# **RESEARCH PROTOCOL**

# Full title of project

Whatever happened to all those attempts to change access to General Practice? Revisiting case studies to learn about innovation, impact and SUStainable change. (GP-SUS)

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# Ethical approval

Ethics approval will be sought for WP2. WP1 and WP3 do not require approval.

# Version control

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V3.0	Catherine Pope	Expand eligibility criteria for the international comparator to include staff participants working	11/05/2023

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# **Table of Contents**

SUMMARY OF THE RESEARCH (ABSTRACT)	4
BACKGROUND AND RATIONALE	5
What is the problem with GP Access?	5
Why GP access is important and why this research is needed now	5
What is already known? Review of existing evidence	6
RESEARCH QUESTIONS	7
AIMS AND OBJECTIVES	8
RESEARCH PLAN/ METHODS	9
Research design and theoretical framework	9
WP1: What has been tried?	10
WP2 Did innovation become the day to day?	11
WP3 Learning from practices	14
DISSEMINATION, OUTPUTS AND ANTICIPATED IMPACT	15
Outputs	16
Dissemination	16
Impacts	17
PROJECT MANAGEMENT	17
Ethics /regulatory approvals	
Data protection and patient confidentiality	
CONFLICT OF INTEREST STATEMENT	
ACKNOWLEDGEMENT AND DISCLAIMER	
REFERENCES	20

# SUMMARY OF THE RESEARCH (ABSTRACT)

**Background:** There is a crisis in General practice that pre-dates the pandemic. Our patient and public advisors described access to appointments as *the* single most important concern for patients. Innovative systems and approaches intended to improve access have been studied in England but results have been inconclusive and contradictory. Post pandemic General practice will need to reconfigure access. We see untapped potential to learn from what happened in practices that participated in earlier evaluations of different access systems and which subsequently continued, adapted or abandoned these systems. The experiences of these practices and the patients they serve could provide rich insights into the sustainability of access models, in different GP contexts, before and during the pandemic.

*Aim*: To work with General practices that have in the past tried interventions designed to improve access for patients, to learn whether and how these innovations were abandoned, adapted or sustained, and to use this learning to support long term improvements in access to General practice.

# **Objectives:**

- 1. To create a typology of different organisational approaches and digital technologies used to enable patient access to General practice appointments (with a GP or other primary care clinician, via face to face, phone or online consultations).
- 2. To describe and compare the longer-term impacts of different approaches to patient access to General practice (including the rapid changes introduced during the 2020-21 Covid-19 pandemic) to understand whether the various approaches worked as anticipated, were adapted or abandoned, and whether practices were able to sustain any improvements over time.
- 3. To distil and develop deep, transferable learning about sustainable approaches that support and improve access to General practice.

**Methods:** Three work packages include a scoping review, case studies and an integration and implementation phase. We propose focused ethnographic case studies in 8 English practices that were part of a variety of access intervention studies that completed at least 18 months before March 2020. As a comparator our Danish collaborators will conduct a case study of the NF33 practice in Copenhagen which has several years' experience of successfully implementing a same day appointments model which has reduced demand while increasing responsiveness. (This case study will include interviews with key staff from neighbouring practices that also operate the same day appointments model.) Drawing on key contemporary theories about implementation, adaptation and abandonment our focused ethnographies (8 English sites, 1 Danish) will include observations in practices, interviews with a purposive sample patients (up to 15 in each practice) and with staff of all types (6- 8 in each English practice and 10-15 in the Danish site). Analysis will use thematic approaches and cross case comparisons with a particular focus on what supports long lasting improvements that work for everyone.

Anticipated impact and dissemination: By drawing on experiences at least three years after the practice participated in evaluation studies of access interventions we will maximise learning about real world implementation using timely and cost effective focused ethnographic case studies. We will feedback to participating practices and prepare policy briefing papers during the study, with steering group contributions from policy and professional stakeholders, and embedded PPI throughout. Three workshops will create resources to support future and sustained change.

# BACKGROUND AND RATIONALE

# What is the problem with GP Access?

There is a crisis in access to appointments in general practice [1, 2] which pre-dates Covid-19. Before the pandemic various systems for allocating and triaging appointments and interventions were devised and tested (often with NIHR funding) to address problems associated with access to GP appointments [3-13]. The results of these studies were often inconclusive or contradictory: it seemed that the findings did not always translate into widespread or lasting changes. Patients continued to report waiting too long to get a GP appointment [14], and GPs continued to report increased and 'unmanageable' workloads [15]. During the Covid-19 pandemic primary care and other NHS services used online, nonface-to-face consultations far more, drawing on digital technologies and triage systems that had previously been trialled, and introducing new ones. In May 2021 NHS England updated the standard operating procedure (B0497) to state that general practices must offer more face to face appointments, choice of consultation mode, physical access to reception, consistent triage across consultation mode, and adapt access models with patient input.

To help address this seemingly intractable problem of access we will conduct highly costeffective, focused ethnographic case studies with practices that participated in past evaluations of innovative access systems. Case study practices will have at least three years' experience (at least 18 months pre-pandemic) of implementation of one of the access/appointment systems and we will find out what happened after the original research completed, exploring how practices made adjustments and adaptations or if they abandoned these new systems.

