

Who is more likely to lose in the postcode lottery of health?

Research in the spotlight

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- Justine Karpusheff

The term 'postcode lottery' is generally used to describe variations in the quality of health services in different places. However, it also sums up [the wide variation in the extent to which where you live can impact your health](#). I spent my early years in north Manchester, where life expectancy is 10 years below areas with the highest life expectancy.

The Health Foundation's Social and Economic Value of Health programme funded a series of original research studies to explore the impact of health on the social and economic outcomes of individuals and populations. Here, we look at what these projects tell us about how much our postcodes matter when it comes to our health.

Conclusions from Round 1

We know from the [first round of this funded research](#) that [health issues in a child's early years are a strong predictor of poorer health outcomes in later life](#). We also know that [postcodes can matter significantly for health](#), particularly if an area's [deeply entrenched geographical inequalities](#) keep you in that place.

The relationship between place and health is difficult to unpick, relating to a range of factors: [social, economic, commercial and environmental](#). It can also be dynamic – if, for example, you move or a place's socioeconomic status changes. But Health Foundation-funded research is starting to signal that adopting place as a lens for data analysis can help to unpick those factors.

Signals from Round 2

Using novel data linkages, studies from the [second round of research](#) tell us that postcodes matter throughout the life course.

A study [exploring how the places children spend time shape their health](#) signals that the impact of place needs to be considered in policymaking right from the start of life. Pulling together demographic, geographical and educational attainment data with social media content, researchers explored the importance of environmental factors to our health.

The study discovered that children who have a walkable route to school are more likely to do better at GCSEs (achieving five or more grades 4–9). And the fewer fast-food outlets and corner shops there are, the less likely children are to be absent from school. If you don't live in a place where these links are being made in planning, you lose out from an early age.

A geospatial lens also enabled researchers to underline [the importance of environmental planning for cognition](#). Links between air pollution and cognitive decline [are now acknowledged](#). By linking individual place of residence to cognition using a technique derived from brain imaging, this novel research points to sub-regions where pollution may have a role in inducing cognitive effects that aren't explained by other factors

This pinpointing of place could be a springboard for further research to explore causality. Less positively, it also signals that if your postcode is in a spot with poor environmental planning, your health is more likely to be affected.

Both of these studies tell us important things about inequalities and place. By using a geographical lens, we can see where people are more likely to lose out and why. Taking a similar approach to drawing together different data sets allowed [researchers using ONS and census data](#) to identify the healthiest and unhealthiest areas across England and Wales, and illustrated how where you live can significantly increase or reduce your years of living disability free.

In [2011, the gap in disability-free life expectancy was 11.3 years](#). If you live in the north and/or in a deindustrialised area, your chances of being disadvantaged in the postcode lottery increase. It

hasn't got any better since then. More recent data show there has been little increase in healthy life expectancy in the north since 2010.

However, all these studies used a slightly different geographical lens. So, what is the right metric to understand health and place? The final funded study shows how important it is to get that measure right. [Using census data to test different ways of measuring health](#), the research team discovered that drawing a smaller geographical boundary than generally used for analysis uncovered a masking of deeper inequalities within and between regions, which may provide a more accurate picture of where to focus future efforts.

Further questions and future plans

Of course, many people don't have a choice about where they live. The postcode lottery may have dealt you a place that '[doesn't matter anymore](#)'. And as data suggest that we are [now living longer in ill health](#), there could be more people with even less chance of moving in the future.

Adopting a geographical lens enables us to see that some people's life chances are hampered by factors all around them from day one, from the places they play to the air they breathe. Postcodes matter for health. But novel methods, such as geospatial analyses and data linkage, can help us better understand the relationship between place and health and pinpoint who is more likely to lose in the postcode lottery. We're thinking about how best to present local-level data related to health to build understanding of these variations in health and help decision makers decide where to focus resources.

While this funded research gives us early signals, there are still unanswered questions about how far health is shaped by flows of populations and social and economic shocks longer term. Does geographical mobility have a positive or negative effect on the postcode lottery of health? We think there is more to unpick in the relationship between health and place, and are [currently exploring a potential new funded research programme](#). Hopefully, we can generate more evidence that will help determine not only who might lose in the postcode lottery, but also how

to reduce that likelihood.

[Justine Karpusheff](#) ([@JKsheff](#)) is Assistant Director of Research at the Health Foundation.

<https://www.health.org.uk/news-and-comment/blogs/who-is-more-likely-to-lose-in-the-postcode-lottery-of-health>