

Alternatives to face-to-face consultation with a GP

Why this research was needed?

The Five Year Forward view has identified that there is pressure of increased demand to move away from providing the traditional face-to-face consultation with a GP for all consultations¹. In response to these pressures, GP services are adopting digital alternatives to face-to-face consultation with a GP. New NIHR research addresses questions of how these alternatives can best be used to meet the needs of GPs, their teams, and patients.

As technology has become more widely available, some general practices have begun to adopt alternative methods of consulting such as telephone triage², but despite the pressure on GPs to offer more consultations by email or Internet video programmes such as Skype, most practices have been slow to adopt these alternatives³. This reflects a reluctance expressed by general practitioners about the impact of introducing additional consultation methods on demand and on their capacity, and concerns about achieving safe use^{4 5}. Research is described from which lessons can be learnt for wider implementation in primary care.

Cochrane reviews confirm that there is little high-quality research in this area and the existing evidence comes largely from the USA, Australia and other countries containing large rural areas with dispersed populations where tele-consultation or alternatives to face-to-face contact are more established^{6,7}. Over the last few years there has been an emerging body of evidence that shows forms of multi-channel patient contact, for example email, web chat, e-forms, social media and communication channels from telephone to internet to smart phone apps can deliver efficiency gains and improve quality in general practice. However, much of this comes from those who have developed commercial solutions for general practice and local evaluations often report very mixed results².

What we found from NIHR research

NIHR has funded studies exploring the cost and effectiveness of alternatives to face-to-face consultations, what impact they have on patient satisfaction, working practices in primary care, and use of other health services.

A completed study by Campbell et al conducted a randomised controlled trial (RCT) of GP-lead triage using components of the Stour Access System (GPT) or nurse-led computer-supported triage, (NT) using the Plain Healthcare Odyssey PatientAssess system, compared with usual care (UC) by a GP for patients seeking same-day consultations. 42 GP services participated in Devon, Bristol/Somerset, Warwickshire/Coventry and Norfolk/Suffolk. All patients contacting the practice on a first occasion with a request for a same-day consultation were included by the receptionist if they were both well enough and able to communicate without difficulty⁸. Introducing either GPT or NT resulted in an *increase* (33% and 48% respectively) in the number of primary care contacts (including within practice, Out Of Hours, Walk in and A&E services) in the 28 days following a patient's request for a same-day consultation when compared with the practices' usual processes for handling such requests.

Introduction of GPT was associated with an increase in overall GP workload compared with usual care, but the study identified a reduction in GP face-to-face contacts. NT was also associated with an overall increase in total primary care workload; however, it too was associated with a reduction in GP contacts. These

changes indicate a redistribution of GP workload from face-to-face to telephone consultations after introduction of GPT and a redistribution of workload from GPs to nurses after introduction of NT.

The study found that both nurse-led (computer-supported) and general practitioner-lead telephone triage were cost neutral to the NHS compared with usual primary care. Triage appeared safe, and no differences in patient health status were observed. Nurse telephone triage was associated with a mixed reception by patients. Patients reported that it was easier to get through to the practice on the phone in practices implementing GPT in comparison with UC, and that it was harder to get prompt care in NT by comparison with GPT and with usual care by a GP.

Because most of the contacts were in general practice, the study provides evidence about general practice workload. Past research has suggested that telephone triage or consultation by a GP or a nurse might be associated with a reduction in GP same-day consultations of about 40%^{9 10}. However, re-consultation rates within the few weeks after telephone consultation increased by a similar magnitude. Any reduction in GPs' workload from reduced numbers of face-to-face contacts was more than compensated for by a substantial increase in the number of telephone contacts undertaken in GP triage. By contrast, introduction of nurse triage seemed to result in an overall reduction in GP workload, but with no reduction in overall costs¹¹.

Introducing any technology into a human system can have far-reaching effects that are difficult to predict¹². New forms of consultation may shift workload to others while not reducing the burden on primary care overall, or possibly increasing burden on practices and alter patient's experience of care. The researchers recommend the whole-system implications should be assessed when introduction of such a system is considered⁸.

How can GP services be improved using this research?

If the priority is to reduce GP face-to-face workload, the introduction of either GP triage or nurse triage might be of practical relevance but does not reduce cost⁸.

Substitution of telephone consultations for face-to-face consultations does not reduce overall workload but changes the nature of that workload¹¹.

