The Health Foundation's response to the Health and Social Care Committee's inquiry – The future of General Practice

December 2021

About the Health Foundation

The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK. Our aim is a healthier population, supported by high quality health care that can be equitably accessed. We learn what works to make people's lives healthier and improve the health care system. From giving grants to those working at the front line to carrying out research and policy analysis, we shine a light on how to make successful change happen.

Introduction

Health systems with strong primary care as their foundation are more efficient, more cost effective, more equitable and have better patient outcomes than systems based on specialist care[i]. In the NHS, general practice encourages good health – via screening and health promotion - and plays a key role in disease diagnosis, management and monitoring.

Pressures on general practice are long-standing, significant, and growing[ii]. Changing population health needs, including growing numbers of people with multiple chronic conditions, and requirements to deliver a wider range of services are compounded by longstanding workforce shortages. COVID-19 has made things worse. General practice is dealing with the clinical care of COVID-19 patients, addressing pent-up demand from lockdowns, delivering key elements of the vaccine programme, and supporting patients caught in secondary care backlogs. Meanwhile, general practice is expected to pay a central role in new Integrated Care Systems, expanding access to services via a broadened range of allied health professionals, and helping develop more integrated models of care[iii,iv].

This submission focusses on two related themes – access and equity - and makes the following key points:

- Current pressures are unsustainable. GP workload and consultation rates are higher than pre-pandemic, but the number of permanent, fully-qualified GPs has fallen since 2015.

- The biggest barrier to improving access to general practice is a lack of GPs. Current attempts to recruit GPs are unlikely to meet their targets. Recruitment and retention of GPs in socioeconomically deprived areas is particularly difficult. Core features of general practice - such as continuity of care - are threatened, but can be supported with focused action.

- In areas of high deprivation, general practice is under-funded and under-doctored. General practices in poorer areas are less likely to perform well on all major markers of quality.

- Current policies for funding and staffing general practice risk widening existing health inequalities. Focussed action to correct disparities in funding and workforce between deprived and affluent areas is urgently needed.

Section 1: The access challenge

There are no comprehensive measures of total workload for general practice, but demand is rising.

Rising demand for general practice pre-dates the COVID-19 pandemic, and is driven by a complex mix of factors. The population is growing[v], and, on average, each person is consulting their GP more often[vi]. The number of people with multiple long-term health conditions, is rising, and people are living for longer in ill health[vii,viii]. Cuts to local authority-funded public health services have coincided with a growth in preventable ill health[ix], which must then be managed by general practice and other NHS services. The system of payment for general practice – weighted capitation – means that the service is not paid more for this increased activity.

After a drop in the first COVID-19 lockdown, GP appointment data collected by NHS Digital shows a quick recovery in appointment numbers in general practice. They have been at or above pre-pandemic levels since September 2020[x]. In October 2021 there were 30.4 million appointments in general practice in England: 1.45 million appointments per working day. In addition, 3.5 million people in October 2021 received a COVID-19 vaccination through general practice. The proportion of face-to-face appointments has risen slowly in recent months, to 64.4% in October 2021 (compared with 81% in October 2019).

Nationally available appointments data have limitations, and do not give a full picture of workload in general practice. NHS Digital appointments data are automatically extracted from GP IT systems, and NHS Digital advises that they are not designed for data analysis purposes. In addition to variation in data quality and completeness, the appointments data does not tell us anything about about the content of the consultation, the time spent on the consultation, any referrals or other work generated from it. Much of the workload of GPs – such as reviewing and responding to test results or correspondence from secondary care and social care – is not captured in these data. And appointment data tells us only about actual use of general practice – it does not measure un-met need.

Health Foundation analysis from a sample of practices using digital first triage (where patients use predominantly online methods as an initial route of access to primary care) also shows rising demand for general practice: there was a 15.8% increase in patient requests for consultations during the first year of the pandemic compared to the previous year. National Audit Office analysis suggests that referral activity from general practice to secondary care has not yet recovered[xi]. Catching-up these 'missing referrals' is likely to increase GP workload. So too will the management of patients waiting on already record-sized waiting lists for secondary care[xii].

Rises in workload aren't matched by rises in GP numbers

Rising GP workload has not been matched by increases in the general practice workforce. Despite a series of pledges, and concerted action to increase GP numbers (including progress on increasing the number of GP trainees), there are currently 456 fewer full time equivalent fully qualified GPs, compared with 2015[xiii,xiv]*.

Our 2019 analysis of GP numbers in England in '*Closing the Gap*'[xv] found that even with continued efforts to increase the number of GPs in training, the number of GPs in the NHS would fall substantially short of demand. This is because growth in supply from GPs entering the workforce from training, international recruitment or re-joining the workforce is more than offset by the increase in patient demand and GPs retiring, leaving or otherwise cutting their hours. If staffing trends observed in 2019 were to continue, we projected that the NHS in England would face a shortfall of 7,000 FTE GPs in 2023/24 and the shortfall would increase to 11,500 FTE GPs by 2028/29. The Health Foundation are in the process of updating this analysis to account for the latest available data on the primary care workforce, including accounting for the impact of the introduction of additional allied health professionals via primary care networks (PCNs). We plan to publish updated workforce projections in summer 2022.

