Peer Review File

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Reviewer A

The "KPC Programs in the VA" section of the body of the manuscript felt a little long and a little less synthesized. I am of two minds with regard to detailing the specifics of individual VA sites in the body of the manuscript. As a reader who was trying to get synthesized information it felt a bit tedious. But if I was in the trenches at an individual VA thinking about innovations we could try I think the specificity and knowing what VA sites to reach out to would be helpful, but that is available in Table 2. Table 2 is great (Listing a contact person/email would be helpful, but I don't think I ever see that done so probably not kosher?). All said, maybe cut back a little of the listing of the site-specific detail in the body and really point readers to the Table 2.

We have removed mention of specific programs in the Results section. We do not include contact information for each program in Table 2 as this can change over time. However, we do provide the contact information for the liaison at VA Kidney-Palliative Care Workgroup as part of listed author information (Alexi Vahlkamp) and the names of the specific individuals at each program who provided information about their program in the Acknowledgement section.

A discussion of the rigidity of the dialysis model of care felt like it was missing from the manuscript, including a mention of the concept of "palliative dialysis" and, potentially, other examples of ways that there could be less rigidity like moving away from the across-the-board "Fistula First" approach (I'm not a nephrologist but my understanding is that for some w/ poor prognosis or uncertainty re: if want to do dialysis if they need dialysis down the road, fistula may not make sense – catheter instead if/when time comes. B/c fistulas can be uncomfortable/procedures initially and when they don't work & some die before ever get to need for dialysis or fistula matures. And the lower infection rate than catheter is over a longer period of time than some live). I think that a KPC model of care would promote more flexible, patient-centered, symptom- function-focused dialysis regimens. Are there VA KPC initiatives to introduce such an approach? They very briefly mention KPC "taking a holistic approach to care that differs from traditional disease-based approach" and they cite Freidin N, 2019 AJKD as citation #33. But that is a very general statement – I think they should go into more depth and what this means in an applied sense as I write above. My recollection is that Freidin may be helpful to review and discuss more in manuscript.

In our section "Why KPC in the VA" we now incorporate discussion (page 6) about the rigidity in dialysis care that is introduced by Medicare incentive programs and how the VA may be less subject to this. We describe how incentive programs under Medicare tend to be longevity-focused and can impose certain treatment burdens to patients whose goals do not align with this approach. As this reviewer points out, one of these incentives favors the use of fistulas over catheters for dialysis access, which require patients to undergo additional surgeries. There are also incentives promoting higher clearance targets which lead to longer or more intensive dialysis treatments for patients. In contrast, Veterans with kidney failure who choose to receive their care in the VA may have more opportunity to receive care that is focused on symptom management and improving quality of life over longevity. Although we do not specifically use the term "palliative dialysis," we describe different ways that flexibility can be incorporated into dialysis care such that individual patient priorities can be achieved. Specifically, Veterans in the VA may choose to undergo shorter and less frequent dialysis treatments, elect to use a catheter to avoid surgeries or forgo dialysis entirely in favor of quality of life over longevity.

We agree with the reviewer that our statement about palliative care as "a holistic approach to care that differs from the traditional disease-based approach to care" is a relatively general statement. We have chosen not to describe palliative care in greater detail given that the readers of this journal will likely know what palliative care is and keeping in mind feedback from Reviewer B (Comment #1) that the Introduction be shortened.

Under "Aligning KPC with primary and subspecialty care", the authors rightly point to siloed disjointed care that occurs in different locations as a challenge to high quality care for patients with advanced kidney disease. They point to the VA as an "integrated healthcare system that makes it uniquely positioned to ensure Veterans who opt for KPC receive care across primary care and specialty care settings that is consistent with their overall values and goals". However, it is important to note that the vast majority of Veterans get their dialysis in community dialysis units either through Medicare or VA Community Care, which makes Veterans with ESKD who elect dialysis subject to a high degree of fragmentation. This should be discussed and any initiatives to address this fragmentation should be shared.

The reviewer raises an excellent point. We now address (page 14) the need for models of KPC that serve the many Veterans with advanced kidney disease who are reliant on kidney care provided in the community that is paid for by the VA. We describe how these patients are commonly subject to care fragmentation, incomplete medical record sharing and communication breakdown between VA and non-VA providers. These challenges will likely place increased demands on KPC Program staff and providers to track down and communicate with non-VA providers and serve as liaisons between non-VA providers and the wider VA health system to ensure that patients receive care that aligns with KPC across the different health settings.

