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# 2006 NATIONAL SURVEY OF RESIDENT AND FAMILY SATISFACTION IN NURSING FACILITIES

Two years of data focus on quality of life, care and service

## EXECUTIVE SUMMARY

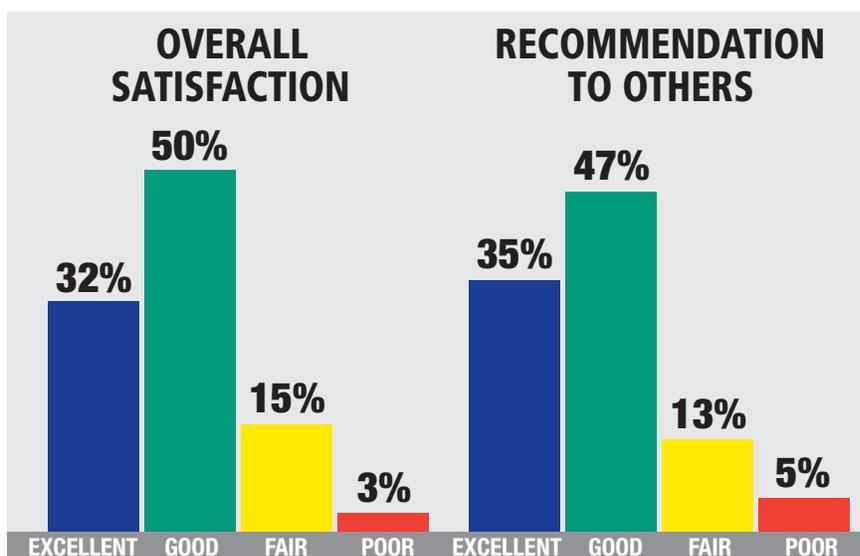
**R**esident and family satisfaction has become increasingly recognized by long-term care providers as a critical aspect of nursing home care. Providers across the country made a commitment to surveying their customers in 2005, which enabled the release of the first national report on resident and family satisfaction. In 2006, My InnerView conducted satisfaction surveys with residents and families from 2,899 nursing facilities in 50 states and the District of Columbia. This represents a 30% increase in the number of participating facilities since the first national report.

This second annual report summarizes key findings using data from 92,433 survey respondents — a much larger sample than the preceding year. Data for this report come from mailed, self-administered resident and family satisfaction surveys. Two global questions ask respondents to rate the overall quality of their nursing home care in terms of their overall satisfaction and how they would recommend it to others. Additional survey items collect ratings for specific performance areas within three quality domains, as well as general respondent characteristics. Selected findings include the following:

■ **Most nursing home resident and family respondents (82%) are satisfied with their nursing facility.** Among the top 10% of facilities ranked on customer satisfaction, 96% of respondents were satisfied.

■ **Similarly, most residents and family members (82%) would recommend their facility to others as “excellent” or “good.”** This compares to 97% of respondents in the top 10% ranked facilities.

FIGURE 1



The study also finds that:

- **Eighty percent rate the quality of life as “excellent” or “good.”** Quality of life encompasses such things as the respectfulness of staff, having one’s privacy respected, being provided religious and spiritual activities, and meeting one’s choices and preferences.
- **Seventy-eight percent rate the quality of care as “excellent” or “good.”** Quality of care refers to such things as the adequacy, competency and attitudes of staff; the care provided by nurses, aides and therapists; how the resident is groomed; and how residents and their families are kept informed.
- **Seventy-three percent rate the quality of service as “excellent” or “good.”** Quality of service encompasses meals, laundry services, cleanliness of the premises and management responsiveness.
- **Average satisfaction ratings for items within each of the three quality domains are much higher in facilities where residents are more likely to have the highest recommendation ratings** (see FIGURE 6, page 7).
- **Compared to 2005, average satisfaction scores remained relatively stable. However, the proportion of most satisfied respondents (i.e., “excellent” ratings) increased significantly, particularly within seven of nine quality of life items** (see FIGURE 7, page 8).

Findings from this study extend knowledge about nursing facility customer satisfaction in four important ways. First, the study draws from the most recent and largest available dataset of nursing facility resident and family member survey respondents to present satisfaction trends from 2006. Second, survey results provide evidence that the proportion of customers who are satisfied and would recommend their facility to others remains high. Third, nursing facilities appear to perform somewhat better on issues of quality of life compared to other quality domains. Finally, this report provides evidence of significant improvement in terms of the growing proportion of most satisfied respondents (i.e., “excellent” ratings), particularly in the quality of life domain.

