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Changes in health in the countries of the UK

Is Blackpool really the worst place in the UK in terms of ill health and years of life lost? We doubt it – and suspect this morbid honour may belong to Glasgow. However, it is Blackpool which is singled-out in the UK analysis of the Global Burden of Disease Study 2016 by Nicholas Steel and colleagues.¹ As Ellen Nolte comments, this study provides important insights into the patterns of disease burden across the devolved nations of the UK, across English local authorities, and over time.² However, we contend that key considerations have been missed.

Why is the analysis for England performed at local authority level, whilst that for the other three nations (Scotland, Wales and Northern Ireland) only performed at national level? The UK map provided by Steel et al [Figure 3 in the article] shows very clearly that (at least for males) the health record for these three nations is significantly inferior to that of England. This is not only true for 2016, but for all years between 1990 and 2016 [Figure 7 in the article]. Life expectancy at birth for Scotland has been consistently around 2 years less than that for England (for both males and females).

Whilst the 150 local authorities in England (including county councils, London boroughs, unitary authorities, and metropolitan districts) have been used in the more detailed analysis presented in the article, there has been no such disaggregation in the remainder of the UK. However, the other three nations are also subdivided – just like England. Scotland is divided into 32 councils (such as the Highland Council); Wales into 22 areas (such as Swansea); and Northern Ireland into 11 districts (such as Belfast). Taken together this gives 215 local authority districts, counties and unitary authorities for the UK. It is our suspicion that the list of the 15 most-deprived areas would look very different if the analysis were based on the 215 UK authorities rather than the 150 English authorities.

Treating Scotland, Wales, and Northern Ireland in aggregate ignores important information. To illustrate the point, consider some basic statistics for Scotland for the period 2014-16. At the

national level life expectancy at birth was 77.1 years for males and 81.2 years for females. However, at council level male life expectancy was highest in Orkney Islands (80.3 years) and lowest in Glasgow City (73.4 years) – a difference of 6.9 years.³

It would be useful to see the analysis presented in the article reworked with a more consistent level of aggregation across the four nations of the UK. We think the residents of Blackpool may well agree!

We declare no competing interests.

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- 1 Steel N, Ford J A, Newton J N, et al. Changes in health in the countries of the UK and 150 English Local Authority areas 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 2018;**392**:1647-61.
- 2 Nolte E. Disentangling the burden of disease in the UK: what now? *Lancet* 2018;**392**:1604-05.
- 3 National Records of Scotland. Life expectancy for areas within Scotland 2014-2016. <https://www.nrscotland.gov.uk/files//statistics/life-expectancy-areas-in-scotland/14-16/life-expect-publication.pdf> (accessed Nov 7, 2018).