We will examine whether and how appointment access innovations are, or could be, sustained in the current complex adaptive context of the pandemic. We will examine how the access models introduced during the original trials were reinforced, challenged, altered or abandoned over time, to understand how access systems evolve or 'die': this will provide, for the first time, an analysis of the longer-term impacts of innovation and organisational changes designed to address the problem of GP access. Our study will provide a unique and timely opportunity to amplify and accelerate learning from previous research to provide more sustainable solutions to the conundrums posed by demand for GP appointments and concerns about GP workload, and the need to reconfigure these systems post pandemic.

# Why GP access is important and why this research is needed now

An effective NHS depends on a well-functioning general practice that is patient centred, holistic and accessible, offering continuity of care and a community focus [1, 2]. Accessibility and the need to reduce waiting has been a consistently reported priority for patients over recent decades [16,17]. It is a key focus of the Five-year Framework for General Practice [18] and appointment models and access is core to the revised, pandemic era, standard operating procedure advice issued by NHS England in 2021 [19].

Being able to see your GP matters hugely to the public and is a core concern of service providers, politicians, policy and other decision-makers. Patient and public input to this proposal underlined that getting an appointment was "*THE* pressing issue facing general practice". GPs are working harder: over the past decade they increased face-to-face contact with patients in response to demand for appointments. Pre-pandemic, some UK press reported that the average wait for a routine GP appointment was over two weeks [20]. Stakeholder engagement at a primary care network workshop held in March 2020 confirmed that General practices struggled with the problem of how best to respond to appointment demand. A series of workshops with primary care stakeholders (including GPs) conducted for the ESRC Remote By Default project confirmed that GPs found the pandemic transition

online logistically challenging [21] and the pandemic had exacerbated workload concerns. This view is supported by concerns raised in a recent BMJ commentary arguing that digital access has 'opened the floodgates' to demand rendering general practice 'unviable' [76]. The BMA report [22] that GP appointments have increased by 1,908,670 (15%) since March 2020 but the workforce has not grown to meet this demand.

Access is one of a number of interconnected challenges facing general practice. Recruitment and retention of GPs has been falling or flat-lining, and fewer GPs now aspire to be partners. Practices have been closing and workloads are described as 'unmanageable'. Increasing demand and workload contribute to GP stress, reducing job satisfaction and wellbeing [23-28]. With the return to face to face consultations as we come out of the initial waves of the Covid-19 pandemic there is talk of a 'new workload crisis', with increased concerns about GP burn out and practice closures [29,30].

Evaluations, of all research designs, but especially multi-centre randomised controlled trials (RCTs), can take many years to set up, conduct and report – yet there is much potential to learn from what happened (after the original research teams left) in practices which implemented new access systems as participants in former studies. We will draw on this potential to provide cost-effective, implementable learning for post pandemic general practice.

Covid-19 accelerated the use of 'total triage' and remote consultations, apparently overcoming previous resistance. Practices rapidly pivoted to 'remote by default', predominantly using phone, but also online and video for first contacts and triage in an effort to protect patients and staff. Yet concerns about these systems persist including whether these modes of access exacerbate inequalities and fail to protect the most vulnerable. including those for whom safeguarding is a concern. During the pandemic routine appointments and consultations for non-Covid symptoms reduced; patients were reluctant to consult and there were concerns that some (e.g. those with cancer symptoms) did not access timely help. Practices continued to provide some face to face appointments and there was new demand for rapid access to GPs for treating and managing urgent/nonemergency Covid-19 cases, and latterly to provide Covid-19 vaccinations. The pandemic provided a stress test and (often unwelcome) exposure to new ways of managing patient access for many practices. General practice is unlikely to revert to the 'old normal' postpandemic, but nor will they only use the access systems put in place in the pandemic. There is a significant fear that simply combining the old and the new access systems will lead to unsustainable workloads and exacerbate the crisis in general practice. These are echoed by patients' concerns about continued access to face-face appointments when needed, delays caused by the need for pre-consultation by phone or online, and the use of multiple and often unsophisticated online systems.

# What is already known? Review of existing evidence

The relevant literature for this proposal comes from three overlapping fields: a) research about patient 'demand' b) empirical studies of interventions intended to manage demand and c) contemporary observations and emerging research about general practice activity during the pandemic.

a) There is a long standing health services research literature on the creation and management of demand for health care [31,32]. It is clear why this matters so much to patients and health systems: when access to the GP is limited (or perceived to be limited) the consequences for prompt diagnosis and referral can be serious. Our own cross-country comparative research on cancer diagnosis found that some English patients' delays in consultation were attributable to difficulty getting an appointment alongside an initial reluctance to risk 'wasting the doctor's time' and lack of clarity about when to return if symptoms did not abate [33]. Statistics show that the number of primary care consultations

has increased year on year in an attempt to meet patient demand, and it is estimated that 90% of NHS contacts take place in primary care settings. Analysis by the Nuffield Trust suggests that some of this demand has been met by other staff groups in general practice (e.g. nurses, paramedics and pharmacists), but there is also a suggestion that patients present with more complex needs and require more in depth consultations and that GPs have to undertake more non-clinical and administrative work, leaving them less time for patient consultations [34].

