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Locum doctors in the NHS : Understanding and improving the quality and safety of healthcare

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Contents

Summary	4
1. Introduction	6
2. Background: What we already know about locum doctors in the NHS in England	7
3. Quality and safety of locum doctors: A framework for analysis	8
4. Our research: Aims and methods	10
5. The nature, scale and scope of locum doctor working in the NHS in England	11
6. How locum doctor working arrangements affect patient safety and the quality of care	14
7. How the clinical practice and performance of locum and permanent doctors compare	18
8. Conclusions and implications for policy and practice	20
References	23

Summary

Doctors who work in the NHS in temporary positions are generally known as “locum doctors”. They may be working for a hospital or a general practice just for a single shift or a few days, or may work there for several weeks or even months. Often, locum doctors are used to cover staff sickness or absence, or to provide for longer term cover for staff vacancies. While some doctors just work as locums, others will have a permanent job but do some extra shifts as a locum as well.

The NHS needs locum doctors. They are a key component of the medical workforce in the NHS and provide necessary flexibility and additional capacity for healthcare organisations and services. But they should be used appropriately, and where they are used, they should be supported effectively.

The number of doctors working as locums, and the costs of this to the NHS have caused some concerns nationally in recent years. It has also been suggested that locum doctors may not provide as good a quality of care as permanent doctors. So, we set out to find out more, through two large surveys of NHS trusts and general practices in England; interviews and focus group discussions with staff in NHS organisations and with locums, locum agencies and patients; and by analysing data that had already been collected about the NHS workforce and about clinical care.

This report presents our findings and their implications. There is more detail available in the full research report which will be published in the National Institute for Health and Care Research journal library (www.journalslibrary.nihr.ac.uk).

We hope this research helps locum doctors and people who work with them in the NHS and contributes to the future development of policy in this area by government, regulators and other key stakeholders. We thank everyone who contributed to and supported our research.

In summary:

- Locum doctors are just one way of providing medical workforce flexibility and capacity – others include internal staff banks, flexible working arrangements and contracts, hybrid clinical posts, role substitution, etc.
- At a national level, increased locum working probably has marginal effects on overall workforce capacity as doctors move from permanent employed positions into working as a locum and vice versa or do both at the same time.
- Locum doctors provide a relatively small proportion of patient care in both NHS trusts and primary care, and that share of care provided by locums has not increased as much as people think in recent years. But locum use is much higher in some areas of England, some organisations, and some specialties. It is higher in smaller organisations/practices, and higher in those with worse Care Quality Commission ratings.
- Locum doctors are a heterogeneous group – including some doctors taking time out of a training pathway, some wanting to work flexibly because of family or caring responsibilities, some recently registered in the UK and wanting to gain experience, and some towards the end of their careers wanting part-time and flexible work but not wanting to retire yet.
- For many doctors working as locums, their choice to do so has been influenced by some aspects of working in a conventional employed position in an NHS organisation. The increased workload, increasing work stress and burnout, loss of professional autonomy and control, and the burden of non-clinical and administrative work all seem to play a part.

- Sustained high use of locums – what some interviewees termed a “service running on locums”, is problematic, and may well be a threat to patient safety and quality. The use of a lot of short-term locums who are unfamiliar with the organisation may also be a particular safety and quality concern.
- There is quite a bit of prejudice against locums. They are blamed by some people for being paid more than permanent staff, criticised for not contributing fully, and sometimes regarded as less clinically competent than permanent doctors. Some of the criticisms were very much focused on overseas trained doctors with an undertone of racism and some of the locums we interviewed shared their experiences of racism.
- The NHS England national guidance on locum working arrangements is pretty good, but awareness is poor, especially in primary care, and adherence beyond the basics of checking GMC registration and the like is very variable.
- The best organisations invest properly in locums by providing a decent induction and support, involving locums properly in activities like clinical staff meetings, professional development, and audit or quality improvement. In the long run organisations will get better value for money from locums who are treated as much like other staff as possible
- There are some differences in practice and performance between locum doctors and permanent doctors. These seem likely to relate more to organisational working arrangements than to any intrinsic differences in clinical performance or competence.
- When there are concerns about the practice of a locum doctor, they are often not dealt with properly. Locums and locum agencies get little feedback on performance, placements may just be terminated early, and the arrangements for dealing with a significant concern are not fit for purpose.
- It is hard for locum agencies to provide proper oversight of the locum doctors on their books, and to provide appraisal, revalidation and, where needed, remediation. Changes to the way locums and locum agencies are governed and regulated may be needed.

1 Introduction

The use of locum doctors in the NHS is widely believed to have increased in recent years, and there have been many concerns among policymakers, healthcare providers, professional associations and professional regulators about the quality/safety, cost and effective use of locum doctors. But we have remarkably little empirical evidence about the realities of locum practice and performance, or about what can be done to assure the safety and quality of care provided by locums in the NHS.

This report is based on research on locum doctors in England carried out by a team at the University of Manchester and funded by the National Institute for Health and Care Research. It is aimed at people working in and with the NHS who are involved in working with or managing locum doctors (such as medical directors, responsible officers, medical staffing managers and others); professional and organisational regulators; and policymakers concerned with the medical workforce and with the quality and safety of care in the NHS.

The report is structured into eight main sections, as follows:

- **Sections 2 and 3** provide a concise summary of what we already know about the use of locum doctors in the NHS in England. Section 2 focuses on the context – the numbers of doctors working as locums, the costs involved, the policies and guidance produced by NHS England and others, and some insights into locum doctor working arising from research into the implementation of medical revalidation. Section 3 examines the existing evidence on the quality and safety of locum doctor practice, and presents our framework of eight key factors which may affect the quality and safety of locum doctor working.
- **Section 4** sets out briefly how we approached our research – there is also a link to the full research protocol and research report for those who want to know more.
- **Section 5** explores the nature, scale and scope of locum doctor working in the NHS in England, looking at both primary care and at NHS trusts. It highlights a great deal of variation in levels of locum usage and some of the factors associated with higher levels of locum usage.
- **Section 6** examines how locum doctors are used in the NHS, their working arrangements and conditions, and the implications for quality and safety. It finds that national guidance on this area is not well understood or used, and that poor induction and ongoing support for locum doctors lead to problems which are then sometimes attributed to the locums themselves. It highlights the difficulties which exist in dealing with any concerns about a locum doctor which can mean that such problems are not addressed.
- **Section 7** presents our findings on whether there are significant differences in practice and performance between locum doctors and permanent doctors. Overall, we find from our survey that those working with locums generally think differences are fairly limited and are often in areas – like providing continuity of care or following organisational policies and procedures – which are more to do with the organisation than the locums. Looking at a large dataset of clinical records in primary care we find a rather mixed picture of differences in practice.
- **Finally, in section 8** we draw together our conclusions and some implications from the research for policy and practice.

Background: What we already know about locum doctors in the NHS in England

2

The numbers of doctors working as locums in the NHS in England are thought to have grown substantially over the last decade, although there has been surprisingly little empirical data published on the NHS medical workforce to substantiate this trend. Nevertheless, between 2009 and 2015, the use of locums in NHS hospitals was reported to have almost doubled¹ and between 2015 and 2019 the number of locums working in primary care was reported to have increased by 250%². In 2018, 8,810 doctors were registered with the GMC as working primarily as a locum, representing 3.6% of all registered doctors, though it is believed that many other doctors undertake some locum work alongside more conventional permanent employment³.

