

Summary of the ModCons project final report, submitted to the funder – the NIHR School for Primary Care Research

Making decisions about mode of consultation in general practice – what happens, when, with whom, and why?

(Project short title: *Mode of consultation in general practice, or, ‘ModCons’*)

<https://www.phc.ox.ac.uk/research/interdisciplinary-research-in-health-sciences/modcons/modcons>

Lead investigator(s) on project

Professor Sara Shaw, Department of Primary Care Health Sciences, University of Oxford

Lead investigator's professional background

Applied social science, health services research

Other NIHR Primary Care School collaborators (name, institution) on project

- Sara Papparini, Senior Lecturer in Applied Health Research (EMCR co-applicant), Wolfson Institute of Population Health, Queen Mary University of London
- Sharon Spooner, Academic Clinical Lecturer, Centre for Primary Care Research, University of Manchester
- Deborah Swinglehurst, Professor of Primary Care, Centre for Primary Care. Queen Mary University of London

Names, roles and host organisation of others involved in project (e.g. include fixed term contract researchers and external collaborators / partners)

Co-applicants

- Michael Gill, Associate Professor in Organisation Studies, Said Business School, University of Oxford
- Anica Alvarez Nishio, Lay representative

Postdoctoral researchers

- Natassia Brenman, Department of Primary Care Health Sciences, University of Oxford

- Sophie Spitters, Centre for Primary Care. Queen Mary University of London (to Apr-24, then University of Birmingham)
- Joseph Wherton, Department of Primary Care Health Sciences, University of Oxford

Collaborators

- Trish Greenhalgh, Professor of Primary Care, University of Oxford – co-PI on linked NIHR-funded study

PROJECT SUMMARY

AIM: To understand how, when, by whom and why decisions are made to use different modes of consultation in general practice, and consider implications for the future organisation and delivery of care.

RESEARCH QUESTIONS

1. What are the set of organisational, professional and individual practices that determine whether a consultation is remote or in-person?
2. How and why are different consultation modalities (and combinations of modalities) supported, or not, by the wider practice organisation?
3. What does and does not work well for patients and clinicians, and why?

OBJECTIVES

1. Extend NIHR-funded research already underway on 'Remote by Default' general practice, to work with three GP practices (one inner city, one urban, one rural) to observe and record the set of practices that inform decisions about mode of consulting, and patients and clinicians experience of them.
2. At the level of the practice, capture and analyse routine data about the number and modality of consultations, and map practice systems and processes for assessing requests for help and for allocating patients to different modes of consultation and type of primary care clinician.
3. At the level of practice staff, shadow and interview staff in each practice to understand (i) the formal and hidden work and (ii) the clinical and administrative work involved in two separate weeks of consulting, inviting staff and patient perspectives on and experiences of different modes of consulting.
4. At the level of the consultation, select 10 patients with 'complex needs' per practice (involving up to 30 patients in total) and conduct interviews with them to understand how their preferences and experiences shape decisions on modality, and examine patient records to retrospectively chart their care trajectories and use of different consulting modalities over time.

5. Synthesise emerging analysis in order provide a rich picture of what is happening, when, with whom and why, and use this to inform evolving policy and practice.

Summary of methods, findings against objectives, and conclusions

We conducted ethnographic research in three general practices in England to observe and record the set of practices that inform decisions about mode of consulting, and patients and clinicians experience of them. Practices were of varying sizes and localities, with digital systems in place and varied approaches to organising triage. Data were collected over 15 months (2022-2024) with 6 initial familiarisation visits (2 at each practice), review of practice documents (e.g. organisational charts) and 3 practice-based workshops to develop process maps of triage systems. To understand practice level triage and decision making about care we then used team ethnography to observe >600 hours of triage-related work, (including e.g. front desk, back office, staff meetings), conducted 50 interviews with staff (35 'go along' and 15 formal), and collected GP appointment activity data for in-person and remote appointments for 2 months. At the patient level we tracked 33 patient requests for care as they moved through triage systems, conducted 19 narrative interviews with patients identified as having complex needs and combined this with review of patient records. We initially explored data thematically, then drew on relevant sociological and socio-technical theories (e.g. re hidden work, complex collaboration) to extend analysis.

