Research report June 2022

Getting the best out of remote consulting in general practice

Practical challenges and policy opportunities

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Contents

Executive summary

This report presents selected policy findings and recommendations from the Remote by Default study of the switch to remote consulting (telephone, video and asynchronous online consultations) during the Covid-19 pandemic. The study included focus groups, case studies and a Delphi consensus exercise about the ethical principles that should shape decisions about remote versus face-to-face consulting. Research findings were tested and refined during four virtual workshops with more than 100 national and local policy makers, academics, clinicians, patients and other stakeholders. Key findings and recommendations are presented below.

Key findings

- Remote consultations can offer benefits to patients and to staff. For some patients, they provide a convenient way to access health care without requiring significant time off work or away from other commitments. For staff, they can be effective in enabling them to see patients in an efficient and timely manner and are ideal for some conditions and aspects of disease monitoring.

- But remote consultations can also be problematic. They can take longer than in-person consultations and can reduce access to care for some patients and vulnerable groups, raising significant questions over inequality of access.

- Remote consultations also carry some risks: missed or delayed diagnoses due to loss of information from visual clues, physical examination and ‘door knob’ concerns; missed signs of safeguarding risk; lost opportunities for public health interventions; and increased use of investigations and referrals to other services. The clinical risk from remote consultations is not yet well understood.

- Some GP practices managed the switch to remote consultations better than others. The level of success related to the size of the practice, the population need, and the digital and communications skills of the staff involved.

- Where triage works well, it steers people to the right professional and appointment type for their need and can avoid the need for a full consultation. But too often, triage arrangements are confusing and difficult for patients, and inefficient for practices, with many duplicated appointments.

- Managing the new mix of remote and face-to-face appointments can be stressful for reception staff, particularly when available appointments and triage rules conflict with patients' expectations and preferred type of appointment.

- Many patients still value personal elements of face-to-face care in relation to both relational continuity and confidentiality (for those without access to private space) and want the freedom to choose their appointment type. Others prefer in-person consultations because they are unable to use digital services. But this can clash with capacity constraints, causing tension between patients and practice staff.

- Many clinicians report finding it harder to build relationships, trust and a holistic understanding of patients through remote encounters, which are seen as more transactional than face-to-face care.

Recommendations

The Department of Health and Social Care, NHS England, the Royal Colleges, Health Education England and other national bodies have a crucial role to play in getting the context right for practices and frontline staff navigating the post-pandemic shift to digital. The full list of recommendations is on page 39, with the broad themes summarised below:

- There shouldn't be a one-size-fits-all approach to appointments in general practice; policy makers need to ensure citizens and staff have the skills and tools they need to use digital services, along with flexibility about how to access different types of consultation. Specifying exactly what technology should be used or how many appointments should be one type or another is likely to fail.

- Training should take a number of forms including:

  - government initiatives to train 'digital citizens' who can engage with a range of digital services including remote health care

  - a national training programme for GP reception staff, potentially adapted from clinic assistant training in The Netherlands, to support working with patients to enable them to engage remotely if possible and find alternatives if not

  - training for clinicians on consulting effectively online, and identifying and mitigating clinical risks associated with remote consulting

  - ensuring GP trainees experience the full range of remote and in-person consultations, and have sufficient exposure to the core values of general practice of continuity, holistic assessment and proactive care.

- Infrastructure is an important tool, particularly improved telephony, and should be prioritised by NHS England.

- Government should fund national research on the impact and effectiveness of different forms of remote triage and the impact of remote consulting on safety, equity and the use of wider NHS services.

Successful ongoing use of digital services in general practice requires action within practices, including:

- Practices should co-design access routes, triage processes and digital services with a diverse group of patients to ensure that all patients can access care on an equal footing and to minimise digital exclusion.

- Practices should monitor and minimise the physical and psychological toll of high-volume remote consulting on clinical and non-clinical staff by assessing and responding to staff experiences and individual support needs.

- The type of appointment offered should, within the limits of available capacity, be tailored to both the clinical needs of each patient and to their personal preferences and ability to use digital services.

- Practices and clinicians must organise the balance of remote and in-person consultations in ways that preserve continuity, holistic assessment and proactive care, which are the core features of general practice.

Introduction

The sudden and widespread shift to remote consulting in general practice triggered by the Covid-19 pandemic has accelerated a gradual change that policy makers had been pursuing for years. Fear of exposure to Covid-19 and the practical constraints of social distancing swept aside longstanding barriers to implementation and professional resistance to this new way of working.

While many patients and clinicians have welcomed the convenience, quality and safety of remote consulting, a variety of challenges have also been identified. Various studies[1,2,3] and patient surveys[4,5] have highlighted both strengths and weaknesses of remote consulting, with Murphy and others noting the need for 'adjustment'[6] in the ways they are organised and delivered. More recently, national media campaigns demanding more face-to-face consultations have drawn attention to dissatisfaction with remote access to GPs among some patients.[7] Despite slightly improved overall satisfaction with GP services during the pandemic reported in the national GP survey,[8] the 2022 British Social Attitudes Survey[9] showed that public satisfaction with GP services has fallen to an all-time low.

This report summarises recent research about remote consulting in response to the Covid-19 pandemic. It describes opportunities, challenges and risks associated with this shift, and explores inherent tensions that exist in choosing between remote and face-to-face care when capacity is constrained.

As the pandemic subsides and concerns shift from designing services for infection prevention to restoring high-quality care, the challenge is how to use remote consultations in ways that meet the needs of both patients and staff, while maintaining realistic assumptions about the role of technology in supporting high-quality service delivery. This is essential for restoring public satisfaction with general practice.

Aim of this report

This report describes the practical and policy implications of recent learning about the switch to remote consultations in general practice, drawing on research undertaken as part of the UK Research and Innovation (UKRI)-funded Remote by Default (RBD) study between May 2020 and September 2021. The report sets out a new framework for planning and evaluating remote consultations and recommendations for policy makers, service planners and frontline staff on how to get the best out of remote consulting in the future.

The report is in four sections. Section 1 is a brief summary of recent policy on remote general practice and describes the design and methods of the RBD study. Section 2 summarises the Planning and Evaluating Remote Consultation Services (PERCS) Framework, which brings together findings from RBD and two other related studies[10,11] to describe the ways in which characteristics of patients, clinicians, technology, staff and the organisations they work in interact to shape the experience of remote consultations. Section 3 presents key points that emerged from the workshops and case studies, presented around the themes of 'patients', 'the consultation', 'staff and organisations', and 'the wider system'. Section 4 sets out the practical and policy implications of our findings. The report concludes with actionable recommendations for ensuring that remote consultations contribute to high-quality general practice in ways that minimise tensions and maximise patient and staff satisfaction.