Locum doctors are essential for maintaining continuity of service and providing flexibility in service capacity and provision in the NHS. Healthcare organisations use them to cover gaps in rotas due to unplanned absence or recruitment and retention problems, and also to fill service gaps in underserved or shortage specialties and areas. However, rising locum numbers and particularly the associated increase in cost have led to a growing concern among policymakers, employers and professional associations about locum use.⁴⁻⁶ Medical agency staff were estimated to have cost the NHS £1.1 billion in 2015/16,⁷ and a locum pay cap was introduced in 2015 to curb expenditure.⁸

Before undertaking this research, we had already undertaken an international review of the empirical and “grey” literature on locum doctors and the quality and safety of patient care,⁹ including a comparative analysis of the use of locums in five countries. Overall, locums were generally regarded as necessary but potentially problematic, in that they may allow healthcare organisations to maintain appropriate staffing levels and flexibility, but they may also adversely affect continuity of care, patient safety, team functioning and costs. This literature also suggested that there was often a lack of robust systems for managing/overseeing locum doctors including inadequate pre-employment checks and induction, unclear line management structures, poor supervision and reporting of performance, and a risk that locums with performance problems move from organisation to organisation.

NHS Employers, NHS England and NHS Improvement have all produced guidance on locum working and employment for NHS organisations, locum agencies and locums themselves.¹⁰⁻¹² However, evidence suggests that some basic requirements (such as adequate induction and familiarisation with organisational systems and procedures) are often lacking, communication especially about locum performance between organisations and locum agencies is poor, and locum doctors often are not included in or given access to systems for clinical governance and professional development.¹³⁻¹⁵

Some insights into these issues arose from the introduction of medical revalidation in the United Kingdom from 2012 onwards. Revalidation requires all doctors to demonstrate that they are up to date and fit to practise through participating in regular, annual appraisals and securing a five yearly revalidation recommendation to the General Medical Council from a senior doctor in their employing organisation (known as a responsible officer). Research on the implementation of revalidation highlighted the lack of robust arrangements for clinical governance for locum doctors.¹⁴ Locums had difficulties in arranging annual appraisals and collecting the portfolio of supporting information about their practice that was required for revalidation (for example patient and colleague feedback, details of adverse events and complaints/compliments, records of continuing professional development, etc). As a result their rates of deferral were higher than for any other group of doctors apart from trainees.¹⁶ A review commissioned by the General Medical Council highlighted a number of concerns and recommended that the GMC and UK health departments should reform the arrangements for overseeing locum doctors.¹⁶

3 Quality and safety of locum doctors: A framework for analysis

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,¹⁵ showed that locums were often perceived to be inferior to permanently employed doctors in terms of quality, competency and safety. Despite their relatively high occupational status as medical professionals, locum doctors experienced many of the difficulties seen in research on temporary workers in other sectors, such as marginalisation, stigmatisation and limited access to opportunities for training and development. Our findings suggested that the treatment and use of locums could have important potential negative implications for team functioning and patient safety.

Some high profile examples of locum failures in care over recent years have contributed to widespread concerns about the quality and safety of locum doctors.¹⁷⁻²⁰ Locum doctors are often perceived negatively by patients,⁴ other healthcare professionals⁵ and NHS leaders.⁶ They are sometimes regarded as less professional²¹ or as untrustworthy 'outsiders' who lack commitment to the organisation.^{22,23}

Empirical evidence that locum doctors provide care which is of a lower quality or less safe than permanent doctors is very sparse.⁹ But we do know that locum doctors are more likely to be the subject of complaints, more likely to have those complaints subsequently investigated, and more likely to be subject to sanctions by the GMC.²⁴

Locum doctors may present a greater risk to quality and safety because they often work in unfamiliar teams and settings, and are less likely to receive proper oversight and necessary support from colleagues and employing organisations.^{24,25} The presence of locums in the work environment has been described as an 'error producing condition'.²⁶ On the other hand, the shift towards locum working may represent a wider societal change in attitudes to careers and work-life balance and may provide employers with greater flexibility in staffing and greater externality of perspectives from locums who work across multiple organisations, while it may give locums reduced work pressures/risk of burnout, increased autonomy, and new career opportunities/flexibility.

Our recent review found only eight empirical studies comparing locum and permanent doctor practice and performance (three of which were from the UK), generally with small sample sizes and weak methodologies. The most substantial study we identified was from the USA and compared 30-day mortality, costs of care, length of stay, and 30-day readmissions for a random sample of 1,818,873 Medicare patients treated by locums or permanent physicians between 2009 and 2014. There were no significant differences in 30-day mortality rates between patients treated by locums compared to permanent doctors. However, cost of care and length of stay were significantly higher when patients were treated by locums. Furthermore, in subgroup analyses, significantly higher mortality was associated with treatment by locums when patients were admitted to hospitals that used locums infrequently, perhaps due to hospitals being unfamiliar with how to support locums. Only locum doctors who provided 60 days or more of care were included in the analysis, meaning that shorter term locums, who might have had less opportunity to become familiar with the organisation, may have been excluded.²⁷ Overall, we concluded that there is limited empirical evidence to support the many commonly held assumptions about the quality and safety of locum working.

Our literature review⁹ identified eight key factors through which locum working may affect the quality and safety of patient care and which may also provide the basis for mechanisms or interventions designed to improve the quality and safety of locum working. These factors are summarised in Figure 1.

3. Quality and safety of locum doctors: A framework for analysis

Figure 1. Key factors which may affect the quality and safety of locum doctors

Factor	Description
Governance and patient safety	Locums are often situated on the fringes of governance systems and may be excluded or omitted from systems of oversight and quality improvement. The short-term nature of locum work can mean that locums are less likely to take part in clinical governance activities, such as audits and continuing professional development (CPD).
Policies, procedures and continuity of care	Locums may be less likely to be aware of contextual issues and local policies and procedures that are relevant to providing safe and effective care, especially if they do not receive adequate induction and briefing when they take up a locum role in a new/unfamiliar organisation. Locums may not be prepared for practise in the same way as permanent staff – for example, inductions can be poor or absent meaning locums are unable to carry out their duties safely and efficiently. Other risks include not knowing how to escalate concerns and being placed in challenging environments with staffing and workload problems.
Impact on the healthcare team – scope of practice	Locums (particularly short-term locums) may place additional burdens on other members of the healthcare team, such as nurses and junior doctors, who could be expected to perform outside of their scope of practice to compensate for a locum's lack of contextual/local knowledge/competencies.
Impact on the healthcare team – workload	Locum working may increase workload for other members of the healthcare team, for example, extra support for the locum who is unlikely to be familiar with policies and protocols and patients returning to see their regular doctor after seeing a locum.
Information exchange – patients	The quality and quantity of patient information may be reduced when locums are employed as locums may be less likely to be familiar with the patient group and how to report and handover information about patients to other healthcare professionals.
Information exchange – locum practise	The quality and quantity of information exchange about locum doctor practice may be poor meaning that potentially relevant information about locum practice may not be shared with their regulator, employing agency or organisation where they are employed.
Professional isolation and peer support	Locums may become professionally isolated and may be less likely to establish/maintain their professional networks and to have good informal networks of peers to turn to for advice, support or social interaction.
Professional motivation and commitment	Locums' moral purpose and vocational/professional commitment are often called into question and it has been suggested that they may be more motivated by financial rewards/incentives than other doctors, and less committed to medicine as a vocation.

