Reviewer's report

Title: Patient and Provider experience and perspectives of a risk-based approach to multidisciplinary chronic kidney disease care: a mixed methods study

Version: 0 Date: 16 Nov 2018

Reviewer: Jennifer Flythe

Reviewer's report:

Smekal et al. present a mixed methods study reporting patient and provider perspectives one year following implementation of a kidney failure risk equation (KFRE)-stratified approach to CKD population management. The analysis includes qualitative interviews and pre- and post-implementation surveys. The article is timely as there is great interest in population management through risk stratification and subsequent tiered resource allocation. This center is a leader in this regard and report of their experiences is of broad interest. Weaknesses in the theming process and descriptions as well as lack of respondent-level pre- and post-survey linkage detract from the manuscript.

Major Comments

* The authors report using a directed content analysis. In the Hsiu source cited, in a directed approach, "analysis starts with a theory or relevant research findings as guidance for initial codes." The authors note that they did not apply a theory to guide analysis. What relevant research findings did they use?

* The identified themes are more topical than descriptive. Would suggest revisiting the titles of the themes and making them more descriptive. For example, "transition process for low-risk patients" is a topic, not a theme. Often, but not always, themes begin with gerunds to impart more feeling/description. In their current form, the themes are labels with different perspectives provided underneath. They are not coherent themes that cross-cut the interviewees.

* The combined analysis of patient and provider perspectives is a little challenging to interpret. The authors note that, within some themes, they make comparisons between patients and providers, suggesting (and as seen in the quotation data provided) that there are differences between provider and patient perspectives. Thus, how can they be combined under a singular theme? The differing perspective relate to the "topic" but a "topic" is not the same thing as a theme. Did patients and providers contribute equally to each theme? That is not likely, and in the case of job satisfaction, the theme (or topic) is not applicable to patients. Is this the case for any of the other topics/themes?
"Access to resources outside of the CKD clinic" - The text in this section suggests that all felt like they had enough resources but quotations reveal that one provider was not referring eligible patients back to routine care out of concern for inadequate monitoring. This is not acknowledged in the text.

"Anticipated concerns": This topic appears to apply only to providers as it is noted that patients did not express concerns about progression. Again, question as a theme if not applicable to both patients and providers. Also, I do not understand the choice of the term "anticipated."

"Reduce patient stress" - Some of the quotations reflect providers' perceptions of patient attitudes. Did patients, themselves, express reduced stress or did this predominantly come from provider perceptions of patient stress? The latter is weaker.

All but 1 of the patient interview participants had been in CKD clinic > 5 years. It seems plausible that patients in CKD clinic for less time may not have been as confident when transitioned back to routine care or might have had different experiences. Lack of inclusion of more patients earlier in their CKD clinic experience prior to discharge to routine care is a weakness- findings may not be transferable to patients with lesser CKD clinic experience.

Could the authors provide descriptive statistics on the length of the interviews?

What was the survey response rate among patients? Among providers? Essential to report this.

The lack of linkage at the respondent level is a major limitation of the survey. This is acknowledged in the discussion but it also needs to be clear in the methods. It makes the results very difficult to interpret as we do not know if the pre and post responses come from the same patients. This is a major limitation.

In the discussion the authors note that patients did not perceive a substantial impact to their care. This is not entirely true as some patients continued to call their prior case managers after being discharged back to routine care- suggesting incomplete confidence in their new level of care.

In the conclusion, the authors note that patients and providers reported that this approach "improved sustainability". Were interviewees directly asked about sustainability? How was sustainability defined? Did patients really refer to sustainability? Does this conclusion accurately reflect the collected data?

Minor Comments

Abstract should name location of this study.

What kind of education was provided to patients about KFRE?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

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Please indicate the quality of language in the manuscript:

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