PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Qualitative Study of Perspectives Concerning Recent Re-hospitalizations among a High-risk Cohort of Veteran Patients in Connecticut, U.S.
AUTHORS	Antony, Sheila; Grau, Lauretta; Brienza, Rebecca

VERSION 1 – REVIEW

REVIEWER	Matthew Lohman University of South Carolina, USA
REVIEW RETURNED	29-Sep-2017

GENERAL COMMENTS	This paper covers an important topic – hospital readmissions – made even more significant by the ACA hospital readmissions reduction program. The study design is novel in that it attempts to characterize readmission risk factors through qualitative analysis of patient perceptions and interviews. The manuscript is well written and clear and the qualitative analysis is adequately described. There are some minor issues and clarifications that might improve the paper but no major concerns. Introduction, first paragraph: This paragraph focuses on the impact of readmission on Medicare costs, which helps underscore the importance of the topic, but it would also be helpful to cite evidence of the impact of readmissions on individual patient outcomes if such research is available, e.g. increased risk of functional disability, hospital-related infections, mortality. Hospitals are an inherently dangerous place for vulnerable individuals and may induce health declines unrelated to original reasons for admission. Given the focus of the paper is on individual patient perceptions, individual outcomes are likely to be the primary concern regarding readmissions among patients rather than what readmissions cost Medicare. Page 4, line 57: The authors write: "Participants could be generally classified into four patient types: (1) loners, (2) "hardcore," (3) engaged, or (4) passive/accepting." It is not clear whether this typology was related to a theme, i.e. patient participation/passivity, as patient type could be construed as a determining factor for readmission risk. Were these types coined by the investigators, or based on prior research? It seems like there might be more standardized terminology for patient types that might facilitate comparisons with other research. If so, reference to this research in the discussion would be helpful. The discussion centers on the role of PCPs and hospitals' in discharge planning and readmission reduction, but there is less

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	mention of the potential role of other settings or providers. For instance, one patient was living in a nursing home and 10 patients were receiving home health services. Some patients specifically expressed issues with inadequacy of visiting nurse services. Since most visiting nurse services are provided by private agencies (although I'm not familiar with whether the VA provides these services directly), it would be beneficial to briefly discuss the potential role of other health providers/settings, e.g. pharmacists, nurses, assisted-living homes, in promoting adequate discharge and transition planning and preventing readmissions. It might also be beneficial to suggest ways in which Medicare might incentivize other providers to help reduce readmissions.

REVIEWER	Sue Patterson Griffith University, Australia
REVIEW RETURNED	18-Jan-2018

GENERAL COMMENTS	The paper reports an interesting and important study - minimising avoidable readmission to hospital by provision of timely, high quality health care that meets the needs of patients is an ethical and economic imperative. In the main, the paper is easy to read and logical. I suggest a detailed proof read to ensure that punctuation is appropriate and that use of abbreviations (e.g. VA in para 1) accords with standards. While the methods section is adequate it would benefit, in my opinion, from reflection on the epistemological underpinning of the study and further detail regarding development of the codebook and the process of review of analyses by the research team. Regarding results, I would be interested in the proportion of participants characterised in each classification. The discussion is satisfactory and interpretation remains grounded in data. Further to commentary regarding the epistemological underpinnings of the study in methods section, I would like to see reflection on the subjectivity inherent in qualitative research in the limitations section.

VERSION 1 – AUTHOR RESPONSE

We wish to thank the editors and reviewers for the thoughtful review of our manuscript, "Perspective Concerning Recent Re-hospitalizations amongst a High-risk Cohort of Veteran Patients." The comments and suggestions have been incorporated in our revised manuscript as noted below. We feel that the revised manuscript has been greatly strengthened as a result of the review.

Summary of responses to reviewers' comments and revisions to the original manuscript:

1. **Cite evidence of the impact of readmissions on individual patient outcomes.** To our knowledge and after conducting additional literature searches, we found very little evidence of re-hospitalization as a predictor of individual patient outcomes (aside from mortality rates). Rather, most studies identify factors such as functional or disease status as predictors of readmission. We have expanded the first and second paragraphs of the Introduction section to include the recent findings on patient outcomes as follows:

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The issue of hospital readmission has come to national attention due to legislation from the Affordable Care Act [1]. Although the link between readmissions and quality of care is controversial, readmissions lead to increased cost, and interventions to reduce readmissions have been correlated with reduced mortality [2]. Approximately one in five Medicare patients is re-hospitalized within 30 days of discharge at an estimated cost to Medicare of $17.4 billion in 2004 [3]. Overall cost for 30-day readmissions within the VA is estimated at $6000 to $8000 for an average medical admission [4], although some studies suggest higher rates of readmission within the Department of Veterans Affairs (VA) health system than in non-VA hospitals [5 6]. In addition to overall costs associated with readmissions, those re-hospitalized are more likely to suffer from chronic comorbidities and impaired functional status that place them at increased risk of death [7 8]. Systems level factors such as hospital size have been found to be negatively associated with the patient outcomes of re-hospitalization and death [9].

VA patients may be at higher risk for re-hospitalization due to their lower socioeconomic status, older age, poor social supports, and multiple comorbidities [10-13]. Amongst seriously ill Veterans receiving palliative care, a recent qualitative study found that issues with self-care and poor support systems may contribute to readmissions [14]. Chronic disease, distance from the VA, and age are also associated with increased readmission risk in Veterans [10 11]. Studies of transitions of care suggest that difficulty navigating the healthcare system, disempowerment to make health decisions, and complex psychosocial factors may contribute to readmissions [15]. Studies of non-VA patients who are readmitted within 30 days of last discharge reveal that patients often have difficulty in understanding their discharge plans, issues with self-care, and difficulty resolving these barriers [16 17]. Functional impairment [16 18 19] and polypharmacy [20]. They are also vulnerable to preventable post-operative complications (e.g., infection, thromboemboli) [21] and, among bariatric surgical patients, have higher pre-surgical basal metabolic index scores [22].