4 Our research: Aims and methods

The overall aim of this 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. We had three main research questions which are set out in the three boxes below.

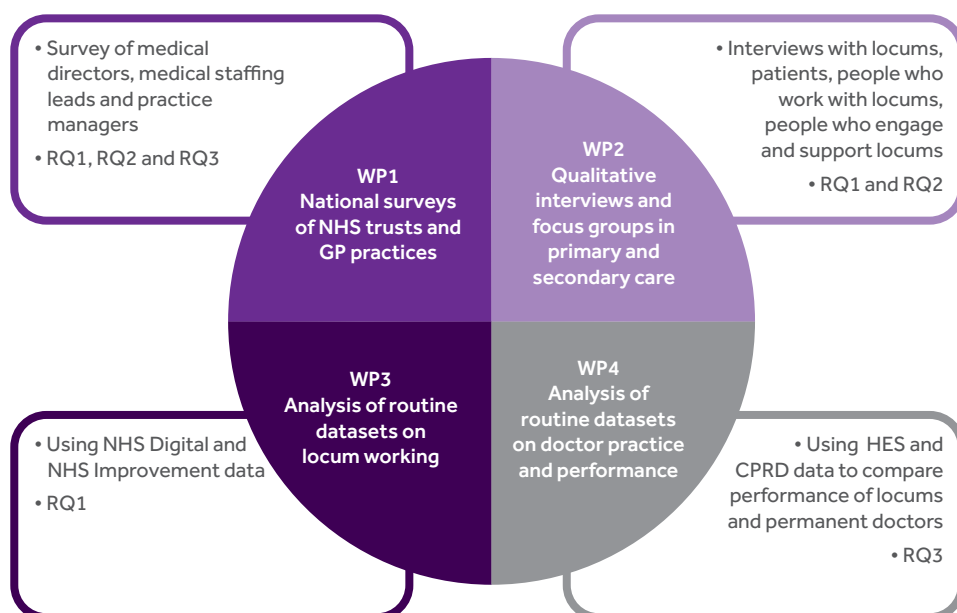
1. What is the nature, scale and scope of locum doctor working in the NHS in England? Why are locum doctors needed, what kinds of work do they undertake, and how is locum working organised?

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?

We provide a graphical summary of our research methods and data sources in Figure 2 below. The full research protocol is available at njl-admin.nihr.ac.uk/document/download/2037819. The full research report will be published in the NIHR journal library in due course (www.journalslibrary.nihr.ac.uk). More information about the project including various journal papers and publications can be found on our website at www.ihpo.manchester.ac.uk/research/projects/the-use-of-locum-doctors-in-the-nhs.

Figure 2. An overview of research methods and data sources



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

5

There has been extensive policy concern and much media coverage of the use of locum doctors in the NHS, suggesting that there has been a substantial increase in the use of locum doctors over time, and this is often conflated with concerns about the costs of locum doctors and particularly the high costs charged to the NHS by locum agencies in some shortage areas or specialties. But our research presents a rather more nuanced picture of relatively stable locum use over time. We have not studied locum costs.

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 primary care electronic records (CPRD) data for the longer time period of 2010-2021 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 GPs do a lot of other non-consultation clinical and administrative tasks – the NHS Digital workforce returns measure staff numbers in FTE while the CPRD data measures numbers of consultations. Second, the NHS Digital workforce returns from general practices may underreport 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 2019-2021 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 an increase in the reported numbers of unfilled shifts which would indicate increasing unmet need.

It may be that the number of doctors working as locums in England has increased as research from the GMC has suggested, but that this comes in part from an increased tendency for some doctors in training to take time out from the training pathway and while doing so to do some locum work. It may also be that more doctors are doing some locum work alongside either full or part-time working in a permanent role in the NHS. But overall, our data does not seem to suggest a substantial increase in the overall use of locum doctors in the NHS over time.

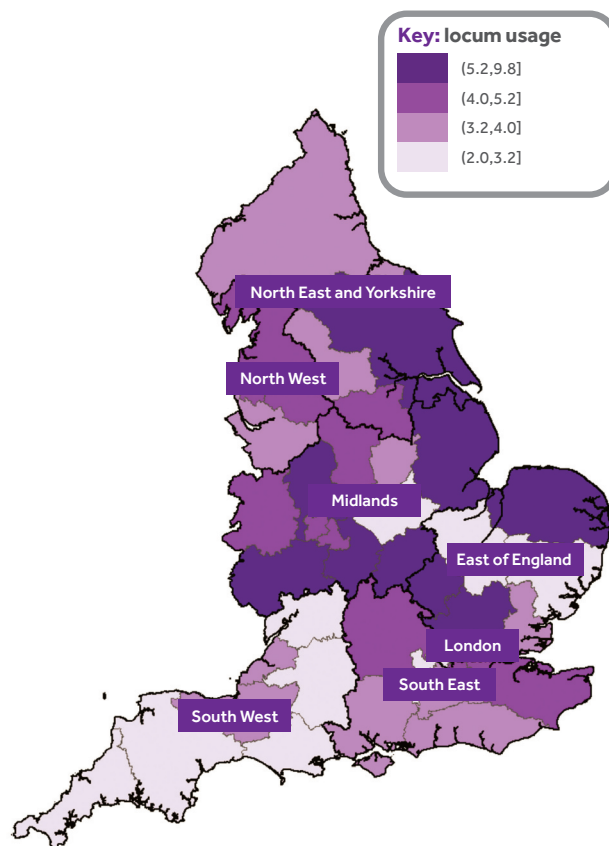
For many doctors working as locums, their choice to do so has been influenced by some aspects of working in a conventional employed position in an NHS organisation. The workload, increasing work stress and burnout, loss of professional autonomy and control, and burden of non-clinical and administrative work all seem to play a part.

But those overall national rates of locum use hide a great deal of variation between organisations which it is important to consider, as figures 3 and 4 show. In primary care, we found the NHS Digital workforce returns showed the rate of locum use by CCG varied from 1% to almost 31%. Among NHS trusts, the reported rate of locum use varied from less than 1% to almost 16%.