One product of the persistent mismatch between supply and demand in general practice is that GPs are leaving or reducing their hours[xiii,xiv], increasing pressure on those who remain. Pre-pandemic, Health Foundation analysis of the 2019 Commonwealth Fund international survey of general practitioners showed that just 6% of GPs in the UK reported feeling 'extremely' or 'very' satisfied with their overall workload, the lowest of the 11 high-income countries surveyed. 60% of UK GP respondents reported that they find clinical practice to be 'very stressful' or 'extremely stressful', the second highest of the 11 nations, and 49% of UK GP respondents planned to reduce their weekly clinical hours in the next 3 years[xvi]. This has likely worsened during the pandemic; polling from 2021 suggests just over half of GPs are considering quitting the profession or retiring early[xvii,xviii]. Burnout doesn't just affect mid to late career GPs. According to the 2021 GMC National Training Survey, 13% of GP trainee respondents reported high feelings of burnout and 40% moderate feelings of burnout[xix].

High GP turnover – the proportion of GPs leaving a practice – is a concern for several reasons. It may be associated with practices experiencing repeated problems with recruitment and retention, be expensive for practices, and adversely affect patient care (for example by reducing continuity of care[xx,xxi,xxii,xxiii]). Health Foundation funded research demonstrates an increase in GP turnover in the past decade, with regional variation. Practices in the most deprived areas also have higher GP turnover rates than practices in the least deprived areas[xx].

Continuity of care improves outcomes and can be maintained

Increases in the number of GPs working less than full time, and rising GP turnover is likely to impact an integral part of general practice – continuity of care.

Continuity of care usually describes an ongoing therapeutic relationship between an individual clinician and a patient (relational continuity). But the term can also describe the consistency of care between teams (management continuity), or across patient records and information (informational continuity[xxiv]). Relational continuity of care is most frequently

studied, and is associated with better health outcomes[xxv], higher patient satisfaction[xxvi], lower mortality[xxvii], and fewer unplanned hospital admissions[xxviii,xxix].

*NHS Digital changed their methodology for counting GP numbers in June 2021[xxx]. If the previous methodology were still used there would be 1744 fewer FTE fully qualified GPs compared with 2015[xiii,xxxi].

The named GP scheme, introduced in 2014, aimed to improve continuity of care by requiring practices to give all patients over 75 a named GP[xxxii]. The intervention did not achieve the desired effect – continuity of care worsened after its introduction, and researchers concluded that 'continuity of care in the patient-doctor relationship is much more complex than the simple allocation of a named doctor'[xxxiii].

Between 2019 and 2021, the Health Foundation funded five sites across England, as part of its Improving Continuity of Care in General Practice programme, to understand whether improvement approaches could be used to increase continuity of care[xxxiv]. The programme predominantly focused on relational continuity. Results from this work will be published in early 2022, but provisional findings from the independent evaluation indicate:

1. That improving or maintaining continuity of care was possible based on several patient reported measures, even in the context of pandemic.

2. Increasing continuity of care can be achieved without detriment to timely access (based on surveys of patient and staff experience).

3. Continuity mattered to patients. More than half who were surveyed in the programme were willing to wait longer to see their preferred GP.

4. Improving continuity of care can lead to increased efficiency and higher quality of care. Part of this includes enabling patients to be more proactive in their self-care and allowing them to be more confident in playing an active role in their own health and wellbeing.

5. Patients experiencing greater continuity of care in the programme were more likely to be older, male, have more frequent GP contacts, live in less deprived areas, and have white ethnicity. But there is learning to suggest that continuity may benefit other groups. Findings from one practice indicated that targeted continuity in younger, healthier patients experiencing new or changing symptoms can help reduce the use of urgent and emergency care services[xxxv].

A mix of factors may impact the ability of general practice to provide continuity of care in the future. These include increasing numbers of GPs working less than full time, the expansion of digital first primary care[xxxvi,xxxvii], and the inclusion of up to 26,000 allied health professionals in the general practice workforce through PCNs.

The Health Foundation is undertaking analysis to explore the association between remote consulting and continuity of care, and has also funded the University of Manchester to conduct a longitudinal study of the impact of the additional workforce on continuity of care in general practice.

Government plans to improve access and support general practice are unlikely to succeed

Plans to improve access for patients and increase support for general practice, announced by NHS England in October 2021[xxxviii], are unlikely to be enough to address current pressures[xxxix]. In the short term, the £250 million of additional funding in the Winter Access Fund will be a boost to some practices, and flexibility over how the money is spent is welcome. But additional funding will be little help without more staff. Many areas will struggle to buy additional GP cover, even with extra money.

The plan's approach to improving performance may have unintended consequences. Publishing practice-level data on appointments (currently only available at CCG level) could help improve understanding of capacity issues, but there is a risk that data are used for blame and performance management instead[xl]. Measures intended to support general practice and guarantee the quality of the service may be viewed as punitive by GPs, and suggested performance measures – such as identifying the bottom 20% of practices in an area by number of face-to-face consultations - are crude.

The narrative on face-to-face appointments risks being over-simplified. Remote consultations work well for some patients, and some problems[xli,xlii,xliii]. Policymakers hope that expanding online access to general practices will improve access to care and help manage workload pressures on GPs. The 2019/20 GP contract required practices to offer expanded online access, including online consultations by April 2020[xliv]. This transition was accelerated by the pandemic[x,xlv,xlvi]. The need for infection control has driven a widespread shift towards telephone consulting. But practices are taking a range of approaches to online access. Many offer 'hybrid' routes of access - fulfilling their contractual requirements to offer online services, and offering patients the option of contacting them via more traditional means (e.g by phoning the practice reception team). Some practices have adopted entirely 'digital first' approaches – requiring patients to access care via online routes in the first instance.

There is limited understanding of the impact of these changes on patient access or GP workload. Health Foundation analysis of a group of practices using entirely 'digital first' access showed a significant rise in consultation rates in the past year, but did not find that this was driven by online access. GPs at these practices are tailoring care delivery to patient needs and preferences: face-to-face consultations were more likely to be used for very old or very young patients, for new medical problems and for non-frequent users (full analysis will be published by the Health Foundation in early 2022).