b) Various systems for managing patient access to their GP have been developed, trialled and evaluated, in the UK [35,36] and elsewhere [37,38]. Attempts to manage demand include triage (using assessment by phone, online or email before offering an appointment), restriction (e.g. limiting appointment availability, length or number of problems to be dealt with), substitution (e.g. offering consultation with a nurse) or by offering alternatives (asynchronous consultations online e.g. via SMS/email; access to real time video consultations). None of these interventions has demonstrated meaningful differences clinically, some have re-distributed rather than reduced workload, or even led to increased demand where they sought to contain it. Others, such as video consultations, have failed to deliver the high levels of use predicted [36]. In short, many strategies have been tried but the evidence base is weak, limited and often contradictory.

c) Research during the pandemic has included studies of the use of remote consultations (Greenhalgh ESRC Remote By Default (RBD), Horwood SCPR unintended consequences of digital health tools (DECODE); Murphy SCPR Collecting rapid COVID-19 intelligence to improve primary care response (RAPCI), Hammond PRP optimising people centred care) of calls to NHS111 (Barnes SCPR NHS111) and patients' experiences of Covid-19 symptoms, diagnosis and care seeking (Ziebland, UKRI)). The early findings of these studies have highlighted that a number of different access systems were enrolled to manage demand. There was greater use of eConsult and online or phone 'total triage' systems for patients seeking to access primary care [39]. There was also a significant increase in use of NHS111 Online and NHS111 telephone services, which also offer pre-assessment and triage ahead of GP consultations [40]. The early findings from the RAPCI study showed that while the number of face to face appointments reduced dramatically, and there was a reduction in GP consultations, in the early months of the pandemic, the rate of consultations had increased 5% by June 2020 [41]. There is evidence that the telephone was a more familiar and dependable technology for providing remote consultations than video and so was used more than other remote technologies during the pandemic [41,42] though was not without issue; OPTEL (Atherton, NIHR) examined use of telephone first triage during the pandemic in patients over 65 years who accepted the changes in access because of the pandemic, but lacked confidence in using telephone consultation and expressed a conflict between being a loyal and responsible patient and advocating for their own healthcare needs. A US study [43] of remote consultations suggested additional access hurdles for the most vulnerable and disadvantaged patients, and these concerns were also aired by primary care staff participating in workshops for the ESRC RBD project (completed in November 2021).

# **RESEARCH QUESTIONS**

Our overarching question is: *What happens, long term to general practices that have introduced innovations designed to improve access?* We want to understand what makes interventions sustainable (and conversely, what makes good ideas for improving access fail or disappear). We understand 'sustainability' as the continued use of a particular access model or system (including in modified or adapted form) and if a model or system was abandoned or discontinued it can be regarded as unsustainable.

There have been numerous funded and unfunded studies conducted to introduce and evaluate the initial implementation of new access systems, and there is a clear opportunity to conduct timely, efficient research to learn from the sites of these 'innovations' to see how they fared in the longer term, including during the pandemic. We contend that there is much to learn about sustainability, and about access interventions themselves, by finding out what happened after the original researchers or innovators left, once the initial roll out was completed and when time has passed so that the access system is no longer 'new'. Our more detailed research questions are:

Understanding the change: What was the change and what were practice expectations for access?

- How good/better access was understood by practices who engaged in access improvement initiatives and what were their ambitions for new systems they adopted?
- Why did the practice choose the system/intervention adopted/tried? (Was there a theoretical underpinning?)
- What were the intentions when introduced and how did these align with staff values?
- What did not work and why?

Accounting for Covid-19: What happened during the pandemic?

- (How) were access innovations adapted or altered before and during the pandemic?
- Which innovations were continued/redeployed during the Covid-19 pandemic and why?

Learning about sustainability: How did access systems/innovations work in practice?

- What changed over time/what was adapted/abandoned?
- Did access innovations deliver the improvements desired by the practices that implemented them?
- Were there differences in access for particular groups of patients?
- What were/are the positive and negative impacts on different practice staff of changes to access systems?
- Were/are there any unintended consequences (positive or negative) of access systems/ innovations?

# AIMS AND OBJECTIVES

**Aim:** To work with general practices that have in the past tried interventions designed to improve access for patients, to learn whether and how these innovations were abandoned, adapted or sustained, and to use this learning to support long term improvements in access to general practice.

# **Objectives:**

- I. To create a typology of different organisational approaches and digital technologies used to enable patient access to general practice appointments (with a GP or other primary care clinician, via face to face, phone or online consultations).
- II. To describe and compare the longer-term impacts of different approaches to patient access to general practice (including the rapid changes introduced during the 2020-21 Covid-19 pandemic) to understand whether the various approaches worked as

anticipated, were adapted or abandoned, and whether practices were able to sustain any improvements over time.

**III.** To distil and develop deep, transferable learning about sustainable approaches that support and improve access to general practice.

# **RESEARCH PLAN/ METHODS**

# Research design and theoretical framework

We will conduct comparative ethnographic case studies of diverse general practices that have in the past tried interventions to improve access for patients. We will focus on practices that had taken part in evaluations which ended at least 18 months before the pandemic (to obtain the long term view). We will also examine how they pivoted to new remote access systems in the pandemic (to understand how this prompted the use of new systems, adaptations to existing ones, and /or the re-introduction of previously abandoned access systems). Working with practices that have a history of using one of a number of different, once innovative, access systems will help us to understand what worked in different contexts, and whether and how practices were able to sustain improvements over time.

