Author’s response to reviews

Title: Patients' perceptions of interactions with hospital staff are associated with hospital readmissions: A national survey of 4535 hospitals

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Version: 1 Date: 13 Aug 2017

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Point-by-point response to reviewers

We thank both reviewers for their comments and suggestions which helped us clarify and improve the manuscript.

Michael Shwartz (Reviewer 1):

Though a relatively straightforward study, the results are quite interesting and the consistency of results across conditions somewhat surprising. I have only a few comments:

1) The paper needs careful copy editing by a native English speaker;

Response: The manuscript has been carefully edited by a native English speaker.

2) I think the authors should put in to the main body of the paper a table that shows the coefficients and p-values for "responsiveness of hospital staff" across the readmission strata for all 6 conditions. These really are the main findings. The full results of the models can still be shown in an Appendix;

Response: Thank you for the suggestion. Table 2 (page 11) was added into the main body showing the coefficients and p-values.
3) The authors have found an association and in many places they are careful about their language. However, in other places, strong indications of causality are implied. For example, in the last sentence of the Conclusions, they say "Hospitals can choose approaches to improve the responsiveness of hospital staff as another avenue to address high re-hospitalization rates."

Response: We have carefully reviewed the manuscript and edited the sentences that might indicate causality.

A study like this would need replication before suggesting hospitals invest resources and energy in improving responsiveness of hospital staff, which leads to my last suggestion, one that may well be outside the scope of a reasonable revision request. I really think it would be very useful, given the somewhat surprising strength of the conclusions, to repeat this analysis using another year of the HCAHPS data. I would have much more confidence in the results if they were shown to be consistent across 2 years of survey data.

Response: The reviewer raises a good point. Unfortunately we are unable to expand the analysis at this time but did add a suggestion in the discussion on page 15 that further research with more recent data should be conducted to strengthen the confidence in the findings.

Suzanne Fredericks (Reviewer 2):

Very good topic. Overall, the paper is well written; however a few minor edits are required:

Response: Thanks for the encouragement. We have carefully edited the manuscript.

1) The psychometric properties of the Hospital Consumer Assessment of Healthcare Providers and Systems scale is needed. Why was this instrument selected? Has it been used previously to assess perception? Please explain

Response: This study analyzed data collected by the U.S. Federal Government, also known as Hospital CAHPS® and reported on its web based hospital quality report card. The data collection instrument HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) was developed by the Centers for Medicare & Medicaid Services (CMS) along with the Agency for Healthcare Research and Quality (AHRQ). It is designed to measure patient perceptions of the hospital care they receive. The instrument has been validated and widely used in the U.S.

Please see text describing it on page 6.
2) Why examine perception? The rationale for the selection of this concept has not been clearly presented

Response: Health care is a co-production process. Health workers need to work in partnership with patients to obtain optimal care outcomes. Over the past decade, there have been increasing calls for patient-centered care. Empirical evidence shows that better patient compliance and cooperation can be achieved if a patient is engaged in shared medical decisions and reaches a high level of satisfaction. Many countries, including the U.S., have collected data from patients about their subjective experiences and interactions with their providers as indicators measuring health system performance. These measures, by their nature and because there are subjective (e.g. how well did nurses and physicians communicate with you?) are based on patients perceptions of the care they received. The HCAHPS survey domains that we focused this study on because studies have shown that patients’ perception is indicative of quality of care (see references below).

We added text to on page 5 to emphasize this point.


3) How is perception conceptualized

Response: Perception in the context of this study and the HCAHPS survey is conceptualized by asking patients for their subjective opinion based on their own observation of the way they were treated by the medical staff. For example: “How often did nurses treat you with courtesy and respect? How often did nurses treat you with courtesy and respect?”
4) What are the implications for practice based on the study findings - please explain

Response: We found that hospitals with better staff responsiveness had lower 30-day readmission rates. Especially, hospitals which are at the 25th – 75th percentile and 75th percentile have an advantage from increasing staff responsiveness. However, the cross-sectional design of this study prevents us from making causal conclusions. Therefore this study should be viewed as suggesting further areas for study. Specifically, it raises the following questions: (1) to what extent does fast staff response time lower re-admission rates? (2) does patient understanding and satisfaction play an equally important role in lowering re-admission rates? (3) what resources and measures will need to be mobilized to improve staff responsiveness to patients questions and communication needs? (4) what differences are there in patient behaviors between those who have different perceptions while in the hospitals and after hospital discharge. Changes in staff responsiveness may offer an additional tool for hospitals to employ in ongoing efforts to achieve reductions in readmissions, an important objective both financially and for patient health outcomes,

Text was added on page 15.