P52  PREDICTORS OF EMERGENCY DEPARTMENT ATTENDANCE RATES IN SMALL AREA POPULATIONS

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Objectives Emergency Department (ED) use is known to be related to both socio-economic deprivation and distance to hospital. However, hospitals are often located in urban areas close to deprived populations. The objective of this study is to investigate the relationship between distance and attendance at EDs, net of deprivation.

Method Multiple linear regression models were used to explore the relationship between deprivation and distance to hospital with age-sex standardised ED attendance rates at neighbourhood level. Distance to a Minor Injury Unit (MIU) was also included. Interaction between distance and deprivation was investigated. Separate models for children and adults were used because some populations had access to a dedicated children’s ED.

Setting The Government Office Region of the West Midlands, in central England (population 5.4 million).

Population Attendances of West Midlands residents to EDs in acute hospitals in financial year 2007/08 (n = 1465555) within 3482 Lower Level Super Output Areas (LSOA), each containing approximately 1600 residents.

Outcome Measures The response variable was the directly age-sex standardised ED attendance rate for each LSOA (square-root transformed). Predictor variables were distance from LSOA centroid to nearest ED and nearest MIU in kilometres and income deprivation score (high score = high deprivation).

Results There was a significant positive relationship between attendance and deprivation, β coefficient = 0.96 (p < 0.001) in adults and 0.68 (p < 0.001) in children. There was a significant negative relationship between attendance and distance, the β coefficient = -0.24 (p < 0.001) in adults and -0.37 (p < 0.001) in children. Child attendance appeared more sensitive to distance than adult attendance but less sensitive to deprivation. Attendance in deprived neighbourhoods was more sensitive to distance than in less deprived ones. For adults, at the third quartile of deprivation, ± attendance rate = -0.32 per km + 19.50 compared to -0.13 per km + 15.86 at the first quartile. For children, at the third quartile of deprivation, ± attendance rate = -0.49 per km + 21.50 compared to -0.30 per km + 17.95 at the first quartile. The paper goes on to describe the models in greater detail, (including the effect of MIUs).

Conclusion Attendance at EDs is sensitive to income deprivation at neighbourhood level but distance from hospital appears to modify this relationship differently in deprived areas than in affluent ones. Also, children’s attendance appears to be more sensitive to distance than that of adults. This is useful to understand when comparing ED attendance between and within populations.

P54  MIGHT FINANCIAL CUTS DRIVE NHS DECISION-MAKING "DOWNSTREAM"? A QUALITATIVE STUDY OF FACTORS AFFECTING PUBLIC HEALTH DECISION-MAKING

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Objectives To explore the process of public health decision-making, and the role of research evidence, taking cardiovascular disease (CVD) as a case study.

Design In-depth interview study.

Setting and Participants Over 30 public health policy-makers and planners in CVD, including: commissioners, public health consultants, data analysts, librarians and knowledge managers at Primary Care Trusts; public health academics; lead consultant cardiologists; local and national guideline developers; and third sector staff.

Methods In-depth semi-structured interviews were recorded and transcribed verbatim. Transcripts and field notes were analysed using the constant comparative method.

Findings Participants reported that previously there was relatively little change in health care investment year on year. Consequently, it was seldom necessary to seek research evidence. However, changes had occurred in recent times. National Health Service (NHS) cuts had led to a more systematic prioritisation process necessitating the explicit use of research evidence. There was a sense that decision-makers must now take stock of what they were doing and ascertain if it was evidence-based. Unfortunately, these cuts had also removed much of the opportunity for creative thinking and for trying out new and unproven innovations. Despite most participants wishing