Abstract

Integrating Tracker Data Into Clinical Care

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Abstract

Background: Adding physical activity to a weekly routine has been shown to contribute to both delaying onset and improving management of existing chronic conditions. With physicians a highly trusted source of advice and care, the physical activity recommendations received from doctors may be adhered to more than other sources, especially when advice is tailored to patients' specific physical conditions and limitations in increasing activity levels. Yet a survey by Smith et al found that fewer than 50% of clinicians were able to provide specific guidance on physical activity. This issue may stem from physicians rarely having objective physical activity data to inform their counseling.

Objective: We aimed to understand physician perceptions of the potential benefits and challenges of integrating trackers in a clinical setting to provide tailored counseling to patients on increasing physical activity.

Methods: Our study consisted of two phases: an online survey and in-depth, key-informant interviews. We recruited 60 clinicians to complete a 50-question survey and recruited fourteen primary and specialty care physicians for 15-20 minute in-person or phone interviews. Results from the survey were tabulated through Google Forms, while the interviews were recorded and then analyzed for emerging themes.

Results: Fifty-seven percent of the fourteen interviewed physicians reported that objective data would be useful in counseling their patients on physical activity. Three-quarters (77%) believed that advice based on an objective data display would be actionable for the patients. Of the 60 clinicians who completed the online survey, only 14% believe their patients are adhering to their physical activity recommendations. More than half (57%) of respondents believe that objective data collected from a tracker would be useful in counseling patients. However, when asked how likely they would be to recommend a tracker to a patient, 43% replied they would recommend a tracker to help motivate patients to make a lifestyle change. From the interviews and the survey, the majority of physicians believed that their biggest barrier is limited time for reviewing data, yet they also expressed strong interest in well-designed displays with a small number of data points highlighting physical activity since the patients' last visit.

Conclusions: The majority of physicians in our study believed that integrating tracker data into clinical settings would improve their ability to make personalized recommendations to patients, but also noted that significant barriers exist, most notably time. Future research is needed to 1) create and test condensed tracker data displays to determine physician willingness to view and use them, 2) evaluate the impact of the displays on physicians' ability to provide tailored advice to patients, and 3) evaluate the impact of tailored advice on increases in patients' physical activity levels.

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KEYWORDS

counseling; data display; patient-physician communication; physical activity; trackers

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