But digital first models of accessing general practice may be increasing workload for GPs[xlvii]. Some GPs may not enjoy remote consulting; overall implications for job satisfaction – and recruitment and retention of GPs – are unclear. And a broader digital care offer risks widening inequity in access to general practice; people living in more deprived areas are more likely to be 'digitally excluded' than people living in wealthier areas[xlviii,xlix]. Evaluation of the range of approaches to digital first primary care is required to ensure that implementation doesn't increase practice workload or drive inequity in access to general practice.

Section 2: The equity challenge

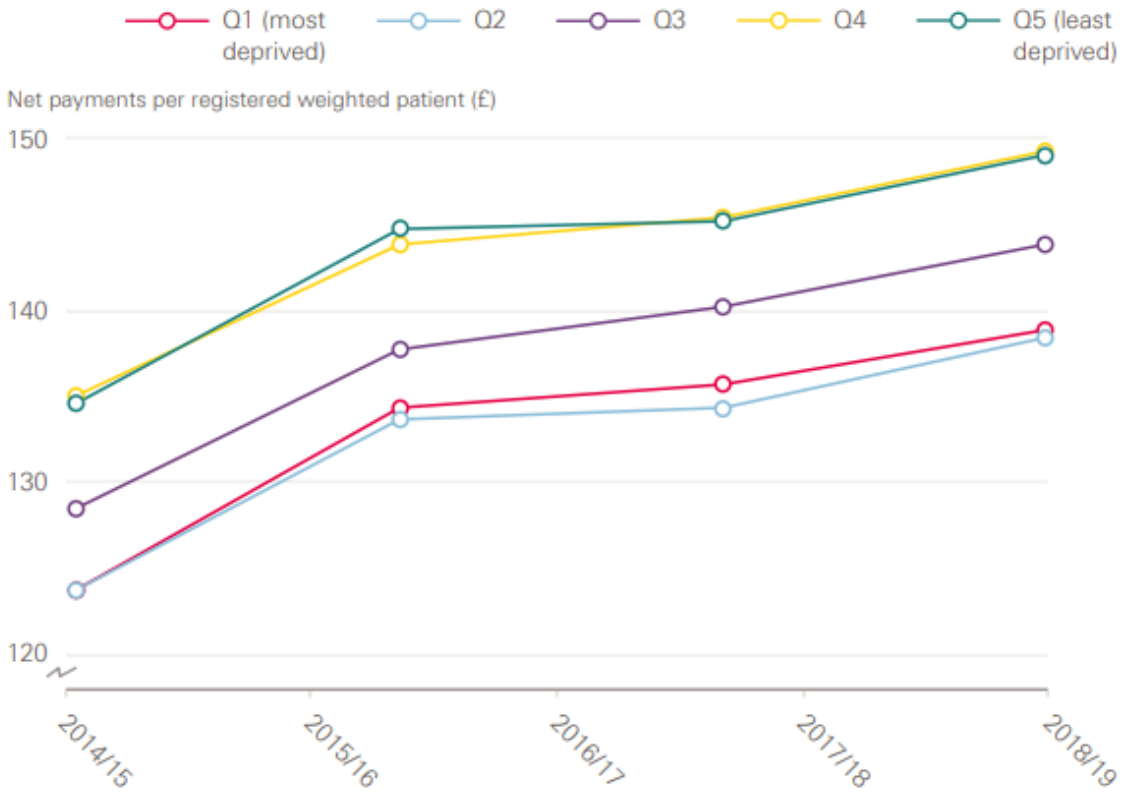
50 years after it was first described, the inverse care law persists in general practice in England[l,li] Health needs are greatest in the most deprived areas, where people develop more health conditions and at an earlier age[viii,lii]. Health Foundation work suggests that inequities in access to general practice are wide and may be growing. Our analysis shows that general practice in these areas is under-funded, under-doctored and may be of lower quality. Urgent action is required to 'level-up' general practice in England[1].

**unless otherwise stated, data cited in this section is taken from Level or Not – Health Foundation analysis published Sept 2020[li]*

Funding

GP practices serving more socioeconomically deprived patient populations receive similar funding per registered patient to those serving less deprived patient populations. Once these populations are adjusted to account for increased workload associated with greater health needs in poorer areas, practices serving more deprived populations receive around 7% less

Figure 1: Trends in GP practice payments per patient by neighbourhood deprivation



Source: Data are from NHS Digital, ONS, and MHCLG quintiles aggregated from LSOA 2011 neighbourhoods

