



# **Mapping underdoctored areas: the impact of medical training pathways on NHS workforce distribution and health inequalities**

## **Findings: Plain language summary**

### **What was the question?**

We investigated why doctors work where they work, thinking about how the healthcare system as a whole is organised as well as individual choices. We were interested in this topic because there are fewer doctors in some areas of the country, despite the greater healthcare needs of the population, and it affects people's health because they cannot see a doctor when they need to. Some areas struggle to recruit doctors to serve the local population, especially in areas where there are other inequalities, such as people having low incomes, there is high unemployment, poor housing and an unhealthy environment.

### **What did we do?**

We conducted case studies of three areas where there are fewer doctors, and one area that does not struggle to recruit doctors. We looked at historical records from the NHS to understand how services are organised and how this may have affected how many doctors there are in an area. We used existing statistical sources to map where doctors work, and looked at areas that have high levels of inequalities, to see if there is a relationship between recruitment and retention and inequalities. We interviewed 100 doctors about why they live and work in certain locations, to try to explain the reasons behind their decisions.

### **What did we find?**

Decisions about the number and type of doctors an area needs are made at a national level. These decisions try to take into account the needs of different places and the people who live there. Unfortunately, the level of access to different types of highly specialist care is still patchy across the country.

The medical workforce is changing, with more women and people from different ethnic backgrounds becoming doctors. However, when we looked at the statistics on what doctors do, we found that gender, ethnicity and social background still have a big impact on what type of job doctors have, and this leads to inequalities in the workforce. For example, there are not many women who work as surgeons, even though this may have been their career intention.

We found that where medical students and doctors train has a big effect on their future career decision making. Many doctors want to stay near their families and friends, but others want to move so that they can work in different medical specialties, or to live in certain locations that are attractive, like coastal communities, or cities.

We also found that the medical training programme is not always seen as very supportive to doctors with different needs. Because medical training involves moving around the country, doctors sometimes found that they were putting off important life decisions like starting a family or buying a house because they did not have a stable work life to support them. This affected their decisions about what they wanted to do in the long term.

### **What does this mean?**

It is important to remember that the medical training programme has two purposes. First, it needs to be designed to meet the healthcare needs of the population. Second, it needs to help doctors to have satisfying careers, so that they will continue to work in medicine. These two purposes are sometimes in tension, and some trade offs and compromises are needed.

By understanding more about what doctors think about when they are choosing a job, we have been able to recommend changes to managers in the NHS that we hope will mean that more doctors want to work in areas that do not have enough doctors, or that struggle to recruit them to work there. We hope that if we understand more about what affects doctors' decisions to work in more challenging areas, we can provide better support for them, and this will mean there is better quality care, and health benefits for local populations.

### **Information about the project**

This study was conducted by a research team at Lancaster University Medical School between 2022 and 2025.

You can contact the research team via our email: [mapping.doctors@lancaster.ac.uk](mailto:mapping.doctors@lancaster.ac.uk)

There is more information about the project on our website:

[www.lancaster.ac.uk/mappingdoctors](http://www.lancaster.ac.uk/mappingdoctors)

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