Meaningful use of EMRs will soon require patient portal use by Medicare patients, and more seniors are going online now than ever; however, our findings highlight the need for health care providers to address functional barriers to Internet use and for future research to target digital health interventions to the specific needs of the frailest patients in this aging population.

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Published Online: May 16, 2014.

Author Contributions: Dr Greysen had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Study concept and design: Greysen, Chin Garcia, Sudore, Covinsky.

Acquisition, analysis, or interpretation of data: All authors.

Drafting of the manuscript: Greysen, Chin Garcia, Sudore.

Critical revision of the manuscript for important intellectual content: All authors.

Statistical analysis: Greysen, Cenzer, Covinsky.

Obtained funding: Chin Garcia, Covinsky.

Conflict of Interest Disclosures: None reported.

Funding/Support: Dr Greysen is supported by the National Institutes of Health National Institute on Aging (NIH-NIA) through the Claude D. Pepper Older Americans Independence Center, a Career Development Award (RC2AG045338-01), and the NIH-NIA Loan Repayment Program. Dr Covinsky is supported by the NIH-NIA through a K-24 Career Mentoring Award and an ROI grant from the National Institute of Nursing Research. Dr Sudore is supported by the US Department of Veterans Affairs, the National Palliative Care Research Center Foundation, and the NIH-NIA (grant 1R01AG045043-01).

Role of the Sponsor: The funders had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

Previous Presentation: This study was presented at the American Geriatrics Society Annual Meeting, May 16, 2014; Orlando, Florida.

Additional Contributions: John Boscardin, PhD, Divisions of Biostatistics and Epidemiology and Geriatric Medicine, University of California, San Francisco, provided expert statistical advice.


Each physician had 4-hour clinic sessions with and without P2s, thereby allowing comparisons. Efficiency was measured in a subsample of sessions by (1) direct measurement of physician time in the examining room and (2) retrospective physician diaries of times spent before and after each session. Patient satisfaction was evaluated using questions from the Consumer Assessment of Healthcare Providers and Systems Clinician & Group Survey.6

On the basis of time-study data, we calculated the total physician time in the examining room per session. Wilcoxon rank sum tests were used to compare median physician times before, during, and after each session with and without P2s. We used χ² tests to compare patient responses with survey questions. The project was a quality improvement project and was not considered research by the institutional review board.

Results | From October 29, 2012, through June 28, 2013, the 5 physicians in the 2 practices had 326 sessions that included P2s. Of these, 37 sessions (22 with and 15 without P2s) that included 289 visits had visit times monitored, and 42 sessions (21 with and 21 without P2s) had physician diaries recording the amount of time they spent before and after the session. Surveys were administered to 156 patients (84 visits with and 72 visits without P2s).

In geriatrics, visits with P2s were a median 2.7 minutes shorter than visits without P2s, 18.0 (interquartile range, 14-21) vs 20.7 (15-26) minutes (P = .01). Among internists, the difference was less, 10.0 (8-14) vs 12.0 (8-15) minutes (P = .15). Per 4-hour scheduled session (Table), an estimated 122 minutes (geriatrics) and 75 minutes (internal medicine) were saved during P2 sessions.

HPI indicates history of present illness; LVN, licensed vocational nurse; MA, medical assistant; MD, physician; P2, Physician Partner; PSR, patient services representative; ROS, review of systems. Rcopia is an electronic prescribing system (DrFirst).

*For general internal medicine visits, the P2 did not perform checkout functions in the room and referred patients to the front desk to perform these.
In summary, the P2 program provides a potential model to improve physician efficiency and satisfaction in the office setting without compromising patient satisfaction. The program should be tested in larger samples and additional settings.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Control</th>
<th>Physician Partner</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geriatrics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation before sessiona</td>
<td>30 (30–30)</td>
<td>15 (10–15)</td>
<td>.002</td>
</tr>
<tr>
<td>Time spent in examining roomb</td>
<td>248 (180–312)</td>
<td>216 (168–252)</td>
<td>.01</td>
</tr>
<tr>
<td>Wrap-up after sessiona</td>
<td>90 (15–120)</td>
<td>15 (10–18)</td>
<td>.01</td>
</tr>
<tr>
<td>Total estimated physician time per session</td>
<td>368 (225–462)</td>
<td>246 (188–285)</td>
<td></td>
</tr>
<tr>
<td>Internal medicine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation before sessiona</td>
<td>20 (20–30)</td>
<td>5 (5–15)</td>
<td>.004</td>
</tr>
<tr>
<td>Time spent in examining roomb</td>
<td>192 (128–240)</td>
<td>160 (120–224)</td>
<td>.15</td>
</tr>
<tr>
<td>Wrap-up after sessiona</td>
<td>28 (0–43)</td>
<td>0</td>
<td>.005</td>
</tr>
<tr>
<td>Total estimated physician time per session</td>
<td>240 (148–313)</td>
<td>165 (125–239)</td>
<td></td>
</tr>
</tbody>
</table>

Abbreviation: IQR, interquartile range.

a Self-reported using physician diaries for geriatrics sessions (13 with Physician Partners [P2s] and 8 without P2s) and internist sessions (8 with P2s and 13 without P2s).

b Physician time per visit (based on 87 visits over 10 sessions with P2s and 63 visits over 7 sessions without P2s in geriatrics and 78 visits over 12 sessions with P2s and 61 visits over 8 sessions without P2s in internal medicine). The median was multiplied by the number of patients that the practice schedules per session. P value represents Wilcoxon rank sum tests based on individual visits (see the Results section).

