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The performance of general practice in the English National Health Service (NHS): an analysis using Starfield's framework for primary care

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Abstract

General practice in the English National Health Service (NHS) is in crisis. In response, politicians are proposing fundamental reform to the way general practice is organized. But ideas for reform are contested, and there are conflicting interpretations of the problems to be addressed. We use Barbara Starfield's "4Cs" framework for high-performing primary care to provide an overall assessment of the current role and performance of general practice in England. We first assessed theoretical alignment between Starfield's framework and the role of general practice in England. We then assessed actual performance using publicly available national data and targeted literature searches. We found close theoretical alignment between Starfield's framework and the model of NHS general practice in England. But, in practice, its model of universal comprehensive care risks being undermined by worsening and inequitable access, while continuity of care is declining. Underlying causes of current challenges in general practice in England appear more closely linked to under-resourcing than the fundamental design of the system. General practice in England must evolve, but wholesale re-organization is likely to damage and distract. Instead, policymakers should focus on adequately resourcing general practice while supporting general practice teams to improve the quality and coordination of local services.

Lay summary

General practice is the foundation of the UK's National Health Service (NHS). But these foundations are creaking. More and more people need care, but there are fewer general practitioners (GPs). Job satisfaction for doctors is falling, and public satisfaction with general practice has plummeted. Politicians are promising major changes to the way general practice is organized, but it's not clear what these changes will be. We wanted to understand whether fundamental changes to the whole model of general practice in England are needed. To do this, we measured the performance of general practice in England against a set of features, widely regarded as defining the characteristics of high-performing primary care systems. We found that, although, in theory, the design of English general practice aligns well with these features, in practice, performance is less good and is getting worse. In particular, people are struggling to access care, and their ability to see the same doctor regularly is declining. There are also unfair differences between population groups. We conclude that the crisis in English general practice has more to do with previous policy decisions and longstanding lack of funding than the fundamental design of NHS general practice. Policymakers should focus on giving the system enough resources and supporting GPs to improve the quality of local services.

Key words: general practice; primary care; NHS reform; NHS performance; access; continuity of care.

Introduction

In 2016, Simon Stevens—then Chief Executive of the National Health Service (NHS) in England—wrote that "if general practice fails, the whole NHS fails." He is right. The NHS model has always been underpinned by general practice. Patients in England have a named general practitioner (GP) -a primary care doctor-trained to look after them from "cradle to grave." General practitioners control access to most specialist care (patients must see a GP to get a referral to non-emergency hospital care); are responsible for longterm, patient-centered care for their patients; and provide most preventive care. A mix of reforms over several decades have changed the way GPs in England operate—for instance, with GPs working together in larger groups and alongside a greater mix of staff.^{2,3} But, general practice in England has historically been overlooked by policymakers in favor of the more politically powerful hospital sector.⁴

Not anymore: pressures in general practice today are impossible to ignore. The system is in crisis. Despite government promises to recruit more GPs, the number of fully qualified, full-time equivalent GPs has fallen since 2015.^{5,6} But demand for the service is rising fast, and appointment numbers are at record highs—putting further strain on remaining staff. Job satisfaction among GPs is low—lower than most comparable countries—and many plan to leave or reduce their hours. 8-10 The number of GP partners—doctors who own a stake in surgeries and hold a contract from government to deliver services to a list of patients—is falling fast, threatening the predominant ownership model of general practice.^{6,9} Worsening access to GP appointments makes national newspaper headlines, and public satisfaction with general practice—historically, the most popular NHS service—has plummeted. 11,12 In 2022, just 35% of the British public were satisfied with general practice, down from 68% in 2019. 13

The crisis has not happened overnight. Despite policy rhetoric to increase the focus on prevention and primary care, poor workforce planning has seen the number of hospital doctors rise rapidly in the past decade, while GP numbers have fallen. 14,15 Overall NHS spending, which has grown at an average of 3.6% annually since 1948 (and 6.7% annually from 1997 to 2010), has been constrained over a decade of austerity, growing by less than 2% per year, on average, since 2010.¹⁶ Spending on general practice has remained under 10% of the NHS budget and the composition of total spending has shifted towards hospitals. 15,17 Meantime, the remit of general practice have expanded, with GPs asked to take responsibility for a wider range of services, including assisting nursing homes and introducing "social prescribing," as well as leading the development of more coordinated services with hospitals, social care, and others, for the growing number of people living with multiple chronic conditions. ^{3,18-20} The result is a mismatch between the supply of GPs and demand for their work. These challenges are not unique to the NHS. Health systems in other high-income countries are also grappling with shortages of primary care physicians and chronic underfunding of community health care, and are debating how best to structure and organize primary care. 10,21

