Reviewer's report

Title: Potentially inappropriate prescriptions (PIPs) for older patients in long-term care

Version: Date: 6 April 2004

Reviewer: Michel Bédard

Reviewer’s report:

General

This is a manuscript that corroborates findings presented by others. The manuscript is generally well-written but additional analyses would strengthen it considerably; I offer some suggestions that may be helpful to the authors.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The authors “assumed that all medications prescribed on an as-needed basis were taken”. Although this may the case for some residents it is unlikely to be for all. Hence, although I understand the authors’ goal to “capture the fullest possible extent of potentially inappropriate prescribing” this focus on the maximum alone creates the risk that the results may be distorted. While the authors could more forcefully emphasize that their numbers represent the maximum I would prefer to see an additional set of analyses presenting the minimum possible extent of potentially inappropriate prescribing by assuming that all as-needed medications were not taken. This would produce a range that may be more useful to potential readers.

The authors state that prescribing was similar for men and women (p. 8). While this may be correct overall it does not appear to be the case when we examine specific types of medications (Table 1). The ability to examine difference in prescribing among men and women is an opportunity that the authors should explore. Data from figures 1 and 2 could be stratified according to sex (maybe in table format), therefore allowing for a more in-depth examination of prescribing and potentially inappropriate prescribing. This would add to the literature.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

The authors could provide a more forceful rationale for devising new criteria for inappropriate prescribing and briefly comment on where theirs differ or not from existing criteria.

Use a lower case “p” for probability values throughout.

Refer to individuals as “residents” preferably to “subjects”.

In Predictors section of Results refer to residents “1.76 times at greater risk of being prescribed”, not “more likely”.

In the same section, the OR for age is not very meaningful given that it is based on a one-year
increment. You can use the OR and corresponding Standard Error to calculate increases in say, five- or 10-year increments. Alternatively, the authors could use the same age categories presented earlier and use the younger group as the reference group.

In the first paragraph of page 11 using “at least one drug” would be preferable to “at least one or more drugs”.

In the last paragraph of page 12 the authors refer to “A positive association (not statistically significant) between length of stay…” If the association was not beyond the play of chance (i.e., risk estimate could also been negative) then the authors should be careful to not use wording implying statistical significance.

Discretionary Revisions (which the author can choose to ignore)

Last sentence of the abstract, consider “identify” rather than “identifying”.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests: None