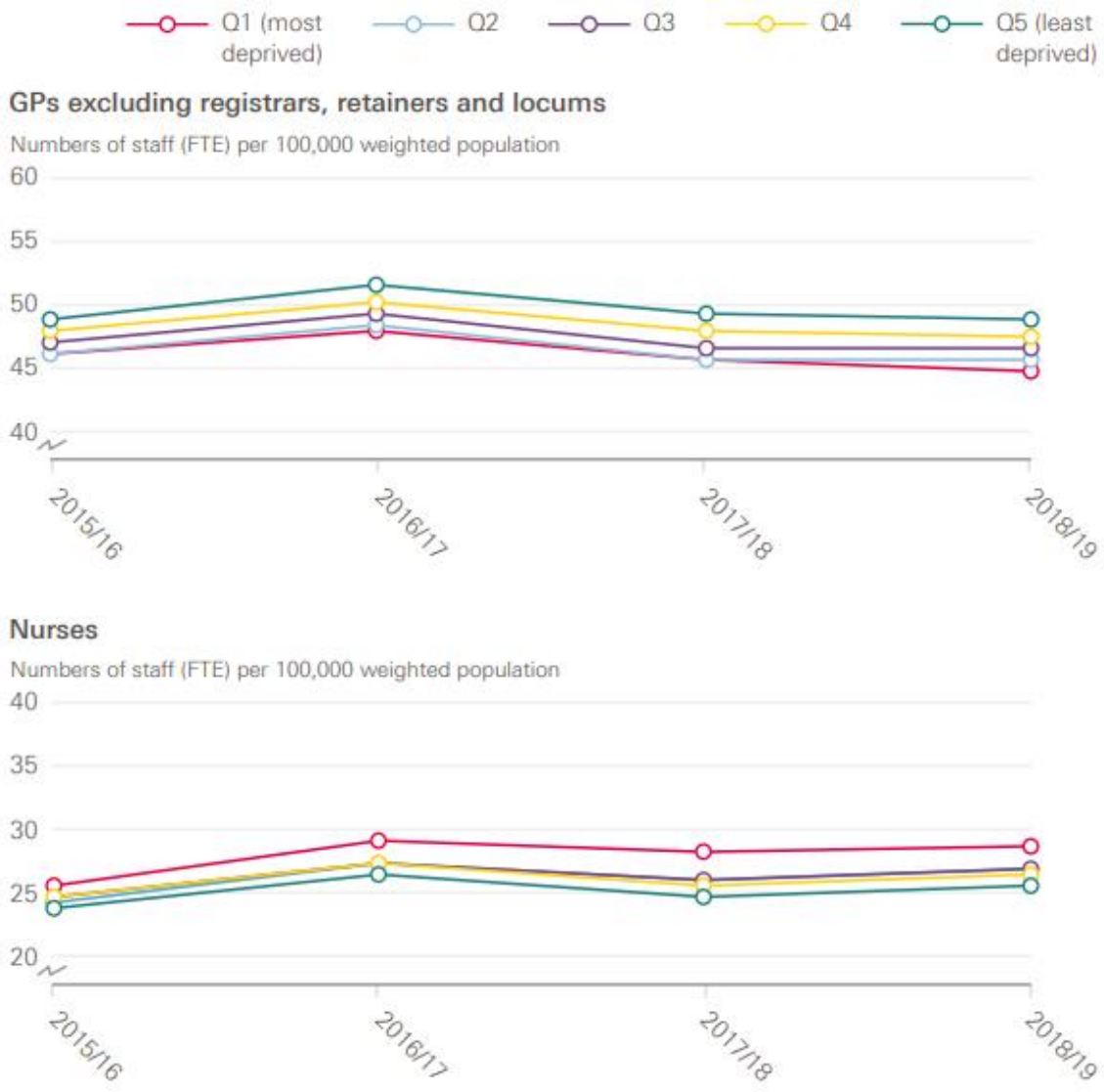
funding per need adjusted registered patient than those serving less deprived populations. This trend has persisted over time and is not narrowing (Figure 1).

Inequities in general practice funding are largely driven by the funding formula for general practice, the 'Carr-Hill' formula (also known as the 'global sum' formula). This aims to distribute funding to practices based on an estimate of their workload. Payments made using the formula typically account for around half of a practice's income[liii]. The Carr Hill formula has long been acknowledged to inadequately weight for need associated with socioeconomic deprivation.[liv,lv,lvi] Promises to 're-do' the formula have been made repeatedly since 2008, but the formula has not been changed.[lvii,lviii, lix]

Workforce

There are fewer GPs per head of need adjusted population in deprived areas than in affluent areas, but more practice nurses (Figure 2).

Figure 2: Trends in general practice workforce supply per 100,000 population by neighbourhood deprivation



This suggests a lower supply of doctors in deprived areas, and a possible substitution of nurses for doctors in poorer areas. After accounting for different levels of need, a GP working in a practice serving the most deprived patients will on average be responsible for the care of almost 10% more patients than a GP serving patients in more affluent areas. Workforce inequalities are increasing for several key roles, including GPs and paramedics[lx].

Practices serving patients living in more deprived areas tend to have fewer GPs. Single-handed practices (those run by a single GP 'partner') are particularly over-represented in the most deprived fifth of neighbourhoods. A disproportionate number of older GPs, particularly those aged 65 and older, work in the most deprived areas. Younger GPs tend to be working in more affluent areas. Left unaddressed, there is a risk of inequalities in GP supply widening as older GPs working in areas of high deprivation eventually leave the workforce.

The COVID-19 pandemic may have added to workforce instability in deprived areas, and widened inequity in access, particularly in relation to face-to-face GP consultations. A relatively large number of GPs are at high risk of mortality from COVID-19, and these GPs are over-represented in single-handed practices, and in areas of high deprivation[lxi].