Discussion | In this study, adding personnel to perform more administrative components of office practice was associated with less presession and postsession physician time, shorter geriatric visits, and higher patient satisfaction. Despite these positive findings, several issues remain. First, what background and training do P2s need? We have increasingly employed bachelor’s degree-level personnel. Training includes medical vocabulary modules, use of the electronic health record, referral and order entry, and optimizing clinic work flow. A related issue concerns scope of practice regulations. It is possible that documentation requirements of different health care systems and reimbursement regulations may impede diffusion. Finally, what are the financial implications of implementing a P2 program? Some practices have estimated that by adding 2 more visits per session, scribe programs can pay for themselves. However, because of diverse cost and reimbursement structures, the business case may vary.

Limitations of the study include the single site, small sample size, inability to measure actual time spent communicating with patients, and self-reported or measured times for only a subsample of sessions.

In summary, the P2 program provides a potential model to improve physician efficiency and satisfaction in the office setting without compromising patient satisfaction. The program should be tested in larger samples and additional settings.

Patients were more likely to strongly agree that the physician spent enough time with them during P2 visits (88.1% vs 75.0%, P = .03). Although 17.7% were uncomfortable with P2s in the room, 79.3% of patients agreed that they helped the visit run smoothly.

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COMMENT & RESPONSE

Meditation Intervention Reviews

To the Editor We appreciated the meta-analysis by Goyal and colleagues1 concerning the benefits of meditation for psychological health. This review reflects a growing scientific interest in health applications for meditation therapies. As authors active in National Institutes of Health– and Department of Defense–sponsored meditation research, we offer several observations that may assist readers in placing these results into a broader context.

We commend the authors’ inclusion of only randomized clinical trials (RCTs) with active controls. However, the review by Goyal et al1 demonstrates the profound effect of relatively subtle decisions about study inclusion criteria for participants with “a clinical condition” or “stressed populations.” In contrast, a 2013 meta-analysis of transcendental meditation (TM)2 identified 10 RCTs on anxiety with active controls (vs 3 in the review by Goyal et al1), with results showing significant effects of TM on anxiety that were not found by Goyal et al. This suggests that different meta-analyses of high-quality studies can arrive at different conclusions based on authors’ selection of studies (see also the meditation review by Sedlmeier et al,3 2012).

Goyal et al1 restricted their review to psychological outcomes and did not include other important clinical outcomes. Given their inclusion criteria, we find this a major limitation in design. The American Heart Association (AHA) published in 2013 its systematic review of RCTs of meditation for high blood pressure and reported that “TM may be considered in clinical practice to lower BP,” and because of negative or insufficient studies, “other meditation techniques are not recommended in clinical practice to lower BP at this time.”4 At the time, the AHA statement also reports RCT data showing reduced rates of mortality and cardiovascular disease events associated with TM practice.5

We would like to reinforce the authors’ limitations concerning the mixed design quality of the meditation trials. Future meditation research would benefit from a systematic categorization of meditation techniques, taking into account the distinctiveness of widely used techniques, quality assurance (certification) of treatment providers, and the regularity of practice by participants.

The authors refer to the important question of noninferiority of meditation to standard treatments. We believe that this is a critical direction for future meditation research. Studies investigating the comparative effectiveness of meditation therapies to more established treatments are crucial next steps for establishing meditation as bona fide treatments.

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Conflict of Interest Disclosures: None reported.


To the Editor A recent publication on the effects of meditation programs against stress2 reviews rigorously randomized clinical trials (RCTs) with active control groups. We would like to point out a couple of unsolved issues that may arise when discussing the impact of these findings.

The review has only collated evidence from RCTs with active control groups. Randomized clinical trials can only be done, by definition, with patients and individuals who are willing to be randomized. Thereby such trials are excluding the potentially most beneficial therapeutic agent: conscious choice and active engagement. Thus, by default, RCTs can only test and describe what is the minimum effect on people who use a certain intervention, as if it were delivered to them as a passive recipient, like a medication. But meditation is no medication. It requires active involvement and the decision to dedicate regularly a specific amount of time, over a larger period in order to change one’s habits and attitudes. This can only be assessed in long-term comparative cohort studies that in other conditions and occasions have shown reliable results comparable to RCTs.2

Against active treatments this meta-analysis showed no effect. We find that this part of the analysis did not represent studies adequately. For instance, 2 studies regarding mindfulness-based cognitive therapy for depression relapse prevention24 were not included, likely because they used treatment as usual as a control, which was an exclusion criterion. Why should, in a condition like recurrent depression, where any treatment is very difficult and has in fact not worked, be treatment as usual be an inadequate control and hence studies be excluded?