A strength of our case study research design is that it will allow us to conduct detailed, in depth comparisons across the chosen cases and analyse similarities and differences that underlie sustained implementation, adaptions or abandonment. While a control case is neither possible nor necessary in this qualitative design we have also included a Copenhagen case study to include a practice that has pioneered (and has several years' experience of) a successful appointment access system which has not yet been emulated in the UK and staff participants from neighbouring practices that also operate the same day appointments model. The case comparisons between the UK cases, and the additional comparative strengths offered through the Danish fieldwork, will help us understand how context influences sustainability.

Our approach is interpretive and our analytical methods largely inductive. We will use ethnographic methods, including interviews, observation and collection of documents [44-46] to gather rich, detailed data about the different systems used to enable patient access to General practice. We conceptualise general practice as a complex adaptive system [47] and understand that innovations seldom follow simple linear pathways or are enacted as anticipated. For this reason a number of social science theories will be useful to our project. We will draw on the Normalisation Process Model [49] to comprehend the work of embedding change, and use NASSS [51] (which encompasses the core elements of the broader Normalisation Process Theory) as a framing device to analyse our data. Our previous work [50] suggests that we should also explore values alignment within the practices e.g. shared motivation to make the practice more responsive to patients' expressed needs, or to re-route them away from the GP to help us to understand staff willingness to engage in an innovation, which will influence sustainability. Beyond this our project will be informed by theories of cultural and health service organisational change [52,53], diffusion and implementation of innovations [48,54,55], theories of sustainability [56,57] and classic ideas about health care demand and help-seeking behaviours [58].

Various models of access have delineated the relationship between supply/demand and socio-structural factors as important in understanding access to general practice [78,79]. While we will be informed by these models and others like them, our aim is not to test the veracity or utility of a particular conceptualisation of access. We will look back at attempts to change GP access systems in a pragmatic way to understand whether and how changes to access have been maintained, adapted or abandoned over time and distil learning for the future. We are keen to understand 'access' from the perspective of the practices and

patients involved in these previous innovations and to maintain the openness of the ethnographic approach to theorising from/with the data we collect.

Our working definition of access encompasses: registered or temporary registered patient access to an appointment for a consultation with a GP or an allied health care professional (e.g. practice nurse, paramedic, physician associate) employed by or contracted to work from General Practice. The appointment or consultation with a HCPC registered health care professional based in General Practice may be offered as face to face or by telephone/video.

We are primarily interested in patient access to a GP appointment (i.e. access to a clinical encounter) but we are aware the routes to this may include online triage (e.g. eConsult) and use of communication technologies such as email or SMS (text messaging) and we will consider their role in access too. We want to learn from practices that attempted to change/improve access to these kinds of appointments/consultations explore what their underlying theory or conceptualisation of access was (if they had one). From a patient perspective access to general practice can be understood as 'achieving what the patient intends as the endpoint' or more colloquially "getting an appointment when you need it". We wish to learn if the changes practices made to their access systems met these goals for patients and practices, and continued to do so.

The project comprises three linked work packages (see flow chart, Appendix A) that will deliver a review and typology of what has been tried (WP1), focused ethnographies examining whether and how innovation became day to day (WP2) and a final integrative work package to consolidate our learning (WP3).

# WP1: What has been tried?

Methods: Scoping review and expert stakeholder consultation

We will use systematic scoping review methodology to describe the different kinds of GP access system that have been tried in general practice settings. This will allow us to rapidly map the evidence relating to access to primary care, identifying the key concepts so that we can develop a typology of GP appointment systems that will underpin case site selection for WP2. We will use established methods for scoping reviews [59] which follow five steps:

Stage 1: identifying the research question

Stage 2: identifying relevant studies

Stage 3: study selection

Stage 4: charting the data

Stage 5: collating, summarizing and reporting the results

The review will examine access (including management by diversion, restriction or substitution), responsiveness (including speed, convenience, mode of contact and knowledge and targeting of specific patient groups), and demand and supply. To account for the changes introduced during the pandemic, our review will be informed by findings from the ESRC Remote By Default (RBD) project completed in November 2021, which studied the implementation and scale-up of remote-by-default in four English and Welsh sites, reviewed national-level documents and engaged with policymakers, regulators, professional bodies, industry, patient/carers and citizens via a series of online workshops. We will broaden our scope beyond that of RBD to examine published research from 2001-2022 - the period associated with significant innovation in access systems, beginning with the roll-out of Advanced Access.

Inclusion criteria:

- Studies published from 2001-present (the period associated with significant innovation in access systems, beginning with the roll-out of Advanced Access).
- Studies using any empirical study design (quantitative, qualitative, mixed).
- Studies set in general practice internationally.
- Studies about how patients access general practice/appointment systems.

We will work with a librarian/information specialist to devise the search strategy. Two members of the research team will independently screen titles and abstracts, and then full texts, with a third reviewer consulted to resolve disagreements. We will create a charting template, allowing us to summarise, where relevant, how access type, responsiveness and demand and supply are described and measured. Quality assessment will be conducted using the 'Quads tool' designed as an appraisal tool for methodological and report quality in systematic reviews where different study designs are included and the aim is to determine the transparency and congruence in the research purpose and conduct where studies are heterogenous [60].

