Impact of NHS 111 Online on the NHS 111 telephone service and urgent care system: a mixed-methods study

Janette Turner,¹ Emma Knowles,¹ Rebecca Simpson,¹ Fiona Sampson,^{1*} Simon Dixon,¹ Jaqui Long,¹ Helen Bell-Gorrod,¹ Richard Jacques,¹ Joanne Coster,¹ Hui Yang,² Jon Nicholl,¹ Peter Bath^{1,2} and Daniel Fall³

¹School of Health and Related Research (ScHARR), University of Sheffield, Sheffield, UK ²School of Information Studies, University of Sheffield, Sheffield, UK ³Sheffield Emergency Care Forum, Sheffield, UK

*Corresponding author f.c.sampson@sheffield.ac.uk

Declared competing interests of authors: Helen Bell-Gorrod reports personal fees from Maple Health Group and grants from Public Health England and the National Institute for Health and Care Excellence outside the submitted work.

Published November 2021 DOI: 10.3310/hsdr09210

Plain English summary

Impact of NHS 111 Online on NHS 111 telephone service Health Services and Delivery Research 2021; Vol. 9: No. 21 DOI: 10.3310/hsdr09210

NIHR Journals Library www.journalslibrary.nihr.ac.uk

Plain English summary

People use the NHS 111 telephone service to help them decide which urgent care service to use when they need help quickly. Recently, an alternative NHS 111 Online service has been introduced. This allows people to use either a website or a smartphone application (app) to answer a series of questions about their health problem, and it then provides advice about what to do next. It is hoped that this will help improve access to services and reduce demand for the NHS 111 telephone service.

We looked at how well the new online service is working in a number of sites across the country. We found little effect on the telephone service, meaning that people are not using the online service *instead* of telephoning and there could potentially be some extra service demand. More younger people use the online service than older people. A survey of service users found that one-third did not follow the advice provided by the online service and users were less satisfied than those using the telephone service. They did find it helpful and were generally positive but thought that the service could be improved with better questions and perhaps a chat option to connect to a person. The online service has improved access for people who do not want to use the telephone service. Staff were also positive about the online option and had not, so far, experienced an increase in their workload. We compared the cost of the online and telephone services and found that the online service move to the online service instead. Overall, the NHS 111 Online service appears to be a useful way to access urgent care working alongside the telephone service but could not replace it as many people like the human contact of the telephone service. Our findings may change as use increases.

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/).

Editorial contact: journals.library@nihr.ac.uk

The full HS&DR archive is freely available to view online at 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

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 in this issue of the journal was funded by the HS&DR programme or one of its preceding programmes as project number NIHR127655. The contractual start date was in March 2019. The final report began editorial review in November 2020 and was accepted for publication in May 2021. 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 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.

Copyright © 2021 Turner *et al.* This work was produced by Turner *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health and Social Care. This is an Open Access publication distributed under the terms of the Creative Commons Attribution CC BY 4.0 licence, which permits unrestricted use, distribution, reproduction and adaption in any medium and for any purpose provided that it is properly attributed. See: https://creativecommons.org/licenses/by/4.0/. For attribution the title, original author(s), the publication source – NIHR Journals Library, and the DOI of the publication must be cited.

Published by the NIHR Journals Library (www.journalslibrary.nihr.ac.uk), produced by Prepress Projects Ltd, Perth, Scotland (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 Professor of Digital Health Care, 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 Senior Scientific Adviser (Evidence Use), Wessex Institute, University of Southampton, 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 Emeritus Professor of Wellbeing Research, University of Winchester, 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

Please visit the website for a list of editors: www.journalslibrary.nihr.ac.uk/about/editors

Editorial contact: journals.library@nihr.ac.uk