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Title	Regional differences in endoscopic ultrasound utilization in Ontario: a population-based retrospective cohort study
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General comments (author response in bold)	1. Administrative databases have a high capture rate from billing data. Was there a time where EUS was not assigned a billing code and that there may have been some procedures performed during that time? **Thank you for this thoughtful comment. We agree that EUS procedures may not be captured soon after the billing codes were introduced. In Ontario, the OHIP EUS billing codes were introduced in 2001. In order to account for this, our study period was from 2003 to 2011. We assumed that two years would be sufficient time for EUS billing code uptake. Saying that, we do note in the manuscript that OHIP billing procedure codes generally have a high specificity (>85%) and limited sensitivity (35-85%).** **Action: In the 'Discussion' section, we note: "The main limitation of this study relates to the use of Ontario health administrative data when the accuracy of OHIP EUS procedures billing codes has not been assessed. On the other hand, OHIP billing data has been shown to be highly accurate for other procedures, with a positive predictive rate of over 90% (>90%) and specificity of over 85%. We attempted to maximize the specificity of the EUS procedure codes by excluding procedures not performed by a physician in related health care specialties, however future validation studies are needed. Second, it is possible that EUS procedures performed in the earlier years of this cohort were not captured by OHIP billing codes. As the study period was designed to begin two years after the initiation of the OHIP EUS codes, we feel that this is unlikely." (page 12).** 2. It may also be interesting to know if patients required travel outside their region to have their EUS. **Thank you again for this thoughtful comment. We agree that inter-provincial migration for EUS procedures would confound our observations. On the other hand, two of the four health regions with the lowest EUS use (Waterloo Wellington and Hamilton Niagara) are not located near interprovincial geographic borders. We believe that this suggests that the influence of interprovincial migration on our observations is limited.** **Action: In the 'Discussion' section, we note as a limitation "Fourth, patients living in low EUS utilization health regions may have travelled out of province to access a EUS service and this could not be captured in our dataset. As multiple regions with the lowest EUS utilization are not located near interprovincial geographic borders (Waterloo Wellington and Hamilton Niagara), we do not feel that this alone could explain our findings." (page 12-13)** 3. Trends of biopsies would also be of interest as to whether it is growing at the same rate as the diagnostic EUS. **Thank you. We agree.** **Action: We performed additional analyses to address this question. In the results section, we add: "The proportion of EUS procedures that involved an FNA increased from 9% in 2003 to 40% in 2011." (page 9)**