1 Overview of recent policy on digital services in primary care

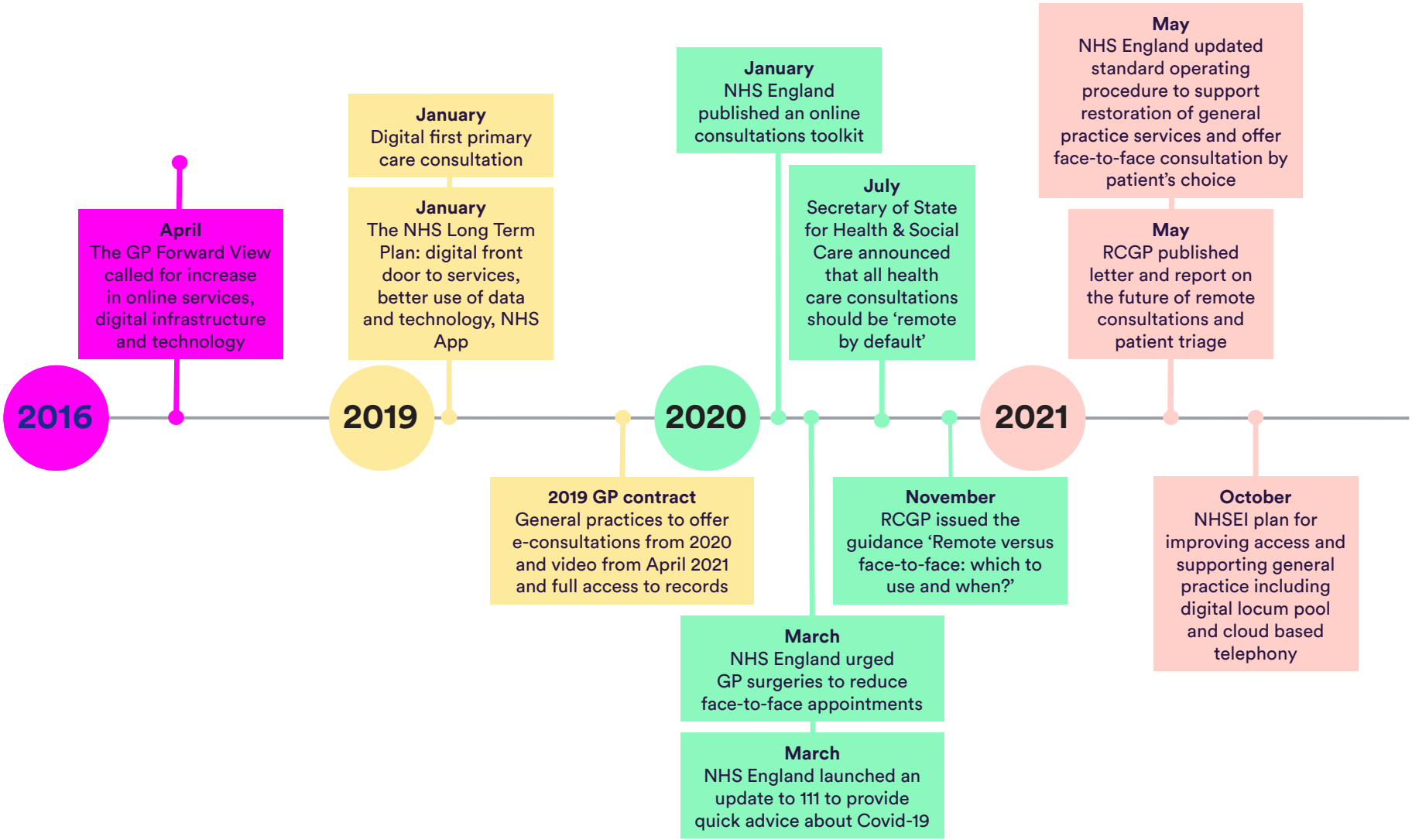
Efforts to support and incentivise the use of digital technology for remote consulting in general practice changed from ad hoc local initiatives to a national drive for change with the publication of the *General Practice Forward View* in 2016.[12] This called for more online triage and consulting; use of technologies to reduce administrative workload and achieve 'paper-free' practices; increased use of apps to support patient care; and investment in IT infrastructure.

England's first 'digital first' NHS GP practice – established when private digital provider Babylon Health took over an NHS GP practice in West London – was welcomed by some patients, but raised concerns about digital first services 'cherry picking' mainly healthy patients from other GP practices, leaving complex patients in traditional practices with no extra resources. There were also concerns raised about increased costs for the host clinical commissioning group (CCG). In 2019, the Digital First General Practice consultation sought to iron out these challenges, and informed the Primary Care Digital GP Operating Model. This introduced various standards to shape the further emergence of digital first practices and ensure they continued to offer in-person appointments for their registered patients.[13] In the same year, the *NHS Long Term Plan* promised that all patients would be able to choose digital access to general practice,[14] and the 2019 GP contract[15] included formal requirements for practices to offer e-consultations from April 2020 and video consultations from April 2021.

By the start of the Covid-19 pandemic, telephone consultations were widely used and online consultations were available in over a third of GP practices,[16] supported by guidance on how to use them from NHS England.[17] Video consultations were still relatively rare, but their use was increasing quickly in

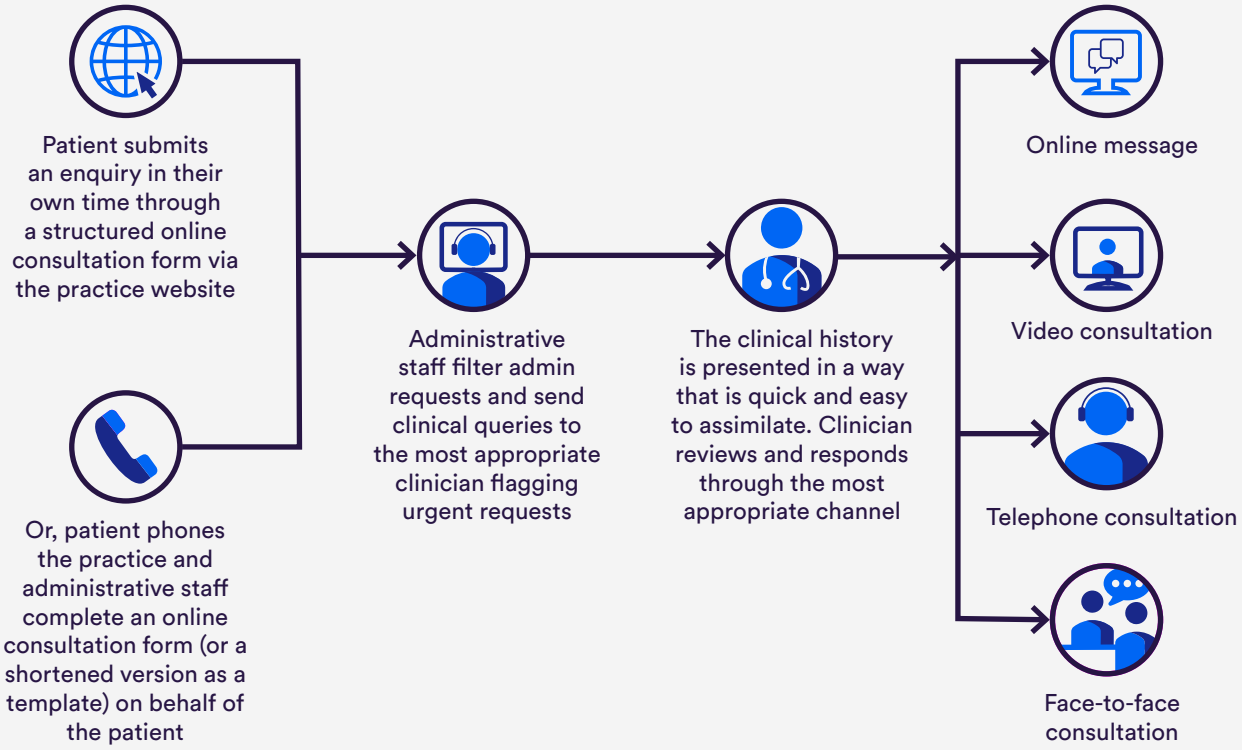
private sector general practice.[18] In July 2020, the then Secretary of State for Health Matt Hancock proposed in a speech that all consultations should be remote by default, with national guidance issued soon afterwards on how to organise 'total triage' systems.[19,20] These became a universal feature of general practice during the pandemic and are still widely used, with additional guidance issued by the RCGP on the safe use of remote consultations in November 2020.[21]

