Reviewer’s Report:

This systematic review explores an interesting and timely topic related to roles of APRNs/PAs in cancer screening and prevention. While the authors did not find an abundance of studies in this area within the literature over the last twenty years, they did a thorough job of summarizing the relevant studies. The paper is well written and very clear. Below are some suggestions for minor revisions.

- Major Compulsory Revisions
  None

- Minor Essential Revisions

1. It may be helpful to provide some additional background on APRNs/PAs in the introduction section. The authors mention underserved populations have poorer cancer outcomes. Is there any background that can be added about an increasing role of APRNs/PAs in settings that primarily serve minority/low-income populations? In other words, over the study period 1990-2011, is there a known increase in the overall numbers of APRNs/PAs and specifically in primary care settings that work directly with minorities, low-income, or new insured through ACA (e.g. community health centers, etc). Similarly, has there been a shift in the role of these practitioners over the course of the study period? Some of this context would guide an audience familiar with the cancer prevention literature but less familiar with the role of APRNs.

2. Methods section, paragraph 1. It will be helpful to list out the exact search terms used both from the recommended list and those used by the authors.

3. Method section, para 1. Why were studies with less than 100 patients excluded from the analyses? Is there a rationale for the 100 patient cut point? How many studies were excluded based on this criterion? Many clinic-based studies have smaller samples and this criterion may have excluded some relevant papers.

4. Discussion section, para 1. The authors note that less than 25% of physicians report working with APRNs to provide colorectal cancer screening. Many crc screenings take place by specialists and not in the primary care setting and depending on the screening type, can be more complex that Pap tests and mammograms, as noted in para 3. Perhaps para 3 can be moved up or this
sentence can me moved into para 3.

5. Discussion section, para 2. Consider moving this to the introduction section. Some of this paragraph is relevant to comment #1 above.

Discretionary Revisions

1. Discussion section, para 1. “APRN/PAs expect to provide or recommend Pap tests, mammograms and FOBT and physicians are currently working concurrently with APRN/PAs to screen for cervical cancer.” This sentence is slightly awkward and wording can be improved to eliminate confusion.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.