My InnerView is an applied research company that currently works with over 5,300 housing and long-term care providers throughout the United States to promote quality improvement through evidence-based management.

Contributions to this report were made by the following members of My InnerView’s research team: Leslie A. Grant, Ph.D., Mauro Hernandez, Ph.D., Michael Davern, Ph.D., V. Tellis-Nayak, Ph.D., Amy Hu, M.S., and Eric Lewerenz, M.S.

## INTRODUCTION

The *2006 National Survey of Resident and Family Satisfaction in Nursing Facilities* is based on the largest dataset on customer satisfaction in nursing facilities in the United States. My InnerView conducted satisfaction surveys with residents and families from 2,899 nursing facilities in 50 states and the District of Columbia. This second annual report summarizes key findings using data from more than 92,433 survey respondents and addresses five questions:

- 1 Who are the respondents to the survey?**
- 2 How satisfied are respondents with the services being provided?**
- 3 How do respondents rate the quality of life, care and service?**
- 4 How do satisfaction ratings compare when ranking facilities by recommendation?**
- 5 How does satisfaction in 2006 compare with 2005?**

### Why measure customer satisfaction in nursing facilities?

During the last three decades, providers, employers, policymakers and payers have begun to consider customer satisfaction as a key measure of quality in long-term care. At the same time, regulatory compliance activities continue to rely on expert judgment, as well as process-oriented and clinical measures of quality. The Omnibus Reconciliation Act (OBRA) of 1987 and other more recent initiatives — such as evidence-based approaches, culture change and pay-for-performance — have emphasized customer satisfaction. Several state legislatures have mandated or encouraged customer satisfaction in nursing facilities while also encouraging similar surveys to be conducted with employees. Both types of surveys have become more commonplace in long-term care.

Growing research in this field provides evidence that resident, family and employee satisfaction are among the most telling indicators of nursing-home quality. A key goal of the national *Advancing Excellence in America's Nursing Homes* campaign ([www.nhqualitycampaign.org](http://www.nhqualitycampaign.org)) is for providers to regularly assess resident and/or family satisfaction. The use of standardized survey tools for measuring satisfaction allows providers to identify areas for inclusion in their performance improvement activities. My InnerView's research has found that customer satisfaction ratings are positively associated with other measures of clinical, personnel, occupancy and regulatory performance.

### How was the survey conducted?

Data from this study come from mailed resident and family surveys that were completed and returned to My InnerView in 2006 (refer to **RESEARCH METHODS**, page 10). The survey instrument was designed by nationally recognized experts in long-term care and has undergone extensive testing of its validity and psychometric properties. It is a comprehensive survey of manageable length that is theoretically grounded. Respondents are asked to rate their nursing facilities in response to both general and specific performance areas using a four-point scale (excellent, good, fair or poor).

Additional questions gather general demographic and background information about the respondents but no personally identifiable data are included. Survey results are used to generate feedback reports for participating organizations and are designed to support quality and performance improvement efforts.

Since the survey respondents do not represent a random stratified sample, national estimates of resident and family satisfaction are based on a standard weighting methodology that My InnerView researchers used to adjust for facility characteristics within each state and nationally (refer to **WEIGHTING PROCEDURES**, page 10).

## FINDINGS

### 1 Who are the respondents to the survey?

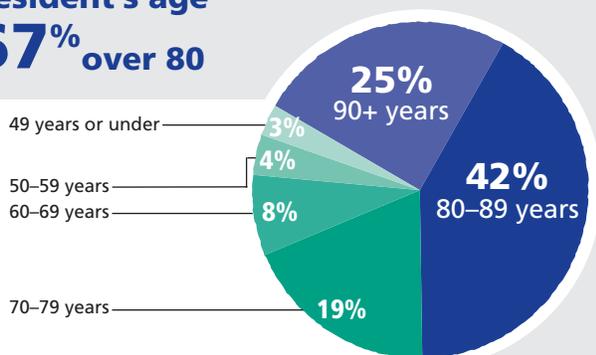
National survey results come from a growing proportion of resident respondents, as well as family respondents who are typically adult children and frequent visitors.

- Surveys were completed by 92,433 residents and families in 2006 —30% more respondents than in 2005. This reflects the 30% increase in nursing facilities that participated in this survey.
- The residents who are represented in this survey have similar demographic characteristics to those reported in other national studies.<sup>1</sup> Specifically, most residents are women (72%) and 80 or more years old (67%). A large majority (62%) have lived in the nursing facility for at least one year (see FIGURE 2).
- The proportion of resident respondents increased from 11% in 2005 to 16% in 2006. Adult children represented the majority of family respondents (52%), as well as the most typical visitor (53%) (see FIGURE 2). The frequency of such visits is high — most family members (84%) visit the resident once a week or more.