Figure 1: Policy timeline for digital general practice and primary care 2016 to 2021



The pandemic drove widespread use of triage arrangements – either through telephone assessment or by submitting an online consultation form – to prioritise request for appointments and channel patients to the right person for their needs. By early 2021, pushback from patients on universal remote triage, and media accounts of the frustrations of patients being forced into remote consultations, led to a reversal of this position. Guidance from NHS England said that all practices should resume face-to-face consultations and that patients should be able to choose a face-to-face consultation if they want one, while the RCGP called for further investment in digital infrastructure and staff training to support the ongoing use of remote consulting in ways that minimise inequalities. Further guidance on remote consulting was issued by NHS England in October 2021.[22,23,24]

Figure 2: Organisational arrangements for the delivery of telephone triage



Source: NHS England (2020) 'Advice on how to establish a remote "total triage" model in general practice using online consultations'. www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/C0098-total-triage-blueprint-september-2020-v3.pdf

The shifting and reversing in policy on remote consultations highlights that the expectations of policy makers about a neat, linear association between policy priorities and anticipated impacts and benefits was misplaced. It also reveals the inherent tensions, complexities and differing expectations that exist between patients, policy makers, clinicians and other stakeholders in relation to the growing use of digital technology in general practice.

With ongoing media criticism of access to general practice, there has been a mixed and at times contradictory picture emerging from public polling on overall satisfaction with general practice.

We now present key findings from the case studies and workshops, and consider how policy makers and practitioners can best support an effective balance between remote and face-to-face consulting as we emerge from the pandemic.

Methods

This report draws on findings from the UKRI-funded RBD study, which examined experiences and challenges of the switch to remote consultations in general practice in response to the Covid-19 pandemic. The study included an evaluation of the remote assessment of breathless patients and four qualitative case studies of the switch to remote consulting in South London (Greenwich), Oxfordshire, Devon and South Wales, comprising interviews with 46 clinicians, 12 patients and 14 non-clinical staff (practice managers, receptionists and staff from a CCG, Healthwatch and a learning disability service). Interviews explored arrangements for introducing remote consulting at the start of the pandemic; support provided by external organisations and the quality of digital infrastructure; the experiences of staff and patients of undertaking remote consultations; risk in remote consulting; inequalities; and impact on practice resilience.

Details of the case studies and wider research methods and ethics approval of the study are available in Greenhalgh and others (2021).[25]

We also conducted four virtual workshops, with more than 100 national policy makers, academics, clinicians, patients and other stakeholders; and a three-round Delphi consensus exercise about the ethical principles which should shape decisions between remote and face-to-face consultations.

The four workshops were conducted via Zoom between September 2020 and June 2021. Emerging research findings were presented and discussed with the different stakeholders to gain further insight into implementing, providing and using digital primary care services. Each workshop addressed a different theme:

- Inequalities and digital exclusion
- Choosing between remote and face-to-face consultations
- Impact of shift to remote consultations on GPs and other practice staff
- Practical and policy implications of research findings

The workshops aimed to identify practical ways in which policy makers and frontline practitioners could get the best out of digital technology and remote consultations for patients, staff, practices and the wider NHS. Key points from the workshops are presented in Section 3 of this report.

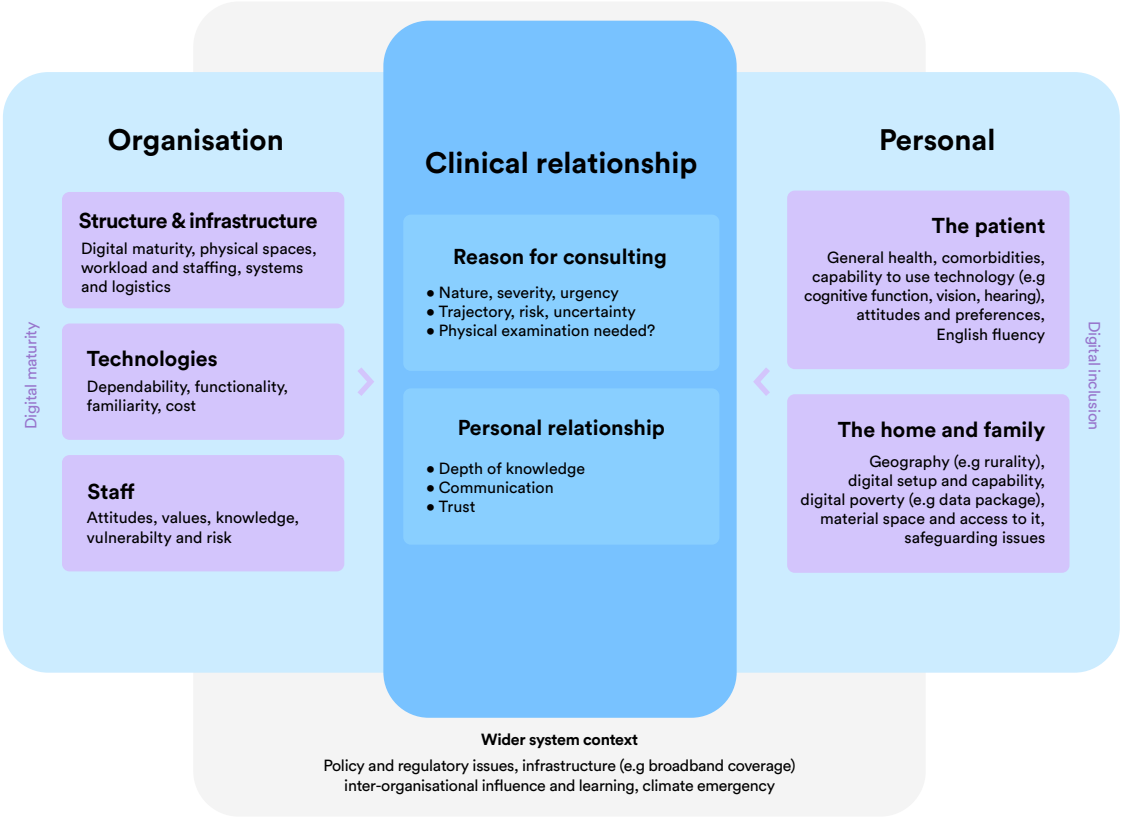
2 The PERCS framework: Planning and Evaluating Remote Consultation Services

Data from research on remote consulting before and during the Covid-19 pandemic informed the development of a framework to guide the planning and evaluation of remote consultation services.[25] The PERCS framework describes the multiple factors which shape the delivery, use and effects of remote consultation, focusing in particular on:

- patients' ability to access and use remote services, and their wider personal and social context
- the clinical consultation, relationships between patients and professionals, and the context in which they take place
- the organisations and staff delivering remote consultations and the technologies they use
- the wider system including the policy and regulatory context, and environmental sustainability.

