

How widespread is working at scale in English general practice?

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Abstract

Background Over the last five years, national policy has encouraged practices to serve populations of >30,000 people (called 'working at scale'), by collaborating with other practices.

Aim To describe the number of English general practices working at scale, and their patient populations.

Design and setting Observational study of general practices in England

Methods We supplemented data published by the National Health Service on practices' self-reports of working in groups with data from reports by various organisations and websites of practice groups. We categorised practices by the extent to which they were working at scale, and examined age distribution of practice population, level of socioeconomic deprivation, rurality and prevalence of longstanding illness by these categories.

Results About 55% English practices (serving 33 million patients) were working at scale, individually or collectively serving populations of >30,000 people. Organisational models representing close collaboration for the purposes of core general practice services were identifiable for ~5% of practices; these were: large practices; superpartnerships; and multisite organisations. About 50% of practices were working in looser forms of collaboration focusing on services beyond core general practice, e.g. primary care in the evenings and weekends. Data on organisational models and purpose of the collaboration were very limited for this group.

Conclusions In early 2018, <5% of general practices were working closely at scale; about half of practices were working more loosely at scale. Data were, however, incomplete. Understanding what is happening at practice level is needed so that we can evaluate benefits and harms.

Key words

Family Practice; General Practice; Primary Health Care; Organizational Models; Health Policy; England

How this fits in

There are no firm data on the number of general practices working at scale in England and what models are being followed. We found that close collaborations for the purposes of delivering core general practice served about 5% of the population and looser collaborations focusing on other services served about half the population. However, data about these were very limited; it is important that we know what is happening at practice level to be able to evaluate working at scale.

Introduction

Over 7,000 general medical practices deliver primary health care in England.¹ For the last 70 years, the main organisational form of general practice has been the small private partnership of general practitioners (GPs), working in a single business unit, employing other staff.¹ When the National Health Service (NHS) was established in 1948, practices with a single partner GP were the norm.² By 2017, practices had grown, but were still small: the average number of partner GPs (full- or part-time) per practice was about three and the average registered population was about 7,000 people.¹

General practices are organisationally separate, with no routine contractual obligations to work together, although many practices have collaborated on a voluntary basis, for example, in out-of-hours co-operatives, and GP fundholding in the 1990s and more formally in Primary Care Trusts from 2000-2013. NHS England's Five Year Forward View 2014³ and the General Practice Forward View 2016⁴ promoted further collaboration. The argument was that 'working at scale', as this has been called, will promote integrated care, access to services, innovation, staff development and organisational resilience, reduce costs, and give primary care a stronger voice.^{4, 5} The NHS Long Term Plan of January 2019 and the new general practice contract for 2019/20 set out plans for all practices to join 'primary care networks'⁶; it will be mandatory for all practices to participate – and incentivised.⁷

There has been no specific organisational model for collaborative working between practices in England (arguably until early 2019, when detailed guidance on primary care networks was published), NHS England arguing that the model should 'depend on local circumstances'.^{5,8,9} A number of models, with different and ambitions and names (e.g. mergers, superpartnerships, multisite organisations, multispecialty community providers, primary care homes, federations, networks, alliances), have been implemented,^{2,10-14} many building on older groupings, relationships and agreements between practices.¹⁴ Published surveys have suggested that 60-80% of general practices work in collaboration with others. One survey provided the

names of collaborations but limited information about how these were organised, the closeness of links and their ambitions.¹⁵ Another survey provided more detailed information, but the response rate was low.¹¹

The size of collaboration proposed has been 'at least' 30,000–50,000 registered patients,^{4,7,16} although the evidence from the UK and elsewhere that any particular size of primary care organisation is better than any other is very limited.^{13,14,17-19} Commentators have argued that smaller practices offer better access, have better local focus and may better meet the needs of some patient groups.²⁰ The Care Quality Commission (the independent regulator of English health services) observed that while bigger general practices appeared to deliver better care in general, many smaller practices with good knowledge of their population, planning of care to meet its needs and good clinical networks also delivered outstanding care.²¹

In preparation for a study of the impact of working at scale on quality of care, we aimed to quantify the number of practices working at scale in England. However, general practice anecdote suggests that some groups are strong and active, and others have little impact on the practice's work. We therefore aimed to build on previous work to develop a comprehensive picture of working at scale attempting to differentiate between those working substantively together and those in which the links were weaker.