At the level of the practice we found that the organisation of the GP practice, and ways of working, interacted with triage systems to variably shape the prioritisation of care demands, by who, and when. Findings show how (i) underpinning practice values grounded in e.g. continuity or efficiency, and ways of working (e.g. propensity for experimentation and 'tinkering' with technologies), differentially informed the on-going design and development of triage systems and processes, (ii) that triaging and decision-making about modality typically involved complex collaborative work across clinical and administrative staff that was variably supported by practice-based systems and technologies, and which shaped how patient requests flowed through systems and how/by whom triage outcomes were negotiated, and (iii) that the capacity of individuals and practices to manage system pressures, especially in the face of extreme demand, shaped how triage systems can be made to work effectively to support decisions about care.

At the level of the patient, interviews revealed how digital triage had changed the way consultations are organised; and observations revealed how this has become a complex asynchronous negotiation between patient and triage doctor that is mediated by technology and supported by receptionists. This offered opportunities to manage simple problems quickly and without a formal consultation (leading to typically text-based or telephone interaction), and for identification of patients requiring a formal (in-person or telephone) appointment. However, the complexity and negotiation involved introduced risks for some

patients (e.g. with multiple long term conditions) to drop out or be excluded from care. These 'at risk' patients were often identified as 'complex', but findings show how much of the complexity lay in practices systems and triage processes. Practice staff repeatedly sought to counter such complexity and support patients in accessing care. This was often hidden and challenging work.

We conclude that practices conduct significant, continuous and often invisible work to design, operationalise, adapt and manage triage systems and processes in ways that work for them, and their patients. This typically enhances 'patient flow' but also introduces complexity into practices systems and processes, which can limit some patients' ability to participate in decision-making about their care. By acknowledging these ways of organising, practices can better enable contextually appropriate, effective *and* efficient triage systems that safely prioritise care demand and use resources wisely.

Plain English Summary

This summary was written collaboratively with our Lay Co-applicant.

When people need to access their GP they need ways to do so that work for them. It used to be that one rang the surgery or just walked in, but the world is more complex now. Surgeries offer many more services, and many patients want consultations that fit around their lifestyle or care needs. This piece of work looked at three surgeries: one in the inner city, one in a suburban area and one in a rural area. We looked at the different types of consultations offered by each of these surgeries, and how decisions are made about who gets what care when, and with what type of consultation. For example, in addition to in-person consultations, some surgeries offer telephone or video consultations, or consultations via email (sometimes called e-consults). We spoke with doctors, nurses and other practice staff. We looked at patient's requests for help: who decides what type of consultation they will get and what sort of care they are offered, and why. We looked at who makes these decisions, and what intended and unintended work is part of the process. We also spoke with patients to get their perspectives on how these processes work. At each practice we spoke with patients whose needs are complex (e.g. they have more than one condition, or in addition to being patients they are also carers, or it might mean that they need translation or language support. We asked them about their preferences and looked at their care journeys over time. We found that practices do a lot of work to design and implement ways of sorting and prioritising patients requests for the care that they need. We also found that a lot of this work can be invisible to anyone that doesn't work in the surgery. This work, referred to as 'triage', helps to make sure that patients requests for care are continually reviewed and acted on. However, it also introduces complexity into

surgeries systems and processes, and this can limit the ability of some patients to participate in decision-making about their care. We produced a series of outputs, including journal papers and events to share findings. Finally we worked with a design team, patients and practices to develop resources which explain to patients the different ways they can access their surgery, and which mode should be used for which type of care need.

3 key messages

Our findings about access, triage, and appointment modality challenge the notion of 'the complex patient'. Complexity can be produced by the systems patients must navigate – it does not lie only within patients.

Our findings show how practices do significant work to design, operationalise, adapt and manage triage systems. This requires practices to make trade-off's (e.g. balancing efficiency with flexibility), continuously review and adapt their use of digital technologies, and to surface and coordinate collaborative work across clinical and support staff.

We provide a critical analysis of digitally enabled triage and what it means for patients in primary care: whilst it enhances 'patient flow' can also limit patients' ability to participate in decision-making processes.