The findings will be analysed and presented following the narrative synthesis approach [61]: this will involve three steps:

- Developing a preliminary synthesis of the findings of all the included articles.
- Map the evidence types, exploring relationships in the findings and draft an initial typology.
- Assessing the robustness of the synthesis produced.

These steps will be conducted initially by two researchers working on the review and then the synthesis and typology will be finalised with the wider team.

We will support this review with two stakeholder workshops involving 12-15 academics, front-line healthcare professionals, policy-makers, commissioners and public representatives. The workshops will examine the emerging typology and will use group interaction, co-production techniques and visual minutes to facilitate discussion. We will use established comparative and thematic data analysis methods [44-46,62] to analyse notes/audio-recordings from the workshops. This work, alongside the review, will be used to refine the typology of access systems and contribute to case site selection for WP2.

We will prepare accessible summaries of the review and typology to feedback to policy, professional and patient/carer/public audiences and submit the full review for publication. The outputs of this work package will provide the foundation for the learning about sustainability and the deliverables from WP3.

# WP2 Did innovation become the day to day?

#### Methods: Comparative Focused Ethnographic case studies

WP2 will examine the longer-term consequences of interventions that were introduced to improve GP appointment systems. We will include systems that were intended to increase access and responsiveness and those designed to manage demand. We will explore the 'on the ground' reality, for staff and patients to generate learning that can inform policymakers' decisions and guide practices when they consider system changes. We will focus on interventions implemented before the pandemic, but will necessarily reflect on pandemic-related changes and developments in these access systems, and their sustainability (or otherwise).

Informed by the typology created in WP1 we will select case study practices for the focused ethnographies [63] to reflect a range of different access approaches. This approach shares characteristics with classic ethnography (i.e. it is explorative rather than hypothesis testing, collects rich observational field notes and interview data) but provides a more targeted method of data collection that makes efficient use of team expertise. Our team has used this

method successfully for a previous NIHR HS&DR funded project, which influenced policy and practice, led to new studies and collaborations with industry and NHS England [64]. For example, guidance was disseminated via a website resource and used by NHS England to develop an online toolkit for the implementation of online consultations. The publications were also used by the Royal College of General Practitioners to develop guidance for patients on how to use online consultation. Drawing on our networks and experience of successful dissemination we will prepare summaries and feedback on WP2 during the project to reach practice and policy audiences in a timely manner.

## Sampling case study practices

We will purposively sample eight English general practices, from those that have been part of evaluations of different access models at least 18 months before March 2020. The sample will be informed by the typology developed in WP1, but based on existing knowledge and preliminary searches of the literature we expect this will include practices drawn from those that implemented Advanced Access [3-6], 'Alt-Con' [50] and Doctor First [12, 13] systems, and will include those who used variants of 'total triage' during the Covid-19 pandemic. Practices will be identified via consultation with our professional and stakeholder advisor networks, and with the assistance of the Clinical Research Network who can provide information about which practices were part of studies examining access models. Our team has close links with a number of practices that have been involved in previous access system evaluations including Advanced Access (Pope), Alt-Con (Atherton and Ziebland), and Atherton led the OBoE study looking at online booking experience. OPTEL on telephone first triage in older people and the qualitative arm of Di Facto examining digital facilitation in primary care. We will take care in selecting practices to ensure variability in relation to size, deprivation score, number of GPs and location (rural/urban). Sampling in gualitative research does not aim to be representative in a predictive statistical sense, but this sampling strategy will ensure variability in the cases analysed allowing transferability of our findings.

In addition to these eight English sites we will also collect data from one international comparator: the NF33 Copenhagen practice (where collaborator DRIVSHOLM is a GP partner). This practice has successfully used the Tid Samme Dag system [65,66] since 2013 and as yet unpublished 'before and after' data from this practice shows that, against a background of increasing workload in Danish general practice, this system has both increased responsiveness through access to same day appointments and apparently reduced demand (as evidenced by one or more free slots left in the day's appointments diary). A qualitative study conducted in the pandemic showed that while Danish GPs initially followed guidance from the Danish College of GPs to deliver more telephone and video remote care, as the pandemic conditions lifted they "increasingly resumed their usual practice" [77], and this is the case in NF33. Staff participants will also be recruited from neighbouring practices that also operate the Tid Samme Dag model. The inclusion of this case study will allow us to scrutinise cultural and national differences that impact on the sustainability of innovations.

# Data collection

In each practice (eight in England, one in Copenhagen) we will interview patients/carers (n=12-15), and GPs and practice staff (n=6-8) (including those involved in decisions to adopt, adapt or abandon access systems). [Note in Copenhagen, some staff participants will be recruited from other neighbouring practices that operate the same Tid Samme Dag model of access so that there will be up to 15 staff interviews.] We will conduct non-participant observation and informal conversations as well as collection of relevant documentation e.g. protocols for use of the access system. The fieldwork schedule in each practice will be:

• Weeks 1-2: familiarisation, identify relevant staff, begin patient/carer sampling

- Weeks 3-4: targeted observations, collect relevant documentation, identify potential interviewees
- Weeks 5-6: conduct interviews, conduct further relevant observations
- Weeks 7-8: additional observations where necessary, final interviews
- Weeks 9-10: creating structured summaries, research meetings to discuss findings

After familiarisation the researchers will not necessarily attend the site every day, allowing time to write up field notes and conduct initial analyses. We will engage with the PCNs in each of the case study sites, and will similarly link with Integrated Care Systems and other organisations so that we build up a good understanding of the local health communities surrounding our sites. Observations augmented by informal conversations will focus on all areas of the practice and on staff members who use the access system, including reception, administrative and clinical staff. Practice meetings will be observed where relevant.