Methods

In January 2018, we asked NHS England for data about the extent of collaborations between practices with which it held contracts. Responding that it did not hold such data, it directed us to a survey it had carried out in September 2017 aiming to understand whether general practices were offering extended opening hours.²² As well as asking about extended access, the questionnaire asked 'What is the name of the group of which your practice is a member, for example this could be the name of your federation?' Only one free text answer to this question was recorded. The dataset provided only the name of the group and no data on the type of group to which the practice belonged. It was not clear which member of the practice had completed the questionnaire.

We therefore sought to enrich the data with information on the type of group according to the strength of the links between practices. At this stage, we were not clear how to categorise the practices: the groups listed in the NHS England survey used many different terms to describe their groups, including federations, consortia, provider organisations, networks, alliances, membership organisations, companies, collaborations or simply groups with no data on organisational form, purpose or closeness of links. Therefore we sought guidance from other literature: a systematic review of the impact of collaborations between general practices,¹³ an online article in which a list of GP organisations working at scale collated by a journalist,¹⁵ published reports about working at scale,^{11,14} and the websites of NHS England, the British Medical Association, the Royal College of GPs, health policy think tanks the King's Fund and the Nuffield Trust, and the online magazines Pulse and GP Online. This exercise provided us also with the names of other general practice groups – and information on organisational structure, purpose and closeness of links for some. We subsequently (HF and LF) searched online for all the named groups using Google, to identify constituent practices and information on organisational form, purpose and closeness of links.

It became clear from this process that we could identify three distinct types of practice: those working at scale for the purposes of core general practice, with shared strategy and risk; those working at scale to deliver services over and above core general practice only, such as extended access, or specialist clinics in the primary care setting; and those apparently not working with other practices at all. We defined core general practice as in the national contracts between NHS England and practices: the management of patients 'who are or believe themselves to be: a) ill with conditions from which recovery is generally expected; b) terminally ill; or c) suffering from chronic disease', during core hours.^{23,24}

We compiled a list of all general practices in England according to whether they were working at scale, defined as serving a population of >30,000 people, either as a single practice or as part of a group. We further categorised those working at scale according to whether or not they were working together for the purposes of core general practice, or for the purposes of services over and above core general practice only. We identified a separate group of university practices serving >30,000 people as those where $\geq 30\%$ of the

registered population was aged 15-24 (using demographic data on population served²⁵); these would be able to work at this scale because of low rates of life-limiting chronic conditions among patients resident for only part of the year, rather than to deliver the benefits envisaged by national policy. We excluded practices with <1000 patients from the dataset, because these tend to be either closing down, or serve specific populations, such as homeless people.

We identified whether practices were rural or urban, the proportion of patients aged 0-5 and 75+,²⁵ the level of socioeconomic deprivation in the Lower-Layer Super Output Area of the main practice surgery postcode (using the Index of Multiple Deprivation)¹ and the proportion who reported a limiting longstanding illness in the GP Patient Survey,²⁶ and examined differences in these between practices working at scale for the purposes of core general practice, working at scale for services over and above core general practice only, and not working at scale.

Results

In February 2018, NHS England listed 7,162 general practices with $\geq 1,000$ registered patients, each with a unique practice code. Figure 1 shows the number of practices and collaborations of different types, with the total size of the population registered with each type.

There were 37 (0.5%) large single practices with >30,000 registered patients, all working from multiple sites across a limited, definable geographical area (although often there were neighbouring practices that were not part of the large practice). About 1.5 million people (~2%) were registered with these large practices. Five had >50,000 registered patients, the largest serving a population of about 70,000. Eight were university practices.

We were able to find at least some information about group working for 6,701 of the 7,125 practices with $\leq 30,000$ registered patients (94%); 4,172 (62%) reported working as part of a group.

Two hundred and ninety eight practices reported working in 136 groups that could not be defined as working at scale, that is, with collective populations of $\leq 30,000$ patients. About 2 million people were registered with these practices.

