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Title

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Permalink

<https://escholarship.org/uc/item/0sh8d3hs>

Journal

Journal of the Royal Society of Medicine, 113(6)

ISSN

0141-0768

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Publication Date

2020-06-01

DOI

10.1177/0141076820931452

Peer reviewed

The primary care response to COVID-19 in England's National Health Service

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Introduction

Health systems across the world have had to make radical changes to help manage the COVID-19 pandemic in their own countries.¹ As the patient's first point of contact is with the health system, these changes have had a dramatic effect on primary care, including England's National Health Service (NHS).

Organisation of primary care in England

Primary care in England is largely government-funded.² Although private (paid for directly by the patient) primary care services have increased in recent years, the vast majority of England's population remain registered with an NHS general practice, which is their sole or main provider of primary care. These general practices are largely funded through capitation payments from the government, with only a small proportion of income coming from other sources such as NHS quality incentive schemes and NHS fee-for-service activities. During this time of turbulence with radical changes implemented in a very short period of time, this system of funding has provided financial stability for general practices, something that is not the case for many primary care practices in the USA or elsewhere.^{3,4}

Planning for the pandemic

The first case of COVID-19 in England was identified at the end of January 2020. Cases increased during February, and by early March, it became apparent that England faced a large COVID-19 epidemic. This led to the Department of Health and Social Care and NHS England (the bodies that respectively fund and manage the NHS in England) to recommend radical changes to the provision of NHS primary care services.

For most general practices, these changes began to be implemented in the week beginning 16 March 2020. As a first step, general practices switched from the

traditional model of face-to-face service provision to one where all patients were initially assessed through a telephone or a video call. Patients were encouraged to register for online booking of these appointments if they had not already done this. All patients requesting advice spoke first to a health professional, usually general practitioners. The aim was to deal with as many queries as possible by telephone or a video call. Patients who required a face-to-face appointment were booked to be seen in later that day. This ensured that patients were largely managed on the same day they sought medical advice. These changes have resulted in around three-quarters of patients being managed remotely compared to the same time last year when only one-quarter were, with the total volume of primary care activity falling by about 25%.⁵

Patients with symptoms that may have been due to COVID-19 infection were seen in dedicated respiratory clinics in general practices with the general practitioner wearing personal protective equipment. By early April, wearing personal protective equipment had become standard practice for all face-to-face consultations because of concerns about exposure to patients with asymptomatic infection. In an attempt to keep general practice clear of patients with COVID-19, most parts of England also began to set up dedicated 'primary care COVID-19 hubs'.

These hubs serve a network of general practices in a locality and see patients with suspected COVID-19 infection who need face-to-face assessment (for example, because of a prolonged illness or a deterioration in their clinical state). In some areas of England, COVID-19 home visiting services were also put in place by the NHS to see patients at home who would find it difficult to travel to a hub or for whom hospital admission was inappropriate. Finally, some primary care providers have also developed mobile oxygen saturation monitoring, where a member of staff is deployed to obtain a rapid reading from a patient at home. This is used when oxygen saturation level may be the only discriminator of serious illness, such as in silent hypoxia.

Information technology in primary care

Other changes were helped by the existing information technology infrastructure in NHS primary care. This includes full computerisation with all NHS general practices using electronic medical records; online access for patients to services such as appointment booking, ordering repeat prescriptions and viewing medical records; and the NHS Electronic Prescription Service whereby a prescription can be sent electronically to a pharmacy of the patient's choice anywhere in England. This electronic prescription service was very helpful for general practitioners as it soon became apparent that many patients had moved away from their usual locations, such as London, when the country went into lockdown in March 2020.

The full computerisation of NHS primary care also allows primary care physicians to work remotely from their clinical site but still obtain access to medical records. This has allowed primary care physicians who are unable to work in clinical settings to continue to offer telephone and video consultations from home and to review the results of laboratory tests and letters from specialists and other agencies. This is important for older physicians, physicians who are pregnant and physicians who have a medical problem that places them at increased risk of complications from COVID-19 infection. It also means that physicians who are 'self-isolating' because either they or a household member has symptoms of possible COVID-19 infection could continue to work during their quarantine period.

To help cope with the demand for advice from patients with symptoms of suspected COVID-19 infection, primary care teams were supported by the NHS 111 service.⁶ This is a free to access, nationally available service whereby patients can seek medical advice either by telephone or online. The NHS 111 service has played a key role in advising patients and in limiting demands on primary care and specialist services. Legal requirements around sharing data were also changed to make it easier to share medical information between different NHS organisations.

Reducing regulatory requirements

To further free up the time of primary care teams, some of the regulatory requirements for general practices were relaxed. This included assessments of general practices by the Care Quality Commission, which assesses quality of NHS services, and the suspension of annual appraisals and revalidation for doctors. Rules around certifying death and completing death certificates were also modified to reduce the workload of physicians. At the same time, the income of NHS general practices has been protected to ensure they do not face financial pressures that threaten their viability.

Optimising clinical care

To support the management of patients, the National Institute for Health and Care Excellence published guidance on the management of patients with suspected COVID-19 infection in the community.⁷ There have also been tools developed for remote monitoring of patients. However, concerns remain that some patients with COVID-19 infection in the community are not being adequately monitored, leading to adverse outcomes and deaths for some patients.⁸

Challenges

There have been serious challenges faced by primary care in England arising from the COVID-19 pandemic, not all of which have yet been addressed. From the perspective of patients, NHS 111 was initially overwhelmed by patient requests, resulting in long wait times to obtain advice and with concerning reports that some ill children may have been wrongly advised to stay at home, resulting in significant harm.⁹ Additionally, the remote consultation model for routine primary care, while offering safe and timely assessment for many, may also result in worsening health inequalities for patients who are not technologically literate, have hearing impairment or for whom English is not their first language.