Policymakers in England have responded with a combination of pragmatism and radicalism. A mix of short-term measures have been introduced by government and NHS leaders to try to ease the pressure—including expanding the number of other primary care professionals working in GP practices, such as physiotherapists and dietitians, and new electronic systems for triaging patients.^{3,22} But politicians are also calling for more fundamental "reform" of the way in which general practice is organized. Suggested approaches include having general practices run by NHS hospitals (with GPs becoming salaried employees) or merging GPs into larger primary care organizations.²³ The Labour Party—currently in opposition—have suggested that some patients should be able to self-refer to hospital specialists, and said they will "phase out" the current system of general practice, but have not yet put forward an alternative.²⁴

Ideas for reform of general practice are contested, and politicians, GPs, and others have conflicting interpretations of the problems to be addressed—for instance, whether GP gate-keeping helps or harms the NHS. ²⁵ Top-down structural reorganizations in the NHS are nothing new, but evidence that they improve care for patients is limited—and organizational restructuring can damage and distract. ²⁶⁻³⁰ Potential changes to general practice in England are also complicated by the relative autonomy of the profession, and the status of GPs as independent business owners—a system in place since the creation of the NHS in 1948. Before embarking on reform, policy-makers must start with a clear articulation of the purpose of general practice in England, the functions of the system, and an understanding of where it currently falls short. Our analysis in this paper seeks to address those questions.

There are a range of ways to measure and assess the performance of general practice at a health system level. Good comparative data are limited. But the European Commission and World Health Organization (WHO) have developed primary care measurement frameworks and indicators. The Organization for Economic Co-operation and Development (OECD) tracks metrics on primary care staff and activity, and internationally comparative surveys solicit opinions from primary care providers about their jobs and patient care. Many of these approaches are rooted in the

work of Barbara Starfield, who, in 1994, described her "4Cs" framework, setting out the core components of high-performing primary care.³⁴

In this paper, we use Starfield's 4Cs framework for highperforming primary care to describe and assess the core functions of general practice in England. We chose Starfield's framework for its clear articulation of the purpose of primary care, description of the core functions required to achieve it, and provision of a tool to assess performance. First, we describe the context of general practice in England and the approach and methods for our analysis—including the assessment tool developed by Starfield that we apply to the English system. Second, we consider the theoretical alignment of general practice in the NHS with Starfield's 4Cs framework. We then use publicly available data and published literature to assess the current performance of general practice in England against each domain. We conclude by analyzing the challenges identified and implications for primary care reform in England.

Context: the role of general practice in the English NHS

Box 1 provides an overview of the organization of general practice in the English NHS.

Box 1. The organization of general practice in the English NHS

Ownership

General practices are independent businesses whose services are contracted by NHS commissioners to provide generalist medical services to a registered list of patients. Although some practices are owned by a single GP, most practices in England are owned by a "GP partnership." This means 2 or more GPs—sometimes with other staff such as nurses—working together as business partners. GP partners are responsible for meeting the requirements of their NHS contract and share the income it provides. An increasing proportion of GPs work as salaried employees of GP partners, without owning a share in the business.⁶

Funding

General practices are funded via a mix of income streams. Around 50% of income comes through a weighted, capitated "global sum payment" to deliver core contracted services. Some funding—for example, to cover development costs—comes from broader NHS funding allocations to local areas, and practices also receive smaller payments such as funding for premises. Around 10% of average practice income comes from quality-based payments through the quality and outcomes framework (QoF). This pay-for-performance scheme incentivizes care improvements for specific activities or outcomes (eg, improving vaccination rates, or management of long-term conditions). 36

(Continuted)

Box 1. Continued

Contracting

Although national contracts specify the range of services practices must provide, there is flexibility in how they are delivered. Practices must offer a mix of in-person and telephone appointments, and some appointments must be bookable online. But processes for making appointments, length of appointments, and the blend of health professionals available are all determined by practices. Commissioners monitor practice performance in several ways, including inspections from the national regulator (the Care Quality Commission), QoF performance, and performance in the national GP Patient Survey.

Since 2019 GP surgeries have been encouraged to join with other local practices to form Primary Care Networks (PCNs).³⁷ These networks require practices to collaborate to share (some) funding and (some) staff to provide an expanded range of services.