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

Figure 3. Variations in locum usage in NHS trusts in England

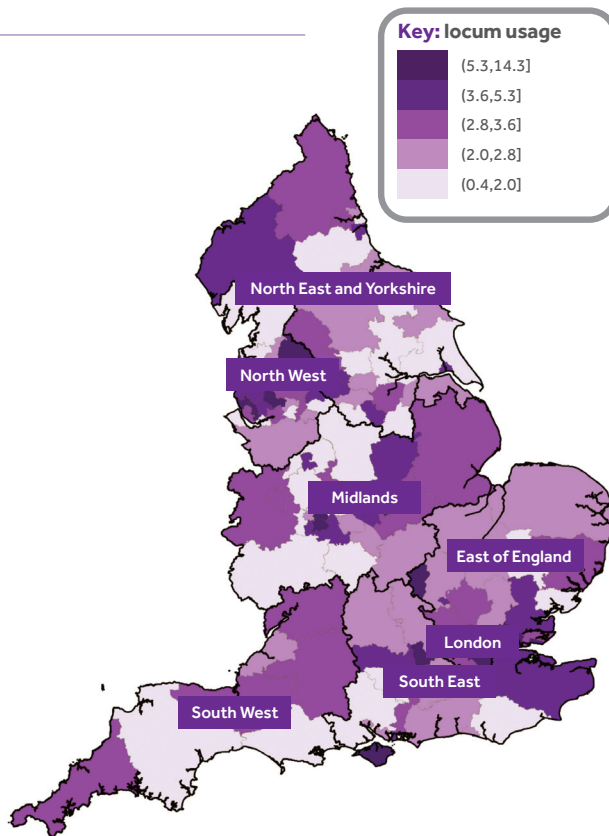
Trusts with the highest locum usage	Trusts with the lowest locum usage
North East London NHS Foundation Trust [15.9%]	Royal Papworth Hospital NHS Foundation Trust [0.02%]
Bedfordshire Hospitals Foundation Trust [15.4%]	Cambridgeshire Community Services NHS Trust [0.04%]
Rotherham Doncaster And South Humber NHS Foundation Trust [13.7%]	The Newcastle Upon Tyne Hospitals NHS Foundation Trust [0.1%]
Oxford Health NHS Foundation Trust [12.4%]	Moorfields Eye Hospital NHS Foundation Trust [0.2%]
Dudley And Walsall Mental Health Partnership NHS Trust [12.0%]	Alder Hey Children's NHS Foundation Trust [0.2%]
North Cumbria University Hospitals NHS Trust [11.9%]	North Tees And Hartlepool NHS Foundation Trust [0.3%]
George Eliot Hospital NHS Trust [11.8%]	University Hospitals Bristol And Weston NHS Foundation Trust [0.3%]
North Cumbria Integrated Care NHS Foundation Trust [11.0%]	Sheffield Children's NHS Foundation Trust [0.4%]
United Lincolnshire Hospitals NHS Trust [11.0%]	Leeds Community Healthcare NHS Trust [0.5%]
Pennine Acute Hospitals NHS Trust [11.0%]	Imperial College Healthcare NHS Trust [0.6%]



Locum usage for NHS trusts is calculated from number of locum shifts per week compared to total medical staff FTE assuming 5 locum shifts per week equates to 1.0 FTE. Data from weekly NHS trust locum returns to NHS England/Improvement and NHS Digital workforce statistics for NHS trusts.

Figure 4. Variations in locum usage in general practices in England

CCGs with the highest locum usage	CCGs with the lowest locum usage
NHS Barking and Dagenham CCG (30.8%)	NHS Stafford and Surrounds CCG (1%)
NHS Newham CCG (26.1%)	NHS Vale of York CCG (1%)
NHS Waltham Forest CCG (26.1%)	NHS Bassetlaw CCG (1.3%)
NHS Hounslow CCG (25.3%)	NHS North East Essex CCG (3%)
NHS Sandwell and West Birmingham CCG (23.8%)	NHS Morecambe Bay CCG (3.1%)
NHS Thurrock CCG (23.8%)	NHS Fareham and Gosport CCG (3.4%)
NHS Southend CCG (22.2%)	NHS South East Staffordshire CCG (3.7%)
NHS Cannock Chase CCG (22.1%)	NHS Wirral CCG (4.1%)
NHS City and Hackney CCG (21.5%)	NHS South Warwickshire CCG (4.2%)
NHS Luton CCG (20.7%) NHS West	Hampshire CCG (4.2%)



Locum usage is defined as locum GP FTE as a percentage of all GP FTE. Data from quarterly returns from practices to NHS Digital.

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

So, what might lie behind these variations? 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 in NHS trusts there was an association between Care Quality Commission ratings and locum use, with organisations with lower ratings making more use of locums. Great caution should be exercised in interpreting this as a causative relationship, in either direction, but it is an important finding. Finally, we did not find an association between locum use and measures of deprivation for the population served, either in primary care or for NHS trusts.

Our surveys of general practices and of NHS trusts showed both some similarities in their reasons for needing locums and ways of using them, and 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.

Should we conclude that the use of locum doctors in either primary care or in NHS trusts can be an indicator of concern? Our qualitative research certainly found that respondents thought an overreliance 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 report) and a potential indicator of wider organisational problems in the general practice or NHS trust. They thought that a service “run on locums” was to be avoided. This suggests that for organisational leaders and other stakeholders (primary care networks, clinical commissioning groups, integrated care systems etc) and for regulators such as the Care Quality Commission and the General Medical Council, being able to analyse and understand rates of locum use could be very helpful.

This leads us to reflect on the quality and value of the quantitative data we have used for our research. In both primary care and in NHS trusts we have made use of existing routine data sources,

though we do not think those datasets have been used previously to study locum use. In both cases, more extensive analysis and feedback/reporting would be likely to help improve data quality. But in addition, collecting more data or collecting it differently would also be worth considering. For example, the NHS Improvement dataset provides a high level of granularity by time, with weekly returns, but it does not collect the specialty or clinical area in which locums are being used, or the reason why they are needed. It is a dataset which was really designed to address the policy concerns about the level and cost of locum use in NHS trusts. Similarly, the NHS Digital workforce returns for general practice make a distinction between short term/adhoc locums and other/longer term locums but do not define those terms clearly, and do not collect any information about the reasons for locum use. The returns also collect some potentially useful detailed information on individual doctors which could be used to study and report on locum working, but the published data is aggregated at practice level. We have not in this study sought to access the NHS electronic staff record (ESR) system which covers almost all NHS trusts and has detailed staffing and payment records for over a million NHS employees, but this could be a very useful source of data for future analysis and reporting for NHS trusts.

The use of locum doctors is clearly an important and enduring component of the medical staff workforce in the NHS, and a way to provide flexibility and capacity in medical staffing. However, we should note that it is only one of a number of ways in which organisations can achieve increased flexibility and capacity – for example through flexible rostering and contracts for medical staff, and improved working conditions. Indeed, our qualitative fieldwork suggests that doctors who choose to work as locums are often doing so because of the working environment they have encountered in permanent staff positions, and in order to achieve a greater degree of control over their own workload and work/life balance than they were able to achieve (or were offered) in a permanent staff position. They trade the loss of security and increased precarity of being a locum in order to get greater autonomy and personal control.

The extent to which locum working increases workforce capacity is somewhat open to question. It is clear from our research that for individual practices or organisations are using locum working as a way to fill short-term workforce capacity gaps, provide additional capacity when it is needed, and to deal with longer term workforce gaps predominantly associated with recruitment problems. But at a macro level, if doctors move from permanent staffing positions into locum work for some of the reasons outlined above, this is probably a zero sum game – it does not increase the overall workforce capacity of the NHS. It may be that some doctors who move to work as locums would otherwise have exited the workforce entirely, and it may be that some doctors who have left clinical practice come back into practice because of the opportunity to work as a locum. But in those cases, there might be other, better ways to improve retention, or to encourage return to clinical practice.

