Health literacy interventions for reducing the use of primary and emergency services for minor health problems: a systematic review

Alicia O'Cathain,^{1*} Alexis Foster,¹ Christopher Carroll,¹ Louise Preston,¹ Margaret Ogden,² Mark Clowes¹ and Joanne Protheroe³

¹School of Health and Related Research, University of Sheffield, Sheffield, UK ²Patient and public involvement member ³School of Medicine, Keele University, Keele, UK

*Corresponding author a.ocathain@sheffield.ac.uk

Declared competing interests of authors: Alicia O'Cathain is a member of the National Institute for Health and Care Research (NIHR) Health and Social Care Delivery Research board (2021 to present), and is a NIHR Senior Investigator.

Published December 2022 DOI: 10.3310/IVQJ9044

Plain English summary

Reducing the use of primary and emergency services Health and Social Care Delivery Research 2022; Vol. 10: No. 38 DOI: 10.3310/IVQJ9044

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

Plain English summary

What was the question?

Some people struggle to find information about their health and understand it. This is known as having a low level of 'health literacy'.

People with a low level of health literacy are more likely to go to an accident and emergency department or seek an appointment with their doctor when they have minor health problems such as stomach upsets or coughs/colds.

This study looked for research on how to improve people's health literacy so they can (1) look after minor health problems and (2) know how to access the right services.

What did we do?

We undertook a systematic review. This means bringing together previous research to learn about what works.

We held meetings with patients, carers, doctors and NHS managers to plan the review and talk about the findings.

What did we find?

We found 67 research papers. These tested booklets, leaflets and websites about how to look after minor health problems. They also tested websites that ask questions about symptoms and then offer a solution (digital self-triage). People found these things helpful. Two out of every three research papers showed that fewer people went to accident and emergency or a doctor after using a booklet or website. We could not work out why only some studies showed changes in service use. This meant that we were not certain that these initiatives worked, but felt that they had potential. There was no sign that the initiatives were unsafe in terms of people not accessing services when they needed to.

What does this mean?

Similar initiatives are being used in the NHS now. They have the potential to stop people going to accident and emergency and their doctor with minor health problems. But they need to be tested further to make sure they are working and to understand why they are working.

Health and Social Care Delivery Research

ISSN 2755-0060 (Print)

ISSN 2755-0079 (Online)

Health and Social Care Delivery Research (HSDR) was launched in 2013 and is indexed by Europe PMC, DOAJ, INAHTA, Ulrichsweb™ (ProQuest LLC, Ann Arbor, MI, USA) and NCBI Bookshelf.

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

This journal was previously published as *Health Services and Delivery Research* (Volumes 1–9); ISSN 2050-4349 (print), ISSN 2050-4357 (online)

The full HSDR archive is freely available to view online at www.journalslibrary.nihr.ac.uk/hsdr.

Criteria for inclusion in the Health and Social Care Delivery Research journal

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

HSDR programme

The HSDR 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 HSDR programme please visit the website at https://www.nihr.ac.uk/explore-nihr/funding-programmes/ health-and-social-care-delivery-research.htm

This report

The research reported in this issue of the journal was funded by the HSDR programme or one of its preceding programmes as project number NIHR131238. The contractual start date was in November 2020. The final report began editorial review in January 2022 and was accepted for publication in May 2022. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HSDR 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 and Care 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, the HSDR 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, the HSDR 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, the HSDR programme or the Department of Health and Social Care.

Copyright © 2022 O'Cathain *et al.* This work was produced by O'Cathain *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

Dr Cat Chatfield Director of Health Services Research UK

NIHR Journals Library Editors

Professor John Powell 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 (HSDR, PGfAR, PHR journals) and Editor-in-Chief of HSDR, 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 Consultant in Public Health, Delta Public Health Consulting Ltd, UK

Dr Peter Davidson Interim Chair of HTA and EME Editorial Board. Consultant Advisor, School of Healthcare Enterprise and Innovation, University of Southampton, UK

Ms Tara Lamont Senior Adviser, School of Healthcare Enterprise and Innovation, University of Southampton, UK

Dr Catriona McDaid Reader in Trials, 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, School of Healthcare Enterprise and Innovation, University of Southampton, UK

Dr Rob Riemsma Consultant Advisor, School of Healthcare Enterprise and Innovation, University of Southampton, UK

Professor Helen Roberts Professor of Child Health Research, Child and Adolescent Mental Health, Palliative Care and Paediatrics Unit, Population Policy and Practice Programme, UCL Great Ormond Street Institute of Child Health, London, 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