

**Reviewer A**

Comment 1: The authors are detailed about their literature review parameters, however appendix 1 is missing to get a sense of how the discussion was directed.

Reply 1: The group discussion guide was not attached in our original submission but has been added. Please see appendix 1.

Changes in the text: Please see appendix 1

Comment 2: While this is not a systematic review, it may be helpful to get a sense of how many articles ended up being reviewed and included in a brief paragraph at the beginning of the results, and maybe some details on the discussion/ transcript could be added to the methods, as to who reviewed it to come up with the themes and whether the lit search contributed.

Reply 2: The authors added additional details on the number of articles reviewed, as well as our approach to identifying themes. This clarifying information is now in our methods section.

Changes in text: See lines 128-131, 139-141

Comment 3: Consider describing how the findings of the literature search and the expert opinions were combined (was the literature search more for the first objective of providing evidence of palliative care utilization in gynecologic oncology, and the expert opinion more for the recommendation?) Or maybe just a statement at the beginning of the results/findings/discussion (which should be renamed as one of these as number 3) that many themes in common were noted between the literature search and the expert opinion, to show that each was used to inform the other—such as on line 130, explain that the authors identified the 3 areas of improvement from both the lit search and the discussion, if that is the case. It is a little unclear right now where the conclusions come from

Reply 3: The literature search was performed for the purposes of reviewing the topic and providing citations for our narrative review. The group discussion among experts was designed to reach expert consensus on areas of unmet need (ie education, research, recruitment into palliative care) in the fields of gynecologic oncology and hospice and palliative medicine. Our experts are well versed in current literature, so we did not necessarily review them together as a group or use any particular citation to guide our discussion. Rather, we identified future directions for our field that should be a focus of future inquiries that had not yet been addressed in current literature. This has been clarified in the text.

Changes in text: See lines 139-146

Comment 4: Section 3 needs a heading such as “Findings” or Results or Discussion, either in front of or in place of the current title of section 3

Reply 4: This has been updated and titled “Findings”

Changes in text: See line 147

Comment 5: The definition of primary versus specialty palliative care is jarring, after having defined the problems that are going to be addressed. It should either be before, as sort of introduction to the findings (review of the literature and informal discussion both highlighted the important differentiation between primary palliative care and specialty palliative care, etc), or within the introduction itself, if it is a background element that did not specifically come out of the lit search/discussion.

Reply 5: The reviewer makes an excellent point, and the definition of primary versus specialty palliative care is now provided as background information to help guide the reader for the remaining discussion

Changes in text: See lines 81-97

### **Reviewer B**

Comment 6: Gynecological malignancy has specific progressing pattern, treatment, symptom and dying pattern, compared with other malignancy. Are there special needs for gynecological surgeons and oncologists to learn?

Reply 6: The reviewer an excellent point. Given the complexity of gynecologic cancer care and the impact this has on our patients, the authors feel that all gynecologic oncologists should have training in primary palliative care skill sets. Additionally, the authors feel that more gynecologic oncologists should be recruited into specialty palliative care training to meet unmet need for palliative care services for women with gynecologic cancers. This is discussed throughout the text. Please see lines 69-80, 403-423.

Changes in text: none

Comment 7: Salyer and coauthors described surgeons' misperception; however, there is still patients' and family misperception that palliative care is terminal care; discussion about palliative care means giving up their treatment for cure. I would recommend the authors to describe this barrier and how to reduce this barrier.

Reply 7: The reviewer makes an excellent point. A discussion of how to reduce patient/family misperceptions of palliative care would be an interesting topic for review, but as our paper is focused on the role of the gyn oncologist the authors feel that this is outside the scope of our current review.

Changes in text: none

Comment 8: The authors presented the needs for screening tools for palliative care referral and nuanced discussion such as goals of care, code status, and advanced care planning. Accurate prognostication is important in this setting. Are there scoring systems for predicting life expectancy of patients with gynecologic malignancy.

Reply 8: There is not a specific prognostic tool for gynecologic oncology specifically. The authors often use the Palliative Performance Scale as well as the UCSF prognostic calculator ([ePrognosis - Calculators \(ucsf.edu\)](http://ePrognosis-Calculators.ucsf.edu)), but this is not necessarily universally utilized by all gynecologic oncology providers. Therefore, we did not address this issue in our discussion.

Changes in text: none

## Reviewer C

Comment 7: The authors mention mandatory 4 weeks of palliative care training during gyn oncology fellowship which I completely agree. Do you think incorporating palliative care discussion throughout the clinical training of gyn oncology fellowship would also be beneficial? Perhaps weekly discussion regarding challenging end of life issues related to patients on the service would allow longitudinal training throughout the two clinical years and emulate day to day life of a gyn oncology attending.