PUBLIC INVOLVEMENT

ModCons explicitly linked with the Remote by Default II study (RbD2, NIHR-funded), which started on 1 September 2021 with the aim of informing a more fit-for-purpose remote-by-default model in general practice. Research and PPI activities in RbD2 consistently highlighted practical, clinical and ethical challenges involved in consulting in primary care in recent times, and where to focus our attention in ModCons (e.g. concerns about access to care and about how entry-level technologies may worsen inequalities of access to different kinds of appointments; or the infrastructure needed for introducing and delivering a business-as-usual remote service in the busy and unpredictable setting of primary care).

Guided by these initial findings, we worked with our PPI co-applicant to focus on three areas of public involvement: (1) governance (via an External Advisory Group), (2) accessing underserved and seldom heard communities about their views and experiences of the advantages and challenges of different ways of

consulting with their doctor; and (3) building in co-design of patient-facing resources and a patient-led paper.

Summary of public involvement activities carried out throughout the project

ModCons explicitly linked with the Remote by Default II study, which provided the PPI infrastructure to inform the aims, focus and design of the ModCons study. Lay advisors have formed a core part of the External Advisory Group, reviewing, commenting and meeting with the research team quarterly. The ModCons team regularly reported to, and responded to feedback from, EAG members. We have consulted the chair of the group, Anica Alvarez Nishio (also Lay Co-applicant for ModCons), about our PPI and patient recruitment strategy; we invited her to witness and participate in one of the patient co-design workshops; and input to a patient-led paper. On this paper we also recruited two further public participants, and organised an accessible, in-person writing retreat so that the paper could be properly co-produced on an equitable basis. In addition, we have undertaken the following activities:

RbD PPI workshop (June 2023): We shared/discussed early ModCons findings re digital triage– key points were taken forward into data collection, analysis, and co-design work. The group provided feedback on interview strategies and associated questions, which fed into design of research tools for data collection.

Southampton Family Hub (Nov 2023): The Patient & Public Involvement and Engagement Officer (University of Southampton) connected us with their local family hub for disadvantaged families who raised the issue of e-consults and GP access. This led to a non-hierarchical conversation supported by images, cue cards, and activities which fed into thinking about our ‘4 stages’ model of triage which we then took forward into co-design work.

Patient co-design workshops x 2 (January & March 2024): We worked with an applied design agency, Design Science, to co-design and develop an output from the ModCons project for patients and GP practices. Co-design involved two patient workshops – one online, one in-person – widening potential for participation. We recruited patients for the online workshop via the Oxford PPI mailing list, with 16 patients attending with diverse experiences, demographics, and from diverse geographical locations. Patient input was key in validating initial conceptualisations of patient experiences in accessing primary care and booking appointments, clarifying design/focus of any resources, to ensure they are useful, user-friendly, and reach the right people.

An in-person workshop increased diversity of input, and progressed design, with the aim of including people who don't use digital technologies. 15 patients

attended the workshop. A new design iteration for resources was presented as a 'deck of cards' detailing the different steps to get primary care appointments.

Both workshops were followed by workshops with practice staff (including GPs, practice managers, and receptionists) to ensure their input in the design process. Thereafter, we organised consultation sessions with 2 ModCons practices to develop resources (tailored to each practice, and adaptable thereafter, and worked with practices and their Patient Participation Groups to refine and finalise resources.

Patient-oriented writing retreat (February 2025): We involved our public co-applicant and 2 patient representatives (each with complex needs) in a writing retreat focussed on developing an academic publication capturing what matters to patients when it comes to different kinds of consultation in general practice. Drawing primarily on patient vignettes and interview data, members of the research team, including our PPI co-applicant we worked together to hone the focus and outline and the paper (writing is on-going with planned submission in 2025 - see outputs). Inputs from the patient representatives helped significantly in the conceptual framing of the paper, and this framing has been put to use in a number of further conversations.

Impact of public involvement

IMPACT ON THE MODCONS RESEARCH PROJECT

In the PPI session in June, the group overwhelmingly preferred the BNIM interview style (which aims to elicit a patient narrative with minimal interference from the interviewer). This led us to take a more narrative approach, also then developing theory-informed patient narrative summaries of the patient interviews, plus review of their records, as an intermediary step in data analysis.

