Original Study

Important Care and Activity Preferences in a Nationally Representative Sample of Nursing Home Residents

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ABSTRACT

Objectives: Person-centered care (PCC), which considers nursing home resident preferences in care delivery, has been linked to important outcomes such as improved quality of life, resident satisfaction with care, and mood and reduced behavioral symptoms for residents with dementia. Delivery of PCC fundamentally relies on knowledge of resident preferences. The Minimum Data Set (MDS) 3.0 Preference Assessment Tool (PAT) is a standardized, abbreviated assessment that facilitates systematic examination of preferences from a population of nursing home residents. However, it is unknown how well the PAT discriminates preferences across residents or items. The purpose of this study was to use MDS 3.0 PAT data to describe (1) overall resident preferences, (2) variation in preferences across items, and (3) variation in preferences across residents.
Data: Data from admission MDS assessments between October 1, 2011 and December 31, 2011 were used for this study.
Sample: A nationally representative sample of 244,718 residents over the age of 65 years who were able to complete the resident interview version of preference, cognition, and depression assessments were included.
Measurements: Importance ratings of 16 daily care and activity preferences were the primary outcome measures. Resident factors including function (MDS Activities of Daily Living-Long Form), depression (Patient Health Questionnaire-9), cognitive impairment (Brief Interview for Mental Status), and sociodemographics (age, race, sex, and marital status) were used as predictors of important preferences.
Analysis: Overall preferences were examined using descriptive statistics. Proportional differences tests were used to describe variation across items. Logistic regression was used to describe variation in preferences across residents.
Results: The majority of residents rated all 16 preferences important. However, there was variation across items and residents. Involvement of family in care and individualizing daily care and activities were rated important by the largest proportion of residents. Several resident factors including cognitive impairment, depression, sex, and race were significant predictors of preferences.
Conclusions: Findings demonstrate the PAT captures variation in preferences across items and residents. Residents with possible depression and cognitive impairment were less likely to rate preferences important than residents without those conditions. Non-Caucasian and male residents reported some

preferences differently than Caucasian and female residents. Additional assessment and care planning may be important for these residents. More research is needed to determine the factors that influence preferences and the ways to incorporate them into care.

Multiple national quality organizations including Advancing Excellence, the American Health Care Association, and the Centers for Medicare and Medicaid Services[1,2] have promoted the transformation of nursing homes to person-centered care (PCC) environments where resident autonomy and personhood is respected and residents receive care according to their preferences.[3,4] Providing PCC that considers resident preferences has been linked to important outcomes such as improved quality of life,[5] resident satisfaction with care,[5] and mood[6] and reduced behavioral symptoms for residents with dementia.[7,8] As such, the national effort toward PCC delivery has continued to expand with a nationally representative survey in 2010 showing 85% of facilities were in the process of implementing some form of PCC.[9]

Delivery of PCC fundamentally relies on knowledge of resident preferences. The MDS 3.0, with its revision in 2010 to include resident voice,[10] provides one opportunity to learn about resident preferences for daily care and activities. The MDS 3.0 Preference Assessment Tool (PAT) is a standardized, abbreviated assessment that makes systematic examination of preferences from a population of nursing home residents possible. The PAT may help clinicians develop an understanding of what is important to residents.[11] However, it is unknown how well the PAT discriminates preferences across residents or items. The purpose of this study was to use MDS 3.0 PAT data to describe (1) overall resident preferences, (2) variation in preferences across items, and (3) variation in preferences across residents.

Methods

Sample

Data were drawn from a cross-sectional sample of admission MDS assessments collected nationally between October 1, 2011 and December 31, 2011. All residents 65 years of age and older and who completed the resident interview version of the PAT, cognition [Brief Interview for Mental Status (BIMS)], and depression [Patient Health Questionnaire-9 (PHQ9)] MDS assessments were included. Residents who were comatose, had more than 1 admission in 2011, or had family or staff report their preferences were excluded. Residents were marked as primary respondent for 90% (item F0600), family for 8% (item F0600), and staff (item F0700) for 3% of nonmissing preference records in the full 2011 MDS file. All criteria and MDS items used to determine the final sample are shown in Table 1.

Measures

Preferences

The PAT found in MDS section F, items F0400A–F0400H, assesses the importance of 16 different care and activity preferences (Table 2, Supplemental Digital Content 1). The resident interview version was used for this study. Response options include 1 = very important, 2 = somewhat important, 3 = not very important, 4 = not important at all, 5 = important, but can't do or no choice.[12]

Function

Function was estimated using the MDS Activities of Daily Living-Long Form summary score, which is calculated from scores on MDS section G items G01101A, G01101B, G01101E, G01101G, G01101H,

G01101I, and G01101J. These items address level of performance (0 = independent, 1 = supervision, 2 = limited assistance, 3 = extensive assistance, 4 = total dependence) as scored by staff observation on 7 activities of daily living (dressing, personal hygiene, bed mobility, transfer, eating, toilet use, locomotion on unit). Activities that occurred 2 or fewer times per week (scores of 7 or 8 on the MDS) were recoded as totally dependent. Scores range from 0 to 28 with higher scores indicating more impairment.[13,14]

Depression

Depression was determined using the total score on the PHQ9 from MDS section D item D0300. The PHQ9 is a valid instrument[15] that screens for signs and symptoms of depression using the presence and frequency of 9 mood symptoms. Scores of 0–4 suggest no depression, 5–9 mild depression, 10–14 moderate depression, 15–19 moderately severe depression, and 20–27 severe depression.[16] A score of 10 or higher has a high specificity and sensitivity for detecting major depression.[17] For this analysis, scores were dichotomized as depressed (scores ≥10) or not depressed (scores ≤9). Staff complete the assessment based on resident responses to the items during an interview.

Cognitive impairment

Cognitive impairment was determined using the total severity score on the BIMS from MDS section C item C0500. Staff complete the assessment based on resident responses during an interview. The BIMS assesses repetition, recall, and temporal orientation with 9 questions and possible total scores ranging from 0 to 15. Scores of 13–15 indicate no or mild cognitive impairment, 8–12 moderate impairment, and 0–7 severe impairment.[18]

Sociodemographics

Age, race, sex, and marital status reported in MDS section A, items A0900, A1000, A0800, and A1200 were included in this study. Race was recategorized as Caucasian, African American, Hispanic, or other, which included Asian, Native Hawaiian, or other Pacific Islander, American Indian or Alaska Native, or multiracial. Marital status was recoded as married or not married. Not married individuals were those who indicated they were widowed, single, or divorced.

Analysis

Descriptive statistics for sample characteristics and preference responses were calculated. Preference responses were then dichotomized into "important" (includes *very important*, *somewhat important*, and *important but can't do or no choice*) and "not important" (includes *not very important* and *not important at all*) for the remaining analyses. Proportional difference tests were conducted and an arcsine transformation applied to determine Cohen's h effect size. Logistic regression was used (16 separate models, one for each preference) to analyze the relationship between resident characteristics and "important" preferences. Items coded "9–no response" were excluded in the analysis. The amount excluded ranged from 0.03% to 0.17% across items. Given the large sample size, odds ratios were converted to effect sizes to provide the magnitude of the significant results. All analyses were conducted in Excel (Microsoft Corp., Redmond, WA) and SAS Enterprise Guide 7.1 software (SAS Institute Inc., Cary, NC).