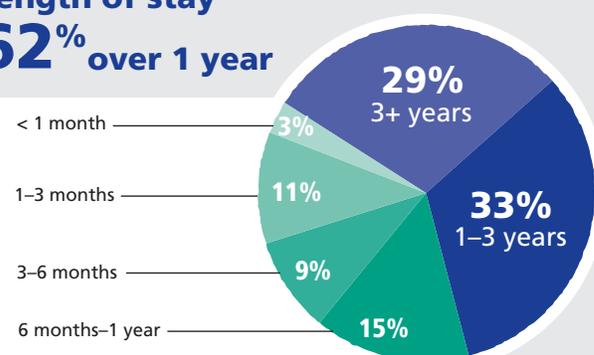
FIGURE 2

**92,433 respondents • 84% families of residents • 16% residents**

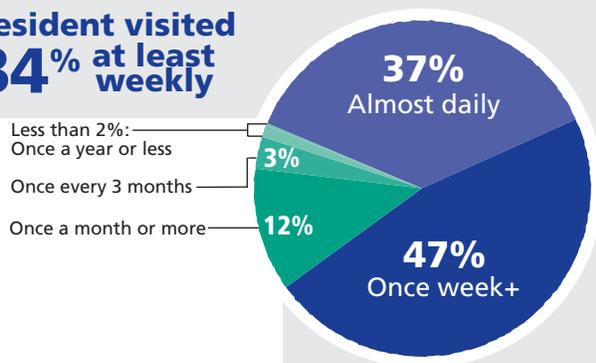
#### Resident's age **67% over 80**



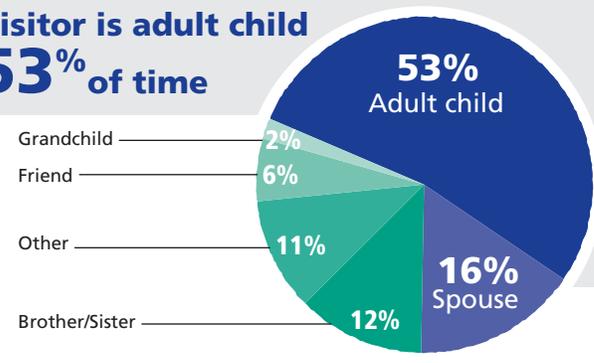
#### Length of stay **62% over 1 year**



#### Resident visited **84% at least weekly**



#### Visitor is adult child **53% of time**



Results based on data from resident and family responses combined.

<sup>1</sup> Jones, A. (2002). The National Nursing Home Survey: 1999 Summary. Hyattsville, MD: Vital and Health Statistics, National Center for Health Statistics, Department of Health and Human Services.

## 2 How satisfied are respondents with the services being provided?

When asked to judge the overall quality of their nursing facility on two global items — overall satisfaction and recommendation to others — most resident and family respondents (82%) gave their facility an “excellent” or “good” rating (see FIGURE 1, page 1).

- The largest proportion of respondents rated their overall satisfaction with the facility as “good” (50.4%), followed by “excellent” (31.6%) or “fair” (14.6%). Those who were least satisfied (according to a rating of “poor”) represented the smallest proportion of respondents (3.4%).
- In terms of recommendation to others, almost half of the respondents (47.3%) gave a “good” rating, followed by “excellent” (35.0%) or fair (13.1%). The smallest proportion of respondents gave a “poor” recommendation (4.7%).
- Among those nursing facilities that would be considered “best in class” — defined as the 90th percentile or the top 10% on customer satisfaction — the proportion of “excellent” and “good” responses increases to 95.7% for overall satisfaction and 96.6% for recommendation to others.

