The use of locum doctors in the NHS: understanding and improving the quality and safety of care

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Scientific summary

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Scientific summary

Background

The numbers of doctors working as locums in the NHS in England are thought to have grown substantially over the last decade, although there have been surprisingly little empirical data published on the NHS medical workforce to substantiate this trend. There have been concerns about the costs of locum working, and about the quality and safety of locum doctors' practice.

Our earlier qualitative research on the experiences of and attitudes towards locum doctors, involving interviews with locum doctors, locum agency staff and representatives of healthcare organisations who use locums, showed that locums were often perceived to be inferior to permanently employed doctors in terms of quality, competency and safety. Our findings suggested that the treatment and use of locums could have important potential negative implications for team functioning and patient safety.

Objectives

The overall aim of our research was to provide evidence on the extent, quality and safety of medical locum practice and the implications of medical locum working for health service organisation and delivery in primary and secondary care in the English NHS. Our three main research questions were:

1. **What is the nature, scale and scope of locum doctor working in the NHS in England?** Why are locum doctors needed, what kinds of work do they undertake and how is locum working organised?
2. **How may locum doctor working arrangements affect patient safety and the quality of care?** What are the mechanisms or factors which may lead to variations in safety/quality between locum and permanent doctors? What strategies or systems do organisations use to assure and improve safety and quality in locum practice? How do locum doctors themselves seek to assure and improve the quality and safety of their practice?
3. **How do the clinical practice and performance of locum and permanent doctors compare?** What differences in practice and performance exist and what consequences may they have for patient safety and quality of care?

Methods

This was a mixed-methods study, consisting of four main work packages:

Work package 1 (addressing research questions 1 and 2) involved a survey of medical directors/medical staffing leads in NHS trusts in England and a survey of general practices in England. The two surveys examined the nature, scale and scope of locum doctor working, why locums were needed, what work they undertook and how their work was organised, and sought views on the performance of locum doctors and a range of issues concerning governance and oversight of practice.

Work package 2 (addressing research questions 1, 2 and 3) involved a combination of semistructured interviews and focus groups conducted across 11 healthcare organisations in both primary and secondary care in the NHS in England. We developed and used three interview schedules (for interviews with locum doctors; people who worked with locums in healthcare organisations; and patients and members of the public).

Work package 3 (addressing research question 1) involved the collection and analysis of existing routine quantitative data sets on locum doctors working in the NHS in England. We used quarterly workforce returns from all general practices in England to NHS Digital to examine locum working in primary care. We used weekly locum usage returns from all NHS trusts in England to NHS Improvement to examine locum working in secondary and community services.

Work package 4 (addressing research question 3) involved the collection and analysis of existing, routine quantitative data sets on doctors' practice/performance which identify whether doctors are locum or permanent staff and so allow us to compare the practice/performance of locums and permanent doctors. We used the Clinical Practice Research Datalink (CPRD) linked to Hospital Episode Statistics to examine these issues in primary care. We sought to undertake a similar analysis in secondary care, using electronic patient record (EPR) data from two NHS hospitals: Salford Royal Hospital and the Bradford Royal Infirmary. However, we encountered a number of problems both in securing data extraction from the two hospitals' EPR systems and in identifying locum and permanent staff activity in the data sets, which severely limited our ability to examine these issues in secondary care.

Results

We report our results from the four work packages grouped around our three main research questions.

The nature, scale and scope of locum doctor working in the NHS in England

In primary care, we found from our analysis of NHS Digital workforce returns that just over 3% of medical staffing was provided by locums and that it had not changed much over the time period 2017–20. However, our analysis of CPRD data for the longer time period of 2010–21 suggested that about 6% of general practice medical consultations were undertaken by locums in 2010 and that this had risen slightly to about 7.1% in 2021. We think there are two main explanations for this discrepancy. First, locums generally only undertake consultations while permanent general practitioners do a lot of other non-consultation clinical and administrative tasks – the NHS Digital workforce returns measure staff numbers in full-time equivalent (FTE), while the CPRD data measure numbers of consultations. Second, the NHS Digital workforce returns from general practices may under-report the numbers of locum doctors, and there have been concerns about the quality and completeness of the data. But both data sources suggest a relatively low – and stable – rate of locum use in primary care.

In NHS trusts (mostly secondary care and mental health), our analysis of NHS Improvement returns from NHS trusts indicated that about 4.4% of medical staff FTE was provided by locum doctors. With a much shorter time series from 2019 to 2021, it is rather more difficult to draw any conclusions about the secular trend, although in that time period the rate of locum use was fairly stable – dropping as expected in the first phase of the COVID pandemic in early to mid-2020, and then recovering. We found NHS trusts making more use of bank (rather than agency) locums over the time period, and some an increase in the reported numbers of unfilled shifts which would indicate increasing unmet need.

However, those overall national rates of locum use hide a great deal of variation between organisations which it is important to consider. In primary care, we found the NHS Digital workforce returns showed the rate of locum use by Clinical Commissioning Group (CCG) varied from 1% to almost 31%. Among NHS trusts, the reported rate of locum use varied from < 1% to almost 16%. Our qualitative work suggested that there were some particularly problematic specialties in which workforce shortages were acute, such as psychiatry. Our multivariate quantitative analyses suggested that there was some variation by region/geography which might reflect workforce capacity or shortage in some parts of England. But they also showed that both smaller general practices and smaller NHS trusts made more use of locums, which might plausibly suggest that larger organisations are more able to cope with workforce gaps without having to resort to locums. In both primary care and NHS trusts, there was an

association between Care Quality Commission (CQC) ratings and locum use, with organisations with lower CQC ratings making more use of locums.