Figure 3 presents a simplified version of the PERCS framework, illustrating the relationships between different factors that influence remote consultations.

Figure 3: The Planning and Evaluating Remote Consultation Services (PERCS) Framework



Original source: Greenhalgh T et al. 'Planning and Evaluating Remote Consultation Services: A New Conceptual Framework Incorporating Complexity and Practical Ethics' *Front Digit Health* 2021;3:726095.

Underpinning this framework are three principles that must be considered when developing remote services. These relate to:

- clinical quality, including the six domains of quality described by the Institute of Medicine plus the additional domains of resilience and learning and development[26]
- clinical ethics, such as beneficence, non-maleficence, efficiency and equity
- the ethics of care, such as staff wellbeing, sustainability and fairness

Building on the PERCS framework, and on themes and discussions from the workshops, the next section is structured around the four sections of the PERCS framework where policy and practice can be targeted to enable patients and clinicians to get the best out of remote consulting: patients and carers, the consultation, the organisations and staff that deliver care, and the wider system. In Section 4 we examine the policy implications of the key findings in each of these areas.

3 Main themes from case studies and workshops

Patient and carer perspectives

Themes about patient experience in the case studies and workshops echoed those reported elsewhere about the personal and wider contextual factors which shape people's ability to access and use remote services.[4,5] Many interviewees and workshop participants had experienced the speed and efficiency of digital technologies in delivering easy-to-access consultations, prescriptions arriving within seconds of ending a consultation, and text messages containing blood forms or medical certificates.

Nevertheless, several interviewees with ongoing health problems missed the subtle 'add-ons' of in-person consultations that build **relationships and trust**. One interviewee in his 70s described wanting to watch his GP's face when receiving test results so he could judge whether he looked worried about them. There was also wide concern about the lost opportunities for patients to raise difficult or embarrassing issues as an add-on to their main presenting problem (so-called 'door knob' diagnoses). While still possible in remote consultations, these were thought to be harder to mention in the closing moments of a phone or video call.

For **very vulnerable patients** with chaotic and disorganised lives, the challenge of remote consulting was not necessarily any greater than for in-person attendance at a GP practice. However, achieving coherence across a mix of services provided by different organisations – many of which had switched to digital consultations – presented additional challenges. Thus, health problems that were exacerbated by housing needs or benefits problems required a person who may have no mobile phone or money for phone credits to tackle three different digital access routes.

There was broad consensus that these patients still need in-person access to services. However, with more aspects of daily life now managed remotely, health and care workers in the Plymouth case study suggested that **care coordinators and social prescribers should be trained to help very vulnerable patients to engage with the digital world and to navigate and achieve coherence between services** which can only be accessed digitally. This approach was supported by workshop participants.

Patients experienced barriers to access in several ways, including the technical challenges of inadequate telephony systems; lengthy online consultation forms; appointment booking rules that rejected patients' judgements about the type of appointment needed; and telephone appointments that were offered without a specified time slot. There were many accounts of the stress of receiving a call when at work or when discharging carer responsibilities, or of clinging onto a phone all day then missing a call back due to a weak phone signal. Appointment booking rules introduced in response to the pandemic – if strictly applied – at times fuelled tension between patients and receptionists.

The second workshop explored whether standard operating policies (or triage systems; see below) with explicit criteria for allocating phone or face-to-face appointments according to patient needs and preferences would diffuse these tensions and make access easier for patients. Participants argued that an '80:20 rule' might apply, with 80% of patients able to cope with practice policies and 20% struggling to do so because of individual and often fluctuating needs that require a personalised response. One patient interviewee illustrated this day-to-day variability in coping with remote consulting:

"there are days when I wake up with [a] foggy brain and struggle to find the right words to describe my symptoms",

but on a good day she coped well.

There was broad agreement that **good communication is essential**, along with ways to **understand each patient's ability to undertake a remote consultation at the time they request an appointment**. Given an opportunity to explain their needs and preferences, and the right kind of open

conversation with receptionists, many patients were thought to be willing to give remote consulting a go, even if their preference was for a face-to-face appointment, particularly if they understand that the remaining face-to-face appointments are being saved for patients with severe acute symptoms.

Clinicians acknowledged the importance of patient choice of appointment type, but balanced this against the constraints of limited capacity. For several clinicians, the ease of remote access through e-consultations was seen to encourage some patients to consult too soon after symptoms of minor illness first appeared – many of which would resolve without medical input. The added workload of 'supply induced' demand raised concerns about overuse of remote appointments by patients with minor illness, reducing access for patients with more complex illness.

The Delphi consensus process undertaken as part of the RBD study explored situations where negotiations fail and tensions arise between patient preference and practice policies and priorities. These were attributed to **inadequate effort to understand patients' needs and preferences mixed with the challenges of explaining to patients about limited capacity** and the need for clinical judgements about severity and acuity of symptoms to determine access to limited face-to-face slots. In the words of one workshop participant,

"it's like autocracy versus democracy. Always explain. That breaks the tension"
(Patient living with long-term conditions, Greenwich)

albeit that a receptionist interviewee described how tiring these conversations can be and how much patience they require. A more detailed account of the principles to guide decisions about booking appointments identified through the Delphi process is available in Greenhalgh and others (2021).[25]

Figure 4: Actions to improve digital services from the perspective of patients

Communication and transparent booking processes

- Provide clear and accessible information to patients about types of appointments available, how to book them and who can use them
- Maintain in-person appointment booking for people who cannot use digital or telephone booking

Clarity about patient ability to use remote consultations

- Assess patient capability to use digital services at the time of registration and periodically thereafter
- 'Check in' before and during consultations about how patients are coping with their remote encounter

Personalised support for patients, including the very vulnerable

- Develop social prescriber and care navigator roles to support very vulnerable patients to coordinate digital services across organisations
- Inform patients about local initiatives to enhance their digital skills

Confidentiality and continuity

- Ensure patients can consult confidentially if not given a fixed appointment time or are uncertain about access to a safe space at home
- Maintain access to continuity of care between clinicians (or microteams) and patients with ongoing problems

Clinical consultations

Two broad themes emerged in relation to clinical consultations. First, the effect of remote consulting on the nature of clinical decision making and management of clinical risk. Second, how remote working affects the relationships, trust and holistic knowledge of patients, which are central to the work of general practice.