There were 3874 practices working in groups with collective registered populations of $>30,000$ patients. Of these, 181 practices were working in ten groups that could be classified as working in close collaborations for the purposes of core general practice. In these, individual practices retained practice contracts with NHS England and a degree of autonomy.¹⁴ Nine out of the ten served $>50,000$ patients, the largest a population of $>300,000$. Some delivered general practice in distant geographical areas; for example, one with practices in Birmingham and Surrey and another practices in Leeds, the Midlands and London. The ten groups were either: superpartnerships ($n=8$), in which all GPs were in partnership but where the individual practices held contracts with the NHS; or multi-site organisations ($n=2$), in which a parent company held all the individual practice contracts with the NHS on their behalf.¹⁴ About 1.2 million people (2%) were registered with a superpartnership and about 290,000 (0.5%) with a multisite organisation.

None of the other 277 groups working at scale could be defined as a superpartnership or a multisite organisation; we therefore assumed they represented looser collaborations. For most we could not find any documentation indicating the organisational model; for 100, we found no online presence. Over 100 served populations of over 100,000 and the largest served half a million people. Most worked over a defined geographical area and included all or nearly all the practices in that area. About 30 million patients were registered with practices in these groups.

For about half of the 277 looser collaborations, an organisational website gave at least some information about the purpose of collaboration, which was in nearly all cases to provide extended access out of hours, and in many, in addition, to deliver services traditionally provided in the secondary care setting, for example, anticoagulation, dermatology or diabetes clinics, in other words, services over and above core general practice.

We found evidence that the data from the NHS England survey²² were unreliable for the purposes of understanding how many groups there were and which practices were involved in each; for example, 53 practices listed groups that were not listed by other practices, suggesting that they were not actually groups; specific groups were often found to be referred to by different names by different practices; several practices reported no group, when we had found in other documentation that there were in fact part of a group.

Table 1 shows the characteristics of practices according to our categorisation: not working at scale, working at scale to deliver services that are not part of core general practice, and working at scale to deliver core general practice. Practices working at scale were more likely to be urban, had younger populations, fewer patients with long-standing illnesses, and higher levels of socioeconomic deprivation than practices not working at scale. These differences were all statistically significant. The differences were more marked for practices working at scale to deliver core general practice than those working at scale to deliver only non-core general practice services.

Discussion

Summary

In February 2018, about 55% of the English population was registered with a practice working at scale, in other words, serving a population of >30,000 people either individually or collectively. However, only 5% was registered with a practice working at scale to deliver core general practice, in one of three organisational models: large practices, superpartnerships, and multisite organisations. Superpartnerships and multisite organisations often did not serve geographically neighbouring populations, although large practices did. For practices working at scale in looser collaborations, serving slightly over half of the population, data on composition, purpose and model were limited, although the practices were mostly neighbours geographically. Where data were available, the purpose of the collaborations was to deliver services over and above core general practice. Many collaborations, of all kinds, were working together to deliver services

for very large populations of greater than 50,000 patients. There was variation in practice and patient characteristics according to type of group: practices working at scale were less likely to be rural, and had younger, more deprived populations.

Strengths and limitations

Our study builds on previous work to identify the extent of working at scale over England. The NHS England survey²² only allowed practices to cite one collaboration and many practices may not have provided complete data on collaborations, given that it focused on extended access. Moreover, practices working in the same group may have reported different names for the same group. Some of our data sources were haphazard, such as organisational websites, so may be unreliable. We were therefore unable to map the multiple collaborative links fully. Collaborations may adopt new ways of working and new services very quickly according to newly identified priorities and websites may not keep up; however, it could be argued that a well-organised and functioning collaboration would have little difficulty in maintaining a reliable website. In favour of this argument was that it was relatively easy to collect data from websites about large practices, superpartnerships and multisite organisations, and much more difficult for some organisations calling themselves federations and networks. We recognise, however, that some federations or other types of group may have sophisticated organisational functioning of which we have not been able to find evidence.

Our data sources did not identify certain other models of working at scale that are known to be operating. These include GP At Hand, which delivers digital remote services (<https://www.gpathand.nhs.uk/>) and is reported to have more than 30,000 patients registered,²⁷ and a hospital-led model in Wolverhampton reported to have 70,000 patients registered.²⁸ Moreover, it did not reliably identify practices participating in the New Models of Care programme,²⁹ which focuses on integration across whole local health care systems.

