Patients’ Use of an Online Symptom-Checker and Impact on Diagnosis-Related Outcomes

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Background

• Patients increasingly seek to be more involved in the diagnostic process. As such, digital healthcare tools (including online symptom-checkers) have proliferated.
• Little is known about characteristics of patients who use symptom-checkers, their rationale for use, and whether patients find them accurate and useful.
• We evaluated how the Isabel Symptom Checker, a popular online symptom-checker, impacted patient experiences with triage and diagnosis.

Methods

4,000 registered US users of Isabel were invited to fill out an online survey on SurveyMonkey.

First 385 respondents invited to fill out online survey on SurveyMonkey

User characteristics

• Age: 48 years (SD=17)
• Gender: 76% women (n=230)
• Race: 89% white/Caucasian (n=271)
• Education: 58% ≥ Bachelor’s (n=191)
• Income: 66% <$100,000 household (n=216)
• Healthcare coverage: 97% (n=296)
• Chronic health conditions: 66% ≥ 1 chronic health conditions (n=216)

Symptom-checker experiences

• Reasons for use: 76% to better understand what could cause their symptoms (n=232), 33% to decide whether to seek care (n=101), 21% to decide what setting to seek care in (e.g., primary or urgent care; n=63), and 16% to get medical advice without going to the doctor.
• Outcomes: 51% reported positive health effects (n=154); 57% reported neutral financial effects (n=172).
• Usefulness/ease of use: 83% thought it gave them useful information for their health problems (n=274). 80% found it satisfying (n=263), 55% found it easy to use (n=182), and 85% reported they would use it again (n=278).
• Helpfulness for obtaining diagnoses: most found it useful as a diagnostic tool (n=253; 77%); 70% said it provided them with insights leading them closer to correct diagnoses (n=231).

Results

• Of 385 patients’ responses, 329 were usable/complete.

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Discussions with physicians

• 70% visited physicians after using the tool (n=213). Of those, 48% discussed the findings with their physicians (n=103).
• 23% felt physicians were disinterested (n=24) and 20% felt their physicians were not open to discussing the tool’s results (n=21).

Conclusions

• A large group of patient-users perceived a symptom-checker to be useful. Formal validation studies to evaluate symptom-checker accuracy and effectiveness in real-world practice could provide additional useful information about their benefit.

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• The findings and conclusions in this report are those of the authors and do not represent the official position of the Department of Veterans Affairs.

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