For some conditions and some aspects of disease monitoring, a combination of online, telephone and video consulting could be convenient, effective, safe and efficient, and highly valued by patients and clinicians alike. As the pandemic progressed, clinicians increased their skills and confidence in remote consulting, learning how to move between different types of remote encounter in different clinical situations, and also where technology offered no added value. Thus, swapping from a phone call to a video consultation in order to 'eyeball' a child was seen as an important way to reduce the risk of missing severe illness, whereas photographs were clearly preferred for assessing rashes. Conversely, acute stomach pain was widely thought to need physical examination that could not be substituted by remote images. Aside from some specific clinical situations (including children with fever), video consultations were generally thought to be too slow and complicated to set up to justify the limited additional information they provided. These issues have been described in more detail by Greenhalgh and others (2022).[2]

The case studies identified various forms of **clinical risk associated with remote consultations**, occurring before, during and after the consultation. These are described in more detail by Rosen and others,[27] and include loss of visual information (such as a limp) which could help to inform a diagnosis or indicate a safeguarding risk (such as signs of physical neglect); loss of information from physical examination which was sometimes mitigated by increased use of investigations and referrals to specialists; reduced opportunities for screening; and loss of opportunistic health checks. Few GPs had received training in remote consulting before the pandemic and, for some GPs, this loss of wider sources of visual information was stressful, raising fears about the risk of missing important clinical signs.

Several GPs noted that Covid rules had restricted home visiting, weakening their understanding of how personal and family context might be affecting a patient's health. They were concerned that continuity was disrupted and that it was harder to build a therapeutic relationship and trust with new patients. This could reduce patient confidence in diagnosis and management plans made over the phone, driving some to subsequently attend accident and emergency (A&E). One GP who also worked in A&E described seeing patients who deny having seen a GP, but subsequently reveal they have been prescribed medication after a telephone assessment, which they didn't trust.

Clinicians also reported that remote consultations were more **transactional** than in-person consultations, making it harder to adhere to the core values of general practice in relation to holistic, ongoing care. The loss of visual information and casual chat when patients walk into a consulting room limits the ability to assess social and personal context alongside physical and psychological symptoms. This was seen as a significant barrier for general practice trainees learning how to make a holistic assessment of patients, taking account of their personal and social context – a point which is considered further below.

Figure 5: Actions to improve the quality of clinical consultations

The core values of general practice

- Promote continuity and minimise use of transactional digital encounters for patients with complex needs
- Combine remote and face-to-face encounters to build raport and obtain a holistic understanding of patient needs
- Promote the core values of general practice in GP registrars by ensuring they have adequate experience of holistic assessment and continuity of care

Risk in remote consultations

- Identify and mitigate clinical and non-clinical risks before, during and after consultations
- Support patients to consult remotely in contexts where they can freely and confidentially share information
- Train staff to identify and respond to safeguarding risk in remote consultations

Skills for safety, quality and effective use of other services

- Disseminate and monitor adherence to guidance for safe, effective consulting in response to emerging research evidence
- Provide training and peer learning to build skills in time-efficient remote consulting and making best use of alternative consultation types
- Monitor the impact of remote consulting on use of investigations, treatments and other services

The organisation and its staff

As the pandemic progressed, limited access to equipment for remote consulting in some practices was largely ironed out with support from IT leads in practices, CCG support staff and the development of new functions by technology companies. However, the ability of practice staff to use technology, respond to glitches and develop the use of remote consulting varied considerably, reflecting different levels of digital maturity. Less digitally mature practices lacked staff who could resolve technical problems and needed external support from CCGs. They made little use of online access, and offered mostly telephone consultations in response to the pandemic. Greater **digital maturity** was seen in practices with staff who could resolve IT problems, which sought to address and minimise digital exclusion, and adapted their use of remote consulting over time as they learned more about how best to use different technologies. The most digitally mature practices had digital development plans, and were actively engaged in testing and evaluating different digital services. Further detail about the **digital maturity scale** developed through this study is available in Greenhalgh and others (2021).[25]

Physical space, in terms of the size and layout of practices, shaped many aspects of care delivery, including how services were organised to achieve social distancing and control infection; to see patients in person; to meet colleagues; and to obtain peer support from others in the practice. While smaller practices struggled to return to in-person consulting, larger practices were able to restore services more easily and to organise socially distanced staff meetings and peer support sessions. Overall, however, we identified a considerable toll in terms of staff isolation, lost opportunities for peer support, patient comfort, and access to care and patient confidentiality (for example, patients having to talk to staff through intercoms and open doorways).

A key challenge in all practices was how to safely assess patient needs and allocate them to the right kind of appointment while minimising infection risk for both staff and patients. This became harder when demand for appointments picked up after the first lockdown and outstripped capacity in many practices. The use of **total triage** (pre-assessment of all requests for an appointment prior to booking) through telephone and online consultation forms grew quickly at the start of the pandemic and has continued to evolve since then.

At their best, **triage systems** allow simple needs to be addressed without the need for an appointment and allow patients to be allocated by receptionists to a clinician who can meet their needs. In practice, the boundary between triage arrangements (where initial information is gathered for a preliminary assessment) and remote consultations could be blurred and 'total telephone triage' by a GP became the default form of consultation in most practices during the pandemic, with a few requiring all patients to complete an online consultation form.

Practice websites were used to support triage and to provide information about accessing the practice, but some workshop participants argued that websites were often poorly designed and difficult to use.

Concerns about triage fell into four main themes: digital exclusion and inequalities in access to appointments; the impact of different triage arrangements on patient and staff experience; inefficiency and duplication of care; and the impact of online triage and consulting on overall GP workload.

The issues of digital exclusion; challenges in completing online forms; inconvenience experienced by patients when not given an appointment time; and the tensions that can emerge between patients and receptionists are described above. More digitally mature practices described various approaches to reducing digital exclusion, including receptionists completing online consultation forms for patients; restoring the ability to walk in and book an appointment as early in the pandemic as possible; and access policies that enabled some patients to book directly into face-to-face appointments. However, the tensions and frustrations arising from triage systems and appointment booking rules described by both patients and staff suggest that triage systems need to be improved.

Interviewees and workshop participants from practices using total telephone triage described some of the inefficiencies of this approach. Patients who needed a physical examination had to have two appointments, and those with a strong preference for an in-person appointment were often frustrated by the requirement for an initial telephone call. Furthermore, some GPs were concerned that the ease of access to e-consulting was increasing demand to unmanageable levels and that, in line with other research findings,[28] remote consultations often take longer, raising further questions about their overall efficiency.

There was broad agreement that the design of triage and remote consulting, set up in haste at the start of the pandemic, had not taken sufficient account of patient needs and preferences, with calls to co-design post-Covid services with patients and carers. Co-design would need to include communications about appointment types and how to access them; website design and content; and choice of online system for remote consultations.

The reported strengths and weaknesses of different triage methods are summarised in Figure 6.