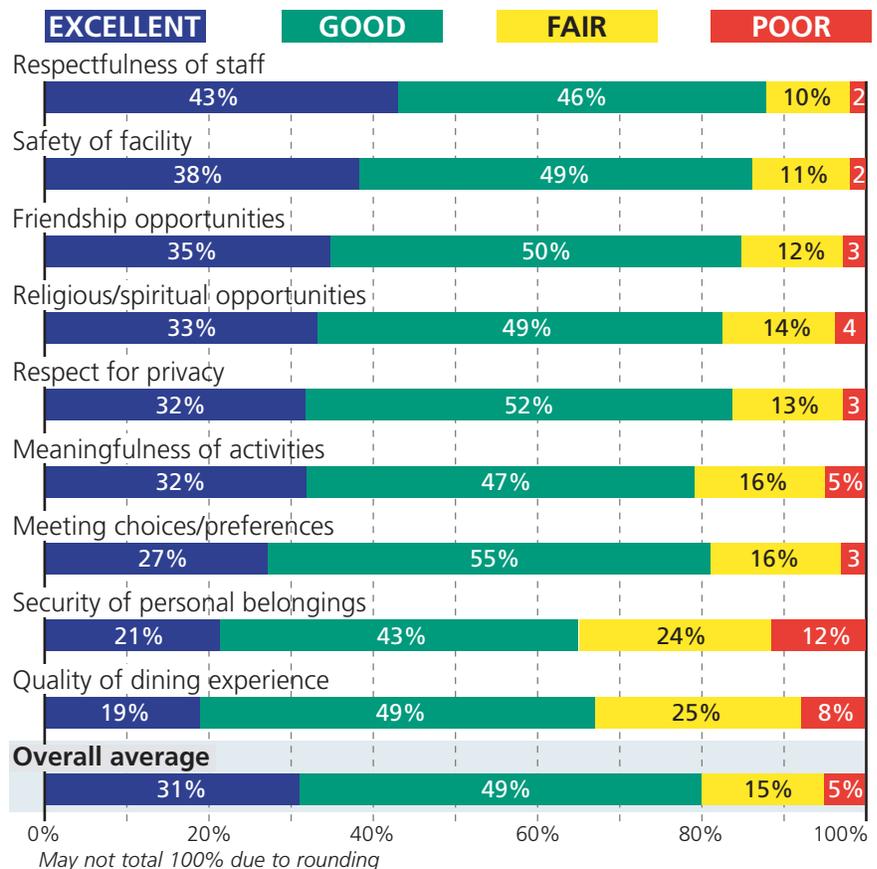
## 3 How do respondents rate the quality of life, care and service?

My InnerView researchers assessed three quality domains: (1) quality of life, (2) quality of care and (3) quality of service. Nursing facilities continued to earn somewhat higher scores across quality of life items (80.1% “excellent” and “good”), followed by quality of care (77.6%) and quality of service (72.6%).

### QUALITY OF LIFE

The quality of life domain measures such things as the respect shown by staff, having one’s privacy respected, being provided religious and spiritual activities, and meeting one’s choices and preferences (see FIGURE 3). Providers received the highest “excellent” ratings from customers for being treated with respect, the safety of the facility, and being provided opportunities for friendships with residents and staff. The two lowest-ranked items were quality of dining experience and security of personal belongings.