Current research:

A two-year study (13/59/08) by Salisbury et al, completing Jan 2017 aims to identify the use of alternatives to face-to-face consultations in GP practices in Bristol, South Gloucestershire, North Somerset, Oxfordshire, Lothian and Highland and Islands, a total of 434 practices (<http://www.nets.nihr.ac.uk/projects/hsdr/135908>). Findings from a GP practice survey in this project (response rate 319/421 practices 76%) shows that despite the majority of practices offering telephone consultations on a frequent basis (66%), fewer practices were implementing email consultations (6%). None were frequently using internet videos (for example, Skype™, FaceTime®), with 86% having no plans to introduce internet video consultations. Individual GPs report similar patterns of use. Given there is little actual experience by GPs, the attitudes towards these options seem to be speculative and reflects their concerns around their burgeoning workload. The next stage of the study is to look in depth at practices that either currently offer, are about to introduce, or have ceased to offer, an alternative method of consultation³.

The guidance and website resource for practices that is being developed aims to help to NHS managers and practice staff determine how alternative methods of consultation may work for their practice population and for the GPs in the practice. A review informing this study considers how has been to consider how alternatives to face-to-face consultation in primary care might be developed and understood, bearing in mind the needs of those who plan, implement and research these alternatives. They recommend a process of co-design with patients and clinicians is used to anticipate, and where possible overcome the attitudinal apparent barriers to implementation¹³.

A recent innovation in general practice involves all patients requesting a face-to-face consultation being asked to speak to a doctor (telephone triage), who is not part of their usual practice. Commercial providers report gains that the services can deal with two-thirds of requests for GP appointments on the phone, greatly reduced waiting times for appointments, improved continuity of care, improved patient experience and reduced A&E attendance and emergency admissions. The on-going study by Roland et al (13/59/40) is due to complete in September 2017. The team will work with commercial providers and use a mix of qualitative and quantitative approaches and a cost-consequences analysis to evaluate the impact of these schemes on practices enrolled with them

<https://www.journalslibrary.nihr.ac.uk/projects/135940/#/>

The study will address concerns highlighted in previous systematic reviews about equality of access to services for patients who do not speak English, those with hearing or speech impairments and those with learning disabilities¹⁴ and the safety of telephone consultations¹⁵.

The Prime Minister's GP Access Fund (Formally Challenge fund) has funded two waves of pilot sites that set out to identify innovative ways to improve access to General Practice and deliver GP services, with many including ways to increase the use of technology to provide alternatives to face-to-face consultations. The NIHR CLAHRC West are assessing the impact of how eConsult, a suite of online patient services developed to give patients access to advice and care via their own GP practice website and allowing patients to consult their GP from home is working for practice staff within the One Care Consortium across Bristol, North Somerset and South Gloucestershire:

<http://clahrc-west.nihr.ac.uk/research/projects/improving-access-primary-care-study/>

Policy Context and policy evaluation:

GP consultations provide triage, diagnosis and assessment, treatment and support for management of long term conditions, preventive and public health interventions, healthcare system navigation including referral and diversion through the system to community and hospital specialist healthcare providers. These are typically of 10 minutes duration, face to face. The Five Year Forward view has identified that this model has become outdated as a model for all consultations, as demand has changed¹⁶. The 10 High Impact Changes in primary care include alternatives to traditional consultations by telephone, text, and e consultation. These feature some of the innovations that have been taken forward the GP Access Fund pilot sites in England, which aim to improve access to general practice and stimulate innovative ways of providing primary care services. There are 57 pilots covering over 18 million population (a third of the country) in over 2,500 practices. A commissioned evaluation of the first 20 pilot sites (wave 1) focused on three key national programme objectives: to provide additional hours of GP appointment time; to improve patient and staff satisfaction with access to general practice and to increase

the range of contact modes^{17 18}. The report states there were 12 sites using telephone consultations or GP telephone triage, 6 used video consultations and 7 used e consultations. Of these, telephone consultations were most used. The authors also stated that there is growing evidence to suggest that investment in telephony infrastructure can be cost effective, however, more work needs to be done to understand the appropriate models that will realise most savings (i.e. a central call centre or individual practice telephone systems)^{17 18}. The impact across all sites, and therefore across a complex array of innovations indicates that capacity was increased and may have addressed unmet demand, some of which may have previously been diverted to ambulatory attendance at Emergency Departments. There was no discernible effect on Out Of Hours Services or emergency hospital admissions. While this evaluation of the Prime Minister's Challenge Fund included some interviews with patients, and use of the existing national GP survey data on satisfaction with access, little is known about the patient perspective; how the services are designed to meet the diverse needs of local populations, their expectations and experience of care. A second wave of sites, comprising 37 new sites, is subject to a further commissioned evaluation by NHS England¹⁹.