Observations and conversations will be recorded in field notes, contemporaneously when possible or written up as soon as possible after the event. We will interview at least 6-8 staff members per practice to include GP partners, salaried GPs and locums, Practice Manager, receptionists, Practice Nurses. Where relevant we will include staff who were directly involved in making decisions about changes to access, including due to the pandemic.

We will interview 12-15 patients/carers in each practice. Patients/carers will be purposively sampled to include different characteristics including age, ethnic group, gender and presence/absence of long term conditions or disability. We will seek interviews with patients/carers who have been at the practice long enough to comment on changes to the access system as well as newer patients who can compare with their experience in other practices. These interviews will explore perceptions and experiences of changes to the access system, how changes or developments were communicated, and the effects on their help-seeking. We will recruit patients/carers by asking the general practice to identify potential participants matching our sampling frame and invite them, by post, to take part in an interview. The design of our study will ensure we include a wide range of patients/carers across the case study sites with opportunities to adjust our sampling as the fieldwork progresses to ensure we are inclusive. Interviews will be conducted face-to-face or by phone as preferred, digitally recorded with the consent of participants and transcribed verbatim.

This case study approach has been used before by the joint CIs and other co-investigators in several NIHR funded projects. It allows for targeted sampling of patients/carers with specific characteristics, helping us to obtain a diverse sample of patients/carers. It requires us to work closely with practice staff and to communicate with them about the range of patients/carers we wish to invite. This approach will be aided by information gained by the ethnographic researchers in the field, who will obtain information about the practice set up and which patients/carers may or may not be impacted by the access system in question and thus important to interview.

An initial invitation will be sent to potential participants, along with a patient information booklet (in previous studies our PPI contributors have preferred this information in booklet format). If they are interested in participating they will be invited to either send a reply slip, or contact the researcher via email/telephone. We will work closely with our PPI contributors in devising these documents. When a patient/carer agrees to take part in an interview, this will be arranged and they will be provided with a copy of the consent form either by post or email ahead of the scheduled interview.

Patients/carers will be free to terminate a scheduled interview/the interview itself at any point. Once they have participated in the interview they will have two weeks to withdraw from the study should they wish to; this will be made clear at the point of recruitment and at the end of the interview.

We intend for the interviews to be accessible and will be offering these either remotely (telephone, video) or face-to-face. Face-to-face interviews will be held either at the patient's home or at the general practice.

We will ensure that the study is set up to facilitate the inclusion of a wide range of patients/carers, which may include varied types of disability and vulnerability. We are aware that those with disabilities and those in vulnerable groups are often unable to participate in research studies yet they may be disproportionately impacted by difficulties in accessing healthcare. We will make it clear to potential participants that we are able to make necessary adaptations to support participation.

We will arrange text relay to support patients/carers who may have hearing conditions. To ensure non-English speakers are included we can offer the use of an established telephone translation service such as 'Language Line' for non-English speakers in interviews. It is already used by many NHS organisations.

We will engage with all participants before their interview to ensure we are aware of any adaptations that might have to be made, examples of this might include (but not be limited to):

- Arranging parking for patient/carer participants wishing to hold an interview at the general practice rather than at home.
- Ensuring the interview takes place in a quiet room with no interruptions or time limitations.
- Arranging the duration of the interview to suit the participant.
- Making sure the venue (if applicable) is accessible to the participant.

Our PPI contributors will work with us to identify possible adaptations that may be necessary ahead of our fieldwork and recruitment to interviews.

Patient/carer participants will be given a £20 shopping voucher as a thank you for the time taken in participating. Participants will be asked if they wish to receive a lay summary of the findings. If they agree to this, this will be sent using either post or email, depending on their preference. Additionally a study website will be set up to share the findings with the participating general practices and their wider patient population.

#### Analysis

Data analysis will commence alongside data collection. Researchers will produce a practice summary document providing contextual information and containing key findings from the fieldwork [50,64]. This will aid team analyses at regular meetings during the fieldwork period. Analysis of interview data and field notes will include initial independent open coding and refinements, leading to the development of a thematic coding structure. Qualitative data analysis software (NVivo) will be employed help manage data and generate 'reports' containing all the relevant data across cases/themes. We will use the 'One sheet of paper' (OSOP) method of analysis to identify emerging lines of argument and support constant comparison and discussion about outliers and negative cases [67]. The team will work together to refine themes and build interpretations that move beyond thematic descriptions to offer explanatory accounts, and with the Danish researcher to conduct comparative analysis.

# WP3 Learning from practices

When approaches to improve GP access become routine or embedded in service delivery, and are successfully integrated such that they continue to be used beyond the initial implementation, they can be considered sustainable [66]. Earlier conceptual frameworks for thinking about sustainability were used to support initial implementation of change and

tended to focus, inevitably, on singular, often short term, outcomes [68]. There are also a number of specific toolkits to support change in general practice access systems that offer ideas for planning change, measuring demand and engaging staff and patients, but again these tend to focus on the immediate implementation period [69-72]. Our work seeks to understand longer term embedding of change and to account for more recent work that has shifted attention to see sustainability as a process. We recognise the importance of understanding adaptation and evolution of change [56,73], and want to combine this understanding with new insights about longer term use of access innovations. Numerous studies have shown that simply providing evidence and information does not deliver lasting improvement. WP3 supports our plans to optimise the impact and reach of this research by working with practitioner, policy and patient/carer/public audiences to disseminate findings effectively during the lifetime of the project and beyond.