FIGURE 3

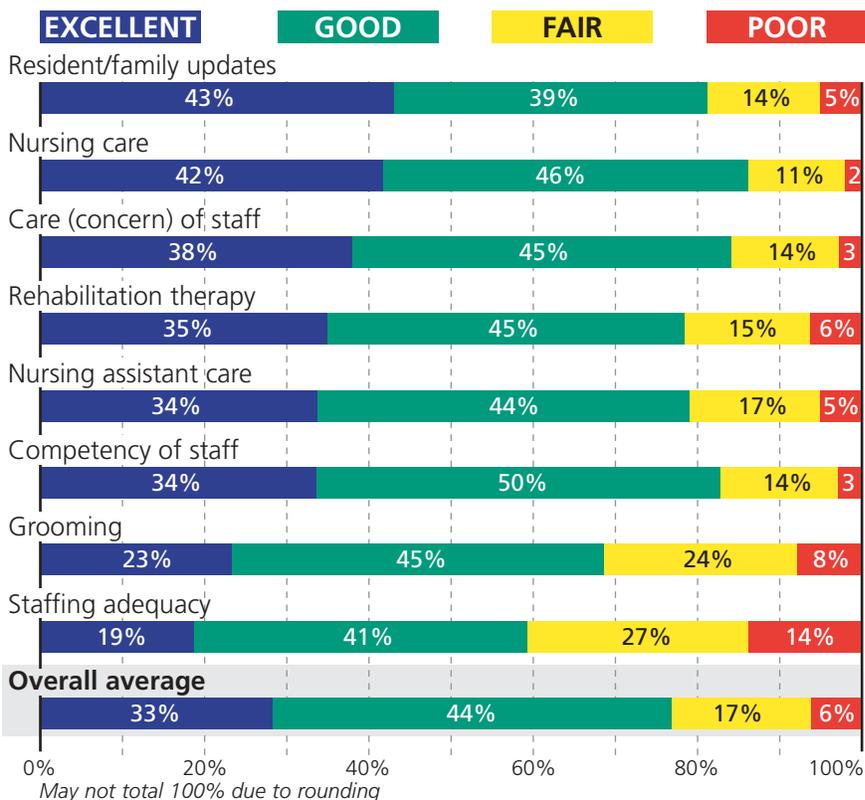


To identify the top drivers of customer satisfaction, the strength of the relationships between each quality of life and both global satisfaction items was also examined. Results provide evidence that respect, safety and choice were the highest predictors of overall satisfaction and recommendation ratings. Within this domain, friendship opportunities, meaningful activities and religious/spiritual activities were the lowest predictors of global satisfaction.

## QUALITY OF CARE

The quality of care domain measures how residents feel about such things as the adequacy, competency and attitudes of staff; the care provided by nurses, aides and therapists; how the resident is groomed; and how residents and their families are kept informed. Survey respondents continue to give their nursing homes the highest ratings of “excellent” for being kept informed, the quality of care provided by nurses, and the care and concern shown by staff (see FIGURE 4). The two lowest ranked items were adequacy of staff and grooming.

FIGURE 4

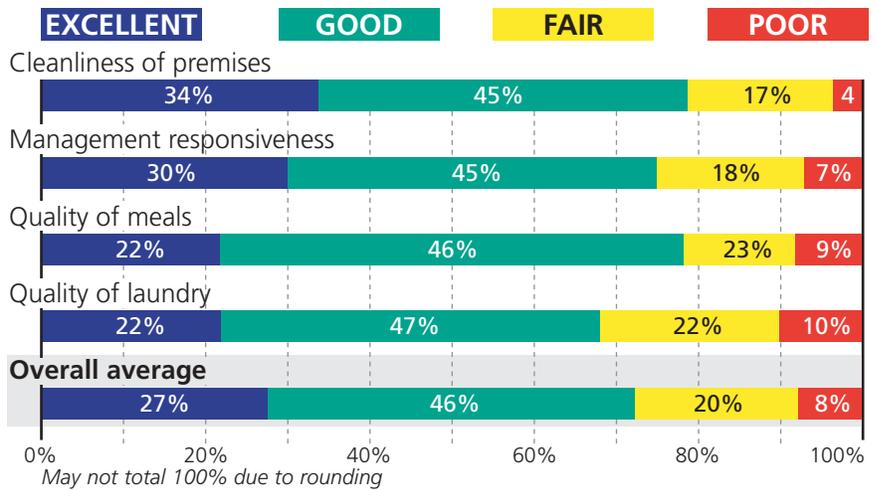


Within the quality of care domain, the highest predictors of overall satisfaction and recommendation ratings were caring and competent staff, as well as quality nursing staff. Respondent ratings for grooming needs, resident/family updates and rehabilitation therapy quality were least predictive of these global satisfaction items.

## QUALITY OF SERVICE

In terms of “excellent” ratings for quality of service items, facilities continue to do better on cleanliness of premises and management responsiveness. Quality of meals and laundry items had lower ratings (see FIGURE 5). Correlation analyses results showed that satisfaction with management responsiveness was the highest and laundry was the lowest predictor for both global satisfaction items.