Figure 6: Strengths and weaknesses of different triage systems

	Strengths	Weaknesses
Pre-booked phone appointment with call back time	Convenient for some patients, avoids time off work/travel to practice if clinical problem can be managed remotely.	May cause 'double-touch' appointment if physical examination needed. Disliked by some patients. Potential safeguarding issues if patient not seen in a confidential space.
Un-timed phone appointment	More manageable for housebound and non-working patients. Allows clinicians to 'pick' patients within their scope of practice.	Hard to put life on hold while awaiting call. Calls may be received when in a public/ non-confidential space. Poor phone signal at the time of call back.
Short online form (eg *Ask My GP*, *Footfall*)	Provides advanced information about problems. Allows staff to filter out admin/book with the right clinician or to refer to another service. Easy to complete for patients.	Potentially burdensome for patients, may not contain the right information to allow for a full remote assessment without a phone call or appointment.
Full online consultation (eg *E-consult*)	Some consults can be completed without further contact. Convenient for some patients. Can book with the right clinician if appointment needed.	Can be complex to complete/ for staff to complete for patients. Risk averse alerts to attend A&E. Some patients 'game' responses.

Clinical staff

The case studies highlighted how clinicians have to cope with a different physical and cognitive load with remote compared with face-to-face consultations. A single clinical problem may require a multi-channelled approach, combining different consultation types (phone, text and video) in addition to collating different sources of information (patient history, hospital letters, past test results, etc). This increased the duration of consultations in many cases, and could make encounters more transactional, requiring extra effort to develop rapport and ensure patients' understanding.

Some GPs described the physical discomfort of sitting by the phone all day. Others explained how the loss of personal interaction, time constraints and strict guidelines around when they could invite patients for face-to-face assessments contributed to a decrease in job satisfaction. Several GPs referred to a disconnect between the GP they want to be and the GP they have become, affecting their morale and confidence.

The complex effects of remote consulting on staff physical and emotional wellbeing added to the difficulties of responding to a pandemic without the appropriate training. During both the case studies and the workshops, concerns were identified about younger and less experienced practitioners and trainees, and the extent to which the current context provides enough experience of the basics of building relationships with patients and for observing and developing skills in holistic assessment and management of patients.

There were concerns that asking trainees to undertake remote consultations before they had learned the basics of clinical consulting was stressful for them and potentially demotivating. In the words of a GP interviewee who was a trainer:

"It's like telling a child in year six you're gonna do calculus without them knowing what two plus two is. And that's what we're asking our doctors to do now"
(GP, Oxfordshire)

Another described a trainee who was not enjoying remote working and considering returning to a hospital role.

Effects on physical and psychological wellbeing were countered in some practices by positive experiences around team support and access to peer advice (where this was possible) to help with clinical uncertainty. Increased autonomy and more control over the structure of their day and overall workload were also valued.

Non-clinical staff

Mirroring earlier comments about patient experiences of accessing different types of appointments, receptionists were acknowledged as the interface between remote and face-to-face care. Their roles combine identifying patient needs; applying practice policies for appointment allocation; explaining constraints on capacity; booking appointments; and, where appropriate, navigating patients to other services. With a backlog of clinical problems emerging after the pandemic, demand for appointments is increasing, as are media reports of aggression towards reception staff.

Explaining how telephone work differs from face-to-face encounters, a receptionist interviewee described needing to

"invest a lot in our verbal communication and listening also because patients are more frustrated. So we also have to be more patient, we have to also be more aware of other alternatives to offer, so it is more demanding"
(receptionist, Greenwich)

Excellent communication skills were highlighted as the cornerstone of satisfactory encounters between receptionists and patients. Workshop participants argued for a step change in receptionist training, with a strong focus on communication and negotiation skills, alongside skills in using digital technologies and managing glitches in software.

Figure 7: Actions to increase staff wellbeing and improve the design and delivery of digital services

Promoting wellbeing in clinical and non-clinical staff

- Introduce initiatives to address physical and emotional impacts of remote consulting on staff such as redesigning the physical environments to allow for increased social interaction and introducing short breaks
- Strengthen peer support for managing clinical uncertainty in consulting, such as clinical team meetings to discuss difficult patients and clinical supervision for recently qualified clinicians

Enhancing skills in communications and relational working

- Enhance training for reception staff to assess patients' digital skills alongside clinical needs and in communicating and negotiating appointment choices
- Blend remote and face-to-face consulting to build and maintain relationships with patients with ongoing problems
- Ensure GP registrars experience enough face-to-face consulting to learn about holistic assessment, continuity and the core values of general practice

Rethinking triage systems

- Offer simplified online triage tools for patients with limited literacy and alternatives to online triage for people lacking access to digital technologies
- Develop triage pathways to minimise the number of double-touch appointments
- Ensure access and triage arrangements enable equal access for all patients
- Coordinate the multiple entry points into general practice (including 111 booking) to minimise repeat attendances for the same problem

Co-designing services and communications with patients

- Involve patients in developing appointment types and how to access them
- Involve in developing communications about remote consulting
- Involve patients in designing the appearance and content of practice websites.

The wider health system

GPs in particular valued the lighter touch regulation on practices during the pandemic, highlighting the impact of simpler decision-making processes and reduced regulatory scrutiny on the ability to innovate at pace, and in response to local need. In some practices, support from in-house IT leads or CCG staff accelerated the switch to remote consulting, while others were delayed by poor IT infrastructure and limited support. As demand for GP consultations increased, exceeding pre-pandemic levels, the infrastructure to support remote consulting came under stress in some areas. Inadequate telephony systems emerged as a particular problem, with patients unable to get through to their practice or experiencing very long waits for calls to be answered.

The lack of coordination and coherence between services (including health, social care and housing) and long-standing problems of poor communication between providers were particularly problematic in relation to vulnerable populations – most notably for homeless patients. In contrast, improvements in communication between GPs and specialists supported by the consultant connect software highlighted how digital services can increase access and create coherence in some clinical situations.

The rapid switch to digital at the start of the pandemic allowed little time for training in remote consulting. Most clinical and non-clinical staff interviewed described muddling through with help from digitally competent colleagues, while some developed non-digital workarounds when they hit barriers to using a particular technology. Various themes emerged in the workshops about the need for better **training for staff and patients**, including the need to train citizens to engage with digital technologies in all walks of life, including health and health care; and training clinicians to identify clinical and safeguarding risks remotely.

Recognising the difficult role of receptionists in identifying patient needs and preferences, and negotiating suitable appointment types, the extended receptionist training in The Netherlands (where they are known as clinic assistants) was identified as a potential model for developing additional skills and **professionalising the receptionist role**. For GP registrars, the challenge

was highlighted of training as a GP through digital consultations without having learned the basics of holistic, medical generalist care.

Many participants welcomed the contribution of remote consulting to creating **a more sustainable NHS**, with reduced travel to clinics and electronic communications replacing paper. In contrast, however, some clinicians described how remote consulting can increase the use of medications, investigations and referrals to specialist clinics to fill gaps in information from physical examination.