Data and methods

We used Starfield's "4Cs" framework for primary care to provide an overall assessment of the core functions of general practice in England. In 1978, the WHO's Alma Ata Declaration identified primary care as the key to health for all.³⁸ In her 1994 paper "Is Primary Care Essential," Barbara Starfield wrote that a health system seeking to achieve 4 elements—first contact, continuity, comprehensiveness, and coordination—would achieve what was envisaged in Alma Ata.³⁴ These "4Cs" (Box 2) have since been adopted in the conceptualization of health system functions across the world, used to plan primary care services, and assess their performance.³⁹⁻⁴¹ Related aspects, such as community orientation, patient- and family-centeredness, and cultural

Box 2. Starfield's 4Cs

First contact: Primary care serves as the main entry point and interface between the population and health system. People go to primary care first for each new need or problem.

Continuity: Primary care emphasizes the relationship over time between a patient and provider. This can be viewed through the domains of relational continuity, informational continuity, and management continuity.

Comprehensiveness: Primary care offers a comprehensive range of services, with capacity to manage common health conditions at all stages of a person's life.

Coordination: Primary care brings together different elements of the health system for the care of a patient. It coordinates with secondary and tertiary care clinicians, as well as community and social services. competence, are derived from accomplishment of the 4 main features that together conceptually define primary care. 42

Our approach to assessing health system performance against the 4Cs utilizes tools developed by Starfield and colleagues. These translate the broad concepts of first contact, continuity, comprehensiveness, and coordination into measurable characteristics. 42

First, we assessed the theoretical alignment between the role of general practice in England and Starfield's 4Cs. We did this by comparing the basic structure and functions of general practice in England with criteria for rating each characteristic, taken from Starfield's 1991 paper on cross-national primary care comparison. Second, we assessed actual performance of English general practice in each domain, focusing on current performance (and presenting data on change over time where it is available, reliable, and relevant). We followed Starfield's approach in dividing each of the 4 core domains of primary care into 2 subdomains: a structure-related domain (measures indicating ability to provide needed services) and a process-related domain (measures indicating how much services are actually provided when needed). Box 3 summarizes an approach to assessment of each domain.

For each domain, we first identified official statistics and large, recent representative surveys on key features of primary care relevant to our analysis (Table 1). We used the latest available data to provide a picture of the current performance of general practice in England.

Where relevant, we supplemented these data with additional evidence that could add to our understanding of the national statistics or interpretation of performance in each domain—particularly in areas where nationally available data were limited (such as care coordination). We did this iteratively and in a mix of ways, including searches in the Medline and Health Management Information Consortium databases, reviewing gray literature from relevant agencies, reviewing

Box 3. Assessment of core domains, from "Is Primary Care Essential" (Starfield, 1994³⁴)

First contact: "Involves assessment of both accessibility of a provider or facility, and the extent to which the population actually uses the services when a need for them is first perceived."

Longitudinality: "Is assessed by the degree to which both provider and people in the population agree on their mutual association, and also the extent to which individuals in the population relate to that provider over time for all but referred care."

Comprehensiveness: "Requires that the primary care provider offer a range of services broad enough to meet all common needs in the population, and assessment includes the extent to which the provider actually recognizes these needs as they occur."

Coordination: "Requires an information system that contains all health-related information, and assessment again includes the extent and speed with which the information is recognized and bought to bear on patient care."

Table 1. Main datasets

Domain	Main datasets used for analysis	
First contact	GP Patient survey, 2023 ¹²	
	British Social Attitudes Survey, 2022, 43 2023 13	
	Commonwealth Fund International Survey of	
	Primary Care Physicians, 2023 ¹⁰	
Continuity of care	GP Patient Survey, 2023 ¹²	
•	National GP contract ⁴⁴	
Comprehensiveness	National GP contract ⁴⁴	
·	Quality and Outcomes Framework performance data ⁴⁵	
	Care Quality Commission inspection data ⁴⁶	
	British Social Attitudes Survey, 2022, 43 2023 13	
	Commonwealth Fund International Survey of	
	Primary Care Physicians, 2023 ¹⁰	
Coordination	Commonwealth Fund International Survey of Primary Care Physicians, 2023 ¹⁰	
	National hospital contract ⁴⁷	

Abbreviation: GP, general practitioner.

reference lists of national policy documents, and searching national policy documents by key word. Search strategies are provided in Appendix S1. Given the evidence on inequalities in access to high-quality primary care between people living in more and less socioeconomically deprived areas in England, we wanted to ensure that our analysis reflects concerns about equity and variation. We therefore also searched for evidence describing variation in performance in each domain between geographical areas—for instance, studies using national data on the GP workforce to assess supply of GPs by area-level deprivation. 48,51