4) Regarding article's discussion of concurrent hospice and dialysis:

-In the "Introduction" section lines 106-108, they make some incorrect statements about the findings of a study by Wachterman et al. JAMA Internal Medicine (citation #35). As the KPC article reports, the JAMA IM study looked at the association between length of time in hospice and the healthcare utilization measures that this KPC article lists. And it is true that it is a cohort of patients who had received maintenance dialysis. However, the JAMA IM study did not examine whether the patients were still receiving dialysis at the time they enrolled in hospice so it is not accurate to say that it is a cohort of patients who receive concurrent dialysis and hospice.

We have rephrased this sentence to accurately reflect the study's findings: "Patients on dialysis who receive hospice incur fewer healthcare costs, less often undergo invasive procedures, and are less likely to die in the hospital as compared with those on dialysis who die without hospice." (page 5)

-In the "Intro" section lines 156-158 and 167-168, the findings of a study by Wachterman et al. JAMA Health Form (citation 56) also need to be clarified. The correct statement would be "Veterans receiving dialysis who receive hospice services paid for by the VA (through the VAs Community Care program) are much more likely to receive concurrent hospice than those who receive hospice services under their Medicare Benefit" (see Table 2; and Figure 2 "Overall"). Of note, as shown in Figure 3, even when Medicare is the hospice payer, VA Community Care is the dialysis payer in the vast majority of cases (about 84% of the time).

We have also rephrased this sentence to specify the payor of dialysis in circumstances where Veterans on dialysis are more likely to receive concurrent hospice: "Veterans receiving dialysis paid for by the VA are much more likely to receive concurrent hospice than their counterparts who utilize their Medicare benefits." (page 6)

- Under "Opportunities to advance KPC", bit more discussion on complexities of operationalizing concurrent hospice and dialysis.

We now discuss (page 14) under "Opportunities to advance KPC" the role of KPC programs in advancing opportunities for concurrent dialysis and hospice. Because the VA frequently contracts out hospice and dialysis care to community providers where Medicare policies have considerable sway, Veterans can commonly encounter confusion and obstacles to receiving this type of care. Thus, VA KPC programs could play a vital role in community partnerships and advocacy that support Veterans who are seeking concurrent care.

Reviewer B

1. The paper is quite long and in some areas feels repetitive, for instance the introduction is quite packed with background information on needs and outcome. Not sure this much degree of general background helps set up the story for pall care at the VA. Would recommend revising and incorporating into the later information about Why palliative care at the VA.

We have substantially shortened the Introduction section and moved some of information about evidence of benefit of palliative care for patients with kidney disease into the section entitled "Why palliative care at the VA."

2. The title of the paper is on models of care at the VA and yet there is just one paragraph describing the models. Would suggest unpacking this with more comprehensive description of what is meant by parallel, merged and embedded. What are strengths, weaknesses?

As the reviewer correctly points out, our manuscript covers more than just models of kidney palliative care. Therefore, we have revised our title to "Implementation of kidney palliative care: Lessons learned from the US Department of Veterans Affairs."

We now describe (page 12) that the different models (i.e., parallel, merged and embedded) that have emerged in the VA reflect the local needs, resources and settings available to support the different models. Because outcome data on these programs are not yet available, we cannot make direct comparisons of models and point out that research is needed to determine the strengths, weaknesses and comparative effectiveness of models. We discuss potential limitations to current models, such as their reliance on highly skilled providers and their existence in only tertiary medical centers, and how they represent future opportunities for model expansion and innovation.

3. Has the VA created similar palliative care models for other serious illness disease types? If so would be helpful to hear about and how this work aligns or builds upon.

We agree with the reviewer that palliative care programs for other illness conditions is an important topic. It is also a sizeable one and falls outside the scope of this paper, and therefore we do not address this in this manuscript.

4. Table 2 lists the key principles of KPC however these are not discussed in the paper.

We believe the reviewer is referencing Table 1 (not Table 2), which lists the key principles of kidney palliative care. We now discuss these principles in our Introduction (page 4) and define them as including “clarification of goals of care and advance care planning, careful symptom assessment and management, social and caregiver support, and interventions to support patients’ psychological and spiritual well-being.”

5. I’m confused about the flow of the paper and what the authors want to convey about the models. Feels like overall more organization would be helpful. How do the many processes described relate to these models. Are there key components of KPC that all the models share that might be better articulated? Maybe even organizing with subtitles: patient identification; timely goals of care and advance care planning; symptom management; CKM and end of life care.

We appreciate the opportunity to improve the organization of our manuscript. We now clarify under the section, “KPC Programs in the VA,” we set out to discuss the different models of care that programs have been adopted and how they implement key components of care. Our discussion under this section has been re-organized accordingly to fit the following sub-headings: models of KPC, goals of care conversations and advance care planning, symptom management, multidisciplinary care, patient selection and quality improvement.

Reviewer C

Excellent overview of the VA system's KPC clinics with suggested improvements within the large infrastructure. I appreciate the thorough review of the KPC programs with the details regarding the team approach and duties. Great work!

Thank you.