

The Value of a Retrospective 9 Year Survey in Establishing a Benchmark for Amputation Rates and Mortality in a Diabetic Population Cohort.

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Background: Implementation of the St Vincent Declaration (1989) remains a major challenge in practice. Amputation rates have been most commonly recommended as the indicator of the quality of foot care. Information on amputations and mortality enables performance comparisons with other population cohorts, and helps to implement changes in service provision. Methods: We carried out a detailed search for all recorded amputations from January 2000 to December 2008, held on our hospital electronic database (Diabeta3). Data accuracy was verified by means of case notes, archived records and hospital admission electronic patient records. Amputations were classified as minor (below ankle) or major (BKA or AKA). Mortality and time to death following amputation was also calculated. Comparative regional and national data was obtained from DiabetesE- a web-based, performance improvement tool supporting implementation of the Diabetes NSF. Results: 70 amputations were recorded in 57 subjects (55% minor, 45% major). 11 patients had > 1 amputation. Age at amputation (mean \pm SD) was 67 ± 9 years (87% male). The annual incidence of amputations (per 1000 diabetic subjects) varied from a minimum of 0.4/1000 in 2003 to a maximum of 1.4/1000 in 2006. Major amputation rates were lowest in 2007-8 which correlated with a rise in minor amputations at that time. In 23/57 (40%) deceased subjects the time to death after amputation was 29.3 ± 17.2 months (minor amputations 17.8 ± 8.4 months vs. major amputations 41.7 ± 19.6 months, $p < 0.01$). Conclusions: Whilst below the quoted national average (2.6/1000 for 2007-8), our data (1.3/1000 in 2008) compares well with that published in DiabetesE, showing an amputation rate of 1.6/1000 within the Poole and Bournemouth PCT in 2007-8. As a result of conducting this survey we have been able to identify the annual variance in our amputation rates. This study has been invaluable in auditing the impact of change in service provision (e.g. our intensified podiatry service since 2007, and the impact of a joint vascular clinic since 2008). These data now provide a much-needed benchmark for evaluating amputation and related mortality rates for our patients in future years.