Quality

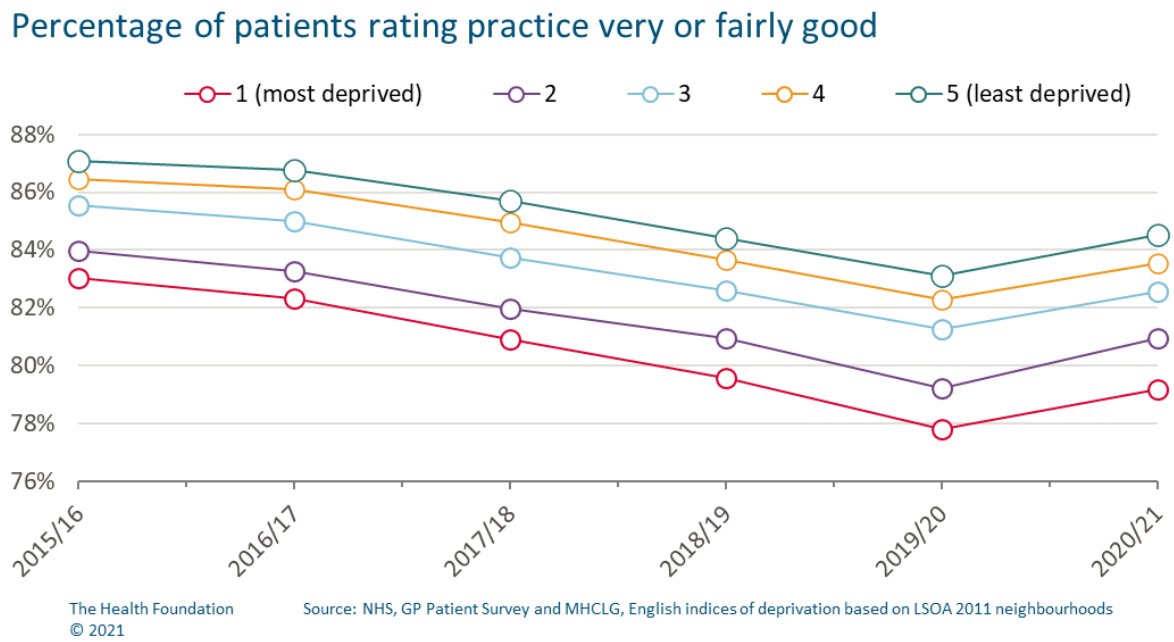
There is no single definition of quality in general practice[lxii,lxiii,lxiv,lxv]. A range of indicators and frameworks are used to measure NHS general practice. These include Care Quality Commission (CQC) ratings, Quality and Outcomes Framework (QoF) scores, and GP patient satisfaction surveys. Measures of quality may themselves be affected by deprivation (for instance, achieving high QoF scores may be harder in more deprived areas[lxvi]).

Following the introduction of QoF in 2004, gaps in QoF performance between practices in wealthier and poorer areas narrowed[lxvii]. By 2011, Dixon et al concluded that differences in performance between practices in deprived and affluent areas had 'all but disappeared'. But analysis of data from 2015–2019 found a persistent, linear correlation between QoF scores and deprivation: practices in the most deprived areas averaged the lowest number of QoF points, and those in the most affluent areas scored the highest. This translates to larger average payments for practices in the most affluent areas.

The CQC has been inspecting general practices in England since 2014. Most practices are rated as 'good', but analysis of the first complete round of inspections showed that practices in more deprived areas were more likely to receive lower ratings of 'inadequate' or 'requires improvement'[lxviii]. Almost 2% of practices in the most deprived quintile were rated 'inadequate' compared to less than 0.5% in the least deprived. 5% of practices in the most deprived areas were rated as requiring improvement, compared to just over 2% for the least deprived.

Health Foundation analysis of data from the GP Patient Survey (an annual survey of around 850,000 patients in England), suggests that experience of and access to general practice varies across England[lxix]. Patients living in more socioeconomically deprived areas have poorer overall experiences of their GP practices compared with patients in less deprived areas. Between 2015-2021, practices serving the most deprived areas received the lowest overall patient satisfaction scores, whilst practices in the most affluent areas received the highest (Figure 3).

Figure 3: **Trends in patient satisfaction score by neighbourhood deprivation**



Although around two thirds of people report a good experience of making appointments, patients at GP practices in more deprived areas, younger people and Asian people report worse experiences of making appointments. These groups are also less likely to find it easy to get through to their practice by phone.

The intersection of access and equity

Unless universal services are resourced and delivered at a scale and intensity proportionate to the degree of need, policies to increase overall access to general practice may widen health inequalities[lxx]. Recent policies to increase access to general practice do not pay sufficient attention to equity.

Recent increases to general practice funding (which are largely channelled through PCNs) use the Carr-Hill formula – perpetuating inequities in funding distribution between more and less deprived areas. And there are no mechanisms to ensure that the additional PCN workforce are distributed in proportion with need. If PCNs in more affluent areas are more able to recruit, the expanded primary care workforce is likely to be skewed towards wealthier areas[lxxi].

We have previously set out the case for 'levelling up' general practice in England, and identified priorities for government[lxxii]. In January 2022 we will publish analysis of the national policies that have sought to improve general practice in deprived areas of England since 1990, and will set out implications for future policy. These will include recommendations to review funding allocations for general practice in England to ensure they support equitable provision of care, and developing a medium and long-term workforce strategy for general practice as part of a broader overall workforce strategy for the NHS in England.

Conclusion

There are no short-term fixes to the workforce crisis in general practice. Increasing skill mix in general practice, and careful expansion of digital access could help redress mismatched supply and demand, but will take time to implement well. Meantime, further attempts to increase access – particularly if based on blunt metrics – risk increasing practice workload and adding to pressures on a precarious workforce. Focusing on *appropriate* access to general practice is more challenging. Among other measures, it will involve being open with the public about what the service can and can't provide, and managing expectations.

Access to general practice should always be considered through the lens of equity and health inequalities. Addressing the inverse care law in general practice aligns with government's levelling up agenda, and should become a core objective of policy. Increasing the capacity of general practice in deprived areas so that resources better align with health need is a pre-requisite for tackling health inequalities.