Two important themes were emphasized in the PPI session, continuity of care and self-advocacy, influenced key papers (e.g. on the risks of patients 'falling through the cracks', the work receptionists do to prevent this from happening; and patient strategies to self-advocate and navigate primary care access).

Our PPI session in November 2023 validated findings about the different stages of triage across GP practices. This fed into co-design work to develop resources for patients. The PPI sessions in January and March 2024 aimed to involve patients and the public in the co-design process. They have informed the iterative design of a prototype for a ModCons resource for patients.

IMPACT ON RESEARCH TEAM

Feedback from the PPI sessions have been impactful on the team in three ways:

1. PPI has directed the development of two follow-up grant applications. A proposal submitted in October 2023 as part of an SPCR fellowship application was not successful, but the SPCR Round 10-IV application to study remote care in patients excluded from primary care through the Special Allocation Scheme (SAS) was funded, and started in Nov-24. Two ModCons PPI members are included as lay co-applicants.
2. Linked to #1, researchers have taken on board new approaches and ways of working to engage those from diverse backgrounds and adopt co-design approaches for development of resources. This has increased learning and capacity, and informed PPIE approaches in subsequent funded work (e.g. on trauma-informed approaches to engagement).
3. The 'writing retreat' in February 2025 provided a unique forum to share and discuss emerging findings from the research, to really engage public/patient interpretations of those findings, and to shape a paper focused on patient narratives collected in the study. This was integral in focusing on challenging the notion of the 'complex patient' (which implies that it is patients that bring the complexity to access and triage) and guiding the team to rebalance the focus to where the complexity lies in the system. The patient representatives identified the huge amount of work patients have to put into managing complex systems and that uncovering this could be one step towards advocating for them and what needs to change in contemporary healthcare.

IMPACT ON MEMBERS OF THE PUBLIC INVOLVED

This section (and the report) has been drafted in collaboration with our Lay Co-applicant:

“During the co-design workshop, it was notable the different ways patients, even patients who did not seem to be highly educated or have many resources, utilised different skills and approaches to access the care they needed...That people understood these different routes into care and were able to use them was very interesting. You could see other people in the room reflecting on what she said and thinking about how they might navigate more effectively.

During the writing retreat, it was notable how receptive the academic team were to hearing about the care access strategies we and our friends used to get the care we need. One of the other representatives used the image of a conductor, and you could tell this had a big impact on the team. It is very rewarding when a lay perspective can make such a big impact on a piece of research.”

Two of the initial 15 contributors (from RbD2 project who gave input into ModCons and spin-off SEARCH study proposal) then became formal patient

collaborators in the SEARCH study. This has opened up opportunities to be part of a project focussing on exclusion in healthcare provision.

Engagement and Dissemination

- Festival of Communities, London (June 2023): ModCons was part of a stall, hosted by the APOLLO social science group (led by co-applicant Prof Deborah Swinglehurst), the theme of which was ‘things that are hidden’ and included activities for children all ages. One activity showcased our research project, which included a curiosity provoking image of a GP practice appointment book with a ‘hidden’ explanation of the decisions that feed into appointments. Our picture included a link/QR code to the Oxford webpage about ModCons. The event took place in Tower Hamlets (east London) with over 7,000 visitors across the two days.
- Dissemination and Networking Event (5 July 2024): ModCons was part of a major event held at Green Templeton College, Oxford, ‘The changing face of remote access to primary care in the UK: Moving from research findings into implementation. Led from the NIHR-funded Remote by Default 2 study, 70 people signed up from all jurisdictions including policymakers, clinical leaders from NHS Resolution, NHS England, NHS Wales, Healthcare Services Safety Investigations Branch, Integrated Care Boards, clinicians and managers from participating RBD2 practices, BMA General Practitioners Committee and Royal College of General Practitioners senior leaders, people involved in the GP curriculum and in other senior training roles and representatives from government across 3 of the UK nations. The study findings were shared (alongside those from related NIHR-funded studies ‘Remote by Default 2’ and ‘Video and Hybrid Group consultations’) as part of the broader evolving landscape of remote access to care. In the afternoon, attendees joined workshops to consider how the study findings could be implemented across the areas of i) contracts and regulation, ii) education and training and iii) within the practice itself. Study findings and implementation actions were summarised through visual minutes that were subsequently disseminated through our networks. A networking event followed involving all participants.