Some of our data sources were unreliable, which means that we may have under- or overestimated the extent of working at scale both in terms of working closely together to provide core general practice, or in terms of less formal arrangements to deliver benefits over and above the requirements of core general

practice. One of the key problems in this regard is that practices may be part of more than one collaborative grouping, as shown in previous studies.¹¹

Comparison with existing literature

We found that working at scale was common, but not as common as suggested by a recent survey (with a 25% response rate) of practices and clinical commissioning groups, in which 80% of responding practices said they were working in formal or informal collaborations.¹¹ This study provided rich data on the nature of collaboration among responding practices. A survey of Clinical Commissioning Groups by a journalist estimated that '70% of the country' was covered by some sort of 'scale GP group'.¹⁵ However, this provided limited data on the nature of collaborations.

Implications

Understanding the extent of working at scale in general practice is the first step to evaluating the impact of different models of working at scale, and identifying the optimal size and appropriate models for tackling the challenges facing general practice. Evaluation needs to take into account practice and population characteristics.

Our study highlights many of the challenges of collecting data on working at scale in general practice and can be used to inform better ways of doing so.

It may be that small practices offer better continuity of care, especially for certain patient groups, such as people with multiple long-term conditions. Evidence from the United States and Canada suggests that small practices may deliver benefits such as better patient experience, more cheaply, with fewer hospital admissions than larger practices.^{19,30,31 32} Whether, however, these benefits are due to smaller organisational size, or other characteristics in turn associated with a smaller registered population, is not known.

For some collaborations, especially some superpartnerships and multisite organisations, the geography of participating practices was not conducive to delivering population-based care, which requires knowledge of

the needs of a defined population, with good clinical networks.⁴ Collaborations serving definable neighbouring geographical populations may be better placed to deliver population-based care. The less formal collaborations working at scale did tend to cover defined geographically-defined populations. Many served very large populations, where achieving agreement between many partners to achieve efficiencies and deliver care according to need may be challenging.

It has become received wisdom that how general practice is currently organised is not sustainable or fit for purpose. The difficulty in sustaining general practice needs, however, to be interpreted in the light of pressure from demographic, social and political forces, including funding context, workforce, patient characteristics and changing expectations. The traditional organisational model itself may not be the cause of the problem nor working at scale the solution. In any case, what 'working at scale' actually means in practice is not clear, although the announcement in the new GP contract of a requirement for practices to join primary care networks goes some way towards clarifying this.⁷ What remains very uncertain is how the new primary care networks, which will go beyond general practice and attempt to integrate across community services, will be integrated with existing primary care organisations working at scale, especially where these are not defined by shared geography and links with other parts of the health and social care system. Tracking progress towards working at scale and defining what it means in practical terms are critical if we are to understand the benefits and harms in relation to efficiency, workforce, patient experience and quality of care.

