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Title	Trends in elective and ruptured abdominal aortic aneurysm repair by practice setting in Ontario, Canada from 2003 to 2016: a population-based study
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Reviewer 1	Ahmed Hussein
Institution	Division of Cardiology, University of Maryland Medical Center, Baltimore, Md.
General comments (author response in bold)	<p>1. The authors should be commended for their good work. However, the discussion need to include discussing the role EVAR in the prevention of aortic aneurysm rupture. Also. I would suggest that the authors briefly compare the advantages and disadvantages of EVAR in comparison to surgical repair, probably in a table form.</p> <p>a. Thank you for the kind words and comments. We have inserted a paragraph (Pg. 10, lines 18-23 and Pg, 11, lines 1-11) discussing the rAAA repair findings as well as how the availability of EVAR may be related to reductions in rAAA repairs. Regarding the advantages and disadvantages of EVAR compared to open repair, we have included a statement identifying some of the ongoing issues with EVAR and referred readers to appropriate landmark randomized and population-based studies in the area on Pg. 4, lines 15-18, and briefly listed these issues in an additional table.</p>
Reviewer 2	Toralben Patel
Institution	Cardiology Program, Wright Center for Graduate Medical Education, Scranton, Pa.
General comments (author response in bold)	<p>1. Limitation of the study is because of the use of population level data and use of administrative codes for identification of our patient cohorts. Also it is important to note that there may be other demographic and geographic factors which may play role as well in the trends noted which may not be in the scope of this paper for analysis.</p> <p>a. Thank you for your comments. We acknowledge that limitations associated with the use of population level data apply for this study in the limitations section. We have added an acknowledgement of the demographic and geographic factors alluded to, and that assessing and modeling these was outside of the scope of this paper on Pg. 12, lines 1-3.</p>
Reviewer 3	Gustavo Azoubel
Institution	Department of Critical Care Medicine, Sunnybrook Health Sciences Centre, Toronto, Ont.
General comments (author response in bold)	Very well done study, extremely important for the planning and resource allocation in Ontario.
Reviewer 4	Sid Nagpal
Institution	Department of Surgery, The Ottawa Hospital — Civic Campus, Ottawa, Ont.
General comments (author response in bold)	<p>1. The authors use the term "rate" in the manuscript. This term refers to the number of new repairs per person years of exposure in those at risk. Instead of examining this outcome, they examined the cumulative incidence, which is the number of new repairs per number of persons exposed (in the paper per 100,000). I think this terminology should be changed.</p> <p>a. Thank you for the comment. The changes have been made throughout the manuscript.</p>

2. Line 14 “In contrast, early work has also shown the importance of individual volume requirements for EVAR competence and significant shortening of the EVAR learning curve for surgeons learning at experienced centres. “ Confusing paragraph, “In Contrast” to what, authors mention open AAA repair also is volume dependent. Please clarify.
a. This transition has been removed and the sentence restructured on Pg. 4, line 18.

3. The main limitation of his study is the narrow scope. Only procedure trends were identified, no preop data on patient characteristics, outcome related mortality, LOS, peri-op complications at the different settings (community vs teaching) is reported.
a. We have acknowledged the scope of the study and cautioned readers against extrapolating the results outside of trend analysis on Pg. 12, lines 1-3.

4. The choropleth graphs, though interesting data impressions, would be more valuable if they were divided from before 2010 and after as the trends changed significantly at that point. Collecting all data from 2003 in one graph does not tell the true trend in the LHIN's. (purpose of paper)
a. Thank you for the constructive comment. We have recreated the choropleth maps, depicting the mean quarterly cumulative incidences of the overall and approach specific elective and ruptured repairs prior to and after 2010. The results section has been revised accordingly.

5. The purpose of this manuscript refers to both open and endovascular aneurysm repair trends in both elective and ruptured Abdominal aortic aneurysms. There has been a dramatic reduction in the performance of open surgical repair in both teaching(67%) and community hospitals(60%). There is also been a dramatic reduction of ruptured abdominal aortic aneurysms repair (80% and 87%). There has also been in a reduction in the total abdominal aortic aneurysm repair over the past 13 years (1.15% vs 23%, teaching vs community respectively). These are important findings and also are reflective of the purpose of the study. This is not discussed in the interpretation or the conclusions.
a. Thank you for the comment. Given limitations regarding the allowable length of this manuscript, we chose to compare and discuss an important finding that has not been demonstrated by previous literature: EVAR may be leading to decentralization of AAA care, likely because of superior outcomes, but also due to increased training, different infrastructure requirements, and patient preference, as discussed in paragraph 2 of the Interpretation section beginning on Pg. 9, line 16.