Our approach has several limitations. Official national statistics are well validated, but by virtue of measuring NHS activity are unable to indicate unmet or incompletely met health needs. So, for example, we can count how many appointments general practice has provided, but not how many people tried and failed to be seen. We address this by supplementing activity data with public satisfaction surveys (which include a representative sample of the population—not just those who have been able to access care). In line with Starfield's framework, we have assessed general practice against broad functions associated with high performance. This provides a simple and clear framework to assess performance of general practice, but means our assessment is highly aggregated and does not involve analyses of data that could help us understand better or worse performance in particular clinical areas—for instance, using clinical indicators on chronic disease management, public health services, or other care delivered by GPs in England. We also assessed current performance rather than focusing in detail on how performance has changed over time. This fits the objectives of our analysis in providing a picture of current performance of general practice to inform questions facing policymakers today—and we put our analysis of current performance in the context of longer-run trends where data are available and relevant. But our analysis tells us less about persistent areas of better or worse performance. Because the administration of NHS services is devolved across the 4 nations (meaning that general practice is subject to different policies in each UK country), we restricted our analysis to England. We also only considered "general practice" rather than the broader scope of "primary care." This is because, in England, dentistry, optometry, and community pharmacy are funded, organized, and managed differently from general practice.

Results

In theory, there is strong alignment between the model for organizing and delivering general practice in the NHS in England and Starfield's 4Cs for high-performing primary care (Table 2). Almost all of the population is registered with a GP, and the NHS runs a tight gatekeeper model; access to specialists is typically via referral from general practice. A national GP contract seeks to ensure that general practice offers a wide range of services to their registered patients, and attempts to standardize provision across the country. Universal use of electronic health records (EHRs) creates a good baseline for care coordination. In practice, the performance of general practice in the English NHS is variable across domains.

First contact

Assessing how well general practice performs in the domain of "first contact" requires assessment of access to general practice, as well as use of the service. In November 2023, 43% of appointments in general practice occurred on the same day they were booked, and 83% were within 2 weeks. Sixty-eight percent of appointments in general practice were face-to-face—still below the pre-pandemic baseline of around 80% of appointments occurring in person. But survey data paint a uniform picture of falling public satisfaction with access to general practice. The annual GP Patient Survey (GPPS)—an independent survey sent to over 2 million people in England—shows a decreasing proportion of people reporting that it is easy to get through to their GP practice on the phone, and falling public satisfaction with the type of appointment on offer. In 2021, 59% of people got an appointment when they wanted it.⁵² By 2023, that had fallen to 50% (in 2018—the earliest year with comparable data—62% had an appointment when they wanted it). 12,53 Other public perceptions data show that 67% of people think that access to GP services has deteriorated over the past 12 months.⁵⁴ Improving access to general practice is also a priority for the British public. When asked to choose what the most important priority for the NHS should be, "making it easier to get a GP appointment" was the most common choice. 13

Difficulties accessing general practice contribute to pressure on emergency departments. The Care Quality Commission (CQC) report that more than 1 in 10 people who could not get a convenient GP appointment sought care via emergency departments. So Cowling et al estimate that almost 6 million emergency department attendances in England per year are preceded by the patient being unable to get a convenient appointment at their GP surgery. Past experiences of difficulties accessing general practice contributed to some patients preferentially attending emergency care.

Challenges with access to general practice occur in the context of high use of the service. In 2022, 82% of respondents to the British Social Attitudes survey reported using GP services in the past year. And use of general practice is rising. The NHS reports monthly data on the number of appointments in general practice, which—barring fluctuations for pandemic-related lockdowns—show a steady increase in appointment volume since records began. In October 2023, general practice delivered 34 million appointments, an increase of over 2 million (6.5%) from October 2022. OpenSAFELY—a collaboration monitoring clinical activity in general practice—reports an increase in activity above the pre-pandemic baseline across a range

Table 2. Theoretical alignment between model of GP services in England and the 4Cs.

