Nursing Home Satisfaction Measures: What Is Their Relationship to Quality?

Pamela Nadash
Jennifer Gaudet Hefele, Edward Alan Miller, Kathrin Boerner
Adrita Barooah, Joyce Wang

University of Massachusetts Boston

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Why Focus on Consumer Satisfaction?

- First, what do we mean by this?
  - Resident/family satisfaction and experience
  - Measurement issues – we will discuss!

- Important measures of nursing home (NH) quality
  - Consumers want it
  - Providers can use it to benchmark and market

- Largely absent from public reports of NH quality
  - Not required under NH Compare – but…
  - Some states mandate
  - Some states use measures in P4P
  - Some ACOs require affiliated SNFs to report
The Focus of This Research:

- Little is known about how NH satisfaction/experience relates to other measures of quality
  - Overlapping or unique contributions?

- Each type of quality measure has problems
  - State variations in surveys
  - Data derived from MDS have other issues
Policy Importance

- Should government require NHs to collect satisfaction/experience data?
- Should such data be incorporated into public reporting/P4P rubrics?
Study Overview

- **Aim**: Understand how resident/family satisfaction and experience relate to other measures of NH quality

- Funded by the Catherine Weldon Donaghue Medical Research Foundation, Another Look Initiative
  - **January 2016 through June 2018**
Research Questions

Q1. To what extent are NH deficiencies associated with resident and family satisfaction?

Q2. What NH characteristics are associated with higher satisfaction?

Q3. To what extent will key factors associated with NH satisfaction vary across different satisfaction instruments?

Q4. To what extent will factors that are strongly associated with resident satisfaction overlap with factors associated with family satisfaction?
In Addition…

- Are the results the same if we use state-specific tools measuring satisfaction?
  - Is their relationship with the quality measures the same?
  - How well do they correlate with the MyInnerView measures?
Data (2013 & 2014)

- Key predictor variables (do they predict satisfaction?)
  - QoL and QoC deficiencies from survey inspections
  - NH Compare Star ratings of overall NH quality -- Combined rating of staffing levels, inspection deficiencies, and select quality indicators

- Key adjustors
  - NH characteristics, including profit status, chain, occupancy, number of beds, staffing
  - Market characteristics, including proportion of people 65+ in the county, competition
What We’re Trying to Predict – Satisfaction!

- Satisfaction measures for both families and residents
  - Three different measures
    - Would you recommend?
    - Overall, how would you rate?
    - Average across all items
  - All 50 states!
- In addition, we have survey instruments unique to different states
  - Minnesota
  - Maryland
  - Ohio
How representative are the NHs for which we have satisfaction data?

- Comparing NHs that used the MyInnerView survey to all NHs in the US, we found:
  - NH Characteristics
    - Slightly higher number of beds (112 vs 109)
    - Slightly higher occupancy rates (84% vs 82%)
    - Less likely to be nonprofit (70% vs 72%)
    - More likely to be chain (76% vs 57%)
    - Serving slightly more acute individuals (12.23 vs 12.12)
  - Staffing levels were the same
  - Different market characteristics
    - More likely to be in an area with more 65+ (15.5 vs 15.3)
    - In less competitive markets (0.25 vs 0.19 HHI)
Results
(These are preliminary!)

▸ How satisfied were survey participants, on average?
  ▶ 3.2-3.3 on a 0-4 scale
  ▶ Results were very consistent, regardless of whether it was family members or residents, or of how satisfaction was measured

▸ How does resident satisfaction correlate with family satisfaction?
  ▶ Not much! Correlations ranged from 0.38 to 0.4.
  ▶ Considered a “modest” correlation
  ▶ Consistent with what others have found
What is the Relationship Between Satisfaction and Our Quality Measures?

- Are they correlated?
  - Modest correlation found with NH 5-Star ratings – 0.24 – 0.36
  - Virtually no correlation with QoL and QoC deficiencies

- Is quality associated with satisfaction, after adjusting for other factors?
  - We found significant associations in the correct directions
  - However, effect sizes were small (+/- 0.02 – 0.04)
  - Again, the association with the NH Compare measure was the most consistent
  - There was no association between QoL deficiencies and family satisfaction, except for the “any QoL def” measure
What Else Had an Impact on Satisfaction?

- Many of the NH characteristic variables
  - Number of beds
  - Chain
  - Occupancy rates
- Staffing variables were not important
  - CNA staffing was significant in several regressions
- Market factors also mattered
  - The proportion of 65+
  - Competition
- Racial composition
  - Proportion of NH residents who were white
  - Proportion of NH residents who were Hispanic
- The acuity of the resident population
- And the state in which the NH was situated
Next Steps: Finalize Results, Look at Different Instruments
In Summary

- The precise measure of satisfaction doesn’t seem to matter – results were pretty consistent
- Family and resident satisfaction aren’t very highly correlated
- QoL and QoC deficiencies aren’t highly associated with satisfaction
- NH Compare ratings, on the other hand, seem to be. Why?
- RN and LPN staffing didn’t come out as important – perhaps because there’s not enough variation
- Other thoughts?
DISCUSSION
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<thead>
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<th>Satisfaction measure</th>
<th>Overall (Combined resident and family)</th>
<th>Resident only</th>
<th>Family only</th>
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<tr>
<td>MyInnerview (0-4)</td>
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<tr>
<td>Overall average</td>
<td>3.221</td>
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<td>Overall assessment (recommendation)</td>
<td>3.297</td>
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<td>Overall satisfaction</td>
<td>3.286</td>
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<td>Family ratings</td>
<td>Resident ratings</td>
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<tr>
<td></td>
<td>Overall survey average</td>
<td>Overall assessment (recommendation)</td>
<td>Overall satisfaction</td>
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<tr>
<td>Overall survey average</td>
<td>0.399****</td>
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Table 6: Correlations between resident and family ratings (MyInnerview data)
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<th>Overall satisfaction</th>
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<td><strong>Resident</strong></td>
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<td>NH Compare 5-star rating</td>
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<tr>
<td>NH Compare 5-star rating</td>
<td>0.310****</td>
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<td><strong>Overall ratings (Resident and Family ratings combined)</strong></td>
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<td>NH Compare 5 star rating</td>
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<td>&lt;.0001</td>
<td>0.03 (0.00)</td>
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