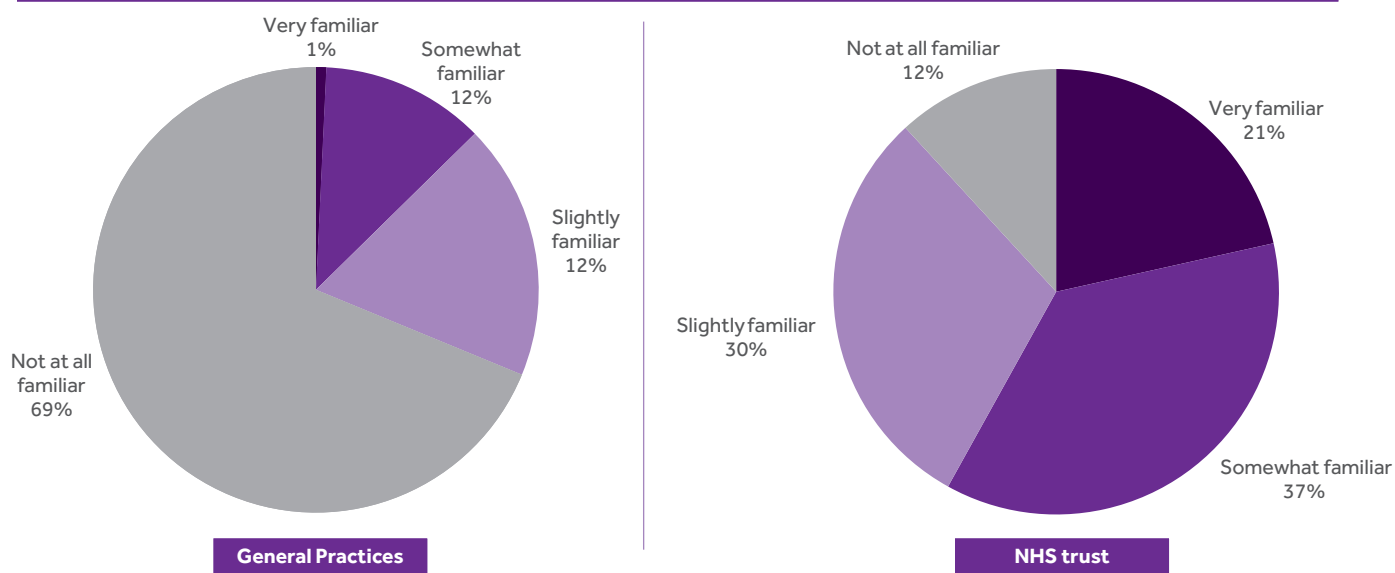
6 How locum doctor working arrangements affect patient safety and the quality of care

NHS England has published detailed guidance for healthcare providers, locum agencies and revalidation management services on supporting organisation engaging with locums and doctors on short term placements. The scope of the guidance is not stated explicitly but it clearly applies to all NHS organisations which use locums (it uses examples in both primary care and in NHS trusts) and is relevant to others, such as independent healthcare providers. It sets out a range of advice on areas such as pre-employment checks, induction, appraisal and revalidation, dealing with concerns, end of placement reports etc. As far as we know, there has not previously been work to follow up systematically on the operationalisation and implementation of the guidance since it was published in 2018.

Our surveys of NHS trusts and general practices suggest that awareness of the guidance 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 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 on areas like end of placement reporting and supporting the locum with appraisal and revalidation.

Figure 5. Familiarity with NHS England guidance on locum doctor working arrangements



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

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 were not able to do so. The position of locum doctors was by definition precarious – they could be removed or have a placement ended easily.

Figure 6. What locum doctors say about how organisations use them

“Not having supervision, not having anyone who you can go to about problems or just about having a rubbish time. I think that is a real problem.” (Interview 36, Locum, Secondary Care)

“I think it’s the fact that you are a trainee, and there is someone who has to look after you, that kind of gives a bit of protection in terms of your learning, which you don’t get as a locum, obviously, ‘cause you don’t have a supervisor...In some ways you are expected to work very independently as a locum, I think. You can ask for help obviously, but I do think that there is kind of an expectation that you kind of just get things done.” (Interview 13, Locum, Secondary Care)

“Unfortunately what I’ve found, which again goes back to communication issues and ego problems, is that people don’t want to hear what the locum has to say in terms of like how things might be improved...there’s not that openness. And it’s also that, I think it’s an attitude thing as well, to think that the locum has nothing to really add. You’re only here to see our appointments, it doesn’t really matter what quality of care you offer.” (Interview 70, Locum GP, Primary Care)

We found in some of our quantitative analysis that locum doctors in general practice were more likely than permanent staff to have trained outside the EEA, and there was among some respondents a marked distrust of doctors who had trained outside the UK. They were blamed for not having enough experience of working in the NHS (an alternative view would be that they would be welcomed for coming to the UK and adding to the medical workforce capacity) and some respondents questioned the equivalence of their training and prior experience to UK training and NHS placements. Overall, we think there was an element of racism underlying some of these attitudes and beliefs, and some locum doctors reported experiencing racism.

We would contrast this with the attitudes of patients to locum doctors, which were generally more accepting of locum working and valued access to seeing a doctor in a timely fashion over whether the doctor was a locum or not. While some patients wanted to see the same doctor each time, many 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.

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

Figure 7. What patients said about locum doctors

"I think locums are no different than regular doctors and they find themselves sometimes in a difficult position because they are thrown into unknown place and they have to figure it out quickly. And as I said, they sometimes lack this confidence that a regular doctor has, just from being in single place for a number of years...locums shouldn't be treated any differently than regular doctors, they've completed their education, their training, they want to help, they want to be professional, et cetera. Just perhaps the patients should be more tolerant."
(Interview 78, patient)

I don't even think our general GPs are familiar anymore...These days I don't even see a regular GP. I end up with them on the end of a telephone...I've never seen the same person and yes, well, a few of them were locums. None of them know me."
(Focus Group C, R3)

"I prefer to see a doctor who knows me because my medical history is complicated. And I think you haven't got time to look at everything. You know, I'm diabetic, I've got fibromyalgia, I've got arthritis, I have sleep apnoea. All connected with each other but you're not seen as a whole. And that's upsetting...that's my experience is that if they say a locum, I just think they're not going to get the full picture, it's easy to dismiss. Whereas when you see a regular doctor who knows your history, I feel at least I'm being listened to more." (Focus Group B, R1)

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.

In simple terms, we found some organisations were using locums poorly and often extensively, because of longstanding and endemic workforce shortages or problems. Others were using locums more selectively and effectively, as part of a wider workforce strategy aimed at creating sustainable capacity and flexibility and alongside other approaches.

Locum doctors are also very heterogeneous. Some have made the positive choice to locum for reasons of work-life balance or personal circumstance, some are locuming at the end of their medical career as an alternative to complete retirement, some are taking a break from medical training pathways to pursue other professional or personal interests and using locum working as a flexible way to sustain their income while doing so. We heard from our respondents concerns about some doctors working as locums because they could not get a permanent position, or because they had persistent problems in relation to their clinical performance or working relationships which made it difficult for them to sustain a permanent position. It must be said that description did not fit any of the locum doctors we interviewed, but doctors in that position were probably less likely to be willing to be interviewed.

One of the most concerning findings from our research was that when problems related to locum doctors' practice arose, they were not dealt with well. Firstly, organisations often did not provide feedback either to locum doctors themselves or to locum agencies at the end of placements. Secondly, when a problem

arose organisations often dealt with it by simply ending the locum placement early or not renewing it, without raising it with either the doctor or the locum agency. Thirdly, the formal mechanism for raising a problem with the locum doctor's responsible officer simply did not work. It relies on the responsible officer in the organisation where the locum was placed finding out about the problem, and passing information on via a form (the Medical Practice Information Transfer form developed by NHS England) to the locum doctor's responsible officer (who could be at the locum agency or at another designated body where the locum doctor works). This long chain of communication is not designed to deal with locum doctors or others who do not have a conventional employed relationship and whose relationship with employers or designated bodies is more distant and transient. Moreover, even if a problem does get flagged and there is a need for some kind of intervention – training, mentoring, clinical supervision or whatever – it is very difficult to secure that remediation without the locum doctor moving into a permanent job with an employer which has the capability and willingness to provide it.