Figure 8: Actions for national bodies and professional organisations to improve the infrastructure for delivering remote consultations

Develop policy to support equal access for all

- Avoid national directives about the type of appointments to be offered
- Require that different modes of access (online, in-person and telephone) are provided to meet different patient needs
- Improve public awareness that effective care can be delivered remotely

Invest in digital infrastructure

- Telephony to support increased telephone traffic into practices
- Widen access to wifi and high-speed broadband
- Skills development for practice staff to make best use of available platforms

Fund and promote national research

- Evaluate the impact and effectiveness of remote triage and the impact of remote consulting on safety, equity and the use of wider services
- Monitor emerging evidence about safeguarding and clinical risk in remote consultations and regularly update guidance for clinical practice

Enhance training for staff and patients

- Re-launch pre-pandemic initiatives to train digital citizens who can engage with a range of digital servcies including digital health care
- Ensure that staff training for digital care includes skills to assess patients' ability to engage with remote consulting and to support them to do so

4 Implications of findings for policy and practice

Building suddenly and dramatically on a steady stream of policies to promote remote consultations, the Covid-19 pandemic drove a pace of digital transformation that politicians and digital innovators had only dreamed of. But it also fast-forwarded our awareness of the challenges associated with this mode of consulting. This report has identified highs and lows in remote and digitally enabled care in general practice.

Our findings illustrate a dissonance between what policy makers hope will happen to frontline staff behaviour and patient experience when they pull a policy lever in Whitehall, and what actually happens on the ground. The case studies and workshops revealed frequent disconnects between expectations about the convenience and efficiency of digital services, and the real world of muddling through by both patients and staff. They have also highlighted workarounds when problems arise; downing tools if a technology provides insufficient benefits for the effort needed to use it; and unintended consequences, for example the backlash against remote-by-default consultations in some patients, and long telephone queues caused by overwhelmed telephony systems.

Our findings about the opportunities and challenges experienced by patients are largely consistent with previous evaluations and reports of patient perspectives on the shift to digital throughout the pandemic including: more transactional encounters;[29] weakened relational practice and trust;[30] barriers to access for some patient groups;[3,5] and increasing inequalities.[31]

In relation to **vulnerable patients**, the themes of **exclusion, access and coherence** were highlighted. For those with complex problems, in particular, shortcoming in the intersections between multiple areas of disadvantage may touch on health, welfare benefits, housing and more, with each access challenge compounding problems in the other sectors.

A series of community digital health hub exemplar sites, funded by NHS England, had just reported on their impact when the pandemic struck,[32] demonstrating a nationwide approach to building the skills needed to engage with digital services including health care. These sites were located in community settings and used peer learning to spread knowledge and digital skills. This kind of approach has the potential to reach people identified in our case studies who are not currently able to engage with formal health services.

The broad aim of these hubs to develop digital skills for all walks of life mirror the approach taken in some other countries and presented in an analysis of the use of digital technology to deliver health care during the pandemic in six European countries.[33] This report describes how some countries built on existing digital health infrastructure to support people through the pandemic, while others – exemplified by Estonia – built on their longstanding policy to enable 'digital citizens' to engage with digital services across all public services, including health. This approach could be restarted now the pandemic has subsided, to tackle digital exclusion and improve coherence between services.

One theme examined in more detail in the RBD study than in others is **the tensions that can emerge** between patients' judgement about the kind of appointment needed or preferred, clinical need, the availability of appointments, and the processes within practices for allocating and booking appointments. These tensions have become more prominent since Covid restrictions have eased. With many patients struggling to book any appointments[34] and some dissatisfied with the offer of a remote consultation, GP leaders are reporting that practices are at breaking point and are unable to increase capacity,[35] while practice managers have launched a campaign to reduce the abuse faced by receptionists.[36] With reduced ability to practise patient-centred care in line with professional values, the mismatch between demand and capacity may well affect job satisfaction,[37,38] with possible knock-on effects on clinician and other staff retention.

With inadequate appointment capacity and patients with variable ability to engage with remote consulting, national policy diktats and rigid local rules for appointment booking will not diffuse the tensions we have identified. Our findings highlight the need for greater understanding from both staff and patients of the constraints that each face; enhanced skills in practice staff to

assess patient preferences and capabilities; improved communications from practices to patients about the purpose of different appointment types and how to book them; and greater understanding from patients and carers about the need to prioritise access to face-to-face appointments according to clinical need. The tensions are more likely to resolve through initiatives around training, communications and public awareness campaigns than through national directives.

Issues of **clinical risk** identified in the research also need careful attention, with their implications for quality of care and patient outcomes, use of wider NHS services, and medico legal risk to which doctors and the wider NHS may be exposed. A diverse set of risks were identified in the study,[27] including those associated with the organisation of services; communications and clinician-patient relationships; the delivery of care; patients' role in self-care; population and public health; and professional development and wellbeing. Guidance by the Royal College of General Practitioners (RCGP)[21] and the General Medical Council[39] address the allocation of different appointment types and the conduct of safe and effective consultations. However, further guidance is needed to minimise risks to patients and clinicians associated with the design and delivery of different types of remote consultation and with population and public health initiatives (such as diabetic foot screening for which there is limited evidence of safety and effectiveness). Our research also highlights the need to monitor use of investigations and referrals to other services following remote consultations, as these have the potential to increase their use and therefore to increase pressure on hospital services and overall costs.

From a workforce perspective, although staff experiences of remote consulting highlighted in both the workshops and case studies demonstrated enthusiasm about its effectiveness for some conditions, there were concerns about weakened relationships with patients and negative effects on physical and emotional wellbeing in some clinicians. A May 2021 survey of 622 GPs by the RCGP reported that 63% said delivering all or most consultations remotely reduces job satisfaction.[21] A September 2021 survey by the British Medical Association reported that 47% of responding GPs plan to cut their hours after the pandemic.[40]

This raises the possibility that a sustained increase in remote consulting will affect retention of the general practice workforce. The government's commitment to provide 50 million extra appointments and 5,000 additional GPs was re-iterated (along with £1.5 billion extra funding) in February 2020.[41] But NHS data suggest that, while the number of trainee GPs has increased, the number of fully qualified GPs has fallen, so progress towards 5,000 new GPs is behind target. If negative effects of remote consulting drive GPs to reduce or stop clinical practice, there will be a further fall in GP recruitment and decreased appointment capacity. In his review of digital transformation in the NHS, Wachter suggested that user engagement and co-design of digital services and funded development support may help to mitigate negative experiences of further developments in remote consulting.[42]

User research could be a valuable tool to get a deeper understanding of the profile, needs and limitations (or 'pain points' in user research terminology) of people using remote services, including that of clinicians and patients.[43] This type of research iteratively collects continuous feedback of the digital users' journey end-to-end to inform the design and development processes, for example via usability testing or accessibility evaluation. Aside from better alignment of digital services (and policy) intent with a wider set of user needs, user research can significantly improve users' experience, and help to reduce cost, time and burden.