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[i] Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. The Milbank Quarterly. 2005 Sep;83(3):457-502.
[ii] Baird B, Charles A, Honeyman H, Maguire M, Das P. Understanding pressures in general practice. The King's Fund, 2016. Available at: https://www.kingsfund.org.uk/publications/pressures-in-general-practice.
[iii] Alderwick H, Dunn P, Gardner T, Mays N, Dixon J. Will a new NHS structure in England help recovery from the pandemic?. BMJ. 2021; 372 (https://doi.org/10.1136/bmj.n248).
[iv] Fisher R, Thorlby R, Alderwick H. Understanding primary care networks: Context, benefits and risks. Health Foundation, 2019. Available at: https://www.health.org.uk/publications/reports/understanding-primary-care-networks.
[v] Office for National Statistics. Population estimates for the UK, England and Wales, Scotland and Northern Ireland: mid-2020. ONS 2021. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/latest.
[vi] Hobbs FR, Bankhead C, Mukhtar T, Stevens S, Perera-Salazar R, Holt T, Salisbury C. Clinical workload in UK primary care: a retrospective analysis of 100 million consultations in England, 2007–14. The Lancet. 2016 Jun 4;387(10035):2323-30.
[vii] Kingston A, Robinson L, Booth H, et al. Projections of multi-morbidity in the older population in England to 2035: estimates from the Population Ageing and Care Simulation (PACSim) model. Age Ageing. 2018 May; 47(3): 374–380.
[viii] Stafford M, Steventon A, Thorlby R, Fisher R, Turton C, Deeny S. Understanding the health care needs of people with multiple health conditions. The Health Foundation, 2018. Available at: https://www.health.org.uk/publications/understanding-the-health-care-needs-of-people-with-multiple-health-conditions.
[ix] Finch D, Marshall L, Bunbury S. Why greater investment in the public health grant should be a priority. The Health Foundation, 2021. Available at: https://www.health.org.uk/news-and-comment/charts-and-infographics/why-greater-investment-in-the-public-health-grant-should-be-a-priority.
[x] NHS Digital. Appointments in General Practice. NHS Digital, October 2021. Available at: https://digital.nhs.uk/data-and-information/publications/statistical/appointments-in-general-practice/october-2021.
[xi] National Audit Office. NHS backlogs and waiting times in England. NAO, 2021. Available at: https://www.nao.org.uk/report/nhs-backlogs-and-waiting-times-in-england/.

[xii] NHS England. Consultant-led Referral to Treatment Waiting Times- Data 2021-22. NHS England, 2021. Available at: https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/.
[xiii] NHS Digital. General Practice Workforce, 31 October 2021. NHS Digital, 2021. Available at: https://digital.nhs.uk/data-and-information/publications/statistical/general-and-personal-medical-services/30-september-2021 .
[xiv] NHS Digital. General Practice Workforce - 30 June 2021. NHS Digital, 2021. Available at: https://digital.nhs.uk/data-and-information/publications/statistical/general-and-personal-medical-services/30-june-2021.
[xv] Beech J, Bottery S, Charlesworth A, Evans H, Gershlick B, Hemmings N, Imison C, Kahtan P, McKenna H, Murray R, Palmer B. Closing the gap: Key areas for action on the health and care workforce. The Health Foundation, The King's Fund, The Nuffield Trust 2019. Available at: https://www.health.org.uk/publications/reports/closing-the-gap.
[xvi] Fisher R, Turton C, Gershlick B, Alderwick H, Thorlby R. Feeling the strain- What the Commonwealth Fund's 2019 international survey of general practitioners means for the UK. The Health Foundation, 2020. Available at: https://www.health.org.uk/publications/reports/feeling-the-strain.
[xvii] MDDUS. Survey shows five out of 10 family doctors tempted to quit NHS. Medical and Dental Defence Union of Scotland, 2021. Available at: https://www.mddus.com/coronavirus/coronavirus-update/2021/february/survey-shows-five-out-of-10-family-doctors-tempted-to-quit-nhs
[xviii] Tilley C. Majority of GPs 'would consider leaving NHS' amid inadequate Government support. Pulse Online, Nov 2021. Available at: https://www.pulsetoday.co.uk/news/breaking-news/majority-of-gps-would-consider-leaving-nhs-amid-inadequate-government-support/.
[xix] GMC. National Training Survey- Online reporting tool. General Medical Council 2021. Available at: https://www.gmc-uk.org/about/what-we-do-and-why/data-and-research/national-training-surveys-reports.
[xx] Parisi R, Lau Y, Bower P, Checkland K, Rubery J, Sutton M, Giles SJ, Esmail A, Spooner S, Kontopantelis E. Rates of turnover among general practitioners: a retrospective study of all English general practices between 2007 and 2019BMJ Open 2021;11:e049827. (doi: 10.1136/bmjopen-2021-049827).
[xxi] Taylor DH, Leese B. General practitioner turnover and migration in England 1990-94. Br J Gen Prac 1998; 48(428): 1070-2.
[xxii] Shen X, Jiang H, Xu H, Ye J, Lv C, Lu Z, Gan Y. The global prevalence of turnover intention among general practitioners: a systematic review and meta-analysis. BMC Fam. Pract 2020; 21(1): 1-0. (https://doi.org/10.1186/s12875-020-01309-4).
[xxiii] Buchbinder SB, Wilson M, Melick CF, Powe NR. Primary care physician job satisfaction and turnover. Am J Manag Care 2001; 7(7): 701-16
[xxiv]Palmer B, Hemmings N, Rosen R, Keeble E, Williams S, Paddison C, Imison C. Improving access and continuity in general practice. The Nuffield Trust, 2018 Available at: https://www.nuffieldtrust.org.uk/research/improving-access-and-continuity-in-general-practice.
[xxv] Cabana MD, Jee SH. Does continuity of care improve patient outcomes? J Fam Pract. 2004 Dec;53(12):974-80.
[xxvi] Saultz JW, Albedaiwi W. Interpersonal continuity of care and patient satisfaction: A critical review. Ann Fam Med. Sep-Oct 2004;2(5):445-51. (doi: 10.1370/afm.91).
[xxvii] Gray DJP, Sidaway-Lee K, White E, Thorne A, Evans PH. Continuity of care with doctors - A matter of life and death? A systematic review of continuity of care and mortality. BMJ Open. 2018 Jun 28;8(6):e021161. (doi: 10.1136/bmjopen-2017-021161).
[xxviii]RCGP. Continuity of Care- Programmes. Royal College of General Practitioners, 2021. Available at: https://www.rcgp.org.uk/clinical-and-research/our-programmes/innovation/continuity-of-care.aspx
[xxix]Barker I, Steventon A, Deeny SR. Association between continuity of care in general practice and hospital admissions for ambulatory care sensitive conditions: Cross sectional study of routinely collected, person level data. BMJ. 2017 Feb 1;356:j84. (doi: 10.1136/bmj.j84).
[xxx] NHS Digital. General Practice Workforce - June 2021 (Methodological Change Notice). NHS Digital, 2021. Available at: https://digital.nhs.uk/data-and-information/find-data-and-publications/statement-of-administrative-sources/methodological-changes#workforce.
[xxxi] NHS Digital. General Practice Workforce 31 March 2021 (Archived). NHS Digital, 2021. Available at: https://digital.nhs.uk/data-and-information/publications/statistical/general-practice-workforce-archive/31-march-2021.
[xxxii] NHS England. GP Contract documentation 2014/15. NHS England 2014. Available at: https://www.england.nhs.uk/gp/investment/gp-contract/2014-2015/.