This also raises some questions about the role and operation of locum agencies and alternative models of organisation. Locum agencies are generally designated bodies – that is they have a responsible officer who provides or oversees appraisal and revalidation for the locums that are connected to the agency, though many locum agencies outsource this function. But in practice it is difficult for locum doctors to assemble the portfolio of information needed for appraisal and revalidation, and locum agency responsible officers have virtually no first-hand knowledge of locum doctors' practice and often do not meet with them face to face at all. In addition, locum doctors may work with multiple agencies but the responsible officer has no way of knowing about their work with other agencies, and locum agency responsible officers have little scope to do anything about problems by way of remediation.

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

Figure 8. Views from locum agencies about locum doctor working arrangements

I don't know the doctors anywhere like as much as I did when I was an RO in the NHS, I knew them all personally. If I used to have a problem, I used to get them in my office there and then, chat it all through, sort it. Can't do that in locum world, it might take me four days to get hold of the doctor, some of them won't respond immediately. I always will have a telephone conversation with them. They don't know me and I don't know them."
(Interview 51, Locum Agency RO)

There is now a system in place ... called the MPIT, it's an official form ... so somebody signs on with us, a new doctor and connects as a designated body, we send the previous responsible officer this form, basically saying, is there any history with this doctor and their answer is either yes or no. The returns on these forms are not reliable because I would think 50 per cent of the ones, I send off don't get returned ... the returns are pretty poor. Now we don't chase them up because administratively it's a difficult thing to do with our resources." (Interview 47, Locum agency RO)

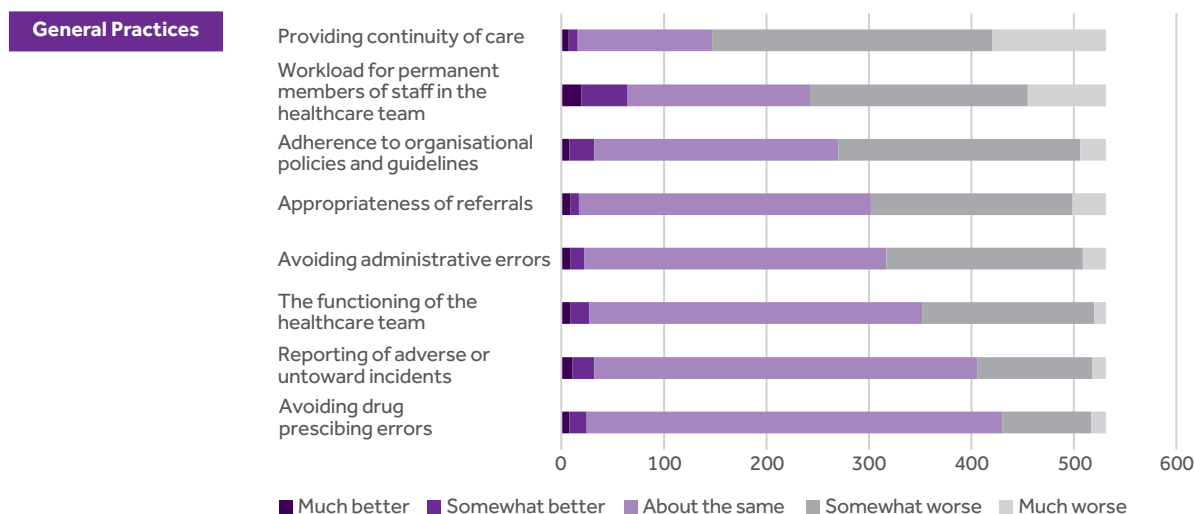
Many of these problems were discussed when medical revalidation was being designed and implemented, and were also highlighted in research on medical revalidation, but they remain unresolved. The emergence of locum chambers – collective membership organisations run by locums themselves – may provide some solutions. At present, locum agencies are not regulated by the Care Quality Commission and one route to reform could be to have system of licensing or regulation for agencies alongside that for healthcare providers, and to use that to promote compliance with NHS England and General Medical Council guidance.

Overall, the qualitative fieldwork highlighted the importance and value of treating locum doctors decently, and affording them the support that would normally be given to permanent members of staff. Locums were more likely to want to work in organisations which afforded them that kind of support, and were more able to do their job properly, and that meant work was less likely to be displaced to other members of the clinical team, and problems related to the quality and safety of care were less likely to arise.

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

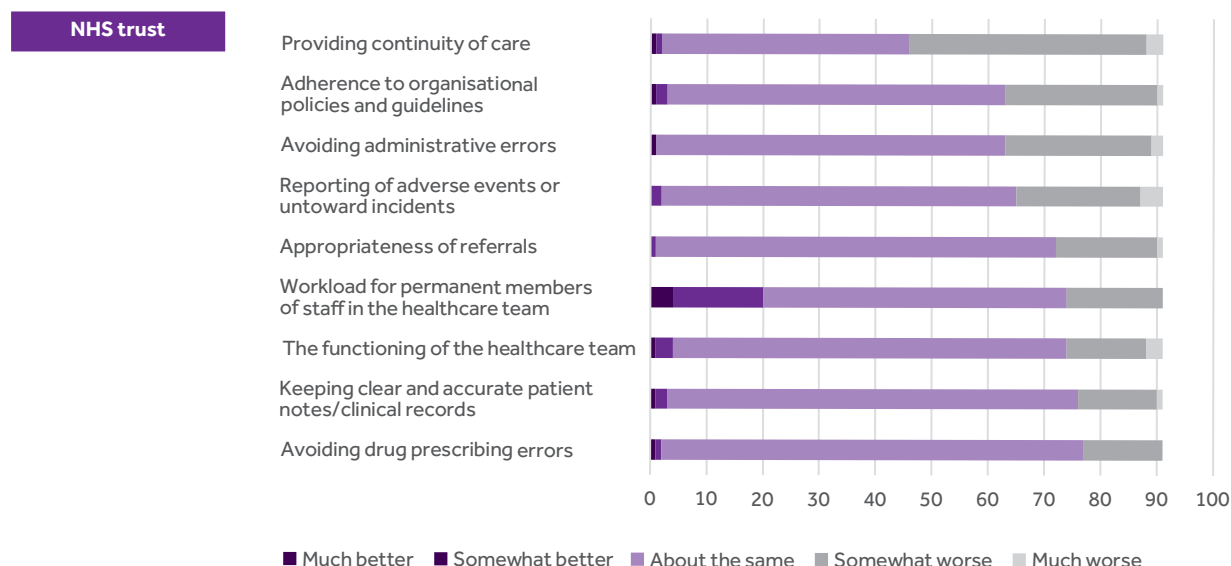
From our surveys of NHS trusts and general practices, respondents generally reported that on a range of areas of clinical practice, they thought locum doctors performed about the same as or worse than permanent doctors. It is notable that the areas where they tended to think locums performed worse were 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.

