Reviewer’s report

Title: Characteristics of older adults using patient web portals to view their DXA results

Version: 0 Date: 15 Jul 2018

Reviewer: Carolyn Turvey

Reviewer’s report:

This is a unique contribution to the growing literature on patient portals in that it examines patient use of the portal to review bone density test results. This is a very specific application but it serves as a good example where patients, if informed, can improve follow-up treatment for a significant chronic condition. The findings of the paper have been reported in the past, but remain important in that simply providing patient portals is not enough to yield benefits of improved patient self-management and eventually improved outcomes.

There are several aspects of the presentation of the study that are confusing and need some clarification. This manuscript frequently refers to this as a randomized study. If I am understanding correctly, the portal registration and assignment was not what was randomized, though that is the focus of this paper. What was randomized was the sending of the informational letters. Please clarify this and, if the portal registration was not randomized, please omit references to this being randomized because it is confusing.

In addition, what proportion of the sample used their web portals to view their DXA results? 19.1%? 13.9%?

A limitation to this study that should be mentioned in the discussion is that the sending of the letter may have reduced the number of people who accessed their information via a portal. There was already a system of notification in place and, if the consent process gave patients a heads up about this, this may have altered their behavior. Were the patient portals mentioned in the information letter.

The introduction discusses how the use of portals can address the fact that providers are either not reviewing results or communicating them to patients. Proponents of portals do not recommend using portals to replace clinical practice but to be used to help patients collaborate with their providers in managing their health. Portals should enhance relationships that are already in place, not replace faulty clinical relationship. Unfortunately and somewhat predictably, providers are relying on patients to check their portals, but this was never the original intention and it is bad practice. It would be good to delete these aspects of the discussion in the Introduction and simply state that access to portals is one of many ways a patient can have access to the information when needed.

Determining the order in which patients received their results is a strength.
In the Discussion section, please provide a citation for the statement. "While web-portals are strongly endorsed, many patients do not like them? What proportion of patients in prior studies indicate that they do not like portals.

Another phase is confusing in the Discussion: " KPGA patients, however, may have received their test results form the ordering provider . . . . ." I do not understand what the authors are saying here.

The Discussion seems long for results that are not entirely new.

In the last paragraph of the Results, it is confusing when the authors state that pvalues were larger due to reduced sample sizes. What are they referring to here?

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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