#### Method: collaborative learning

We will integrate the findings from WP1 and WP2 and work with our stakeholders (see below) to create resources to support sustainable change processes. We will bring 'insider accounts' and tacit or hidden knowledge about factors (such as staff values alignment) which influenced whether and how particular access systems work/succeed (or do not), showing what was required to bring them into use and the practices and processes of adaptation, evolution and long term embedding that supported and continue to support them. Recognising that innovations are sometimes abandoned we will also illuminate the processes that underpin these decisions and show why some interventions are rendered unsustainable in some practices while they may prosper in others.

We will convene 3 sequential workshops with stakeholders/key audiences to 1) report findings and receive responses, 2) collaborate on translating the key messages and develop resources for practice and policy 3) receive feedback, refine and further develop the outputs. The audiences for our work will include people from participating practices, Primary Care Networks (PCNs), clinical commissioners, partnership boards of integrated care systems (ICSs), RCGP policy team and BMA, NHS England including representatives from the Primary care digital transformation team, the General Practice Resilience Programme, the General Practice Development Programme, the GP Access challenge fund, Vanguard and Time for Care projects, and independent think tanks such as the Kings Fund and Nuffield Trust. The workshops will be interactive and facilitated, and we may introduce conceptual models of sustainability and existing access toolkits and contemporary guidance, as well as summaries and examples from our review and case study data as prompts for the workshop discussions. The workshops will be summarised succinctly by the researchers and shared with the participants, with opportunity for further comment and input.

Outputs from this WP will include summaries of the workshops written in blog/accessible formats on the project website, and targeted policy briefings which will curate 'key learning' messages for particular audiences e.g. 'learning for PCNs' and 'what can my practice do to embed access changes long term?' as well as policy/evidence type briefings. Our aim will be to keep these outputs short and focused to ensure that they reach the intended audiences and can be actioned. We are reluctant to use terms such as 'toolkit' before engaging in the collaborative development workshops but we envisage that tangible deliverables might also include documents/web-based resources such as 'myth busters', case study vignettes and signposting to evidence. The format of the workshops will bring together people interested in improving access to general practice to foster interactive learning and valuable networking opportunities which in turn will be shared beyond the end of the project.

# DISSEMINATION, OUTPUTS AND ANTICIPATED IMPACT

This study will contribute to our understanding of how to address pressing problems of appointments and managing demand in general practice. We will contribute an efficient study of what has happened to 'new' access systems in the years after they were adopted. We will provide unique data from earlier interventions designed to fix the problem of patient access, and about what happened when these interventions were used during the Covid-19 pandemic. Our analyses will provide transferable evidence and resources to support policy, general practice staff, professionals and service users, and inform research to support sustainable change in practice and service delivery. The efficient design means that the findings will be available in a fraction of the time required for new intervention trials.

# Outputs

Key deliverables during the project include the review and typology of approaches to GP access from WP1, the case studies from WP2 and summaries and resources developed from the stakeholder workshops in WP3. We will develop infographics and accessible patient/public and health professional outputs as well as academic papers for primary care. policy and medical journals (e.g. BJGP, BMJ, JHSRP) and submit presentations at relevant conferences (e.g. SAPC, HSRUK). At this stage we envisage at least four academic papers corresponding to the three work packages (i.e. review and typology, two papers reporting on the focused ethnographies, and learning for sustainable access systems in general practice). We will also produce a final report for the Health Services and Delivery Research journal and regular updates via a dedicated project website hosted at Nuffield Department of Primary Care Health Sciences, Oxford, https://www.phc.ox.ac.uk/research/health-experiences/gpsus-whatever-happened-to-all-those-attempts-to-change-access-to-general-practice. The website will also provide links to project resources and outputs. The anonymised case study summaries will be available as a resource for practices looking to change access systems and may be archived to provide gualitative data for future training and education for researchers and clinicians about ethnography and gualitative methods.

# Dissemination

Our dissemination strategy will provide findings and deliver learning in a timely way during the project and beyond its official end date. We have distinct strategies for the different audiences for our work.

# Sharing with participating practices

As many practices have local patient representative groups we will work with our PPI representatives to prepare newsletters, leaflets or local website materials that are accessible for these groups, including via practice Facebook sites where these exist. For practice staff we will feedback findings to the participating general practices via short verbal or written updates at staff meetings and sharing interim and final outputs with them.

# Informing and engaging patients/service user, carers, NHS, social care organisations and the wider population

We will enrol our steering group advisors including PPI to disseminate this study to members of their networks, including Primary Care Networks, Commissioning Groups, NHS Digital, NHSX, NHS England and the Royal College of GPs and relevant SMEs (such as TPP, Babylon). We have had previous success using this collaborative dissemination approach, alongside a project website and outputs to increase the impact of our work, for example reaching out to NHS England and the Royal College of GPs to inform the development of guidance for patients on how to use online consultation. Previous dissemination work has also resulted in follow on studies and new collaborations with digital health industry partners as well as NHS and Department of Health and Social Care, we expect our project will have a

similar trajectory. A key ambition is to get the findings to practice and policy audiences in a timely manner, during and beyond the lifetime of the project.