Figure 9. Perceptions of aspects of care provided by locum and permanent doctors in general practices and NHS trusts



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

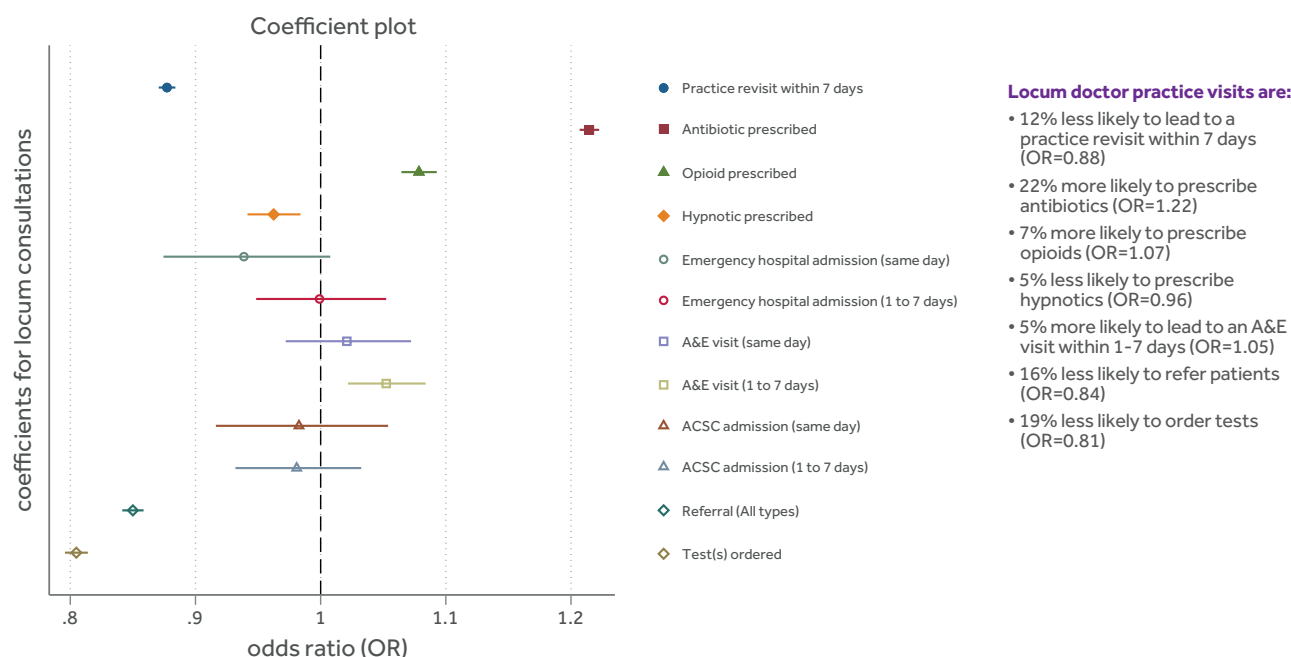
Figure 9. Perceptions of aspects of care provided by locum and permanent doctors in general practices and NHS trusts



We were able to explore differences in practice in primary care directly through our quantitative analysis of primary care electronic patient records, 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 seven days than those who had seen a permanent doctor. We could hypothesise that a return visit can indicate that a problem was not resolved at the first visit; or we could alternatively argue that return visits are a sign of effective follow-up and safety-netting decisions at the first visit. We found 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 A&E within seven days but there was no difference in rates of emergency hospital admission after a practice visit. Our qualitative fieldwork may help us to understand some of these differences, and suggests that they arise more from the complex interplay of the organisational setting and working arrangements for locums than from particular clinical practice characteristics of locum doctors per se.

Figure 10. Multivariate regression analysis of differences in quality and safety indicators between locum and permanent doctors in general practice in England



8 Conclusions and implications for policy and practice

The NHS needs locum doctors. They are a key component of the medical workforce in the NHS and provide necessary flexibility and additional capacity for healthcare organisations and services. But they should be used appropriately, and where they are used they should be supported effectively. Here we summarise the key points from our research findings and outline some implications.

- Locum doctors are just one way of providing medical workforce flexibility and capacity – others include internal staff banks, flexible working arrangements and contracts, hybrid clinical posts, role substitution and so on. Using locum doctors should be far from the only strategy NHS organisations use to provide medical workforce flexibility and capacity.
- At a system or national level, increased locum working probably has marginal effects on overall workforce capacity. It might bring a few doctors back into the workforce who would not otherwise be working as doctors in the NHS but our research suggests that it is mostly a “zero sum” game, with doctors who would otherwise be working in conventionally employed positions moving into locuming, and some doctors working what is effectively some overtime on top of their conventionally employed position as a locum.
- Locum doctors provide a relatively small proportion of patient care in both NHS trusts and primary care, and that share of care provided by locums has not increased as much as people think in recent years. But locum use is much higher in some areas of England, some organisations, and some specialties. It is higher in smaller organisations/practices, and higher in those with worse Care Quality Commission ratings.
- Locum doctors are a heterogeneous group – including some doctors taking time out of a training pathway, some wanting to work flexibly because of family or caring responsibilities, some recently registered in the UK and wanting to gain experience, and some towards the end of their careers wanting part-time and flexible work but not wanting to retire yet. Some people told us there were doctors working as locums who could not find or hold down a permanent job, but we did not think we met any locums like this in our interviews.
- For many doctors working as locums, their choice to do so has been influenced by some adverse experiences they may have had working in a conventional employed position in an NHS organisation. Locum interviewees referred to the growing and unmanageable workload, increasing work stress and burnout, loss of professional autonomy and control, a lack of recognition and reward, the burden of non-clinical and administrative work, and the simple fact that they could be better paid as a locum while working less and having more flexibility and work/life balance.
- The sustained high use of locums – what some interviewees termed a “service running on locums” is problematic and may well be a threat to patient safety and quality. The use of a lot of short-term locums who are unfamiliar with the organisation may also be a particular safety and quality concern. The Care Quality Commission and others should consider locum usage in their inspections/visits to organisations and perhaps be particularly concerned where it is a “forced choice” – organisations who have no alternative but to use locums to keep a service running, and locums who have no alternative but to work in temporary positions.
- There is quite a bit of prejudice against locums. They are blamed by some people for being paid more than permanent staff, criticised for not contributing fully, and sometimes regarded as less clinically competent than permanent doctors. There is a racist undertone to some of the criticisms we heard, particularly about doctors who trained outside the UK, and some locum doctors reported their experiences of racism.

