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

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

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