The Incidence of Lower Extremity Amputations due to Diabetic Foot Disease in Two Saudi Arabian Sister Hospitals .F L Bowling¹, M Malone², A A Gannass², A J M Boulton¹University of Manchester, Central Manchester Foundation Trust. Dept. of Podiatric Surgery, National Guard Health Affairs, King Abdulaziz Medical City, Riyadh, Saudi Arabia.

Retrospective Study: The Kingdom of Saudi Arabia has undergone significant changes toward westernisation, with increasing trends towards a westernised diet which has exploded over the past 20 years. In tandem with this, the rate of diabetes has also reached epidemic levels and the associated complications of this disease is leading to significantly high rates of diabetic foot disease and the culminating increase in lower extremity amputation. Objective: The purpose of this study is to assess the incidence of diabetes related lower extremity amputations between 2 National Guard Health Affairs Hospitals. The NGHA hospital in Riyadh is known as King Abdulaziz Medical City and this institute houses the only Podiatric Surgery Department and Podiatric led diabetic foot care programme in the whole of Saudi Arabia. The secondary objective of this study is to determine if the NGHA-Riyadh facility has a lower incidence of diabetic related LEA which could be attributable to the presence of a podiatric surgery department. Research Design and Methodology: A retrospective analysis of all inpatient registrants was undertaken from the National Guard Health Affairs Hospitals in Riyadh and Al Hasa using the international classification of diseases, ninth and tenth edition revision (ICD-9, ICD-10) between the dates of January 1994- December 2010. Results: The mean Incidence ratio recorded during the 17 year time frame of 1994-2010 at the NGHA-Riyadh hospital was 26.1 /1000 (SD±10.4) diabetic population and for the NGHA- Al Hasa the mean incidence was 45.5/1000 (SD \pm 9.9) diabetic was recorded. The total combined incidence of diabetes related LEA throughout the National Guard was 35.8/1000 (SD±14) diabetic population. When comparing the amputation rates between both hospitals using the Mann-Whitney U Test there was a statistical difference with P<0.5 (P=0.0001). Conclusions: Within Saudi Arabia there exists some unique factors which may account for the high number of amputations undertaken each year. The incidence throughout the sister hospitals in the Saudi Arabian National Guard reflects this high rate, of which, is one of the highest reports from around the globe. There is drastic need for intervention in this area if the incidence of amputations is to reduce.