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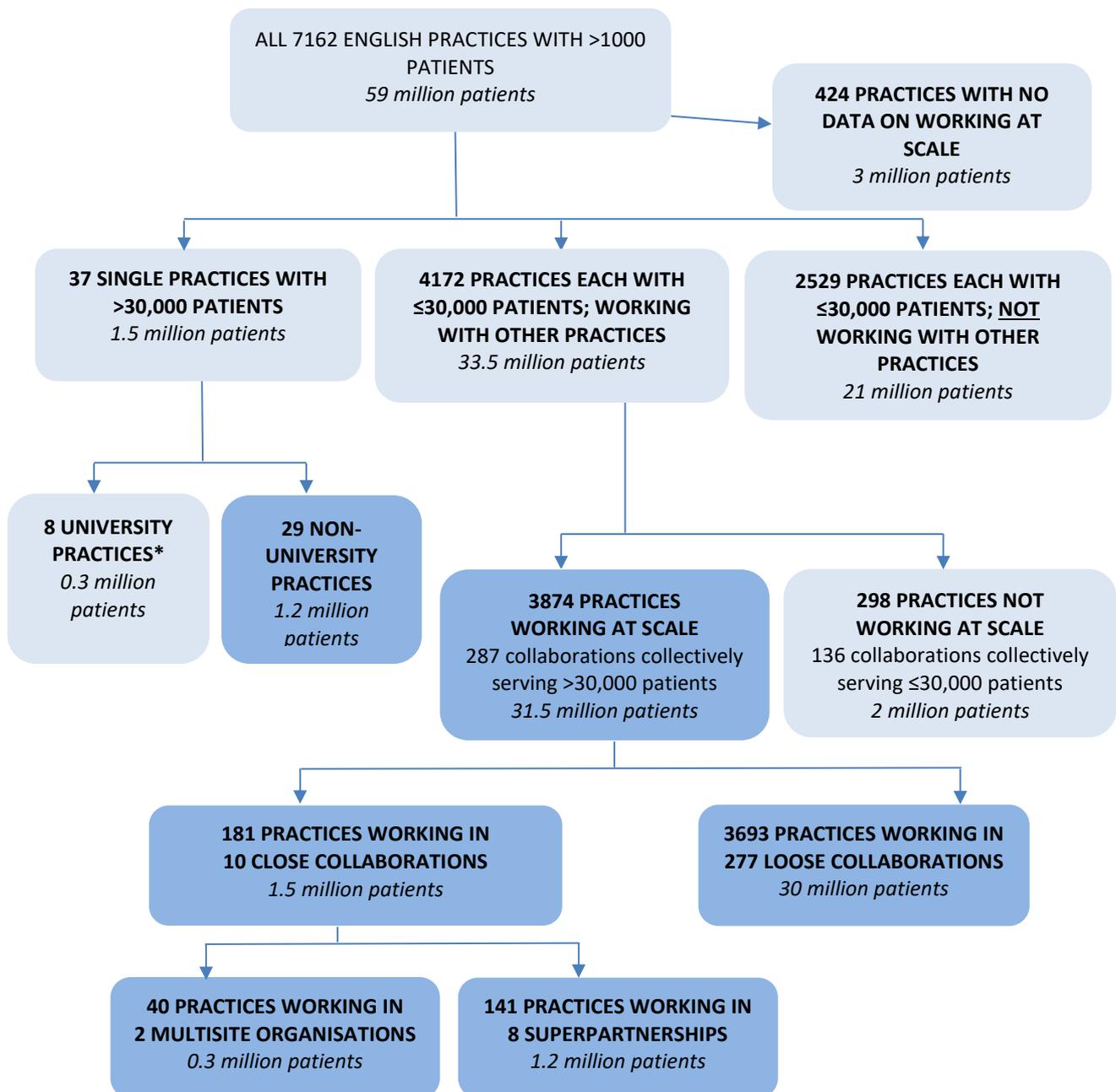
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Figure 1. Categories of working at scale in English general practices with numbers of registered patients

Practices in dark grey boxes were working at scale i.e. working to serve populations >30,000 patients either as single practices or in collaborations with other practices



*practices with >30,000 patients of whom ≥30% were aged 15-24

Table 1. Characteristics of practice and registered population by type of working at scale

Working at scale defined as working to serve populations >30,000 patients either as single practices or in collaboration with other practices

Practices in existence February 2018, except practices with <1000 registered patients

	Not working at scale	Working at scale For only non-core general practice*	For core general practice†	University practices	No data	All practices
Number of practices	2,827	3,693	210	8	424	7,162
Rurality of practice						
% rural	19.1	12.1	10.0	0.0	13.0	14.9
Odds ratio vs not working at scale (95% CI)		0.58 (0.51 to 0.67)	0.45 (0.28 to 0.72)			
Level of deprivation						
Median IMD 2015	20.6	22.9	30.2	21.5	23.0	22.2
Difference vs not working at scale (95% CI)		1.9 (1.0 to 2.7)	5.9 (3.5 to 8.4)			
Characteristics of practice population						
Mean % aged <5yrs	5.5	5.7	6.1	1.8	5.7	5.7
% difference vs not working at scale (95% CI)		0.2 (0.1 to 0.3)	0.6 (0.4 to 0.8)			
Mean % aged >75yrs	8.3	7.4	6.6	1.7	7.3	7.7
% difference vs not working at scale (95% CI)		-0.9 (-0.8 to -1.1)	-1.7 (-1.3 to -2.2)			
Mean % longstanding illness	54.5	53.0	52.3	41.5	53.6	53.6
% difference vs not working at scale (95% CI)		-1.5 (-1.1 to -2.0)	-2.3 (-1.2 to -3.4)			

*services beyond the core general practice contract e.g. extended access out of hours, services normally delivered in secondary care

†large practices, superpartnerships and multisite organisations working to deliver core GP at scale, i.e. to populations >30,000 patients. The core general practice contract requires practices to manage patients who are acutely ill, chronically ill or terminally ill during office hours.

IMD 2015: Index of multiple deprivation 2015 of lower layer superoutput area of practice postcode