FIGURE 5

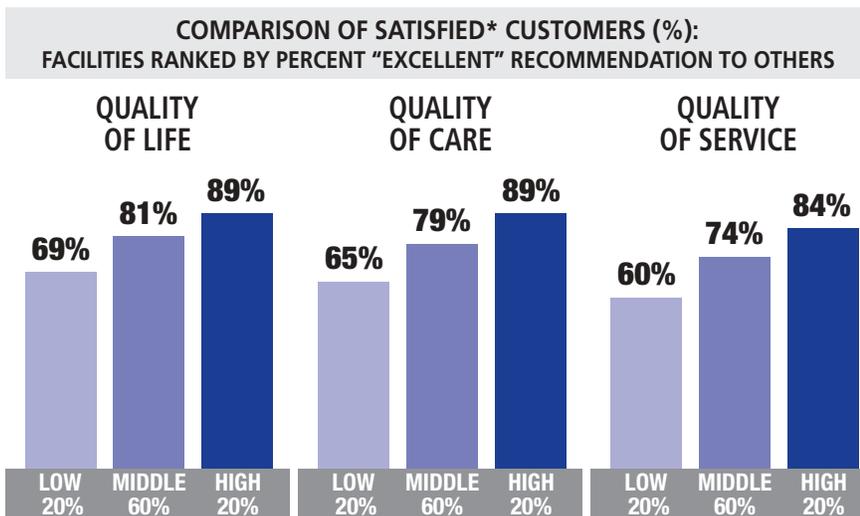


## 4 How do satisfaction ratings compare when ranking facilities by recommendation?

To answer this question, nursing facilities were ranked according to the proportion of residents and families who gave their facility the highest recommendation score of “excellent.” The “Low” group represents the bottom 20% ranked facilities that had the lowest proportion of “excellent” recommendation scores. The top 20% ranked facilities were included in the “High” group. We then calculated the average proportion of “excellent” and “good” ratings for each of the three aggregated quality domains.

Results show that nursing facilities with the highest proportion of respondents who would recommend their facility to others as “excellent” consistently receive higher average satisfaction ratings across each of the three quality domains. Specifically, the proportion of satisfied customers was at least 20 points

FIGURE 6



\* Based on percent “excellent” and “good” responses

higher in the top 20% (“High” group) than the bottom 20% (“Low” group) whether measuring quality of life, quality of care or quality of service items. These findings are not surprising when considering that the likelihood of customers recommending their facility to others may be driven by their cumulative experiences in three distinct constructs of quality.

## 5 How does satisfaction in 2006 compare with 2005?

Since this study represents the second annual national survey of nursing home resident and family satisfaction, we were interested in how satisfaction scores differed from one year to the next. To answer this question, we first compared average weighted scores for individual-level responses to each survey item between 2005 and 2006. We did the same comparison for the proportion of “excellent” responses to each item between survey years. Standard tests were used to identify changes that would be considered statistically significant (refer to RESEARCH METHODS, page 10).

Compared to 2005, average satisfaction scores remained relatively stable. Across all satisfaction items, seven showed very modest and statistically significant ( $p < .05$ ) increases in their average scores, ranging from 1.4% higher for meeting resident choices to 4.4% higher for the quality of rehabilitation therapy. Average scores were significantly lower for two items — grooming needs (2.3%) and safety of facility (2.0%).

When comparing the proportion of “excellent” responses, our analyses provide evidence of improvement in satisfaction for a larger number of areas (see FIGURE 7). The proportion of “excellent” responses showed modest (difference was 6% to 13% higher) and statistically significant ( $p < .05$ ) improvements in seven of nine quality of life items, one of which was 5% lower ( $p < .05$ ). Two of the eight quality of care items and two of the four quality of service items also showed similar improvements in the proportion of most satisfied residents. Reported changes in other items were not statistically significant.

FIGURE 7

CHANGE IN MOST SATISFIED* NURSING FACILITY CUSTOMERS, 2005–2006		
		Percent Change
<b>QUALITY OF LIFE</b>	Quality of dining experience	13%
	Security of personal belongings	12%
	Religious/spiritual opportunities	11%
	Meeting choices/preferences	10%
	Friendship opportunities	7%
	Meaningfulness of activities	7%
	Respect for privacy	6%
	Respectfulness of staff	n.s.
	Safety of facility	-5%
<b>QUALITY OF CARE</b>	Rehabilitation therapy	12%
	Resident/family updated	8%
	Staffing adequacy	n.s.
	Care (concern) of staff	n.s.
	Competency of staff	n.s.
	Grooming	n.s.
	Nursing care	n.s.
	Nursing assistant care	n.s.
<b>QUALITY OF SERVICE</b>	Quality of meals	9%
	Quality of laundry	8%
	Cleanliness of premises	n.s.
	Management responsiveness	n.s.
<b>GLOBAL SATISFACTION</b>	Overall satisfaction	n.s.
	Recommendation to others	n.s.

\* Based on percent “excellent” and “good” responses  
n.s. = Not statistically significant

## SUMMARY AND DISCUSSION

There has been increasing recognition that customer satisfaction is an essential measure of quality in nursing home care. This represents a significant shift in focus for evaluating quality that moves beyond structure and process evaluation to emphasizing outcomes in: (a) clinical areas, (b) satisfaction as reported by residents and families and (c) quality of life.<sup>2</sup> This report presents findings from the second national study of resident and family satisfaction in nursing facilities throughout the U.S. Findings from this study extend knowledge about nursing facility customer satisfaction in four important ways.

