Article details: 2019-0138	
Title	Title: Palliative Care Clinical Rotations Among Undergraduate and Postgraduate Medical Trainees in Canada: A Descriptive Study
Authors	Bruno Gagnon MD MSc, Anne Boyle MD, Fabienne Jolicoeur MSc, Mauranne Labonté MSc, Kim Taylor MSc, James Downar MD
Reviewer 1	Dr. Adam Fowler
Institution	Lions Gate Hospital, North Vancouver, British Columbia
General comments (author response in bold)	1. (pg 2, ln 29-30) I'm not clear on why data collected over different time periods (i.e. one ending 2016 vs. one ending 2017)—is this related to durations of training programs? **The process required to obtain the data for undergrad students was very arduous. By the time we obtained it, we were able to extend the survey for postgraduate by another year as it was easier for the medical schools to find these data.** 2. (pg 2, ln 31-36) Description of information collected is difficult for me to read and process. Consider organising as a vertical list. **Thank you for the suggestion. Information collected was rearranged in a vertical list. (pg 2, ln 35-41)** 3. (pg. 3, ln 18-22) Here the authors describe the concept of the Estimated Percentage (EP). Would this be a better place to acknowledge the limitations of this estimation, esp. the over-estimation caused by students doing multiple rotations? (pg 5, ln 1) **Thank you for the observation. Acknowledging the limitations early would be a great idea, however, since the limitations of this estimation are mentioned in the Postgraduate Palliative Care clinical rotations paragraph and in the interpretation section, we believe it would be redundant to do so.** 4. (pg 3, ln 23) In this same discussion, you provide an example of "hypothetical data." Since the actual data are available, why not just use that? **As suggested, a modification was made to include an example from actual available data: 'For example, during the academic year of 2009-2010, for the 5-year anesthesiology program, 22 Palliative Care clinical rotations were completed among a total of 305 residents from the 9 responding schools offering this residency program, leading to an estimated percentage of Palliative Care clinical rotations of 36.1% ((22/305)*5)' (pg 4, ln 6-9)** 5. (pg 4, ln 9-10) When describing increases in PC rotations among schools without mandatory rotations, the numbers are called "significant." Does this mean statistically significant? If so, is there a p value? If not, I might consider a different word (e.g. "meaningful") to avoid confusion. **Thank you for that observation. P-values were added for more precision. (pg 4, ln 46-47)** 6. (pg 4, ln 14-17) I am struck by how only 13/17 schools provided information at the postgradual level. Do you have any reason (or speculation) on why the data are so sparse? It seems like schools should have this easily. **We agree with your comment. We were also surprised and disappointed that this information could not be obtained from all medical schools. These**

	medical schools did not have the resources to collect the information, or their data was not structured so that they could extract the requested information. We added this sentence to acknowledge our efforts to retrieve the data: 'One of the authors (FC) had multiple phone communications with each school representative to provide support in completing the form.' (pg 2, ln 43-44) 7. (pg 4, ln 37-42) A list of specialties was chosen for further data collection among the postgraduate cohort. However, no justification is given here. Would it make more sense to explain why these specialties were chosen here, rather than pg 5, ln 7? I initially assumed these were the only specialties for which data was available. **Thank you for this remark. The sentence below should help to avoid any confusion: 'Data were also obtained for a selected group of specialty/subspecialty training programs for which we considered Palliative Care to be particularly relevant (i.e. Anesthesiology, Family Medicine, Geriatric Medicine, Internal Medicine, Neurology and Psychiatry).' (pg 3, ln 13-16)** 8. (pg 5, ln 7-18) Here begins the explication of the data in terms of % receiving rotations among different specialties. I am concerned that including Family Medicine in the second described group muddies the comparison of FM (where most Palliative Care physicians originate) vs. specialty training. I understand why it's relevant to offer information on the whole group, but it would be nice to have the data about the whole group presented first, then separate paragraphs describing Family Medicine (as you did pg 4.44-5.5) and specialty/RCPSC trainees alone (which is not included). I think this would strengthen the paper as well as make it more practical in terms of its goal (i.e. describing the actual state of training). **Thank you for observation. We rearranged Table 2 (initially Table 3) in order to separate Family Medicine and specialty training. Changes were also made in the manuscript to separate Family Medicine and specialty training. These changes should facilitate the interpretation of data for respective specialties. (pg 5, ln 30-44)** 9. (pg 6, ln 4-7) I found the description of the limitations of the Estimated Percentage a bit complicated. The fact that students will be counted multiple times if they do multiple rotations will (not "may") lead to an overestimation of the EP. However, I'm not certain if this needs to be explained in such mathematical detail, especially since it was already acknowledged earlier. Simply saying "counted multiple times" should suffice. Thank you for your comment. Our explanations have been simplified and revised based on your suggestion: 'If a trainee completed more than one rotation in Palliative Care, this trainee was counted multiple times in the numerator, which led to an overestimation in some cases.' (pg 7, ln 2-3) 10. Overall, I found this an interesting paper and it provides excellent context to the ongoing push to increase palliative care training at the undergraduate and the postgraduate levels. I think the greatest take-away is that unless rotations are made mandatory, we are not going to see students getting experience in this critical area. Figure 1 is a beautiful visual aid in that regard. However, I think it is necessary to break down the data further. Specifically, I would like to see data for

	the whole group, for Family Medicine trainees, and for Royal College specialist trainees divided separately. Presently, on the first two divisions are discussed. **Thank you for these encouraging comments. Revisions were made in the manuscript (pg 5, ln 30-44) and in Table 2 (initially Table 3) so that it would be easier to consult Family Medicine and specialty training data separately.**
Reviewer 2	Dr. Breffni Hannon
Institution	Princess Margaret Hospital, Dept of Psychosocial Oncology and Palliative Care Toronto, Ont.
General comments (author response in bold)	Abstract 1. Results for Family Medicine trainees are presented twice in the results section, with different numbers each time. First the authors state that '53.6% of Family Medicine trainees completed PC clinical rotations on average between 2008 and 2017', then it says 'During the same period, fewer than half of residents in…Family Medicine…completed a PC clinical rotation'. This is repeated in the results section of the paper also. Can the authors clarify this? **Thank you for that observation. Changes were made in the abstract (pg 1, ln 17-24) and the results section of the manuscript (pg 5, ln 20-44) to avoid possible confusion.** General comments 2. There are a few grammatical errors throughout the paper, e.g. should read 'data were', not was. **We are sorry for the grammatical errors. In the text 'data was' has been replaced by 'data were'. To palliate this inconvenience, the revised manuscript was extensively reviewed by a colleague whose first language is English.** Methods 3. Why was the time period for undergraduate and postgraduate data collection different? **Thank you for that observation. Please see response to Reviewer 1 Comment 1.** Discussion 4. The limited information available from medical schools about the number and length of palliative care rotations offered is striking. **We completely agree. Please see response to Reviewer 1 Comment 6.** 5. It is highly likely that the results are an overestimation of the proportion of trainees completing rotations, since those trainees who have an interest in palliative care as a career path will likely complete several rotations. **Thank you for your comment. Please see response to Reviewer 1 Comment 9.** 6. What do the authors see as major barriers to mandatory palliative care rotations, and how might these be addressed? **Thank you for that question. More explanations have been added to the discussion section: 'Adequate human and financial resources are lacking for**

	Palliative Care training programs in most Canadian medical schools, which limits the opportunity for trainees to access Palliative Care training (unpublished data presented at the 2017 Advanced Learning in Palliative Medicine conference (17)).' (pg 6, ln 16-20)