Core function	Summary of Starfield's criteria ⁴²	Theoretical alignment with NHS general practice
First contact	Need for specialty services decided after consulting GP. Access to specialists is via referral from general practice. Patients unable to self-refer to specialists	With limited exceptions (eg, for emergency care) UK general practice acts as the gatekeeper to wider NHS services. People must see a GP to obtain referral to secondary/tertiary care. Patients are unable to self-refer to most hospital specialists, but there are limited self-referral schemes (for example, for some musculoskeletal complaints).
Continuous	Assesses the extent of a relationship with a GP or facility over time that isn't based on the presence of specific health problems. Highest ratings given where the relationship is based on enrollment with a source of primary care.	Citizens are not required to register with a GP surgery (although the vast majority of the population do). They may register at 1 general practice (although may be temporarily registered at another). All registered patients must be allocated a named accountable GP. 44 Practices are required to make reasonable efforts to accommodate preferences for particular GPs, although patients are not required to see "their" GP, and can make an appointment with any GP in the practice.
Comprehensive	The extent to which the full range of services is either directly provided by the GP, or specifically arranged for elsewhere. Highest ratings are given for the universal provision of extensive and uniform benefits and for preventative care.	A national GP contract ensures that a wide range of services are universally available via general practice. ⁴⁴ Most preventative care is carried out through general practice with exceptions for some services provided via public health (local authority funded) or via national screening programs.
Coordinated	Care is considered coordinated where there are formal guidelines for the transfer of information between GPs and specialists.	The GP acts as the continuous lynchpin in the patient's health care. GPs refer to specialists, and receive correspondence from them in return. NHS hospital contracts require hospitals to communicate discharge plans and outpatient clinic letters to GPs within set time frames. The Where specialist specialist referral occurs, GPs expect to be copied into correspondence to maintain oversight of the patient's total care.

Abbreviations: GP, general practitioner; NHS, National Health Service.

of clinical activities (including blood tests, medication reviews, and chronic disease monitoring).⁵⁸ General practitioner workload—an imperfect marker for service use and challenging to define and measure—appears to have increased dramatically in the past decade.^{8,59}

Access and use of general practice is not equal across demographic groups. Although health needs and GP consultation rates are higher in more socioeconomically deprived areas, general practice in these areas is underfunded and underdoctored relative to general practice in richer areas, once differences in health needs are accounted for. 48,51 Recent analysis found that a GP working in a practice serving the most socioeconomically deprived areas will, on average, be responsible for the care of almost 10% more patients than a GP serving patients in the most affluent areas. And practices in the most deprived areas receive, on average, 7% less funding than practices in the wealthiest neighborhoods. 48 General practices in poorer areas, on average, perform less well on all 3 major markers of quality: quality and outcomes framework (QoF) scores, CQC inspection results, and GPPS ratings.⁴ People from more deprived areas; disabled people; carers; people from Bangladeshi and Pakistani ethnicities, and Muslim, and Sikh religions; those with Gypsy or Irish Traveler backgrounds; and people who identify as LGBTQI+ all report worse overall experiences of general practice.¹²

Closure of GP surgeries also threatens access to general practice. National data do not allow differentiation between mergers and closures, but the number of open active GP practices has declined steadily in recent years. Consequences of practice closures are poorly understood, but evidence suggests that closure is associated with declining patient satisfaction, and increasing numbers of patients per GP in remaining surgeries. Practice closures are also more common in socioeconomically deprived areas, risking widening existing inequities in access to care.

Continuity of care

Continuity of care is often described as containing 3 domains: relational, informational, and management continuity. ⁶¹ Here we assess relational continuity of care in English general practice. Because informational and management continuity relate closely to the use of information technology, and to handovers between health professionals, we cover other domains of continuity in our section on coordination.

Theoretically, general practice in England has high fidelity to Starfield's measurement of relational continuity. People register with a specific GP surgery, each contractually obliged to allocate all patients a "named accountable GP." In practice, continuity of care in English general practice is not routinely measured, so our understanding is limited by poor data availability. Data that do exist suggest declining continuity. 62

Although all patients have a named GP, the proportion of appointments that occur with that doctor (or a different preferred GP) is not included in nationally reported data. The GPPS data show the proportion of people who have a preferred GP to be declining steadily in recent years (from 53.7% in 2018 to 41.5% in 2023). 12 Of people who do have a preferred GP, the proportion who say that they are able to see or speak with that GP almost always, or a lot of the time, is also declining (from 50.2% in 2018 to 35.4% in 2023). 12 Although Levene et al⁶³ found the decline in relational continuity to be "marked and widespread," continuity of care is lower for people living in more deprived areas, and for younger patients. People from some minority ethnic groups (Bangladeshi, Pakistani, Black African, Black Caribbean, and any other Black background) have lower continuity of care than White people.⁶⁴ Multiple studies find that continuity of care tends to be lower in larger GP practices. 65-67 In 2022, the Health and Social Care Select Committee—a cross-party group of members of parliament responsible for scrutinizing government policy on health and social care—examined evidence on the Future of General Practice and highlighted their "extreme concern" about declining continuity of care.⁶⁸

Comprehensiveness of care

For Starfield, comprehensive primary care requires that providers offer a broad range of services, and that these services are used to meet needs as they occur.³⁴ NHS general practice performs well on the first of these 2 measures.

