Reviewer’s report

Title: The Diagnostic Yield of the first episode of a Periodic Health Evaluation

Version: 1 Date: 16 January 2012

Reviewer: Amy Linsky

Reviewer’s report:

Major Compulsory Revision

General comment - One of my biggest concerns with this manuscript is that they reference the periodic health evaluation, which my perception of - and the background alludes to - is a recurring annual exam without regard to acute complaints. However, the cohort that the study analyzes is the first exam for individuals presenting to an executive health physical. The first exam for any patient to any practice seems conceptually different than analyzing a return visit for a periodic health evaluation. Related is the fact that the cohort is from an executive health clinic, which the authors themselves discuss as a limitation in the discussion section.

Specific comments:

Intro Section

Third paragraph - is there a citation regarding patients “saving” up complaints for their PHE?

Fourth paragraph - The last two sentences of the Intro seem more appropriate for a discussion and don’t seem to fit here.

Methods Section

First paragraph - As mentioned previously, I think there needs to be a justification for using the first exam to a clinical site; do these patients have other health care providers who they have been seeing regularly? Are the characteristics of the executive health cohort the same as for the cohort used for this study? Are the cohorts the same? I would like to see a table with baseline characteristics rather than just a reference; who are the participants in this study? What is there health status previously? What type/amount of care have they received prior to this visit? Some of these answers seem better suited for the results section.

Second paragraph – is the conclusion of the medical episode after the first visit or after the second time meeting with the patient? How was it determined if a diagnosis was “new?” Was a diagnosis considered “old” if the patient reported it? Or did they look for previous medical record documentation, either at Mayo or elsewhere?

Third paragraph – what scale of clinical importance was used? Is there a list of what was considered trivial (either a table, or reference, or online appendix)? Is everything that is not trivial thereby considered to be “clinically important?” Is
intraclass correlation the right test, or is there a need for kappa? How was a random sample of diagnoses chosen? How many were selected?

Fourth paragraph – for non-patient prompted, is more detail available (such as whether from history, physical, labs, radiology)?

Results Section
First paragraph – If not done above, describe the 491 patients. What does continuously enrolled mean? I thought it was just the first episode of care. Again, who is the study population? How many total diagnoses did each patient have? I could see that if a patient had a lot of pre-existing diagnoses, there would be less opportunity to make a new diagnosis. The 428 “clinically important” diagnoses are for how many patients (I see it in paragraph 2, but would like to see it sooner). Not sure that mean diagnoses per patient across all patients (even those with zero diagnoses) is helpful.
Second paragraph – Are the 255 patients with new diagnoses different than the 246 without new diagnoses?
Third paragraph – as mentioned in the Methods section, is there any more information about how the non-patient prompted diagnoses were made?

Discussion Section
First paragraph – is this prospective? Or was a retrospective chart review conducted?
Second paragraph – This first sentence is long and somewhat difficult to understand. The concept of unhealthy lifestyle behaviors/habits, while I agree is important, seems a bit tangential. Further, these numbers should be presented in the results section.
Sixth paragraph – it gets confusing with the references to USPSTF recommendations – I think it would be helpful to either reference the recommendations that you used more explicitly, or potentially focus just on the value of the PHE for diagnosing USPSTF related diagnoses. That is, make a case that the PHE is (or is not) a valuable service to provide the recommendations of the USPSTF. It may be more objective than using “clinically significant” diagnoses.
Seventh paragraph – I agree that this is important, and I was curious in the methods about the scale used in this study. However, this isn’t really the study objective and I’m not sure it helps the discussion. Consider deleting it, and maybe putting something in the methods like, “Given a lack of valid and reliable scales, we chose to determine significance in the following way…”

Conclusion
Do you mean to say viable? Or are you trying to say it’s valuable? If the latter, not sure they can make that conclusion without any outcomes data.

Table
For prevalence, I would like to see the n (%), since the n’s appear to be small.
I would consider just showing patient prompted since the “/” makes me think it should be a ratio. Or show the inverse, how many were NOT patient prompted, since that may make a stronger case for the value of the PHE.

This is a really long table. Is it possible to highlight what you think are important findings?

Minor Essential Revisions
Discussion – paragraph 4 – “…2.14 diagnosEs”

Discretionary Revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests'