general practices were invited to attend for foot screening. Of 563 participants, 16 (3 per cent) developed new ulcers over the next 18 months. A retrospective cost analysis was conducted for all who developed ulcers and for a representative sample (209, or 38 per cent) of the non-ulcerated population. A societal perspective was adopted in that costs to the healthcare system and the patient were considered. The former included primary, secondary and community care service usage. The latter included patient's own-time input in treatment and travel costs. Resource usage was identified via patient questionnaires at 18 months post screening and a vector of unit costs was applied to calculate costs. Multivariate regression analysis was used to examine the effect of experiencing a new ulcer on costs of care.

Results: Mean healthcare cost at 18 months was €2,785 (SD 6,472) for non-ulcerated patients and €9,566 (SD 18,753) for ulcerated patients. The equivalent patient cost estimates were €189 (SD 257) and €688 (SD 479) respectively. After controlling for other clinical and socio-demographic variables, ulceration was associated with a statistically significant increase of €7,308 ($P = 0.004$) in healthcare costs and €499 ($P < 0.001$) in patient costs.

Conclusions: The incremental costs of diabetic foot ulceration in Ireland are substantial. These data can help inform policy and planning in this area in the future.

P295

Do we care about our patients with diabetes feet? Diabetic foot examination at the front-door

SN Iqbal¹, Z Majid¹, A Tiwari², I Wilson³ and MA Saeed⁴

¹College of Medical and Dental Sciences, University of Birmingham, Birmingham, UK, ²Department of Vascular Surgery, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK, ³Department of Podiatry, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK, ⁴Department of Diabetes, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK

Aims: National Institute for Health and Clinical Excellence (NICE) guidelines were published in March 2011 outlining inpatient management of diabetic foot care. Our aim was to assess how the University Hospital Birmingham NHS Foundation Trust was performing.

Methods: Relevant parts of NICE Guideline CG119 were used to audit the clinical practice of patient assessment within the first 24 h of diabetic foot related emergency admissions. Fifty-eight admissions over

a 5-year period were identified by search terms 'cellulitis' or 'osteomyelitis' of toe or foot and case notes and electronic records were studied.

Results: The ratio of males to females was 67 to 33 per cent; age range 28–84 years (median 60.43 years); and the ratio of Type 1 to Type 2 diabetes was 17.20 to 82.85 per cent. Unilateral cellulitis was the main reason for admission (77.6 per cent). Although 96.6 per cent of patients had their feet examined, this was not always adequate: only 43.1 per cent of patients had peripheral vascular disease assessment, with the highest (56.3 per cent) and lowest (25 per cent) proportions of assessment done by foundation and middle-grade clinicians, respectively; peripheral neuropathy was assessed in only 29.3 per cent of patients with the highest (37.5 per cent) and lowest (25 per cent) proportions of assessment performed by middle-grade clinicians and consultants, respectively. Although not part of the NICE guidelines, Waterlow scoring by nursing staff, for pressure sore risk assessment, was only done in 34.5 per cent of patients.

Conclusion: There is a clear need for improved examination of the diabetic foot upon emergency admission in order to provide adequate care and to identify high risk patients. Diabetes UK should endeavour to heighten awareness of diabetic foot care amongst non-diabetes clinicians.

NB: Co-first authorship SN Iqbal and Z Majid

P296

The cost of foot care for people with diabetes in England and the potential for quality improvement and savings: an economic analysis

M Kerr^{1,2}

¹NHS Diabetes, NHS Diabetes and Kidney Care, Newcastle-Upon-Tyne, UK, ²Insight Health Economics, London, UK

Aim: To estimate annual NHS expenditure in England on foot ulceration and amputation in people with diabetes and the potential for high quality targeted care to improve outcomes and reduce costs.

Methods: An economic model was constructed to estimate NHS expenditure on care for people with diabetic foot complications. Model parameters were derived from routine data sets, supplemented by evidence from clinical studies and patient survey data. Expenditure estimates were produced for community, outpatient and inpatient care. The cost of multidisciplinary foot care teams was estimated, based on resource data from two English providers, and potential savings and quality of life impacts were modelled, based on evidence from clinical studies.

Results: It is estimated that the NHS in England spends £450 million–£580 million a year on foot care for people with diabetes. Clinical evidence suggests that multidisciplinary foot care teams can reduce ulcer duration, amputation rates and mortality. Many of the benefits arise through early access to specialist care. The quality-adjusted life-year (QALY) gains from a 50 per cent reduction in late referrals of diabetic foot ulcers to specialist care are estimated at £37 million–£45 million a year. It is likely that multidisciplinary foot care teams are cost saving or cost neutral to the NHS.

Summary: The cost to the NHS of foot care for people with diabetes is substantial. Commissioners and providers have the potential to improve patient outcomes and increase NHS productivity through increased use of multidisciplinary foot care teams.