In England, the national GP contract ensures that all patients registered with GP surgeries are entitled to a baseline offer of care, no matter where they live or who their GP is. The GP contract requires practices to provide a comprehensive range of "primary medical services" within core contracted hours (8 AM-6:30 PM, Monday to Friday, excluding national holidays). It also requires the provision of cervical screening, child health surveillance services, contraceptive services, maternity medical services, and vaccine and immunization services. 44 Some services—such as provision of out-of-hours GP care—are optional for practices but are commissioned at a local level to ensure complete population coverage. Practices also have the option to opt in to providing additional care, such as minor surgery, in return for extra payment. 44 Other services—like sexual health and drug and alcohol services are not included in the GP contract, and are instead provided by public health (which, since 2013, has been the responsibility of local authorities and other national agencies rather than the NHS).

The GP contract attempts to ensure universal provision of comprehensive care from general practice. But whether people's needs are met requires consideration of access (assessed above) and quality of care. Assessing quality of clinical care in general practice is difficult. Many measures are blunt, composite, or confounded. Practice QoF performance—which includes indicators for preventive services, such as screening; management of public health concerns, such as smoking; and chronic conditions like asthma and diabetes—is, on average, high (in 2022-2023, 63% of surgeries achieved >90% of available QoF points). 45 But, as indicators—and therefore the number of points available—change yearly, tracking trends over time is hard. Inspections of practices are carried out by the CQC and address 5 domains: asking if the service is safe, effective, caring, responsive, and well-led.⁶⁹ The proportion of practices rated as "good" or "outstanding" has risen over time; currently, 5% of GP practices are rated "outstanding," 87% "good," 4% "require improvement," and 0.7% are "inadequate." 46

Despite these promising data, surveys of GPs and patients highlight concerns with overall performance of general practice in England. In 2022, 49% of GPs surveyed in England think that the quality of care they provide has worsened in the past 3 years. ¹⁰ Patients agree: 47% of people think that standards of care at their local GP practice have decreased in the past year. ⁵⁴ The proportion of people reporting a good overall experience of their GP surgery is falling, ¹² and the 2021 British Social Attitudes Survey reported a record 30-point drop in overall public satisfaction with GP services, down to 38% from 68% in 2019. ⁴³ In 2022, overall satisfaction fell again, to 35%. ¹³ But not all results are so negative, and there is evidence to suggest that, once people access care, they are satisfied with the care they receive: the GPPS reports that 93% of people have confidence and trust in the

health professional they saw, and 91% say that their needs were met at their last appointment.¹²

It is possible that the comprehensive offer of care in English general practice is undermined by short GP consultations, and what can be covered in them. Median consultation duration in UK general practice is around 10 minutes—similar to Germany, but significantly shorter than other high-income countries (where 15–25-minute consults are the norm). Of General practitioners spend a longer time with patients who have more conditions, but at all levels of multimorbidity, people living in deprived areas have less time per GP consultation. UK GPs want more time with patients, but 84% of patients feel that they were given enough time in their last GP appointment. Of 10,12 There is no known association between consultation length and positive patient experience—although shorter consultation times can limit the content of the consultation and range of services provided.

Just as experiences of access to general practice vary across geographies and socioeconomic and ethnic groups, so, too, do overall experiences of general practice in England. Overall satisfaction with GP services is highest in the South West and lowest in the South East and parts of central England. People living in the most deprived areas report the least positive overall experience. And people from some minoritized ethnic groups, people who are carers, and people who identify as LGBTQI all report less positive overall experiences of GP services. 12

Coordination of care

Coordinated care requires an information system that contains all health-related information and use of this system to deliver patient care.³⁴ General practice in England performs relatively well on this domain, although there is scope to improve coordination with other NHS and social care services.

Aided by a robust regulatory framework and the close involvement of GPs in developing EHRs, general practice was the first NHS service to digitize. 74 Since 2004—when the government agreed to cover purchase costs—use of EHRs in general practice has been near universal.⁷⁴ Electronic health records are purchased and funded centrally, and GP practices choose which system they use. There is a robust and fast system to transfer EHRs between surgeries when a patient moves, and EHRs link with community pharmacies to facilitate electronic prescribing (GPs can send prescriptions electronically from their EHRs for patients to collect from a nominated pharmacy anywhere in England). 75 An additional Summary Care Record (SCR) system allows emergency and out-of-hours clinicians to view basic information from the GP EHR. At a minimum, the SCR holds information about current medication, allergies, and patients' basic demographic details. 76

