Author’s response to reviews

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

Authors:

Nils Gutacker (nils.gutacker@york.ac.uk)
Karen Bloor (karen.bloor@york.ac.uk)
Chris Bojke (c.bojke@leeds.ac.uk)
Julian Archer (julian.archer@plymouth.ac.uk)
Kieran Walshe (kieran.walshe@manchester.ac.uk)

Version: 2 Date: 13 Dec 2018

Author’s response to reviews:

We thank the advisor for his/her comments, and are pleased to address them. We have reproduced the advisor’s comments below (in bold) with our responses (in normal font). We highlight changes to the manuscript in italics.

Advisor

I have had a look at the DiD analysis and think it is fine. Basically, it shows (1) there was no difference in mortality rates between leavers and stayers before the policy, (2) no difference in mortality rates between leavers and stayers after the policy either, so (3) the difference-in-differences (i.e., (2) minus (1)) are zero too.

A few suggestions:

1. It would be informative to the reader if for the DiD analysis the authors could report the absolute mortality rate levels (adjusted and unadjusted) as well as the differences.

Thank you for this suggestion, which we have taken on board.

We now report two additional tables (adjusted/unadjusted) of absolute mortality rates in the pre- and post-policy periods by leaver/stayer status and specialty/admission pattern. These tables are very large and we, therefore, prefer to report them in an online appendix rather than in the manuscript.
2. An assumption commonly made using DiD analysis is "common pre-trends", which can often be tested empirically - do the authors have any comment on this? Are they able to investigate this using their data?

Our chosen DID design is a before/after comparison with two time points (2010-11 vs 2013-14), which does not permit testing for parallel pre-trends. Please note that group assignment varies over time, i.e. clinicians that were stayers in the pre-policy period can become leavers in the post-policy period but not vice versa. It might therefore be best to think of our design as DID with two cross-sections, rather than a longitudinal DID design.