8. Conclusions and implications for policy and practice

- The NHS England national guidance on locum working arrangements is pretty good, but awareness is poor (especially in primary care) and adherence beyond the basics of checking General Medical Council registration and the like is very variable. It is worth thinking of ways that the Care Quality Commission or others could check up on locum working arrangements during inspections/visits.
 - The best organisations invest properly in locums by providing a decent induction and support, involving locums properly in activities like clinical staff meetings, professional development, and audit or quality improvement. This is clearly more feasible with longer-term locums who should also be supported with appraisal and revalidation. This is all covered in the NHS England guidance and in the long run organisations will get better value for money from locums who are treated as much like other staff as possible.
 - There are some differences in practice and performance between locum doctors and permanent doctors. These seem likely to relate more to organisational working arrangements than to any intrinsic differences in clinical performance or competence. We found a really mixed picture of differences in practice in primary care which we are very cautious about interpreting but deserves further investigation.
 - When there are concerns about the practice of a locum doctor, they are often not dealt with properly. Locums and locum agencies get little feedback on performance, placements may just be terminated early, and the arrangements for dealing with a significant concern (which would require reporting to the locum's responsible officer and potentially to the General Medical Council) are not fit for purpose.
 - It is difficult to see how a locum agency can provide proper remediation (such as training, supervised clinical practice and the like) for a doctor who needs it. Such doctors probably need to go into a conventional employed position to get remediation but it may be difficult for them to find an organisation which will take them on.
 - Locum agencies act as designated bodies (providing appraisal and making revalidation recommendations to the General Medical Council for the doctors who are connected to them rather than to another employer) but it seems questionable whether locum agencies can actually fulfil the requirements of appraisal and revalidation properly. They do not have effective oversight of the full scope of practice of the doctors that are connected to them. Arguably, locum agencies should not be able to be designated bodies – but that would leave the question of who would deal with appraisal and revalidation for locum doctors who do not have a prescribed connection to an employing body such as an NHS organisation.
 - Overall the governance of locum doctors and of locum agencies remains problematic. It is worth noting that while health and care providers are regulated by the Care Quality Commission, and individual doctors are regulated by the General Medical Council, staffing agencies (including locum agencies) are not regulated by anyone. There are no controls on who can set up a locum agency or on how it is run.
 - In some places, particularly in primary care, self-organised groupings of locum doctors into “locum chambers” have emerged, and this has been supported by the National Association of Sessional GPs. Locum chambers are an interesting and potentially helpful innovation which could provide another way to deal with the governance issues raised above in relation to locum doctors.
- We hope this research helps locum doctors and people who work with them in the NHS and contributes to the future development of policy in this area by government, regulators and other key stakeholders. We thank everyone who contributed to and supported our research, and especially members of our Project Advisory Group and Patient and Public Forum for their invaluable help and support throughout the project. We thank all research participants, including those who responded to our two national surveys of NHS trusts and general practices in England and those who were interviewed and participated in focus groups.

The study sponsor for the research was the University of Manchester. The study received ethical approval from the Health Research Authority on 8 December 2020 (IRAS project ID: 278888; REC reference: 20/NW/0386). Data from the Clinical Practice Research Datalink (CPRD) were obtained under licence from the UK Medicines and Healthcare products Regulatory Agency (MHRA). The data is provided by patients and collected by the NHS as part of their care and support. Hospital Episode Statistics (HES) data are subject to Crown copyright (2022) protection, re-used with the permission of The Health & Social Care Information Centre, all rights reserved. The CPRD study protocol was approved by CPRD's Independent Scientific Advisory Committee (ISAC) (reference: 20_000246). We would like to acknowledge all the data providers and general practices who make anonymised data available for research.

This report draws on independent research commissioned by the National Institute for Health and Care Research (NIHR128349). This research is also supported by the National Institute for Health and Care Research Greater Manchester Patient Safety Translational Research Centre (NIHR Greater Manchester PSTRC, Grant number: PSTRC-2016-003).

The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, MHRA, MRC, CCF, NETSCC, the Health Services Delivery Research programme or the Department of Health. In addition, the views and opinions expressed by the interviewees in this publication are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, MHRA, MRC, CCF, NETSCC, the Health Services Delivery Research programme or the Department of Health.

References

1. Moberly T. Number of locums has doubled since 2009. *BMJ*. 2016;355.
2. NHS Digital. General Practice Workforce, experimental statistics. <https://digital.nhs.uk/data-and-information/publications/statistical/general-and-personal-medical-services/final-31-march-2019-experimental-statistics>. Published 2019. Accessed 1st June 2019, 2019.
3. General Medical Council. What our data tells us about general practitioners working for the NHS in England and Scotland. 2018.
4. Nutt T. Don't talk about the money? The King's Fund. <https://www.kingsfund.org.uk/blog/2017/03/dont-talk-about-money>. Published 2017. Accessed.
5. Morgan M, McKeivitt C, Hudson M. GPs' employment of locum doctors and satisfaction with their service. *Fam Pract*. 2000;17(1):53-55.
6. Lind S. Stop denigrating GP locums, 'livid' GP leader tells NHS England. *Pulse*. www.pulsetoday.co.uk/your-practice/practice-topics/employment/stop-denigrating-gp-locums-livid-gp-leader-tells-nhs-england/20034172.article. Published 2017. Accessed December 2017.
7. NHS Improvement. Agency controls: expenditure reduced by £1 billion and new measures. NHS Improvement. <https://improvement.nhs.uk/news-alerts/agency-controls-1-billion-saving-and-new-measures/>. Published 2017. Accessed February 2017.
8. Rimmer A. Locum pay rates have increased despite hourly rate cap. *BMJ*. 2017;356:j135.
9. Ferguson J, Walshe K. The quality and safety of locum doctors: a narrative review. *J R Soc Med*. 2019;112(11):462-471.
10. McKeown A, Griffin A. Locum Appraisal, Revalidation and Governance Report. 2016.
11. Chapman R, Cohen M. Supporting organisations engaging with locums and doctors in short-term placements: A practical guide for healthcare providers, locum agencies and revalidation management services. NHS England 2018.
12. NHS Improvement. Reducing reliance on medical locums: a practical guide for medical directors. <https://improvement.nhs.uk/resources/reducing-reliance-medical-locums-practical-guide-medical-directors/>. Published 2016. Accessed 1st March 2017.
13. Archer J, Bloor K, Bojke C, et al. Evaluating the development of medical revalidation in England and its impact on organisational performance and medical practice: overview report. Manchester: University of Manchester, University of York and University of Plymouth; 2018.
14. Walshe K, Boyd A, Bryce M, et al. Implementing medical revalidation in the United Kingdom: Findings about organisational changes and impacts from a survey of Responsible Officers. *J R Soc Med*. 2017;110(1):23-30.
15. Ferguson J, Tazzyman A, Walshe K, et al. 'You're just a locum': professional identity and temporary workers in the medical profession. *Sociol Health Illn*. 2021;43(1):149-166.
16. General Medical Council. Taking revalidation forward: improving the process of re-licensing for doctors. Sir Keith Pearson's review of medical revalidation. 2017.
17. CQC. Investigation into the out-of-hours services provided by Take Care Now Care Quality Commission. www.cqc.org.uk/sites/default/files/documents/20100714_tcn_report_part_1.pdf. Published 2010. Accessed November 2017.
18. NHS Professionals. Patient safety: addressing temporary worker clinical standards, governance and compliance. 2011.
19. The Royal College of Surgeons of England. Locum Surgeons: Principles and standards. In: London: The Royal College of Surgeons of England; 2011.
20. Kirkup B. Reading the signals. Maternity and neonatal services in East Kent—the report of the independent investigation. 2022.
21. Campbell JL, Roberts M, Wright C, et al. Factors associated with variability in the assessment of UK doctors' professionalism: analysis of survey results. *BMJ*. 2011;343.
22. McKeivitt C, Morgan M, Hudson M. Locum doctors in general practice: motivation & experience. *Br J Gen Pract*. 1999;49:519-521.
23. Chan T, Sabir K, Sanhan S, Sherbino J. Understanding the Impact of Residents' Interpersonal Relationships During Emergency Department Referrals and Consultations. *J Grad Med Educ*. 2013;5(4):576-581.
24. General Medical Council. What our data tells us about locum doctors Manchester 2018.
25. General Medical Council. Secondary care locums report Manchester 2015.
26. Dean B, Schachter M, Vincent C, Barber N. Causes of prescribing errors in hospital inpatients: a prospective study. *Lancet (London, England)*. 2002;359(9315):1373-1378.
27. Blumenthal DM, Olenski AR, Tsugawa Y, Jena AB. Association between treatment by locum tenens internal medicine physicians and 30-day mortality among hospitalized medicare beneficiaries. *JAMA*. 2017;318(21):2119-2129.