Although EHRs enable coordination of care within general practice, other NHS services—particularly hospitals—have been much slower to digitize. The for the most part, hospitals and general practices do not use the same EHRs, so patients have separate sets of notes. Coordination therefore relies on communication between general practice and hospital teams. The NHS attempts to mandate good informational coordination between hospitals and GP surgeries via the national hospital contract. This requires that hospitals send discharge summaries to GPs within 24 hours, that clinic letters should be sent within 7 days, and that patients should be discharged with at least 1 week's supply of medication. Tompared with

perceptions of GPs in other high-income countries, England appears to perform well at coordinating general practice with hospital services. ¹⁰ Nonetheless, there are ongoing issues with timeliness of exchanging information: just 29% of GPs in England report "usually" or "often" receiving clinic letters within 7 days and only 23% say that they receive the information they need to continue managing care for a patient within 48 hours of hospital discharge. ¹⁰

The interface between general practice and hospital care is a common site for operational failures in the NHS. Researchers using qualitative methods observed a range of failures, including issues with incorrect, delayed, insufficient, or missing information from external health care teams; problems referring patients into different services; and challenges caused by external teams not arranging follow-up, or providing medications or information to patients.⁷⁷ Another study found that 4.5% of appointments in general practice were for potentially avoidable issues created by hospitals (eg, a lapse in a booking process such as failure to send a follow-up appointment). 78 National NHS guidance has attempted to address some of these issues for example, by encouraging specialists to request tests and refer within the same hospital for nonurgent conditions rather than referring back to GPs.¹

Broader evidence on integrated care in England points to persistent challenges coordinating services between GPs and others. Like in many countries, policymakers in England have long been concerned about fragmentation between health and care services—particularly for people with complex needs-and introduced a mix of initiatives to improve coordination. 19,79-81 Evaluations of 3 major national programs in England since 2008 (involving GPs, hospitals, community services, social care, and others) reported a mix of barriers to delivering more integrated care—including datasharing problems, cultural and professional differences, challenges securing clinical engagement (particularly from GPs), and broader pressures on services. 19,20,82,83 General practitioners also report major barriers coordinating with community and social services-including lack of follow-up and insufficient staffing. 10

Discussion

In theory, the NHS system of general practice aligns well with Starfield's core functions for high-performing primary care. General practice in the English NHS is designed to offer a universal, comprehensive range of primary medical services. There is a tight gatekeeper model, and patients receive care at the same surgery. General practitioners have digital infrastructure to coordinate care and there are national requirements for information sharing between GPs and hospitals. The NHS's structure as a universal single-payer system, with care available based on need, is designed to support equitable access. In practice, however, there are areas where general practice underperforms on Starfield's core domains. The universal offer of comprehensive care from general practice risks being undermined by worsening access. Continuity of care between a patient and a specific GP is decreasing. 62,68 And there are persistent barriers to coordination of services between GPs and other parts of the health system. 10 The provision of general practice in England is also inequitable. 48 Problems with access and continuity of care are worse in more socioeconomically deprived areas. 12,64

Policy attention on Starfield's domains has not been equal

Starfield's 4 domains have not received equal attention from national policymakers. Improving access to general practice has been an overriding priority for successive governments—and a mix of targets, financial incentives, and new routes to access care have been introduced as a result.^{22,84-87} But this focus on improving access may have undermined other features of high-performing primary care: for example, evidence suggests that past policy initiatives to improve access may have weakened continuity of care.^{84,88}

A future priority for policymakers is to find the right balance between objectives to improve access and continuity. This is not straightforward: patients make different trade-offs between access, continuity, and other aspects of their care based on age, sex, perceived acuity and severity of clinical problem, prior relationship with care providers, and other factors.⁸⁴ And public perceptions of what matters most may be changing.⁸⁹ But targeted approaches to increasing continuity of care have been developed, 90 and a study of options for promoting continuity and access suggests that it is possible, although hard, to achieve both.84 Doing this in the context of broader policy developments—such as expansion of remote and digital care models, and changing skill mix—is an added challenge. General practices in England are increasingly working at greater scale, with GPs working in larger groups and alongside expanded teams of allied health professionals, but evidence suggests that larger GP practices are associated with lower continuity of care. 65-67 A broader understanding of what "access" means for patients is also likely needed for instance, one that considers how patients identify themselves as candidates for care, and the navigation and permeability of services—not just availability of appointments. 91,92

Weak resourcing undermines policy objectives

National policymakers will struggle to improve access, increase continuity, or meet other policy objectives without strengthening underlying capacity in general practice. Gatekeeping models of health care, such as the NHS's model of general practice, have major strengths, including an association with higher care quality at lower cost. 93 Health care systems in Europe without strong gatekeeping models, such as France and Germany, have introduced a mix of policies to incentivize it. 94,95 But the benefits of gatekeeping diminish if there are not enough gatekeepers to work in the system (and the potential risks, such as delayed diagnoses, increase). 93 The number of fully trained, full-time equivalent GPs in England has fallen since 2015 (the first year of comparable data), and recent estimates suggest that GP shortages currently stand at 4200.^{6,96,97} General practitioner job satisfaction is low and falling compared with that in other high-income countries. 10 Levels of stress and emotional distress are high, and alarming numbers of GPs plan to leave the profession or reduce their hours.⁸⁻¹⁰