2. **Relationship of patient typology to the themes identified in the data and the proportion of participants in each typology.** We have added text to explain that patient types did not "map" on in any consistent way across all the themes identified and have sought to add text in the Results section to suggest where a theme or sub-theme may more often apply to one group than to another.

   We are very reluctant to report proportions or numbers in a qualitative study—aside from describing the study sample in Table 1—as the sample size is small, not representative of the study population, and can, therefore, be potentially misleading. Instead, we prefer to use adjectives (i.e., many, few, majority, none, etc.) to give some indication of the prevalence of a given thought or idea within the data set. Consistent with our position, we had noted that the passive/accepting group was quite small. The remaining participants were distributed fairly evenly across other three groups.

3. **Discuss the potential role of other settings or providers in discharge planning and readmission reduction.** The question is a very good one but requires some additional information to understand how we have addressed this issue in the revised manuscript. Perhaps the most important fact to note is that Medicare is not financially involved in any way with the care of VA patients (otherwise it would effectively be double billing the government). Therefore, any discussion about Medicare or ways in which it can leverage other service providers/insurers is beyond the scope of this study. For some patients who meet criteria, the VA also pays for home-based primary care, home help, and nursing services. However, VA patients often have other healthcare insurance that may cover visiting nursing services, and

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home help. We have added text at several spots that recommends increased and on-going communications with these organizations.

4. **Identify the epistemological underpinnings of the study, and provide more details about codebook development and review of analyses.** We have revised the second paragraph of the Methods section as follows:

All interviews were audiotaped, transcribed verbatim, and subsequently de-identified. Interviews continued until data saturation was achieved as determined during regularly scheduled research team meetings. Codebook development and data analysis followed an iterative process and were grounded in the text. The coding and analytic team (SA, LG) met weekly throughout the process of codebook development, coding, and analysis. A total of 32 codes were created based upon the content expressed during the interviews. Both team members independently coded all transcripts, and any coding discrepancies were resolved by consensus during the weekly meetings. The team's epistemological position was constructionist and used pragmatism as the interpretive framework. Using ATLAS.ti (Version 7.1.7) and thematic analysis [22 23], we identified common patterns across the dataset, grouped them into themes, and sought "negative" instances where the data did not fit the existing themes. Reports of all quotes subsumed under each code were generated and discussed iteratively to identify themes that transcended individual codes. The analyses were reviewed by the research team iteratively during the entire coding and analytic period of the study.

5. **Note the inherent subjectivity as a limitation.** We have added the following sentences to the limitations paragraph in the Discussion section:

Finally, as in any qualitative study, interpretation of the study results, although grounded in the data, is viewed through the epistemological and ontological lenses of the researchers performing the analysis. Given the multidisciplinary nature of the research team, we believe that our perspectives and training were diverse and permitted a broader and more balanced consideration of the data

6. **Detailed proof read to ensure that punctuation is appropriate.** We have reviewed the manuscript for punctuation and should note that we ascribe to the Oxford comma. We did not correct punctuation in quotes as we feel that the transcriber has the best understanding of the cadence of the conversation and punctuates accordingly. However, we will adopt whatever punctuation convention is used by the journal if the manuscript is accepted for publication.

VERSION 2 – REVIEW

REVIEWER	Matthew Lohman University of South Carolina, United States
REVIEW RETURNED	16-Mar-2018

GENERAL COMMENTS	The authors have adequately addressed concerns from a previous version of the manuscript. One additional note:the authors state in their response, "Perhaps the most important fact to note is that Medicare is not financially involved in any way with the care of VA patients." The reason for questions regarding Medicare's role is the authors' focus on Medicare and the ACA hospital readmissions reduction in the introduction - "The issue of hospital readmission has come to

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	national attention due to legislation from the Affordable Care Act 1. Although the link between readmissions and quality of care is controversial, readmissions lead to increased cost, and interventions to reduce readmissions have been correlated with reduced mortality 2. Approximately one in five Medicare patients is re-hospitalized within 30 days of discharge at an estimated cost to Medicare of $17.4 billion in 2004." The ACA readmissions reduction program focuses on incentivizing hospitals to reduce readmissions through potential payment reductions from the Centers for Medicaid and Medicare services. Thus, if the authors would like to avoid confusion on behalf of readers with respect to the role of Medicare, they should focus in their introduction on statistics and issues regarding readmissions in the VA system specifically and not on statistics regarding Medicare and/or Medicaid. This issue, however, does not detract significantly from the manuscript.

VERSION 2 – AUTHOR RESPONSE

We would like to once again thank the reviewers and editors for their valuable input. We have made the following revisions:

1. We have revised the title to indicate that this is a qualitative study that occurred in the U.S.

2. To avoid the potential confusion engendered by mention of the Affordable Care Act or Medicare/Medicaid in the first paragraph of the Introduction, we have deleted that text and two associated references. This appeared to be the only additional reviewer-recommended revision.

3. The Methods section now includes a statement to indicate that written consent was obtained from all participants.

4. We now provide a completed copy of the SRQR checklist and have added line numbers to the manuscript to link checklist entries to the appropriate sections of the manuscript.

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