Planned or published articles in peer-reviewed journals

PUBLISHED

1. Payne R, Clarke A, Wieringa S, Swann N, van Dael J, Brenman N, Rosen R, Mackridge A, Moore L, Kalin A, Dakin F, Shaw SE, Ladds E & Greenhalgh T. (2023) Patient safety in remote primary care encounters: multimethod

qualitative study combining Safety I and Safety II analysis. *BMJ Quality & Safety*. 33:573-586: <https://doi.org/10.1136/bmjqs-2023-016674>

2. Rybczynska-Bunt S, Byng R, Spitters, S., Shaw SE, Jameson B & Greenhalgh T (2024). The reflexive imperative in the digital age: Using Archer's 'fractured reflexivity' to theorise widening inequities in UK general practice. *Sociology of Health & Illness*, 46(8): 1523-1991; <https://doi.org/10.1111/1467-9566.13811>

SUBMITTED /UNDER REVIEW

3. Brenman N, Spitters SE, Gill M, Spooner S, Papparini S, Swinglehurst D, Wherton J & Shaw SE Choreographing triage: Making patient requests 'flow' through digitally enabled systems of access and decision-making in NHS primary care. *Sociology of Health & Illness*, under review.

IN PROGRESS/TO BE SUBMITTED IN 2025-26

4. Shaw SE, Brenman N, Spitters S, Wherton J, Swinglehurst D, Papparini S, Spooner S, Ladds E, Beck D, Cowling H, Alvarez Nishio A. How practices make triage work: findings from an ethnographic study in three UK general practices in England. *Social Science & Medicine*, in preparation.
5. Spitters S, Brenman N, Gill M, Papparini S, Swinglehurst D, Wherton J & Shaw SE. Digital triage in primary care: an exploration of work practices supporting the implementation and use of digital triage technologies; *BMJ Quality & Safety*, in preparation.
6. Swinglehurst D, Brenman N, Spitters S, Papparini S & Shaw SE. How digital innovation in primary care disrupts the clinical consultation; *British Journal of General Practice*, in preparation.
7. Brenman N, Spitters SE, Wherton J, Alvarez Nishio A, Gaffin J, Pearl J PATIENT & Shaw SE. Where does the complexity lie? What matters to 'complex patients' when accessing care in General Practice. *Health Expectations*, in preparation.
8. Wherton J, Shaw SE, Greenhalgh T, Veinot T, Spitters S, Brenman N. Infrastructuring in practice: a processual perspective on co-evolving remote consultations in primary care. *Computer Supported Cooperative Work*, in preparation.

IN PLANNING

9. Brenman, N. Shaw, S, Spitters, S. Mediating inequalities: what is the role of reception staff in general practice? *Journal of Health Services Research & Policy*

Conference presentations

We have presented findings through over 10 conference and symposia presentations: at the Nordic STS conference (*Decisions at a distance: Digital*

triage and the mediation of access in care), SPCR showcase (*Making decisions about consultation modality in general practice*); MedSoc 2023 (*Beyond the digital front door: Choreographing triage across primary care spaces*); LSE Health seminar series (*Accessing general practice: digital, efficient and equitable?*) MedSoc 2024 (*Modern general practice access: Digital and efficient?*) UCL Qualitative research network (*How digital innovation in primary care disrupts the clinical consultation*), and Organisational Behaviour in Health Care (*Navigating the Future: Innovations in Primary Care Organisations*), and three presentations of key papers (see above) at the Society for Academic Primary Care South West Conference 2025). This included a poster presentation based on work with patient collaborators: *Decision-making about appointment type in complex primary care: What matters to patients?*

Other outputs from the project (e.g. blogs, infographics, videos)

We have developed co-designed, patient-facing resources for practices that can support patients in accessing care and booking appointments. These have been co-designed with patients/public and practices, and in liaison with NHSE, and are now freely available, and downloadable for any practice to use.

