

Resident and Family Satisfaction with Nursing Home Care in Rhode Island: Differing Views of Performance

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The publication of family and resident satisfaction with nursing home care in late 2006 was the first report of its kind for Rhode Island's 92 nursing homes.¹ The two-year project, conducted with Quality Partners of Rhode Island and Vital Research, LLC, of California, consisted of self-administered surveys mailed to family members or friends of residents and face-to-face interviews with residents, including residents with mild-to-moderate cognitive impairment. The family and resident surveys were nearly identical in terms of dimensions of satisfaction ("domains") assessed and methods for scoring performance.² In an earlier publication, we presented information from the surveys on priority indices developed to guide quality improvement (QI) efforts in the state's nursing homes and found that the high priority domains for QI efforts identified by residents and their families differed.³ Here we present more specific information on the nature and extent of those differences.

Survey research in the long-term care setting can be challenging, particularly when residents are cognitively or physically impaired and need assistance in reading or answering the questions. The cost of conducting a cognitively adapted face-to-face interview can be prohibitive, however, so patient satisfaction survey organizations often default to a mailed survey for residents as well as family members. These organizations are keenly aware of the potential for loss of information from the impaired residents and for introduction of bias from staff persons, family members, or other residents who may provide assistance in filling out the survey. Rhode Island's nursing homes accepted the additional expense of a cognitively adapted face-to-face resident interview in order to include the broadest possible group of residents. Here we examine whether or not these two populations generally agreed or disagreed on the quality of care delivered in order to determine if future survey efforts might reasonably be limited to more cost-effective mailed surveys for residents or to surveys of family members only.

METHODS

The family and resident surveys, adapted from surveys developed for use in Ohio,⁴ assess satisfaction with care in eleven common domains or topics. On a home-by-home basis, we looked at the level of agreement between the residents surveyed (as a group) in that home versus the family

members surveyed (as a group) in that home. A total of 3,057 residents completed interviews, and 4,082 family members or friends returned completed surveys. The level of agreement across 92 homes within each survey domain and for total satisfaction was tested with a prevalence and bias-adjusted Kappa (PABAK) statistic.⁵ The Kappa statistic compares observed agreement versus expected agreement, taking into account the fact that two observers, or two groups of observers, will sometimes agree or disagree simply by chance. A Kappa of 0.00 or lower indicates poor agreement between residents and families, whereas a Kappa near 1.00 suggests near-perfect agreement.⁶ Because the satisfaction score is a continuous variable ranging from 1.00 points (low) to 4.00 points (high) but the Kappa statistic is based on a categorical outcome, we dichotomized all scores as less than 3.70 (out of 4.00) versus greater than or equal to 3.70. (Note: Because of the de-identified nature of the survey results, we were unable to examine agreement for resident-family pairs, which might provide more accurate analysis of agreement than our group analysis at the nursing home level. Moreover, our decision to dichotomize the scores as above or below 3.70 does not take advantage of a weighted Kappa, in which partial credit for agreement is given when ordinal responses are in adjacent rather than extreme categories of performance. Such weighting is beyond the scope of this inquiry.)

RESULTS

Overall, family and residents were more likely to agree ($K > 0$) than to disagree ($K < 0$). (Table 1) However, reasonable agreement, defined as a Kappa of 0.50 or higher between family members and residents, existed in only two of twelve scores. There was substantial agreement with respect to Meals and Dining ($K = 0.674$) and mod-

Table 1.
Comparative levels of satisfaction for nursing home residents and families, and Kappa statistic, by satisfaction domain, Rhode Island, 2006.

