

Patients Perceptions of a Shoe Fitting Service at a Diabetic Foot Clinic

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Background: Diabetic Footwear Service: The multidisciplinary diabetic foot team within the Elsie Bertram Diabetes Centre serves a population of 32,000 people with diabetes across a large geographical area. It provides a tertiary centre of excellence for the management of acute diabetic foot disease. The clinic has annual activity levels of >4500 contacts and >700 new patient referrals. The specialist podiatrists in this centre are the sole gatekeepers for the provision of hospital footwear for people with diabetes. Over the last ten years the eligibility criteria for footwear has tightened. It is now only provided to people with a diabetic foot complication which has resulted in significant foot deformity which cannot be accommodated in an 'off the shelf' shoe. People who fall outside of this criteria are given both verbal and printed information and advised to purchase their own shoes. The clinic has a specialist shoe fitter working alongside the podiatrists two sessions per week. The clinic offers stock, modular stock and bespoke footwear. Only 19% of the shoes provided are bespoke, the remainder 81% is stock or modular. In 2009 the diabetic foot clinic shoe fitting service supplied 262 new pairs of shoes, although approximately 15% of these were for the same patients. These were provided for free on the National Health Service. The long-term need for hospital footwear is factored into treatment plans to ensure that once ulcer healing has been achieved patients receive footwear that enables them to be discharged from the clinic back into the care of the community podiatry services. Patients are entitled to receive two pairs of shoes per annum and we offer a repair service. Patients can then contact the diabetic foot clinic to arrange an appointment with the shoe fitter as necessary either for repair, alteration or replacement. We constantly strive to improve the quality of care that we deliver, and as part of this we conducted an initial study to assess how patients who attended the specialist footwear clinic perceived the service they received in 2001 and followed this up 10 years later.

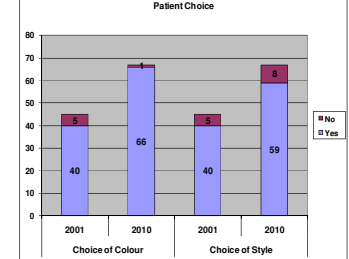
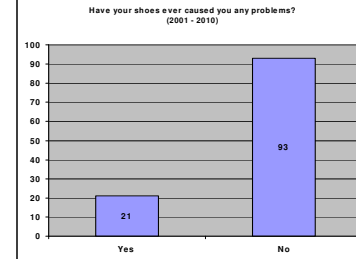
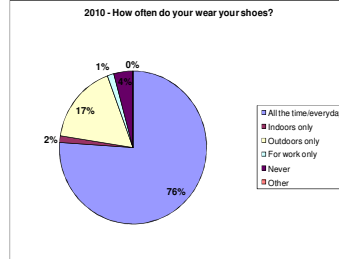
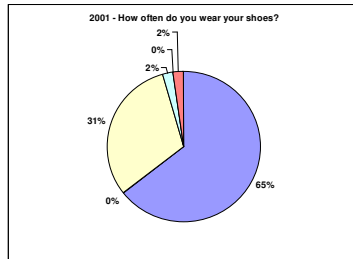
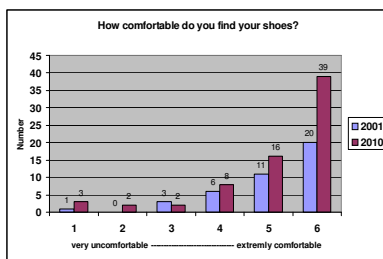
Aim: To assess patients' perception of the shoe fitting service provided at a Diabetic Foot Clinic

Setting: The Elsie Bertram Diabetes Centre diabetic foot clinic, a single, tertiary referral centre in Norwich, UK.

Method: A questionnaire was devised in collaboration with the Clinical Governance and Audit department at the Norfolk and Norwich University Hospital NHS Foundation Trust. This was originally completed in 2001 and repeated 10 years later in 2010. On both occasions patients were identified from the hospital Patient Administration System database. The questionnaire was to patients with an enclosed pre stamped, reply envelope.

Results: Of the 100 patients surveyed in 2001, 45 people replied, (45%). In 2010, 71 of the 124 people invited replied (57%). 95% of respondents felt that they were given adequate information as to why they were being provided with hospital footwear. The turn around time for the first pair of shoes was one month or less in 92% of cases in both surveys.

Over the last 10 years patients have been using the repair service more often, rising from 53% using the repair service in 2001, to 64% in 2010. In both surveys 91% of people rated the shoe as 4 or above (scale 1-6, with 6 being the most comfortable) for comfort. The proportion of people who wore their shoes all the time/everyday rose from 65% in 2001 to 76% in 2010. The range of colours offered by the service increased in the last decade and this was reflected in the rise in response from 89% in 2001 to 99% in 2010 when people were asked if they felt they were given a choice of colours. The turn around time for repairs within 1 month was 92% in 2001 and 98% in 2010. In both surveys 88% of people reported that they had never experienced any problems with their shoes.



Conclusions: The response rate for the survey was extremely good. This may be because we see our foot patients very regularly and have an excellent rapport with many of them. We found a higher rate of patient reported compliance with people wearing their hospital footwear all the time compared to previous work⁸. This had increased from 65% in 2001 to 77% in 2010. This could be a reflection of greater patient acceptability as a result of greater choice. It could also be a result of the tightening of the eligibility criteria, ensuring that only patients that really needed hospital footwear received it. This tightening of eligibility criteria meant that their foot complication could not be accommodated in an 'off the shelf' shoe. Reassuringly the appearance of hospital footwear has become more aesthetically acceptable, with less than 3% of people not wearing their shoes because they did not find their appearance acceptable. There is considerable skill in successfully fitting a shoe on a neuropathic foot with deformity, and in our centre 82% of people issued with hospital footwear reported that they had never experienced any subsequent problems with their feet. Anecdotally the supply of both the first pair of shoes and repairs within 1 month is a very rapid turnaround time. This ensures that the provision of custom made footwear does not delay the discharge of patients from the diabetic foot clinic once healed. The cost of providing hospital footwear will vary depending on the complexity of the prescription from stock-bespoke and in our clinic in Norwich can vary from £100-363 (€120 - 437, \$154 - 558). The estimated cost of healing one diabetic foot ulcer is £5200 (€6250, \$8000) per patient. The 2008/9 payment by results tariff for a non-elective amputation is £11,031 (€13,200, \$17,000). Neither of these amounts takes into account the associated secondary socio-economic costs. It can be seen that there are strong economic arguments in favour of providing a service providing custom footwear. Although the provision of custom made footwear is an integral part of the management of the diabetic foot there is little evidence to demonstrate the benefit of hospital footwear in preventing ulcer recurrence. The footwear service provided at the Elsie Bertram Diabetes Centre has consistently high levels of patient satisfaction. This is reflected in 96% of respondents rating their experience with the shoe fitting service as either 'very good' or 'excellent'.