In addition, we have also produced a research poster communicating findings of the patient-focussed paper referenced above on complexity and what matters to patients (presented at SAPC SW in Oxford 2025), which builds on the extensive dissemination of work to primary care and academic audiences detailed in the academic impact section below.

Collaboration & Impact

We have developed collaborations in FOUR main areas:

1. This was a collaborative grant, bringing together research team across University of Oxford, University of Manchester and Queen Mary University of London. It extended existing NIHR-funded research on remote by default general practice (RbD2). Collaboration has strengthened across SPCR members, and with the RbD2 team (e.g. leading to two publications across ModCons and RbD2 – see above). We have also strengthened the collaborations across Oxford (primary care departments and the Said Business School in Oxford).
2. Collaborations with the three practices participating in the ModCons study have strengthened, with plans for a joint publication (see above), and on-going work co-designing patient-facing resources. We have also developed a new collaboration with Bridgewater Surgeries for a related project on remote care in the specialised service for excluded patients (NIHR SPCR funded, starting Nov-24). This has generated a new collaboration with the Manchester

School for Primary Care Research involving primary care researcher Kelly Howells and NIHR Clinical Fellow Jessica Drinkwater as co-applicants.

3. We have formed new collaborations with colleagues in the Netherlands, which has enabled a series of knowledge sharing events (including ModCons research team, and participating practices, as well as relevant policymakers); and more recently with colleagues in Denmark on remote access to urgent care. This has led to submission of an application of postdoctoral fellowship to support network development, and on-going discussion regarding a potential European grant.
4. We have linked with Archie Lodge, an Academic Foundation Doctor at the University of Oxford and Oxford University Hospitals with a background in engineering and medical device design and manufacturing. We consulted him on specific aspects of the research, to feed into the development of our healthcare quality improvement outputs and to support the development of a clinical fellowship application informed by ModCons findings.

Project impact

We have sought impact in FOUR key areas:

1. **INFORMING POLICY & ENGAGING SYSTEM-LEVEL STAKEHOLDERS** – linking across with other NIHR funded studies, we have been building relationships and generating interest from policymakers, regulators, patient organisations, professional organisations and linking closely with evolving work in the RbD2 study. This has included a series of 4 cross-sector stakeholder events, the last of which focussed specifically on early ModCons findings (see #14), and a recent event at the House of Commons sharing findings from RbD2, ModCons and other related work. A further dissemination event on 6th July in Oxford, involved national, regional and practice-level stakeholders. Our strong links with policy makers from NHS England provided opportunities to ensure that ongoing policy in this area is grounded in the real-life experiences of patients and practices (e.g. via contributions/discussion at the DPCERN – digital primary care research and evaluation network, hosted by the NHSE team). We have shared formative findings from ModCons with these teams.
2. **BUILDING AND SUSTAINING LEARNING AMONG GP PRACTICES** about the organisation and delivery of remote and in-person consulting – in the wider RbD2 programme, we are building a community of GP practices that can inform and support development and implementation of remote services where appropriate, acceptable and safe. We are feeding into this evolving community of practice, specifically through the lens of sharing learning about how to organise and deliver mixed modes of consulting in general practice. We are currently developing guidance that can inform participating practices of our findings through our work with Design Science (i.e. online resources, and production of

animations). In addition, we are collaborating with Dutch colleagues about similar developments in primary care in the Netherlands. We started a series of knowledge translation activities in March 2024, working with the Dutch practices, the project lead Dr Wieringa and 3 students from the University of Amsterdam. Our aim is to distil further insights across Dutch/UK practices in this area – with the opportunity for practices to come together and share learning.

3. **PATIENTS & THE PUBLIC:** A primary aim of the ModCons co-design work is to inform and empower patients about their role and rights when it comes to decision-making about appointments in primary care. We have co-produced resources to support patients in accessing primary care appointments that are right for them.
4. **ACADEMIC IMPACT** – ModCons is progressing social science perspectives on decision-making and triage processes in the current landscape of primary care, in particular the digitalisation of access, ‘total triage’ systems, and digital working in healthcare. Our conference presentations and series of publications in progress (see section 11) are aimed at social science and primary care audiences.