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Mapping underdoctored areas

Submission date
06/10/2022

Recruitment status
No longer recruiting

Registration date
02/12/2022

Overall study status
Completed

Last Edited
15/07/2025

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Access to healthcare relies on there being enough doctors in an area to treat patients. There are fewer doctors in some areas, despite the greater healthcare needs of the population, and it affects people's health because they cannot see a doctor when they need to. The problem of not having enough doctors is known as 'underdoctoring.' 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. These inequalities also affect people's health, and we call them the 'social causes of poor health'.

How medical training programmes are organised is important, because we know that where doctors train is a big influence on where they end up working. Several studies have looked into doctors' careers, often using questionnaires to find information, but we think that there are a lot of factors that influence where doctors work which have not yet been looked into, including how this relates to the social causes of poor health.

Who can participate?
Doctors and trainee doctors aged 18 years or above

What does the study involve?
Our study will investigate why doctors work where they work, thinking about how the healthcare system as a whole is organised as well as individual choices. We will conduct case studies of three underdoctored areas, and one site that does not struggle to recruit. By looking at these areas, we will be able to understand the differences between places, which will have lessons for other areas in the UK as well as the areas we are focusing on. We will interview doctors at different stages of their careers to understand what doctors think about when they are choosing a job, (e.g. location, career progression) so that we can make changes that mean that more doctors want to work in underdoctored areas.

What are the possible benefits and risks of participating?
Although participants may find participation interesting, there are no direct benefits. There are no risks to participating as this is an observational only study.

Where is the study run from?
Lancaster University (UK)

When is the study starting and how long is it expected to run for?
August 2022 to March 2025

Who is funding the study?
National Institute for Health and Care Research (NIHR) (UK).

Who is the main contact?
Liz Brewster, e.brewster@lancaster.ac.uk

Contact information

Type(s)
Scientific

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Additional identifiers

Integrated Research Application System (IRAS)
317106

Central Portfolio Management System (CPMS)
54021

National Institute for Health and Care Research (NIHR)
134540

Study information

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

Acronym
MapDoc

Study objectives
There is an underexplored relationship between medical training pathways and health inequalities.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 22/08/2022, Faculty of Health and Medicine Research Ethics Committee, Lancaster University (Faculty of Health and Medicine Research Ethics Committee, Health Innovation One, Sir John Fisher Drive, Lancaster University, Lancaster, LA1 4AT, UK; no telephone number provided; fhmresearchsupport@lancaster.ac.uk), ref: FHM-2022-0970

Primary study design
Observational

Study design
Observational qualitative

Study type(s)
Other

Health condition(s) or problem(s) studied
Generic health relevance

Interventions
This project will collect qualitative data via interviews. We will work across three underdoctored and one oversubscribed case study site. Case study sites have been selected based on the NHS trusts who offer clinical placements (the hospitals and GP surgeries that medical students work in during their undergraduate study) aligned to a medical school in each case study site. This includes up to 27 different NHS trusts; the sample for these sites will be guided by geospatial statistical analyses, which will map socio-economic inequalities across these case study sites. We aim to recruit participants as described from each case study site, but are aware that this may not be possible within the available time, if pressures on the NHS are too great. Our aim is to work across a selection from each case study, with a view to accessing some participants from each category in a minimum of ten NHS organisations.

The qualitative approach has been selected in order to describe participants' educational and career pathways and relate them to other data around socio-economic inequalities and their impact on healthcare, rather than hypothesising about or predicting responses. The qualitative study will gather information and key themes by using semi-structured interviews to explore their educational and career pathways.

Data analysis will be conducted using a data-driven constant comparison approach that uses conceptual ordering to develop theory. It will foreground experiences that have shaped pathways through medical training, understand key moments of change and identify considerations that will influence potential points of intervention.

Interviews
One interview of approximately 60 minutes will take place with each participant to address the research questions.

Informed consent will be taken at the start of the interview.
We will work with doctors at various career stages, and interviews will focus on particular points in career trajectories.
We will recruit a minimum of 25 and a maximum of 35 consultants and GPs (10 per underdoctored case study; 3-4 in oversubscribed site.
We will recruit a minimum of 25 and a maximum of 35 Specialty/ GP trainees (10 per underdoctored case study; 3-4 in oversubscribed site. Aim for equal representation from GP and specialty trainees, and representation across grades ST1 to ST8. If appropriate, we will include Specialty Doctors).
We will recruit a minimum of 25 and a maximum of 35 Foundation Programme trainees (10 per underdoctored case study; 3-4 in oversubscribed site).
The interviews will be conducted face to face or online via Microsoft Teams, depending on participant preference. All participants taking part in the interviews must be able and willing to give informed consent.
A draft topic guide for the interviews has been created to guide discussion and maximise relevance and appropriateness. The topic guide will be used in the interviews to provide an initial structure and allow for comparability between respondents, while also allowing for flexibility and individuality in the responses given.
Interviews will be recorded and transcribed.

Intervention Type
Other

Primary outcome(s)
Describe participants' educational and career pathways and relate them to other data around socio-economic inequalities and their impact on healthcare measured using one interview of approximately 60 minutes. Data analysis will be conducted using a data-driven constant comparison approach that uses conceptual ordering to develop theory. It will foreground experiences that have shaped pathways through medical training, understand key moments of change and identify considerations that will influence potential points of intervention.

Key secondary outcome(s)
There are no secondary outcome measures

Completion date
31/03/2025

Eligibility

Key inclusion criteria
All participants will have a current role in one of the NHS organisations in the case study sites.
Inclusion criteria for the interviews:
1. A consultant, GP, specialty trainee, GP trainee, Specialty Doctor or Foundation Doctor.
2. Over 18 years
3. Able and willing to give informed consent at the time of the interview

Participant type(s)
Health professional

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Sex
All

Total final enrolment
100

Key exclusion criteria
Exclusion criteria for interviews:
1. Age <18 years
2. Does not have a current role as listed above
3. Unable or unwilling to give informed consent

Date of first enrolment
01/11/2022

Date of final enrolment
01/08/2024

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
United Lincolnshire Hospitals NHS Trust
Lincoln County Hospital
Greetwell Road
Lincoln
United Kingdom
LN2 5QY

Sponsor information

Organisation
Lancaster University

ROR
https://ror.org/04f2nsd36

Funder(s)

Funder type
Government

Funder Name
NIHR Evaluation, Trials and Studies Co-ordinating Centre (NETSCC)

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are not expected to be made available due because the research team are not the dataset owner for several datasets. One dataset, which we are dataset owners, will contain data that cannot be de-identified. It will be stored in a non-publically available repository, Lancaster University's PURE repository and will not be accessible beyond the research project.

IPD sharing plan summary
Not expected to be made available, Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		08/05/2025	12/05/2025	Yes	No
Participant information sheet	version 1	16/06/2022	18/10/2022	No	Yes
Plain English results			15/07/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes