Reviewer's report

Title: Waiting to see the specialist: Patient and provider characteristics of wait times from Primary to Specialty Care.

Version: 1 Date: 12 November 2013

Reviewer: Mauro Mauro Laudicella

Reviewer's report:

- Major Compulsory Revisions:
  The authors should be very clear on the sample of FP included in their study and how this sample compares with the total population FP. This point is really important to understand the external validity of the results of their analysis to the population of FP in Ontario. The current version of the manuscript provides unclear information on the study sample: Table 1 reports the characteristics of FP included in EMR; Table 2 reports the share of EMR linked to EMERALD. It is difficult for the reader to understand whether the sample is representative of the total population of FP in Ontario from these tables.

- What is the sample size of FP included in this study as compared with the total population of FP in Ontario? And their characteristics?

- What is the share of total referrals that are successfully linked to OHIP?

- What is the share of total referral examined in this study as compared to the total referrals in Ontario?

The main contribution of this work is to investigate wt from FP referral to specialist visit. In contrast, earlier works focused on the wt from specialist referral to hospital admission. Therefore, the reader would find useful to know whether the wt from FP referral to first specialist visit is an important share of the total time waited before an hospital admission with respect to the specialities examined in this study.

The reader would expect to see a table or an appendix including the results of the Multivariate linear regression analysis. The authors should include such a table or alternatively omit this part of the analysis since it is not essential. It is not standard practice to comment empirical results that are not included in the manuscript.

- Discretionary Revisions:
  Referrals to mental health should be dropped by this analysis as only the 30% of EMR data are linked to EMERALD. Results from mental health analysis are likely to be biased and misleading.

What are the differences between Family Health Organisations, Family Health
Networks and Family Health Groups? Why difference in wt might be linked to these types of FP?

The authors construct an index of Usual Provider Continuity and use this to investigate variation in wt. Some institutional background on the FP organisation in Ontario and Canada would help the reader on this point, e.g. are patients free to move across different FP?

The authors use a generic indicator of severity and find no effect of comorbidities on wt. This result is potentially alarming as medical guidelines advice to prioritise specific groups of patients in greater need of seeing a specialist. Some comorbidities might justify priority on the waiting list. In contrast, other comorbidities might have the opposite effect as patients might be less likely to attend at the specialist visit. The authors should expand on the interpretation of their results on the patient severity. Is the Johns Hopkins index appropriate to capture differences in patients’ need of a specialist visit?

“Study design: descriptive record linkage study of […]” should read “Study design: observational study of […]”.