Reviewer’s report

Title: Does regulation increase the rate at which doctors leave practice? Analysis of routine hospital data in the English NHS following the introduction of medical revalidation

Version: 0 Date: 29 Aug 2018

Reviewer: Robert Elliott

Reviewer's report:

I have been asked to comment on statistical method. From the detail provided in the paper this would appear appropriate to the data and research question addressed. I enter the caveat that I have not received advanced training in econometrics and have not used the methods employed here in my own research.

The research is conducted carefully within the limits of available data. The discussion is measured and appropriate.

Figure 3 shows an increase in both the observed and predicted number of consultants ceasing activity over the period of analysis. It reveals that alongside revalidation there were other important contemporaneous developments accounting for the termination of consultant activity. Among these developments one, often remarked, was the 2012 change in the tax exempt ceiling on pension contributions - which may have induced consultants to revise and advance retirement plans. The method employed, D-I-D, seeks to control for these contemporaneous developments. As the authors note the results hold on "the assumption that the hazard of exit following a positive recommendation fully reflects these confounding influences" (Discussion). The assumption is reasonable and any dissension could generate illuminating discussion.

The paper represents an important contribution. I recommend publication.

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

Yes

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

Yes

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

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