

A multimethod study of NHS 111 online

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Scientific summary

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Scientific summary

Background

NHS 111 services are a key plank in the NHS Five Year Forward View designed to improve access to (appropriate) services under the banner 'right person, right place, right time'. NHS 111 online is a web-based triage and assessment service, which was launched in England in late 2017. As with the telephone NHS 111 service, it uses a computerised decision support system or algorithm, with a suite of questions designed to elicit symptoms or concerns and generate a 'disposition' (referral or recommendation). Dispositions include advice about self-care, a call back from a clinician, direct appointment booking to primary or urgent care, or (in some locations) a booked arrival time at an emergency department. Evidence about how online triage and assessment systems are used, their effectiveness and their impact on wider health services is limited. This research study responded to an NIHR call for research about NHS 111 online and it examines patient and workforce interactions with this service.

Aim

The aim of this study was to examine patient pathways and workforce implications of NHS 111 online.

Objectives

- Describe the pathways of care and services used by patients who access NHS 111 online.
- Describe the extent of differential access to and use of NHS 111 online.
- Describe the workforce for NHS 111 online and assess the impact of different work arrangements on the urgent and emergency health-care system.
- Compare the workforce implications of NHS 111 online with Healthdirect in Australia.

Methods

We used a multimethod parallel design with two work packages to investigate patient pathways to care, and the work and workforce implicated in the use of NHS 111 online. Work package 1 described and mapped the imagined and real pathways or patient/user care journeys associated with the use of NHS 111 online; a survey was administered to examine eHealth literacy and preferences for using NHS 111 online for different symptom scenarios. Work package 2 comprised an interview-based exploration of the work, workforce and organisational impacts of the deployment of NHS 111 online, drawing on the views and experiences of NHS staff and stakeholders. This work package also contained the international comparison with the Australian Healthdirect system using interviews with key workforce and organisational stakeholders to explore workforce implications of this service.

Qualitative interviews and documentary materials

We undertook semistructured interviews with 80 staff in primary, urgent and emergency care, and dental services, and with representatives of charities representing vulnerable and disadvantaged groups in England. We also interviewed 41 staff and stakeholders associated with the Australian Healthdirect system. We asked about awareness of NHS 111 online/Healthdirect and impacts on work and workforce arrangements and on the wider health-care system. We collected copies of relevant policy

documents, system specifications and updates, adverts and health education materials produced by NHS and other organisations to understand more about pathways to care and the services associated with NHS 111 online.

Survey

We carried out a cross-sectional survey of 2754 people to explore eHealth literacy skills using the eHealth Literacy Questionnaire (eHLQ). The eHLQ is a validated 35-item 7-scale questionnaire measuring the use of technology to process health information; the understanding of health concepts and language; the ability to actively engage with digital services; feeling safe and in control in using online services; motivation to engage with digital services; access to digital services that work; and access to digital services that suit individual needs. The survey also collected basic sociodemographic details and asked about preferences for using NHS 111 telephone and online services for a range of different symptom scenarios. The survey was designed to be available in paper and online formats, but pandemic risk mitigation measures meant that only online completion was possible. Consequently, the survey was made available for self-completion via a hyperlink/QR code, and for assisted completion using an iPad and with support from a research nurse.

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