■ **First, the study draws from the most recent and largest available dataset of nursing facility resident and family member survey respondents to present satisfaction trends from 2006.** Results are timely and provide important feedback for nursing home providers. The increased use of a common, standardized satisfaction tool has several important implications for the profession. Providers may be better able to monitor the quality of services as rated by their primary customers while comparing performance across multiple areas, within their own facility and in comparison to other facilities over time. Increasing participation in satisfaction surveys may also facilitate state efforts to use customer satisfaction as one criterion for enhancing Medicaid reimbursement rates. Customers are also afforded another important tool for confidentially providing feedback to facility owners and management about areas for improvement.

■ **Second, survey results provide evidence that the proportion of customers who are satisfied and would recommend their facility to others remains high.** Contrary to common perceptions and attitudes about receiving care in a nursing facility, the closest observers of care in these settings — residents and family members — seem to have mostly favorable experiences with the care that they receive. Possible explanations for this apparent contradiction include the lack of public reporting of and attention to nursing facility customer satisfaction. The number of nursing facility satisfaction studies is relatively small and results have not been widely reported except in a few scientific journals, state commissioned reports and industry periodicals.

■ **Third, nursing facilities appear to perform somewhat better on issues of quality of life compared to other quality domains.** Of particular importance is the role of interpersonal aspects of care (i.e., staff care and concern, being shown respect, having choices and preferences met, management responsiveness) that are strongly associated with overall satisfaction. These findings should interest nursing facility owners, managers and staff wanting to focus attention on areas that are most likely to influence satisfaction within existing resource limitations.

■ **Finally, this report provides evidence of significant improvement in terms of the growing proportion of the most satisfied respondents (i.e., "excellent" ratings), particularly in the quality of life domain.** Eleven of the twelve areas that showed a statistically significant change were positive and seven of these were for quality of life items. One possible explanation for these findings may reflect the effect of directing new or increased attention to these particular areas of performance. Improvements in other areas may be more difficult to realize across such a large number of organizations within a short period of time. Future research might examine the influence of "culture change" and resident-centered care practices that have received considerable attention in recent years. Some caution is indicated when interpreting results from two years of data since the time period is too short to be considered a trend. Nevertheless, improvements in the proportion of most satisfied nursing home customers are noteworthy and should be considered promising.

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<sup>2</sup> Lowe, T. J., Lucas, J. A., Castle, N. G., Robinson, J. P., & Crystal, S. (2003). Consumer Satisfaction in Long-Term Care: State Initiatives in Nursing Homes and Assisted Living Facilities. *Gerontologist*, 43(6), 883-896.

## RESEARCH METHODS

This section provides an overview of the research methods used for the national satisfaction survey by describing data sources, survey instruments used, survey distribution, as well as other weighting, imputation and analytic procedures. The study is based on mailed survey data collected from 2,899 nursing homes that engaged My InnerView to measure the satisfaction of their residents and families in 2006.

The survey questionnaires were designed by members of My InnerView's research team — Leslie A. Grant, Ph.D. and V. Tellis-Nayak, Ph.D. Initial survey questionnaire design was based on reviews of the literature and existing surveys, in-depth interviews with residents and families, focus groups and corresponding content analyses. The resident and family member questionnaires include 24 questions that correspond to specific domains within four broader constructs — quality of life, quality of care, quality of service and global satisfaction. Instruments underwent cognitive testing for question and response development. Additional analyses were conducted that provide strong empirical support for the predictive validity and construct validity of the survey instruments. My InnerView's survey instrument has undergone extensive field testing and has outstanding psychometric properties (refer to **VALIDITY OF SURVEY INSTRUMENT**, page 12).

Information for mailing the resident and family satisfaction surveys was provided by participating nursing facility representatives to My InnerView. To protect respondent privacy and ensure confidentiality, survey questions do not ask for personal identifying information. The surveys were completed by individual respondents and mailed directly to My InnerView using self-addressed stamped envelopes that were included in the mailed survey and instruction packet.

Since the participating nursing facilities represent a convenience sample rather than a random stratified sample, national estimates of resident and family satisfaction are based on a standard weighting methodology that My InnerView researchers used to adjust for facility characteristics within each state and nationally (refer to **WEIGHTING PROCEDURES**, below). To address missing data for individual survey items, values were imputed using selected demographic and location characteristics for each respondent. All imputations were done using the standard hot-deck procedure available in Stata® software. Analyses included descriptive statistics (frequencies, percents, means) and correlations, as well as group score comparisons using two-sample t-tests and analyses of variance (ANOVA).

