Physician Perceptions of an Electronic Health Record-based Clinical Trial Alert System: A Survey of Study Participants

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ABSTRACT
Physicians play a vital role in the clinical trial recruitment process, but most do not participate. We developed a new Clinical Trial Alert (CTA) system and studied its effect on a cohort of physicians across a health system. Following this study, we surveyed our physician subjects. Their responses offer insights into the CTA’s utility, their attitudes toward trial recruitment, and suggest areas for CTA refinement.

BACKGROUND
Physician participation in trial recruitment is vital to clinical trial success, but relatively few physicians contribute to such efforts. Research into why physicians don’t participate more is limited, but some obstacles have been identified. We developed an Electronic Health Record (EHR)-based Clinical Trial Alert (CTA) system to enhance physician participation in trial recruitment. The CTA triggered trial reminders and facilitated recruitment of interested patients whenever a patient’s EHR data met selected trial eligibility criteria during routine clinic visits. Physicians could dismiss the CTA or use it to refer patients to the trial coordinator. We applied it to a type 2 diabetes mellitus trial and studied its effect on 114 staff physicians (10 endocrinologists, 104 general internists) practicing at referral-center-based and community-based clinics. During our intervention phase, we observed a significant increase in the number of physicians participating in recruitment activities and in their rates of referrals and enrollments to the trial compared to baseline. After the study, we surveyed physicians to assess their perceptions of the CTA and of trial recruitment.

METHODS
We developed our 14-question survey by drawing upon factors previously identified to influence physician participation in trial recruitment and their use of similar EHR-based technologies. Participation in the IRB approved survey was solicited via email sent to our physician subjects. Physicians could respond to the Web-based survey or to an email version. Up to three reminders were sent to those who had not responded over the 10-week survey period. Responses were entered into a computerized spreadsheet. Response frequencies were calculated and the data were descriptively analyzed.

RESULTS
Sixty-nine physicians (61%) responded during the survey period; all but seven via the Web. A greater proportion of endocrinologists (90%) than internists (58%) responded, but respondents were otherwise similar to non-respondents. Selected results follow. 48% of respondents did not use the CTA to refer any patients during our study. 32% of respondents reported not knowing about the diabetes trial prior to CTA activation despite the use of traditional efforts to inform them of it. 77% appreciated being reminded about the trial by the CTA; this rose to 86% among those who used the CTA to refer a patient. When asked to rank their reasons for dismissing a CTA, 43% cited a lack of time, 36% cited knowledge of the patient’s ineligibility, and 19% cited limited knowledge about the trial as their most common reason. 39% wanted the CTA to contain more information about the associated clinical trial than it did. Regarding their comfort discussing clinical trial participation with their patients, 27% of respondents felt very comfortable discussing participation in any clinical trial (88% of endocrinologists and 17% of internists), and 31% felt very comfortable discussing participation in the associated diabetes clinical trial in particular (100% of endocrinologists and 20% of internists). Only 10% felt the CTA was difficult to use, and just 26% felt it was more than somewhat intrusive. 74% were interested in being presented with CTAs for future trials; this rose to 87% if future CTAs were made to trigger only for patients with a high likelihood of eligibility for the trial. Narrative comments were submitted by 23 (33%) respondents and included suggestions for improving the CTA’s content, appearance, or operation.

CONCLUSIONS
Most physicians felt that the CTA was easy to use and would like to see it used in the future. Specialists and generalists differed most notably in their level of comfort discussing clinical trial participation with patients. These findings will help to inform refinement of the recently studied CTA system, and they add to the limited body of knowledge regarding physicians’ attitudes toward clinical trial recruitment.

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