

Digital and online symptom checkers and assessment services for urgent care to inform a new digital platform: a systematic review

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Plain English summary

Digital/online symptom checkers for urgent care

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Plain English summary

NHS England is planning to introduce a 'digital 111' service alongside the existing NHS111 urgent-care telephone service. This will allow people to use a website or smartphone app to find out information about a health problem. The new digital 111 service will be like a 'symptom checker' to provide possible diagnoses and suggest a course of action (e.g. self-care, arrange a general practitioner appointment or go to an emergency department). During the research study, we looked for other research on these types of online or digital services that are designed to assess symptoms, provide health advice and direct patients to appropriate services for urgent health problems.

We found 29 relevant publications. There was little evidence to suggest whether symptom checkers are safe or unsafe, and studies evaluating their safety were generally short term and small scale. Symptom checkers were found to be generally less accurate than health professionals, although their performance in studies was variable. Symptom checkers tended to be more cautious in their advice than health professionals. There was some indication that symptom checkers can influence the demand for urgent-care services, but results were inconsistent. There was very limited evidence on patients' reactions to advice from symptom checkers, including information regarding whether or not patients follow the advice.

The studies showed that younger and more highly educated people were more likely to use these services, and women used them more than men. Patients were generally satisfied with digital services, although results came mainly from studies that were not of the highest quality.

The research we found indicates that there is limited knowledge regarding the probable impact of digital 111 services. Findings about patient satisfaction suggest that, once introduced, the use of digital services may increase rapidly. It will be important, therefore, to monitor and evaluate these services using all available data sources and through high-quality research.

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