Our surveys of general practices and of NHS trusts showed both some similarities in their reasons for needing locums and ways of using them, as well as some notable differences. Both gave as common reasons for using locums the need to cover either planned or unplanned absences or gaps in staffing – mainly leave and sickness absence – and both reported using them to provide additional workforce capacity when it was needed. But NHS trusts were much more likely to report needing locums because of difficulties recruiting doctors.

We also found some interesting differences in where general practices and NHS trusts sourced locum doctors from. Practices said they made much less use of locum agencies and tended to use trusted locums who were familiar to the practice, while NHS trusts made much more use of locum agencies and staff banks, and within that there was a lot of variation in that some NHS trusts made much more use of locum agencies rather than staff banks. Overall, NHS trusts sourced about a third of their locums from staff banks according to our analysis of NHS Improvement returns.

Our qualitative research found that respondents thought an over-reliance on locums (however that might be defined) could be a 'red flag'. Respondents suggested that the consistent use of high levels of locums was both a concern in itself, because of the implications for quality and safety (which we turn to later in this discussion) and a potential indicator of wider organisational problems in the general practice or NHS trust.

How locum doctor working arrangements affect patient safety and the quality of care

Our surveys of NHS trusts and general practices suggested that awareness of the national NHS England guidance on locum working was very mixed – and particularly poor among respondents from general practice. Those who were aware of it in NHS trusts generally viewed it quite favourably, but some commented that it set out an ideal model which was hard to follow in practice. Among general practices, it was often seen as less relevant to their needs and to the setting of an individual general practice. Self-reported compliance with the guidance was generally high in areas like pre-employment checks and induction, but much less good in areas like end-of-placement reporting and supporting the locum with appraisal and revalidation.

Our qualitative research confirmed and extended the survey findings. For example, we found that giving locums a proper induction was viewed by locums as really important to their subsequent ability to perform in their role, and that issues not covered properly in their induction hampered them and could add to the workload of other members of the clinical team. But in our qualitative interviews with respondents who work with locums, we often found an unrealistic expectation that locums should come into the organisation and be able to start work immediately – to 'hit the ground running' – and that they should devote all their time to clinical work as that was what they were being paid – and paid well – to do. Locums themselves reported taking steps – like working in fewer organisations and avoiding some organisations, working at a lower level/grade and limiting their scope of practice – to deal with the problems of being inadequately inducted and supported.

This was part of a wider negative and stigmatising narrative which often cast locums as less professional, less committed, less competent, less reliable and more financially motivated than permanent medical staff. By 'othering' locum doctors in this way, it was easier both to justify treating them differently (and less well) than other staff and to explain problems or difficulties with quality and safety as being attributable to locums and locum working. In short, it was easy to blame locums when things went wrong, and they were often either not there to defend themselves or not able to do so. The position of locum doctors was, by definition, precarious – they could be removed or have a placement ended easily.

We would contrast this with the attitudes of patients to locum doctors, which were generally more accepting of locum working, and which valued access to seeing a doctor in a timely fashion over whether the doctor was a locum or not. Patients thought that traditional notions of relational continuity were not consistent with their own experiences of care, and some valued the fresh perspectives on their condition which came from seeing a different doctor.

It is clear from our research that locum working can have adverse consequences for the quality and safety of care, but that such consequences were probably more likely to result from the organisational setting and the working arrangements than they were from the locum doctors themselves and their competence, clinical practice or behaviours. It is also clear that there is great variation in the characteristics both of organisations which use locums and of locums themselves. One of the concerning findings from our research was that when problems related to locum doctors' practice arose, they were not dealt with well.

How the clinical practice and performance of locum and permanent doctors compare

From our surveys of NHS trusts and general practices, respondents generally reported that on a range of areas of clinical practice, they thought locum doctors performed about the same as or worse than permanent doctors. It is notable that the areas where they tended to think locums performed worse were things like continuity of care, and adherence to guidelines and protocols, which are, as we have already discussed, more influenced by the organisational setting and arrangements like induction than by the locum doctor's own clinical expertise and fitness to practice.

We were able to explore differences in practice in primary care directly through our quantitative analysis of the CPRD data set, and this provided some very interesting but quite mixed findings which should be interpreted with great caution. For example, our multivariate analysis found that patients who saw a locum doctor were less likely to make a return visit to the general practice within 7 days than those who had seen a permanent doctor. We found that locum doctors and permanent doctors had some differences in prescribing behaviour, but they were mixed (locums prescribed antibiotics and opioids more frequently but hypnotics less frequently than permanent doctors). Locum doctors were less likely to make referrals and to order tests. In terms of hospital events following a consultation with a locum, patients were more likely to visit accident and emergency within 7 days but there was no difference for hospital admission.

Conclusions

Locum doctors are a key component of the medical workforce in the NHS and provide necessary flexibility and additional capacity for healthcare organisations and services. We found that the extent of reliance on locum doctors varied considerably, but that an over-reliance on locums for service provision was undesirable. Some differences in practice and performance between locum and permanent doctors were found, but these seemed often to arise from organisational characteristics. We found patients were more concerned with the clinical expertise and skills of the doctor they saw than whether they were a locum or not. Organisational arrangements for locum working could be improved in many respects, and there were particular problems with the way any concerns about locum doctors were managed.

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