The implementation of the 'COVID-19 primary care hubs' has been patchy, with services slow to develop in many parts of England and a perception of a lack of clear central guidance. In some areas where hubs are operational, emerging evidence suggests that utilisation is relatively low, indicating that the model may not be functioning at the capacity that was planned for. This has led to the closure of some hubs and also of home visiting services, with responsibility for managing patients with suspected COVID-19 infection being passed back to general practices. Finally, guidance to cease non-essential care for patients – such as physiotherapy, radiology services, cervical screening and spirometry – has the potential to lead to delayed diagnoses, poorer health outcomes and exacerbate existing health disparities.¹⁰

Primary care staff have also not been immune to difficulties. Most notably, the quality and availability of personal protective equipment was an issue particularly in the earlier part of the epidemic, endangering staff health and potentially reducing the quality of care for patients.¹¹ Several general practitioners have now died from COVID-19 infection in England and this has further exacerbated concerns about personal protective equipment in primary care. Testing for staff who are self-isolating with symptoms of COVID-19 has been difficult to access, meaning that staff who feel well enough to attend work must stay at home due to

mild symptoms which may not be COVID-19. This is now being addressed through an expansion in testing capacity for acute COVID-19 infection. However, testing capacity remains limited in England, as does contact tracing; both of which are core elements of global strategies to control COVID-19.¹²

Conclusions

We have seen rapid changes in primary care in England, but challenges remain, particularly if the number of people with COVID-19 infection increases rapidly and starts to overwhelm the health system, or if second and subsequent waves of infection occur. Other challenges include providing medical care for people who are self-isolating at home because of their age or because of underlying medical problems that increase their risk of complications and death if they contract a COVID-19 infection. There are also problems that will arise from the cutting back of many specialist hospital services, which will have negative effects on health outcomes if restrictions in health services remain in place for a prolonged period.

Overall, primary care in England has responded well to the COVID-19 pandemic, making radical changes to how primary care services are delivered in a very short period of time. Key to allowing this to happen is the commitment by the UK government to support general practices financially to prevent the loss of income that has occurred to primary care practices in countries such as the USA. However, the future will remain challenging for primary care teams in England until such time as a vaccine or effective drug treatment can be found for COVID-19.

Declarations

Competing Interests: None declared.

Funding: AM is supported by the NIHR NW London Applied Research Collaboration.

Ethics approval: Not applicable.

Guarantor: AM.

Contributorship: AM wrote the article and finalised the manuscript. EJM and ABB provided critical feedback. The final article was approved by all authors.

Acknowledgements: Imperial College London is grateful for support from the NIHR NW London Applied Research Collaboration. The views expressed are those of the authors.

Provenance: Not commissioned; peer-reviewed by Claire Rees.

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References

1. Anderson RM, Heesterbeek H, Klinkenberg D and Hollingsworth TD. How will country-based mitigation measures influence the course of the COVID-19 epidemic? *Lancet* 2020; 395: 931–934.
2. Majeed A and Molokhia M. Primary care in the United Kingdom. *J Ambul Care Manage* 2008; 31: 198–200.
3. Levey NN. Coronavirus already changing medical care in the U.S. See <https://www.latimes.com/politics/story/2020-04-10/coronavirus-lasting-changes-healthcare> (last checked 18 May 2020).
4. Kamerow D. Covid-19: don't forget the impact on US family physicians. *BMJ* 2020; 368: m1260.
5. Campbell D. Only one in four GP appointments now conducted in person. See <https://www.theguardian.com/society/2020/apr/19/tech-revolution-only-one-in-four-see-face-to-face-gp-visits> (last checked 18 May 2020)..
6. NHS Digital. Potential coronavirus (COVID-19) symptoms reported through NHS Pathways and 111 online. See <https://digital.nhs.uk/data-and-information/publications/statistical/mi-potential-covid-19-symptoms-reported-through-nhs-pathways-and-111-online/latest> (last checked 18 May 2020).
7. National Institute for Health and Care Excellence. COVID-19 rapid guideline: managing suspected or confirmed pneumonia in adults in the community. See <https://www.nice.org.uk/guidance/ng165> (last checked 18 May 2020).
8. Giles C. UK coronavirus deaths more than double official figure, according to FT study. *Financial Times*, 22 April 2020. See <https://www.ft.com/content/67e6a4ee-3d05-43bc-ba03-e239799fa6ab> (last checked 18 May 2020).
9. Royal College of Paediatrics and Child Health. Delayed access to care for children during COVID-19: our role as paediatricians – position statement. See <https://www.rcpch.ac.uk/resources/delayed-presentation-during-covid-19-position> (last checked 18 May 2020).
10. Coronini-Cronberg S, Maile EJ and Majeed A. Health inequalities: the hidden cost of COVID-19 in NHS hospital trusts. *J R Soc Med* 2020; 113: 179–184.
11. Majeed A, Molokhia M, Pankhania B and Asanati K. Protecting the health of doctors during the COVID-19 pandemic. *Br J Gen Pract* 2020. Epub ahead of print 11 May 2020; bjpgp20X709925. DOI: <https://doi.org/10.3399/bjpgp20X70992>.
12. Pollock AM, Roderick P, Cheng KK and Pankhania B. Covid-19: why is the UK government ignoring WHO's advice? *BMJ* 2020; 368: m1284.