1. NHS England, Care Quality Commission, Health Education England, Monitor, Public Health England, NHS Trust Development Authority. *Five year forward view*. London: NHS England. 2014.
2. NHS Alliance, Primary Care Foundation. Appendix 3 Remote consultations: are they safe, effective and efficient? In: *Making time in General Practice*; 2015.
3. Brant H, Atherton H, Ziebland S, McKinstry B, Campbell JL, Salisbury C. Using alternatives to face-to-face consultations: a survey of prevalence and attitudes in general practice. *British Journal of General Practice* 2016; 10.3399/bjgp16X685597. <http://dx.doi.org/10.3399/bjgp16X685597>
4. Hanna L, May C, Fairhurst K. The place of information and communication technology-mediated consultations in primary care: GPs' perspectives. *Family Practice* 2012;**29**:361-6. <http://dx.doi.org/10.1093/fampra/cmr087>
5. Atherton H. Use of email for consulting with patients in general practice. *The British Journal of General Practice* 2013;**63**:118-9. <http://dx.doi.org/10.3399/bjgp13X664072>
6. Atherton H, Sawmynaden P, Sheikh A, Majeed A, Car J. Email for clinical communication between patients/caregivers and healthcare professionals. *Cochrane Database of Systematic Reviews* 2012, Issue 11. Art. No.: CD007978. DOI: 10.1002/14651858.CD007978.pub2.
7. Bunn F, Byrne G, Kendall S. Telephone consultation and triage: effects on health care use and patient satisfaction. *Cochrane Database of Systematic Reviews* 2004, Issue 3. Art. No.: CD004180. DOI: 10.1002/14651858.CD004180.pub2.
8. Campbell JL, Fletcher E, Britten N, Green C, Holt T, Lattimer V, *et al*. The clinical effectiveness and cost-effectiveness of telephone triage for managing same-day consultation requests in general practice: a cluster randomised controlled trial comparing general practitioner-led and nurse-led management systems with usual care (the ESTEEM trial). *Health Technol Assess* 2015;**19**. <http://dx.doi.org/10.3310/hta19130>

9. Richards, DA, Meakins, J, Tawfik, J et al. Nurse telephone triage for same day appointments in general practice: Multiple interrupted time series trial of effect on workload and costs. *BMJ*. 2002; **325**: 1214–1217
10. Jiwa, M, Mathers, N, and Campbell, M. The effect of GP telephone triage on numbers seeking same-day appointments. *Br J Gen Pract*. 2002; **52**: 390–391
11. Campbell JL, Fletcher E, Britten N, Green C, Holt TA, Lattimer V, et al. Telephone triage for management of same-day consultation requests in general practice (the ESTEEM trial): a cluster-randomised controlled trial and cost-consequence analysis. *The Lancet*; **384**:1859-68.
[http://dx.doi.org/http://dx.doi.org/10.1016/S0140-6736\(14\)61058-8](http://dx.doi.org/http://dx.doi.org/10.1016/S0140-6736(14)61058-8)
12. NHS Confederation. *Remote control: The patient-practitioner relationship in a digital age*. London: NHS Confederation; 2010.
13. Atherton, H, Ziebland, S. What do we need to consider when planning, implementing and researching the use of alternatives to face-to-face consultations in primary healthcare? *Digital Health* 2016; 2.
14. Chapman JL, Zechel A, Carter YH, Abbott S. Systematic review of recent innovations in service provision to improve access to primary care. *The British Journal of General Practice* 2004;**54**:374-81.
15. McKinstry B, Hammersley V, Burton C, Pinnock H, Elton R, Dowell J, et al. The quality, safety and content of telephone and face-to-face consultations: a comparative study. *Quality and Safety in Health Care* 2010;**19**:298-303.
<http://dx.doi.org/10.1136/qshc.2008.027763>
16. Ewbank L, Hitchcock A, Sasse T. *Who cares? The future of general practice*. London: Reform; 2016.
17. NHS England. Prime Minister's Challenge Fund: Improving Access to General Practice First Evaluation Report: October 2015.
<https://www.england.nhs.uk/wp-content/uploads/2015/10/pmcf-wv-one-eval-report.pdf>.
18. NHS England. Prime Minister's Challenge Fund: Improving Access to General Practice Second Evaluation Report to September 2015
<https://www.england.nhs.uk/wp-content/uploads/2016/10/gp-access-fund-nat-eval-wave1-sml.pdf>
19. GP access fund wave 2 evaluation. <http://clahrc-gm.nihr.ac.uk/our-work/organising-healthcare/gp-access-fund-evaluation/>