Reviewer’s report

Title: What proportion of prescription items dispensed in community pharmacies are eligible for the New Medicine Service?

Version: 1 Date: 16 January 2014

Reviewer: Kelly R Reveles

Reviewer’s report:

General: This paper describes the actual proportion of prescriptions eligible for the New Medicine Service in England, compared the predicted proportion. Although this topic is interesting, the paper lacks development in relevance and significance. The questions posed by the authors are well-defined, but need greater clarification on methodology and results. There are several areas that need to be addressed prior to accepting this manuscript for publication (see Major Compulsory Revisions below).

Major compulsory revisions

Abstract
1. Background: Include secondary objectives in the last sentence.
4. Results: Add your original sample size (8005) and final sample size (17).
5. Results: The abstract says that 29.6% of prescriptions were picked up by patient representatives, but the results and discussion say that 28% were. Double check numbers and be consistent.

Background
1. Paragraph 1: Please list the four conditions that were selected for the NMS rollout (asthma and COPD, type 2 diabetes, antiplatelet/anticoagulant therapy, and hypertension)
2. Paragraph 2: Do you have any additional references for the statements regarding pharmacists’ attitudes on the NMS opportunity rate and the reasons behind this? Please avoid the use of “unpublished” data if possible.
3. Paragraph 2: Since your objectives include identifying NMS opportunities near GPs, add more discussion and references that drove this hypothesis. Are there studies that have quantified the number of prescriptions filled at pharmacies near GPs or that prescriptions filled at pharmacies near GPs are more often for chronic conditions?
4. Paragraph 3: please be specific as to your primary and secondary outcomes.

Methods
1. Paragraph 1: Beside location, was there a systematic way of selecting
pharmacies for inclusion? There were 8 pharmacies selected, but are the more pharmacies in that chain in the area for which you selected from?

2. Paragraph 1: Please add to your description of the sample size calculation that it was based on the primary outcome. What was the difference from the expected 0.5% NMS rate that you used to calculate the sample size?

3. Paragraph 1: In the abstract, you say that you collected 1000 consecutive prescriptions from each pharmacy, but in the methods you say that you collected 8000 total. Please specify and be consistent.

4. Paragraph 3: What was the prescription cutoff for “pharmacies so busy that more than one researcher would be needed to collect data?”

5. Paragraph 3: Be very specific as to the “atypical demographics” for which you excluded pharmacies and give reasons why you excluded those.

6. Paragraph 3: Please provide the number of pharmacies that were excluded for each exclusion criterion.

7. Paragraph 4: You need to be very specific as to the inclusion and exclusion criteria for prescriptions. This should include 1) the conditions that are eligible for NMS, 2) how prescriptions were classified as for eligible conditions under NMS, 3) whether MDA, home care, and delivery prescriptions were excluded, and 4) and consent eligibility (did you use an age cutoff, was parental consent acceptable, and were patient representatives excluded from consenting?).

Results

1. Paragraph 1: If you have this information, it would be really nice to know some of the characteristics of the pharmacies, like average number of prescriptions dispensed and number of pharmacists trained in NMS.

2. Paragraph 2: Again, stating your inclusion/exclusion criteria in the methods is critical. How did you go from 6080 non-MDA, non-home care items to just 20 eligible prescriptions?

Discussion

1. Paragraph 5: The reason for the differences in study conditions compared to national rates may also be due to the geographic location of the pharmacies chosen for the study (i.e., are the demographics in Nottingham different that the rest of the country?).

2. New paragraph: Please create a separate paragraph at the end of the discussion that specifically states the limitations of the study, including sample size and generalizability based on location of pharmacies chosen.

3. Paragraph 8: In this paragraph, you discuss that data collection was spread over five months. You need to expand on this in the methods section. If the pharmacies were sampled at various times, this should be included as a limitation of the study, as number and type of prescriptions dispensed can vary over time.

4. Paragraph 9: This winter storm only seems relevant if you aimed to collect 8000 prescriptions total versus a certain number per pharmacy, which would
mean the certain pharmacies had more prescriptions dispensed. However, you state in the abstract that 1000 prescriptions were collected for each pharmacy.

5. Paragraph 9: This paragraph, addressing funding, seems that it would be the most important thing to discuss and should be addressed much earlier in the discussion. You really need to use this information to talk about the importance and relevance of your study. You also need to further describe how payments to pharmacies occur as part of NMS, so that readers have a better understanding of where the NMS funds go and what happens to the funds if the pharmacies do not meet the 0.5% NMS targeted rate. In other words, what are the public health implications of your study? What effect could it have on community pharmacies or the program in general?

Conclusions
1. Paragraph 1: Also address the conclusions of your secondary outcomes.
2. Paragraph 1: If you are going to state policy implications in your conclusions, they need to be much more developed in the background and discussion sections.

Minor essential revisions

Background
1. Paragraph 2: define “PSNC.”

Methods
1. Paragraph 1: Since your sample size calculated to 7852, you should say that you aimed to collect at least that many prescriptions. Saying that you would collect 8000 is a little misleading since you actually collected 8005.
2. Paragraph 3: define “m.” Is this miles?
3. Paragraph 4: change “the data was” to the data “were.”
4. Paragraph 4: define NHS

Discretionary revisions

Abstract
1. Conclusions: Use the conclusions from the manuscript text for the abstract.

Background
1. Paragraph 1: It would add depth to the background to address the goals of the NMS (e.g., improve patient adherence) and requirements for pharmacists to provide NMS.
2. Paragraph 3: You may consider adding a third objective to your study to determine the reasons why patients are ineligible or have missed opportunities for NMS.

Results
1. It would be really nice to have a flow chart that starts with the number of prescriptions collected, then the number of items still included after each
exclusion criteria is applied. Consider adding this as a Figure.

Discussion

1. Paragraph 3: Hypothesize as to the reasons a greater proportion of pharmacists engage in NMS compared to MUR.

Conclusions: none.

Tables

1. Table 1: This table isn’t necessary, as the data are presented in the text.
2. Tables 4: This table is probably not necessary; however, if you choose to delete it, please provide these numbers in paragraph 2 of your results section.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.