Instant Messaging: an Innovative Way to Recruit Primary Care Providers for Qualitative Research

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INTRODUCTION

Recruiting primary care providers (PCPs) for participation in health services research is a major challenge. PCPs report barriers such as time constraints^{1–3}, low interest or buy-in for the research topic³, and inadequate rapport with researchers². Busy PCPs are overloaded with alerts and reminders⁴, and hard to reach via phone⁵ or email, resulting in asynchronous communication and lost, forgotten, or ignored messages. In integrated health care systems such as the Veterans Health Administration (VA), organization-wide instant messaging (IM) allows real-time communication between employees. We describe a novel use of IM to increase PCP participation in interviews for health services research.

METHODS

As part of a mixed-methods study, we emailed eligible VA PCPs between June 2017 and September 2018 inviting them to participate in a semi-structured telephone interview about their use of lumbar spine magnetic resonance imaging for managing uncomplicated, acute low-back pain. Initially, researchers emailed follow-up messages to PCPs who did not respond. After 5 months of poor response rates using email-only recruitment, we began using IM (Skype for Business, Microsoft Corp, 2018) to follow-up with PCPs. The Stanford Institutional Review Board approved this study modification (no. 38033)⁶.

Two researchers spent about 10 h per week recruiting PCPs through IM (Fig. 1). Using IM software, we searched for PCPs' names then sent a brief message to PCPs whose status was "available" to re-introduce the study and request

participation. If the PCP agreed, we asked for their availability for a 15- to 30-min telephone interview. We sent up to three IMs to "available" PCPs who did not respond to our IM, before considering them a passive decline. PCPs whose status was "unavailable" were noted, and we checked again another time.

RESULTS

We sent invitation emails to 452 PCPs. Of these, 55 completed interviews and 66 declined. During the first 5 months of the study when we used *email-only recruitment*, only 3 PCPs were interviewed and 5 declined. In months 6 through 16, we used *IM follow-up* with 357 PCPs who did not respond to the initial email, and 52 PCPs were interviewed and 61 declined (Fig. 1). During the 11 months of IM follow-up, we conducted an average of 5 interviews per month, including 1 month when we completed 15 interviews (Fig. 2).

Using organization-wide IM increased interview participation, defined as percent of sample interviewed, from 3.2% using email-only recruitment to 14.6% using IM follow-up. Instant messaging also improved the number of *responses of any kind* from 8.4% using email-only to 38.4% using IM.

Reasons for declining, offered via IM, included "overwhelmed with current workload," "the local facility will [not] allow me time to participate", or "not really interested." Some PCPs indicated they were interested but busy: "Seeing patients, check back tomorrow" or "I will get back to you," and sometimes offered times when they could be reached. Other PCPs replied that they were free but would not be available later, so we interviewed them immediately.

DISCUSSION

Email-only recruitment resulted in low response rates, and PCPs were more responsive to IM. IM is more noticeable on-screen than email and encourages greater immediacy of response. PCPs can respond briefly over IM⁷, ignore the message, or respond later, but they may feel more compelled to answer knowing someone is waiting for a response. IM allowed PCPs to participate immediately, rather than

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*Interested but incomplete or unscheduled interviews

Figure 1 Comparison of email versus instant message follow-up strategies. The asterisk symbol indicates interested but incomplete or unscheduled interviews

postponing for a future date. The casual nature of IM also helped build rapport, as some PCPs engaged in friendly banter with the researcher.

IM follow-up recruitment required more active participation from researchers but was more efficient than email. Sending

an IM when someone was online yielded more responses, drastically improved interview participation rates, and reduced the overall time spent recruiting.

Although other research describes IM use in clinical practice or how electronic platforms are used for recruitment, this

Figure 2 Interviews per month across recruitment period and strategy

is the first study we know of using IM to recruit PCPs. Our study provides evidence that PCPs are receptive to recruitment via IM; however, additional research is needed to assess the acceptability of IM to providers. In addition, researchers will need approval from Human Subjects Research Committees to ensure IM is used judiciously. Organization-wide IM recruitment shows promise for increasing PCP participation rates in health services research.

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Compliance with Ethical Standards:

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Conflict of Interest: The authors declare that they do not have a conflict of interest.

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