

# Informing NHS policy in 'digital-first primary care': a rapid evidence synthesis

Mark Rodgers,\* Gary Raine, Sian Thomas,  
Melissa Harden and Alison Eastwood

Centre for Reviews and Dissemination, University of York, York, UK

\*Corresponding author [mark.rodgers@york.ac.uk](mailto:mark.rodgers@york.ac.uk)

**Declared competing interests of authors:** none

Published December 2019

DOI: [10.3310/hsdr07410](https://doi.org/10.3310/hsdr07410)

## Plain English summary

Informing NHS policy in 'digital-first primary care'

Health Services and Delivery Research 2019; Vol. 7: No. 41

DOI: [10.3310/hsdr07410](https://doi.org/10.3310/hsdr07410)

NIHR Journals Library [www.journalslibrary.nihr.ac.uk](http://www.journalslibrary.nihr.ac.uk)

## Plain English summary

Digital technology can be used by primary care clinicians to communicate with patients at home or at work instead of having a face-to-face consultation. This might include having an appointment with a clinician using internet video, e-mail or a smartphone application. It has been suggested that these methods may be welcomed by some patients and could provide a number of benefits, such as saving the NHS money and reducing the amount of work that primary care staff have to do each day.

This project aimed to find out what evidence exists about the impact of using digital technology for non-face-to-face appointments on patients, medical staff and health services. We did this by assessing and combining the findings from a number of reviews and recent individual studies.

We found very little evidence on outcomes related to quality of care, service delivery, benefits or harms for patients, or on financial costs or cost-effectiveness. Much of the evidence came from studies that collected people's views, rather than from studies actually measuring what happens. Patients who use digital technology for appointments are likely to be younger and female and have higher income and education levels.

People who find attending face-to-face consultations difficult, such as people with poor mobility, may benefit from digital alternatives. A number of barriers to using digital alternatives were identified, including inadequate NHS technology and staff concerns about workload, security and confidentiality. One recent UK study suggested that there is little difference in the overall time it takes general practitioners to hold a face-to-face consultation compared with a video consultation. We found no studies examining how to contract and commission alternatives to face-to-face consultations.

# Health Services and Delivery Research

ISSN 2050-4349 (Print)

ISSN 2050-4357 (Online)

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) ([www.publicationethics.org/](http://www.publicationethics.org/)).

Editorial contact: [journals.library@nihr.ac.uk](mailto:journals.library@nihr.ac.uk)

The full HS&DR archive is freely available to view online at [www.journalslibrary.nihr.ac.uk/hsdr](http://www.journalslibrary.nihr.ac.uk/hsdr). Print-on-demand copies can be purchased from the report pages of the NIHR Journals Library website: [www.journalslibrary.nihr.ac.uk](http://www.journalslibrary.nihr.ac.uk)

## Criteria for inclusion in the *Health Services and Delivery Research* journal

Reports are published in *Health Services and Delivery Research* (HS&DR) if (1) they have resulted from work for the HS&DR programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

## HS&DR programme

The HS&DR programme funds research to produce evidence to impact on the quality, accessibility and organisation of health and social care services. This includes evaluations of how the NHS and social care might improve delivery of services.

For more information about the HS&DR programme please visit the website at <https://www.nihr.ac.uk/explore-nihr/funding-programmes/health-services-and-delivery-research.htm>

## This report

The research reported here is the product of an HS&DR Evidence Synthesis Centre, contracted to provide rapid evidence syntheses on issues of relevance to the health service, and to inform future HS&DR calls for new research around identified gaps in evidence. Other reviews by the Evidence Synthesis Centres are also available in the HS&DR journal.

The research reported in this issue of the journal was funded by the HS&DR programme or one of its preceding programmes as project number NIHR128198. The contractual start date was in June 2018. The final report began editorial review in December 2018 and was accepted for publication in May 2019. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HS&DR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health and Social Care.

**© Queen's Printer and Controller of HMSO 2019. This work was produced by Rodgers *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This issue may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.**

Published by the NIHR Journals Library ([www.journalslibrary.nihr.ac.uk](http://www.journalslibrary.nihr.ac.uk)), produced by Prepress Projects Ltd, Perth, Scotland ([www.prepress-projects.co.uk](http://www.prepress-projects.co.uk)).

## NIHR Journals Library Editor-in-Chief

**Professor Ken Stein** Professor of Public Health, University of Exeter Medical School, UK

## NIHR Journals Library Editors

**Professor John Powell** Chair of HTA and EME Editorial Board and Editor-in-Chief of HTA and EME journals. Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK, and Senior Clinical Researcher, Nuffield Department of Primary Care Health Sciences, University of Oxford, UK

**Professor Andrée Le May** Chair of NIHR Journals Library Editorial Group (HS&DR, PGfAR, PHR journals) and Editor-in-Chief of HS&DR, PGfAR, PHR journals

**Professor Matthias Beck** Professor of Management, Cork University Business School, Department of Management and Marketing, University College Cork, Ireland

**Dr Tessa Crilly** Director, Crystal Blue Consulting Ltd, UK

**Dr Eugenia Cronin** Senior Scientific Advisor, Wessex Institute, UK

**Dr Peter Davidson** Consultant Advisor, Wessex Institute, University of Southampton, UK

**Ms Tara Lamont** Director, NIHR Dissemination Centre, UK

**Dr Catriona McDaid** Senior Research Fellow, York Trials Unit, Department of Health Sciences, University of York, UK

**Professor William McGuire** Professor of Child Health, Hull York Medical School, University of York, UK

**Professor Geoffrey Meads** Professor of Wellbeing Research, University of Winchester, UK

**Professor John Norrie** Chair in Medical Statistics, University of Edinburgh, UK

**Professor James Raftery** Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

**Dr Rob Riemsma** Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

**Professor Helen Roberts** Professor of Child Health Research, UCL Great Ormond Street Institute of Child Health, UK

**Professor Jonathan Ross** Professor of Sexual Health and HIV, University Hospital Birmingham, UK

**Professor Helen Snooks** Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

**Professor Ken Stein** Professor of Public Health, University of Exeter Medical School, UK

**Professor Jim Thornton** Professor of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, University of Nottingham, UK

**Professor Martin Underwood** Warwick Clinical Trials Unit, Warwick Medical School, University of Warwick, UK

Please visit the website for a list of editors: [www.journalslibrary.nihr.ac.uk/about/editors](http://www.journalslibrary.nihr.ac.uk/about/editors)

**Editorial contact:** [journals.library@nihr.ac.uk](mailto:journals.library@nihr.ac.uk)