NHS England recently published a plan for expanding the NHS workforce over the next 15 years, including a target to increase the number of posts for doctors training to be GPs by 50%. ⁹⁸ These plans will only be successful if matched with increased investment in primary care services and broader policy action to improve GPs' working lives, including interventions to reduce GP workload, making the best use of wider primary care staff, and improving working conditions. ^{99,100} Capital investment in buildings, equipment, and information technology

(IT) will also be needed for GPs to work productively. Almost half of GPs in England say their practice building is not fit for purpose, and GPs experience a mix of operational failures caused by poor technology and missing equipment. ^{101,102} Investment in health care capital in the United Kingdom has been lower than comparable countries for decades. ¹⁰³

A lack of resources also creates challenges for care coordination. There has been a longstanding focus on strengthening care coordination across care settings-including policy efforts to expand multidisciplinary teams working in primary care, investment in social prescribing link workers, and requirements to work more closely with wider community services.^{3,18} But these efforts have been frustrated by broader changes in NHS policy and lack of investment in social services that general practice needs to coordinate with. 19,20,82,83 Local government in England—responsible for public health and long-term care services—has faced substantial cuts in funding over the last decade, with funding falling furthest in more deprived areas. 104-106 The unmet need for long-term care is high and staffing shortages are chronic. 107 General practitioners report inadequate staffing in community and social services as a major challenge to coordinating care. 10,108 The quality of general practice must be understood in this wider context, as well as broader pressures on NHS services, which, by December 2023, had left over 7.6 million people waiting for routine hospital treatment, with knock-on effects for workload in primary care. 109

Inequitable provision compromises overall performance

Our findings illustrate inequities in general practice in the NHS across Starfield's 4 domains. General practice in poorer areas is underfunded and under-doctored relative to richer areas. Als, 51 Overall patient satisfaction with general practice is consistently higher for some demographic groups than for others. Als, 52 This is, perhaps, not surprising: analysis suggests that the funding formula used to risk-adjust capitation payments for English general practice underweights for need associated with socioeconomic deprivation. 110

Past governments have tried a mix of approaches to making the provision of general practice fairer, including changes to GP funding, contracts, buildings, and staffing.⁵⁰ In the 2000s, a mix of these approaches temporarily succeeded in boosting GP numbers in deprived areas.^{50,111-113} In contrast, efforts to tackle the inverse care law in general practice since 2010 have been more limited. Policies have been small in comparison with the scale of the problem, and inequities are growing.^{48,50} Policymakers can do more to address these problems, including by reviewing and revising GP funding allocations and introducing stronger central oversight and coordination of geographical GP distribution.^{1,50,68,111,112}

Conclusion

In recent years, politicians in England have responded to challenges in general practice by suggesting that the current model for organizing the system does not work. Yet, the underlying causes of current performance challenges in general practice in England appear more closely linked to under-resourcing than the fundamental design of the system.

This does not mean that no change is needed. The way care is delivered in general practice in England must continue to evolve to meet changing population needs, such as increasing

multimorbidity, and to incorporate innovations in care, such as artificial intelligence, where these could improve quality or productivity of services. There is much to be done, such as better integrating the expanding range of health professionals working in general practice, re-considering the blend of national and local contracting for GP services, and ensuring that incentive schemes to improve quality in general practice achieve their aims. Different ways of managing GP services will also make sense in different local contexts-and new approaches are already emerging. 114,115 But a wholesale re-organization of English general practice—for instance, transferring the management of GP practices to NHS hospitals—is likely to damage and distract. Instead, improving the performance of general practice in the English NHS requires policymakers to focus on increasing investment, modernizing general practice IT and estates, and boosting the workforce with strategies to retain as well as recruit GPs-alongside broader policy efforts to support practices to improve the quality and coordination of services. Providing the long-term funding to make this happen will be challenging given the state of public finances and broader pressures on public services, as well as on hospitals and other parts of the NHS. 116 But if Simon Stevens was right that, if general practice fails, the NHS fails, then policymakers might consider investment in general practice money well spent.

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Supplementary material

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Conflicts of interest

Please see ICMJE form(s) for author conflicts of interest. These have been provided as supplementary materials.

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