### WEIGHTING PROCEDURES

In order to create representative weights, we assume that the respondents to the survey are representative of their facilities, as well as those facilities that did not participate in the survey. Weights were constructed for each respondent based on:

1. The number of residents in the facility
2. The state where each facility is located
3. Whether the facility is in a Metropolitan Statistical Area (MSA) versus a non-Metropolitan Statistical Area (non-MSA)
4. Ownership of the facility

Secondary data used to construct the weights included the total number of residents per nursing facility and the MSA code for each facility.<sup>3</sup> The weighting process resulted in each respondent to the survey being representative of the number of residents in a facility, the number of residents in the state and the number of residents nationally.

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<sup>3</sup> Nursing home resident data available through the Centers for Medicare and Medicaid Services ([www.cms.gov](http://www.cms.gov)); MSA codes available through the Information Technology Laboratory at the National Institute of Standards and Technology ([www.itl.nist.gov](http://www.itl.nist.gov)).

To construct the weights, we used several steps. First, we built a basic weight, which is equal to the number of residents divided by the number of respondents in each facility. Second, we created a state weight by post-stratifying the basic weight to the state nursing home resident population totals based on the number of nursing home residents in the state by MSA versus non-MSA location, and for-profit versus not-for-profit ownership. Third, we created a final weight by adjusting the state weight to equal the U.S. national nursing home resident population totals for the number of residents nationally by whether the facility is in a MSA versus a non-MSA location, and whether the facility is for-profit versus not-for-profit.

### **BASIC WEIGHT**

The basic facility-level weight is calculated by taking the number of residents in the facility divided by the number of survey respondents in the facility. We assume that the respondents within a facility are not different from the non-respondents.

Basic weight = (Number of residents/Number of respondents)

### **STATE WEIGHT**

To create the state weight, we created a series of nursing home resident population control totals at the state level. The control totals are the number of residents in facilities within the state by MSA versus non-MSA location, and whether the facility is for-profit versus non-profit. Accordingly, each state can have up to four population control totals (2 x 2) based on MSA versus non-MSA and for-profit versus non-profit. Each respondent's basic weight is multiplied by the quantity of the number of residents in the control total divided by the sum of the basic weights within each of these four cells within each state.

State weight = Basic weight x (sum of the residents within population control total cell/sum of basic weight within population control total cell)

Each respondent's basic weight is multiplied by one of four quantities.

### **FINAL WEIGHT**

Because there were no respondents to the survey in some of the population control total cells by state, to create a national weighted estimate we further modified the state weight to create a final weight that is representative of the country.

Final weight = State weight x (sum of residents within population control total cell/sum of basic weight within population control total cell)

The final weight is equal to the weighted national totals of the number of residents in nursing facilities throughout the U.S. This final weight was used to make national level estimates of resident and family satisfaction.

## VALIDITY OF SURVEY INSTRUMENT

Cronbach's coefficient alpha is a special application of construct validity. In general, a Cronbach's alpha of 0.80 or greater is considered excellent. Figure 8 shows Cronbach's coefficient alphas for four sub-scales and overall satisfaction scale in our resident and family satisfaction survey instrument.

FIGURE 8

### CRONBACH'S ALPHA COEFFICIENTS FOR RESIDENT AND FAMILY SATISFACTION SCALE AND SUB-SCALES

SUB-SCALE/SCALE	NO. ITEMS	CHRONBACH'S ALPHA	N
Quality of life	10	.92	66,658
Quality of care	8	.92	68,461
Quality of service	4	.79	66,302
Global satisfaction	2	.95	88,119
Satisfaction scale	24	.97	45,345

NOTE: Observations with missing or skipped items are excluded from the reliability analysis. Sample sizes are reduced because Cronbach Alpha coefficients are calculated by excluding imputed values to avoid spurious correlations.

Grant<sup>4</sup> found very strong positive correlations between family and employee satisfaction assessed using My InnerView's customer and employee satisfaction survey instruments. Because these data come from two independent sources (i.e., a survey of families and a separate survey of employees), there is strong empirical evidence for the predictive validity of My InnerView's survey instruments.

<sup>4</sup> Grant, L.A. (2004). Organizational Predictors of Family Satisfaction in Nursing Facilities. *Seniors Housing and Care Journal*. Vol. 12, No. 1, 3-13.

An electronic version of this report and other related information (including the 2005 report) can be found at [www.myinnerview.com](http://www.myinnerview.com).