In terms of **developing the workforce to use digital technology and improving digital maturity in general practice**, many of the recommendations below build on learning from recent reports and policy documents that have only been partly actioned. The training needs identified were in a large part already set out in the 2019 Topol Review, which recommended that NHS organisations, including GP practices, should assess and develop their digital readiness and invest in developing specialist digital skills in their existing workforce.[44]

While CCGs and integrated care systems were supporting digital development pre-pandemic and provided huge support to practices in early 2020, this study has identified significant variation in practice staff skills and overall digital maturity. Our research suggests that the skills needed to provide digital services equitably and well go beyond awareness about technologies or technical expertise in using them. Excellent communication skills in

practice staff and asking about patients' needs and skills, and an ability to identify and resolve tensions, are also very important. One could argue these skills were always essential, but the pandemic-driven choice between remote and face-to-face care is acting as a lightning rod for patient and public opinion, and requires particularly skilled and careful handling of the **patient-technology interface**.

This was perhaps implicit in Topol's recommendation that: 'Professional, Statutory and Regulatory Bodies (PSRBs) and practitioners need to identify the knowledge, skills, professional attributes and behaviours needed for healthcare graduates to work in a technologically enabled service, and then work with educators to redesign the curricula for this purpose.'[44] This recommendation seems particularly relevant for reception staff who are working at the interface of patients, clinicians, technologies and triage systems. There may be lessons available from the extensive three-year training provided for GP reception staff in The Netherlands, which prepares staff for a combined role across practice administration and assessing and supporting patients.[45]

While a primary focus of the Topol Review was on understanding and learning to use technologies, the additional need to negotiate their role in day-to-day care with patients, carers and other professionals was highlighted in a Health Education England report on digital readiness in general practice in Wessex.[46] This recommended that clinical commissioning of digital transformation in practices should be 'a well-resourced and supported, gradual, iterative change process that is team-based and works to understand and actively engage patients.'

In terms of implementing policy and learning that we can draw from the pandemic and apply in the future, recommendations in the Wachter report remain highly relevant.[42] The report presents underlying principles for effective IT implementation and its ten recommendations span national and local perspectives related to infrastructure, interoperability, privacy, data sharing and more.

From the perspective of practices building on recent transformation, lessons from the Wachter report include introducing digital health systems for the right reasons, introducing them well rather than quickly, embracing

user-centred design, and carrying out user research to reshape the service as experience grows.[42] Going live with a new digital service is just the beginning; it will take time for significant benefits to accrue – re-enforcing the conclusions of Murphy and others[6] – and the systems established at the start of the pandemic will need considerable modification if they are to serve the next generation well.

There is a clear need for flexibility in the way patients can access GP practices and in the types of appointments on offer. But also, for understanding among patients and carers of the capacity shortages in general practice compared to levels of demand. **National and local communications campaigns** could help to raise awareness of the potential benefits of remote consulting, of limited GP capacity and the role of self-care for minor illness. But a lot will still rest on practices and the professionals working in them to negotiate flexibly with patients when booking appointments.

Recommendations

Department of Health and Social Care

- Avoid national directives about the number or type of appointments that should be offered in general practice. Rather, policy makers should require the provision of different modes of access to general practice *and* improve public awareness that effective care can be delivered through different (remote and face-to-face) appointment types.

- Re-launch pre-pandemic initiatives to train 'digital citizens' who can engage with a range of digital services including remote health care.

- Fund national research on the impact and effectiveness of different forms of remote triage and on the impact of remote consulting on safety, equity and the use of wider NHS services.

NHS England and integrated care systems

- Ensure that very vulnerable patients, who may need to access several public services, have support to use multiple digital services, including digital access to general practice.

- Continue efforts to improve the infrastructure for remote general practice, with a particular focus on improving telephony.

- Ensure that integrated care system digital development work includes a focus on the patient-technology interface in digital general practice, and training staff to assess, understand and respond to patients' social context and their ability and willingness to engage with remote consulting.

National and regional organisations involved in training and service development for digital care

- Update medical and nursing training to include assessing, understanding and responding to the personal and social elements of digital consulting, including patients' ability to engage safely and effectively with digital technologies.

- Monitor emerging evidence on clinical, safeguarding and organisational risks associated with remote consulting. Regularly update guidance in response to research and patient experience.

- Ensure that GP trainees experience a full range of remote and in-person consultations and have sufficient exposure to continuity and medical generalist care to learn the core values of general practice (continuity, holism, prevention and proactive care).

- Consider trialling extended training for receptionists adapted from the training provided for clinic assistants in The Netherlands.

Practices and general practice staff

- Co-design with patients and carers the blend of remote and in-person consultations and the pathways through which patients can access appointments.

- Offer different forms of online, telephone and in-person access and triage to ensure that *all* patients – with varying ability to engage with remote consulting – can access services.

- Maintain continuity of care between clinicians and patients with ongoing or complex health needs using a mix of remote and in-person consulting, to allow relationships and trust to form and support clinical care in line with the core values of general practice.

- Design triage in ways that respect patient choice of appointment type where capacity allows, enable all patients to access services irrespective of ability to use digital technology, and minimise wasteful 'double touch' encounters.

- Ensure that all staff are trained to assess and respond to the varied patient ability to engage with remote consultations and give consideration to professionalising the receptionist role through extended training adapted from clinic assistant training in The Netherlands.

- Acknowledge and minimise the physical and psychological toll of high-volume remote consulting by assessing and responding to staff experiences and individual support needs.

National and local priorities for policy and practice in relation to remote consultations

Actions for national policy makers and organisations

Ensure fair access for all, with both digital and in-person options for booking and participating in consultations.

Commission research into the impact of triage and of remote consulting on clinical outcomes, safety, equity and the use of wider NHS resources.

Increase investment in telephony, other digital infrastructure and in training to provide and use digital health care.

Regularly update training and guidance on clinical assessment; clinical risk/safeguarding; and managing the patient–technology interface.

Improve training for citizens to use technology for wellness and to access services and remote consultations and offer care coordination to very vulnerable people who need coherence across multiple digital services.

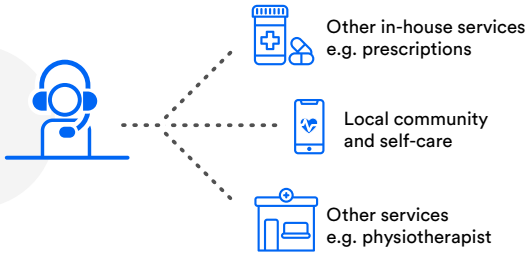
Actions for practices and their staff

Access

Provide options for ways to access care that balance patient needs and available appointment capacity. Co-design access routes, including websites, with patients.

Triage

Triage should be co-designed with patients; simple to use; efficient in its use of capacity: responsive to patients' needs and respected by patients.



Clinical consultation

Don't let digital access crowd out access to continuity and holistic care. Recognise, mitigate and monitor clinical risk in remote consultations.

Staff

Enhance skills in all staff to assess patients' ability to use digital technology and consult remotely and adjust consultations accordingly.

Monitor and prevent burnout in clinical and non-clinical staff and create opportunities for peer support for remote consulting.

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