Reply 7: The reviewer makes an excellent suggestion, and this has been added to the text

Changes in text: See lines 392-398

Comment 8: I also think additional palliative care providers to tumor boards or have palliative care meeting with gyn oncology providers regarding issues in both in patient or outpatient setting may also be extremely beneficial to patients with advance or terminal cancers.

Reply 8: This is also an excellent point but may not be feasible universally across all health systems and institutions given the nationwide shortage of palliative care providers, and variation in tumor board timing, presentation format, etc across different settings. This would be an excellent pilot project or topic for future studies.

Changes in text: none

Comment 9: 3) The authors mention the grave shortage we are currently experiencing regarding the number of practicing palliative care providers and this shortage will be growing to be worst in the next decade. A similar shortage is experienced in gyn oncology work force. Do you think encouraging fellows to have additional years may discharge physicians to pursue gyn oncology and complete fellowship? Do we need to have medical ( medical oncology ) and surgical gynecologic oncology (Gyn surgery) tracks?

Reply 9: This is certainly a consideration, as there is variation in training experiences across gynecologic oncology fellowship programs. Some programs may elect to focus on surgical training, whereas other programs provide more comprehensive training in both surgery and medical oncology. The authors think that a discussion of the shortage of gyn oncologists is outside of the focus of our current discussion, but would be an excellent topic for a future study.

Changes in text: none

Comment 10: How do you propose the gyn oncologists address palliative care needs of their patients while they are busy with surgical and medical managements of cancer patients? Most gyn oncologists in community and or nonacademic settings, have to also address challenging benign gyn conditions requiring complex surgeries as well. Taking on all aspects of care for patients with gyn malignancy would be ideal but is it a realistic goal to incorporate surgical experts to handle end of life issues which often requires multiple and prolong visits to appropriately carry out a patient centric care?

Reply 10: The authors agree with the reviewer, as all of the gyn oncologists in our focus group mentioned time as a major barrier to provision of palliative care services--and this was coming from gyn oncology providers with palliative care training. The authors concluded that this could be addressed through 1) making palliative care referrals automated within health systems when

inpatient/outpatient palliative care teams are available or 2) Upskilling APPs to provide this level of care when there are no palliative care providers available. Please see lines 232-328 for additional discussion.

Changes in text: See lines 227-231 updated in text

Comment 11: Adding additional burden to already overwhelming schedule of gyn oncologists may contribute to higher rate of burn out resulting in early retirement and maybe career track changes to non-clinical positions. Do you think a more focused training and tracked residency training would allow more training and hence mastery of primary palliative care in addition to all other aspects of oncology training?

Reply 11: The reviewer brings up an excellent point, as the evolving role of “what is a gyn oncologist” is often discussed at our national meetings. The authors do not think we have enough data available to comment on whether improving primary palliative care training among trainees would add to burnout. On the contrary, it may be possible that improved communication skills, having awareness of team wellness, feeling empowered to consult palliative care for complex patient care, etc may improve provider satisfaction and decrease burnout rates. This would be an excellent topic for future study.

Changes in text: none

Comment 12: The authors also address the misalignment in goals of care between patients and their treating providers. This is a very important point as often times success is defined as prolonging life and the quality of life is secondary to this goal. Most patients when given the full picture may choose less aggressive measures and enjoying better quality of life. How do you propose addressing this issue and aligning the goals of patients and providers? Do you think we spend enough time teaching these facts to our junior physicians?

Reply 12: The authors agree with the reviewer, trainees do not receive enough education in how to elicit goals of care and adapt treatment recommendations to their patients’ preferences. This could be addressed through formalized palliative care training as we outlined in lines 372-399. We added clarifying information to emphasize that this is a specific skill (among others) that should be addressed in dedicated palliative care training for gyn oncologists.

Changes in text: see lines 392-398

Comment 13: Do you think early referral in patients with higher risks of recurrence, multiple rounds of adjuvant therapy or in general symptom control warrant outpatient palliative care referral? How does this early referral help contribute the have more discussions when patients are facing hospice care and end of life care?

Reply 13: Yes, all of these criteria listed by the reviewed should trigger an outpatient palliative care referral when available (see table 2). Established, outpatient palliative care will allow gynecologic oncology patients to have dedicated care for symptom management and optimizing their quality of life, and to build rapport with their provider so they may begin more complex, nuanced discussion such as goals of care, code status, advanced care planning, and hospice transitions early in their disease course.

Changes in text: see lines 252-256