[xxxiii] Tammes P, Payne RA, Salisbury C, et al. The impact of a named GP scheme on continuity of care and emergency hospital admission: a cohort study among older patients in England, 2012-2016. BMJ Open 2019;9:e029103 (doi:10.1136/bmjopen-2019-029103).
[xxxiv] The Health Foundation. Increasing Continuity of Care in General Practice. The Health Foundation, 2021. Available at: https://www.health.org.uk/funding-and-partnerships/programmes/increasing-continuity-of-care-in-general-practice.
[xxxv] Rosen R, Massey Y, Abbas S, Hufflett T. Relational continuity for general practice patients with new and changing symptoms- Final Report. The Health Foundation, 2020. Available at: https://www.health.org.uk/improvement-projects/relational-continuity-for-general-practice-patients-with-new-and-changing.
[xxxvi] Ipsos MORI, York Health Economics Consortium. Evaluation of Babylon GP at hand-Final evaluation report. Hammersmith and Fulham CCG and NHS England, 2019. Available at: https://www.hammersmithfulhamccg.nhs.uk/media/156123/Evaluation-of-Babylon-GP-at-Hand-Final-Report.pdf.
[xxxvii] Mann C, Turner A, Salisbury C. The impact of remote consultations on personalised care: evidence briefing. University of Bristol Centre for Academic Primary Care, 2021. Available at: http://www.bris.ac.uk/primaryhealthcare/news/2021/is-remote-consulting-compatible-with-personalised-care.html.
[xxxviii] NHS England. Our plan for improving access for patients and supporting general practice. NHS England 2021. Available at: https://www.england.nhs.uk/coronavirus/publication/our-plan-for-improving-access-for-patients-and-supporting-general-practice/.
[xxxix] Fisher R, Alderwick H. New plan for supporting general practice in England. BMJ 2021;375:n2585 (https://doi.org/10.1136/bmj.n2585).
[xl] Fisher L. GPs "named and shamed " if they fail to see patients face to face. Telegraph, Oct 14 2021. Available at: https://www.telegraph.co.uk/news/2021/10/13/gps-named-shamed-fail-see-patients-faceface/.
[xli] Mahase E. GPs are being blamed for government failures in primary care, say doctors. BMJ 2021;374:n2234.
[xlii]Murphy M, Scott LJ, Salisbury C, et al. Implementation of remote consulting in UK primary care following the COVID-19 pandemic: a mixed-methods longitudinal study. Br J Gen Pract 2021 ;71:e166 -77. (doi: 10.3399/BJGP.2020.0948 pmid: 33558332).
[xliii]Britain Thinks. How has covid-19 impacted current perceptions and future expectations of the NHS? Britain Thinks 2021. Available at: https://britainthinks.com/how-has-covid-19-impacted-current-perceptions-and-futureexpectations-of-the-nhs/.
[xliv] NHS England. GP Contract documentation 2019/20. NHS England, 2019. Available at: https://www.england.nhs.uk/gp/investment/gp-contract/gp-contract-documentation-2019-20/.
[xlv] Murphy M, Scott LJ, Salisbury C, Turner A, Scott A, Denholm R, Lewis R, Iyer G, Macleod J, Horwood J. Implementation of remote consulting in UK primary care following the COVID-19 pandemic: a mixed-methods longitudinal study. British Journal of General Practice. 2021 Mar 1;71(704):e166-77.
[xlvi] Pearce C. GPs distressed by remote consulting, shows BMA survey. Pulse Online, June 2021. Available at: https://www.pulsetoday.co.uk/news/workforce/gps-also-distressed-by-remote-consulting-shows-bma-survey/.
[xlvii] Salisbury C, Murphy M, Duncan P. The impact of digital-first consultations on workload in general practice: modeling study. Journal of Medical Internet Research. 2020 Jun 16;22(6):e18203.
[xlviii] NHS Digital. What we mean by digital inclusion? NHS Digital, 2021. Available at: https://digital.nhs.uk/about-nhsdigital/our-work/digital-inclusion/what-digital-inclusion-is.
[xlix] Davies AR, Honeyman M, Gann B. Addressing the Digital Inverse Care Law in the Time of COVID-19: Potential for Digital Technology to Exacerbate or Mitigate Health Inequalities. J Med Internet Res 2021;23(4):e21726 (doi: 10.2196/21726).
[l] Hart JT. The inverse care law. The Lancet. 1971 Feb 27;297(7696):405-12.
[li] Fisher R, Dunn P, Asaria M, Thorlby R. Level or not? Comparing general practice in areas of high and low socioeconomic deprivation in England. The Health Foundation 2020. Available at: https://www.health.org.uk/publications/reports/level-or-not.
[lii] Marmot M, Allen J, Boyce T, Goldblatt P, Morrison J. Health Equity in England: The Marmot Review 10 Years On. The Health Foundation, 2020. Available at: https://www.health.org.uk/publications/reports/the-marmot-review-10-years-on.
[liii] Beech J, Baird B. GP funding and contracts explained. The King's Fund, 2020. Available at: https://www.kingsfund.org.uk/publications/gp-funding-and-contracts-explained.

