QUALITY OF LIFE FOR NURSING HOME RESIDENTS: PREDICTORS, DISPARITIES, AND DIRECTIONS FOR THE FUTURE

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QOL Matters for NH Quality

- Substantial research on quality of care in nursing homes (NH) exists; less is known about quality of life (QOL) for NH residents.

- Resident QOL is a patient-centered outcome and is linked to a host of clinical indicators

- CMS and IOM call for improvements in NH residents’ QOL
RESEARCH AIM 1

To investigate which facility and resident characteristics are associated with NH resident-reported QOL
Data

Three sources:

1. Consumer Satisfaction and Quality of Life Survey (2010):
   - Response rate: 85%
   - 375 facilities for 2010

2. Resident clinical data from the Minimum Dataset

3. Facility-level characteristics from facility reports to the DHS

The combined data set consisted of 10,923 residents in 375 Minnesota nursing facilities.
## QOL Domains

<table>
<thead>
<tr>
<th>Domain</th>
<th># items</th>
<th>Sample items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>4</td>
<td><em>Is it easy for you to get around in your room by yourself?</em></td>
</tr>
<tr>
<td>Personal Attention</td>
<td>6</td>
<td><em>Do the people who work here treat you politely?</em></td>
</tr>
<tr>
<td>Food</td>
<td>3</td>
<td><em>Do you like the food here?</em></td>
</tr>
<tr>
<td>Engagement</td>
<td>9</td>
<td><em>Are there things to do here that you enjoy?</em></td>
</tr>
<tr>
<td>Negative mood</td>
<td>6</td>
<td><em>In the past two weeks, how often have you been bored?</em></td>
</tr>
<tr>
<td>Positive mood</td>
<td>3</td>
<td><em>In the past two weeks, how often have you been peaceful?</em></td>
</tr>
</tbody>
</table>
Key Findings

• Resident characteristics influence QOL
  – Across multiple domains
  – Limitations in ADLs
  – Alzheimer’s disease, low cognitive scores
  – Anxiety/mood disorders

• Facility characteristics, too
  – Medicaid payment source
  – **Staff hours per resident day** (especially activity staff and LPNs)
  – Quality improvement score
  – Administrative turnover
  – Pay for performance
RESEARCH AIM 2

• To examine the relationship between NH facility-level characteristics and change in facility QOL over time

• We group facilities into QOL performance categories of “improved,” “declined,” and “mixed,” and examine predictors of change in QOL for each group
Data

• Quantitative data from three sources from 2007-2010:
  1.) Consumer Satisfaction and Quality of Life Survey:
      • Aggregated to facility level
  2.) Resident clinical data from the Minimum Dataset
  3.) Facility-level characteristics from facility reports to the DHS (N=369).
Key Findings, Full Sample

• *Structural characteristics*, in particular greater *resident acuity* and larger *facility size* had a significant negative effect on facility-aggregated resident QOL.

• *Non-profit status* (as compared to for-profit) was positively associated with higher resident QOL.

• *Organizational characteristics* had the most consistent effects across multiple QOL domains.
  – *Staff hours of direct care* (especially activity staff and RN hours) and quality improvement score had positive effects on QOL for a number of domains
Key Findings, Cont.

• Facility scores change over time.

• Facilities that **declined in QOL over time**
  – Higher acuity negatively affect QOL
  – More activity staff hours positively affect QOL

• NHs with **mixed performance**
  – More activity staff hours positively affect QOL

• NHs that **improved**
  – Larger facility size negatively affects QOL
  – More RN hours per resident day positively affect QOL
  – Higher quality improvement scores positively affect QOL
RESEARCH AIM 3

• 3a. To examine whether non-white NH residents experience lower QOL as compared to white NH residents.
  – If so, are the differences explained by resident characteristics (e.g., health)?

• 3b. To investigate whether NHs with lower proportions of non-white residents have better aggregate QOL than NHs with higher proportions of non-white residents.
Background

• The proportion of minority older adults in NHs has increased dramatically, and will surpass that of white adults by 2030.

• Yet, little is known about these groups’ unique experiences related to QOL.

• *Findings on quality of care show that:*
  – Non-white older adults are more likely to be placed in lower-quality NHs, receive poorer quality of care, and have access to fewer resources.
  – Disparities in quality of care are linked to racial and socioeconomic segregation of NHs, rather than within-provider discrimination.
Sample

• 375 facilities

• MN NH residents in 2010 (n=10,923)
  – 10,538 white residents
  – 385 non-white residents
    • 93 Native American
    • 40 Asian American/Pacific Islander
    • 211 Black/African American
    • 41 Hispanic/Latino
Key Findings: Individual Level

RQ1: Compared to white nursing home (NH) residents, do non-white residents experience lower QOL?

- Significant differences between white and non-white residents.
  - White NH residents had higher satisfaction with *food enjoyment*, *personal attention*, *social engagement*, and had better mood scores than non-white residents.

- After controlling for resident health and status characteristics, only *food enjoyment* remained significant.
Key Findings: Facility Level

RQ2. Do NHs with lower proportions of non-White residents have better aggregate QOL than NHs with higher proportions of non-White residents?

• At the facility level, a higher percentage of white residents predicts better QOL across nearly all domains (except environment)

  – Difference remains even when controlling for Medicaid, staffing, ownership, size, and location
    • All of which were significant predictors of QOL in their own right
Conclusions

• Complex nature of QOL for NH residents.
• Resident characteristics must be accounted for but interventions should be directed at facilities
• Prioritize certain types of facilities
• But target factors which are amenable to change
• Facility capacity is vital in meeting physical needs and care AND providing a nurturing social environment
• Next steps: work with community organizations and facilities
  – to improve QOL for vulnerable and complex residents, especially in facilities with low capacity to do so