## Impacts

Specific **impacts for general practice** will be stronger empirical evidence accompanied by opportunities for learning about making sustainable changes to access systems. We envisage that this learning will also apply to other organisational changes designed to embed in the long term in such settings. Those practices involved in the case studies will have the additional benefit of revisiting their experiences of introducing access innovations with support from an experienced research team. We will make ourselves available to discuss the findings and specific implications with each practice that takes part, in whatever format they prefer.

Intended **impacts for national policy makers**, whether in NHS, Department of Health and Social Care or professional bodies such as RCGP and BMA will be a longitudinal perspective on organisational innovation and the current crisis in general practice. We will present findings to support learning about the longer term and unintended consequences (positive and negative) of policy initiatives.

For researchers, to our knowledge this will be one of a handful of qualitative studies that has conducted case studies in sites that participated in previous, completed, evaluations to discover what happened after the research teams left. The original research teams will undoubtedly be interested in the findings and we will engage with them during workshops. We believe this will enrich future use of these methods and feed into methodological debate thereby **impacting on future research.** For our research team we anticipate this project will inform our future planned research developing interventions to support the organisation and delivery of primary care and improve patient and staff experiences of these vital NHS services.

There will be unique **impact for NIHR and other funders** who make significant financial investments in research, including about innovations in general practice. The timelines for research designed to evaluate interventions typically allow relatively short follow up of implementation and change, sometimes just 6-12 months. By focusing on practices which were part of earlier studies we will develop our understanding of sustainability and provide valuable information about the return on research investment. This has the potential to inform future funding decisions and show the impact of research investment.

Finally, but not least, we seek to **impact on patients and public** experiences of NHS care. There are 300 million patient consultations in general practice every year. We believe it is time we learnt what happened to previous attempts to address the problems of waiting and access so that we can inform lasting improvements to their experience of general practice services.

# **PROJECT MANAGEMENT**

Pope and Atherton are joint principal investigators (PIs) for this project, thus ensuring strong leadership and cross-institutional collaboration to deliver the project. Atherton will lead WP1, Pope will lead WP3 and they will share responsibility for WP2 overseeing 4 of the English case studies each. Pope will supervise the researcher based at Oxford and Atherton will supervise Bryce and Eccles, based at Warwick. Collaborator Drivsholm will lead the Copenhagen case study, supported by Atherton.

We will hold monthly project Management Team (MT) meetings for the PIs and researchers where we will discuss operational matters, current WP activities and ensure that we keep the

project on-time and on-budget. Full team meetings every 4 months will involve all coapplicants and will be used to plan activities, present and discuss data analysis and emerging findings and to work on outputs and dissemination. These meetings and members of the research team will report to the Study Steering Committee (SSC) and Patient and Public Involvement/Engagement (PPI/E) meetings as necessary to share progress and integrate findings. The SSC will meet 5 times during the project and will be led by Professor Chris Salisbury (academic GP), and will include a researcher with expertise in ethnography in primary care (Dr Jonathan Hammond, University of Manchester), and independent representatives from the RCGP (Dr Ruth Ellenby), NHS England & NHS Improvement (Dr Jean Ledger), an independent charitable organisation that informs health policy and care (Rebecca Baird, Kings Fund), CCG member and clinical advisor on digital strategy (Dr Edward Turnham, Norfolk & Waveney CCG) and a representative of a Primary Care Network (tbc). The PPI lead (Gronlund) and two PPI/E members (Mr Martin Tod and Mrs Jenny Lee) will also be members of the SSC. The SSC will oversee the project, advising on ethical conduct, guality assurance, data and project management and providing valuable network links for our dissemination.

# Ethics /regulatory approvals

The focus of the rapid ethnographies is changes to access systems and as such this research will not observe direct patient care or patient records, but the study will involve observation and interviews with staff and patients in General practices so we will seek requisite approvals from NHS REC and HRA. We will follow NHS and University of Oxford governance and data management procedures.

# Data protection and patient confidentiality

All investigators, research staff, PPI and steering group members will comply with the requirements of the Data Protection Act 2018 and General Data Protection Regulation (GDPR) 2016/679 with regards to the collection, storage, processing and disclosure of data including any personal information. The Principal Investigator (Pope) is the data custodian. University of Oxford is the data controller. At the end of the study data (including consent forms) will be stored for 10 years in accordance with University of Oxford policy and then destroyed. After the 10 year retention all research data (including consent forms) will be securely destroyed using the appropriate procedure advised at that time by the University of Oxford research data team.

# **CONFLICT OF INTEREST STATEMENT**

Atherton is a member of the Primary Care Digital Transformation Advisory group at NHS England and the Implementation of Online Consultations Sub-group at NHS England. These are unpaid positions. Atherton was provided with data, at no charge, by GP Access for an independent analysis of their online consultation platform. The study was conducted entirely independent of GP Access who had no influence on the analysis or interpretation of results. GP Access are the providers of an online consulting platforms used by the NHS.

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# **APPENDIX A**