Satisfaction Domain	Levels of Satisfaction (Number of Nursing Homes)				Kappa Statistic
	A Residents: HIGH Families: HIGH	B Residents: HIGH Families: LOW	C Residents: LOW Families: HIGH	D Residents: LOW Families: LOW	
Meals and Dining	4	12	3	73	0.674
Activities	6	18	3	65	0.544
Direct Care	24	16	14	38	0.348
General Satisfaction	43	27	4	18	0.326
Administration	50	18	14	10	0.304
Resident Environment	20	36	4	32	0.130
Choice	13	9	33	37	0.087
Social Services	27	12	22	13	0.081
Therapy	1	35	2	39	0.039
Laundry	15	46	1	29	-0.033
Facility Environment	25	64	1	2	-0.413
Total Satisfaction	20	24	8	40	0.304

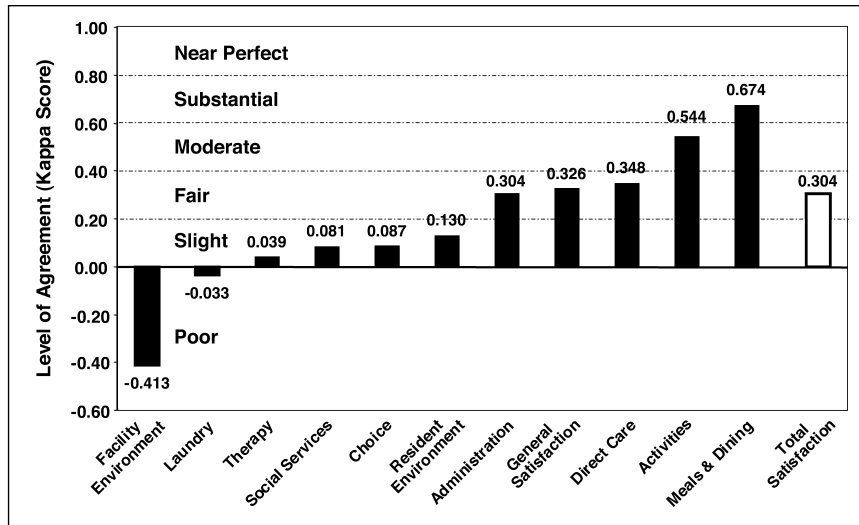


Figure 1. Level of agreement (Kappa statistic) between nursing home residents and families on satisfaction with care, by satisfaction domain, Rhode Island, 2006.

erate agreement with respect to Activities ($K = 0.544$). (Figure 1) The two groups surveyed were in least agreement regarding Facility Environment ($K = -0.413$) and Laundry services ($K = -0.033$), where family members appear to be less satisfied than the residents.

The numbers in the columns in Table 1 labeled A, B, C, and D correspond to the nursing home cell counts of the 2x2 matrix with which each Kappa is calculated. Rating a domain 'high' indicates that the respondent group (family or resident) scored that domain a 3.70 (out of 4.00) or higher, on average; a low rating corresponds to an average score of less than 3.70. With the exception of the Social Services ($n=74$), Therapy ($n=77$), and Laundry ($n=91$) domains, cell counts added up to 92, the total number of participating nursing homes, for each row of Table 1. (The Social Services and Therapy questions were not answered by all residents, so that the numbers of responses were too few to yield domain scores at the smaller nursing homes.) Note that the highest Kappa—or highest level of agreement—tends to occur where columns A and D produce

a large sum. For the Meals and Dining domain, for example, in 77 of 92 homes the family respondents as a group and the resident respondents as a group were in agreement in rating satisfaction with the homes' food services either high or low.

DISCUSSION

Survey researchers have noted previously that visitors—even regular visitors—are not good substitutes for assessment of elderly patient satisfaction with nursing home care.⁷ In our previous report, we noted that Rhode Island's nursing home residents and families have distinctly different improvement priorities for nursing home care.³ It appears that the additional resources needed to measure the satisfaction of the nursing home

residents were warranted in this state, for residents and their families have unique expectations of and experiences with long-term care.

Rhode Island's nursing home administrators understood the fundamental differences in family and resident expectations of long term care, and committed in January 2007 to follow up with and address each group's concerns in both separate and joint learning circles. We applaud their diligence and sensitivity in so doing.

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Disclosure of Financial Interests

Margaret S. Richards, PhD, and Gwen C. Uman, RN, PhD, have no financial interests to disclose.

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