

1447 Trends in Lower Extremity Amputation Incidence in European Union 15+ Countries 1990-2017

R. Goodall¹, W. Hughes², J. Saliccioli³, D. Marshall¹, A.H. Davies¹, J. Shalhoub¹

¹Imperial College London, London, United Kingdom, ²Cambridge University Hospitals, Cambridge, United Kingdom, ³Harvard Medical School, Boston, USA

Aim: To assess trends in lower extremity amputation (LEA) incidence in European Union (EU15+) countries for the years 1990-2017.

Method: This was an observational study using data obtained from the 2017 Global Burden of Disease (GBD) Study. Age standardised incidence rates (ASIRs) for LEA (stratified into toe amputation, and LEA proximal to toes) were extracted from the GBD Results Tool (<http://ghdx.healthdata.org/gbd-results-tool>) for EU15+ countries for each of the years 1990-2017. Trends were analysed using Joinpoint regression analysis.

Results: Between 1990 and 2017, variable trends in the incidence of LEA were observed in EU15+ countries. For LEAs proximal to toes, increasing trends were observed in six of 19 countries and decreasing trends in nine of 19 countries, with four countries showing varying trends between sexes. For toe amputation, increasing trends were observed in eight of 19 countries and decreasing trends in eight of 19 countries for both sexes, with three countries showing varying trends between sexes. Australia had the highest ASIRs for both sexes in all LEAs at all time points, with steadily increasing trends. The USA observed the greatest reduction in all LEAs in both sexes over the time period analysed (LEAs proximal to toes: female patients 22.93%, male patients 29.76%; toe amputation: female patients 29.93%, male patients 32.67%). The greatest overall increase in incidence was observed in Australia.

Conclusions: Variable trends in LEA incidence were observed across EU15+ countries. These trends do not reflect previously observed reductions in incidence of PAOD over the same time period.