[liv] Levene L, Baker R, Bankart J et al. Socioeconomic deprivation scores as predictors of variations in NHS practice payments: a longitudinal study of English general practices 2013–2017. British Journal of General Practice 2019; 69 (685): e546-e554. (https://doi.org/ 10.3399/bjgp19X704549).
[lv] Kontopantelis E, Mamas MA, van Marwijk H, Ryan AM, Bower P, Guthrie B, Doran T. Chronic morbidity, deprivation and primary medical care spending in England in 2015-16: a cross-sectional spatial analysis. BMC medicine 2018 Dec;16(1):1-3.
[lvi] Levene L S, Baker R, Wilson A, Walker N, Boomla K, Bankart MJ. Population health needs as predictors of variations in NHS practice payments: a cross-sectional study of English general practices in 2013–2014 and 2014–2015. Br J Gen Pract 2017 Jan 1;67(654):e10-9.
[lvii] NHS England. NHS Five Year Forward View. NHS England, 2014. Available at: https://www.england.nhs.uk/publication/nhs-five-year-forward-view.
[lviii] NHS England. Next steps towards primary care co-commissioning. NHS England, 2014. Available at: https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2014/11/nxt-steps-pc-cocomms.pdf.
[lix] NHS England. General Practice Forward View (GPFV). NHS England, 2016. Available at: https://www.england.nhs.uk/publication/general-practice-forward-view-gpfv/.
[lx] Nussbaum, C., Massou, E., Fisher, R., Morciano, M., Harmer, R. and Ford, J. Inequalities in the distribution of the general practice workforce in England: a practice-level longitudinal analysis. BJGP Open 2021; 5 (5): BJGPO.2021.0066. (https://doi.org/10.3399/BJGPO.2021.0066).
[lxi] Fisher R, Asaria M. How might COVID-19 affect the number of GPs available to see patients in England? The Health Foundation, 20 20. Available at: https://www.health.org.uk/publications/long-reads/how-might-covid-19-affect-the-number-of-gps-available-to-see-patients-in-england.
[lxii] Mosadeghrad AM. Factors influencing healthcare service quality. International journal of health policy and management. 2014; 3(2): 77. (https://doi.org/10.15171/ijhpm.2014.65).
[lxiii] Dixon-Woods M, Baker R, Charles K, Dawson J, Jerzembek G, Martin G, McCarthy I, McKee L, Minion J, Ozieranski P, Willars J. Culture and behaviour in the English National Health Service: overview of lessons from a large multimethod study. BMJ quality & safety. 2014; 23(2): 106-15. (http://dx.doi.org/10.1136/bmjqs-2013-002471).
[lxiv] Goodwin N, Dixon A, Poole T, Raleigh V. Improving the quality of care in general practice. The King's Fund, 2011. Available at: https://www.kingsfund.org.uk/publications/improving-quality-care-general-practice.
[lxv] De Silva D, Bamber J. Improving quality in general practice. The Health Foundation, 2014. Available at: https://www.health.org.uk/publications/improving-quality-in-general-practice.
[lxvi] Dixon A, Khachatryan A, Wallace A, Peckham S, Boyce T, Gillam S. The Quality and Outcomes Framework (QOF): does it reduce health inequalities?. NIHR Service Delivery and Organisation programme, 2011. Available at: https://www.researchgate.net/publication/259622369.
[lxvii] Doran T, Fullwood C, Kontopantelis E, Reeves D. Effect of financial incentives on inequalities in the delivery of primary clinical care in England: analysis of clinical activity indicators for the quality and outcomes framework. The Lancet. 2008; 372(9640): 728-36. (https://doi.org/10.1016/S0140-6736(08)61123-X).
[lxviii] Care Quality Commission. The state of care in general practice 2014 to 2017. Care Quality Commission, 2018. Available at: https://www.cqc.org.uk/publications/major-report/state-care-general-practice-2014-2017.
[lxix] Fisher R, Fraser C. Who gets in? The Health Foundation, 2020. Available at: https://www.health.org.uk/news-and-comment/charts-and-infographics/who-gets-in.
[lxx] Marmot M, Goldblatt P, Allen J et al. Fair Society Healthy Lives (The Marmot Review). Institute of Health Equity, 2010. Available at: https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review.
[lxxi] Fisher R, Baird B. Primary care networks and the deprivation challenge: are we about to widen the gap? BMJ Opinion 2019. Available at: https://blogs.bmj.com/bmj/2019/05/08/primary-care-networks-and-the-deprivation-challenge-are-we-about-to-widen-the-gap/.
[lxxii] Fisher R. 'Levelling up' general practice in England- What should government prioritise?. The Health Foundation, 2021. Available at: https://www.health.org.uk/publications/long-reads/levelling-up-general-practice-in-england.