

Customer Satisfaction Tools for Skilled Nursing Facilities

My InnerView has developed customer satisfaction survey instruments for residents, families and employees of skilled nursing facilities, assisted living facilities and independent housing. In addition to these core survey instruments, My InnerView has a number of survey tools for specialized applications such as short-stay or Medicare patients discharged from nursing facilities, families of memory-care residents in nursing and assisted living facilities, home health, adult day health care, hospice and rehabilitation companies. My InnerView also offers organizational assessments focused on corporate culture, leadership and culture change.

My InnerView has the largest national database on resident, family and employee satisfaction in nursing facilities with:

- 5,318 facilities in our skilled nursing resident and family satisfaction database representing over 400,000 respondents
- 4,486 facilities in our skilled nursing employee satisfaction database with over 580,000 respondents

In total, My InnerView has worked with over 8,300 senior care providers in all 50 states and the District of Columbia. The strategy behind the development of My InnerView's resident, family and employee satisfaction tools is described in the following pages.

■ SURVEY VALIDITY

My InnerView's customer (resident and family) and employee satisfaction instruments for skilled nursing and assisted living were developed by My InnerView researchers and members of the faculty of the University of Minnesota including Leslie A. Grant, Ph.D., Associate Professor of Healthcare Management and Director of the Center for Aging Services Management.

Survey development

An extensive literature review was conducted and a large number of existing survey instruments examined in the development of My InnerView's customer and employee surveys. In-depth interviews of residents and family members were carried out, using unstructured interviews with open-ended questions. Qualitative data were collected from over 75 focus groups in sites across the country. Content analyses of these focus groups identified themes that are important for residents and families when it comes to assessing quality of skilled nursing and assisted living services. These focus groups provide face validity in the development of our instruments. Additionally, all the survey instruments have undergone extensive field testing and subsequent validation.

■ FACTOR ANALYSIS

We ran separate factor analyses of the family and employee satisfaction scales using data over several years. Similar results were obtained for each year using either orthogonally or obliquely rotated solutions.

Family satisfaction is comprised of two factors:

- Factor one represents omnibus or system-wide satisfaction and includes all items on My InnerView's family satisfaction scale, excluding those in the second factor.
- Factor two represents satisfaction with social relationships, activities and rehab therapy. The second factor is related primarily to the resident's social life, and includes five items related to friendships with staff, friendships with residents, meaningful activities, religious and spiritual needs and rehabilitation therapy.

Employee satisfaction is comprised of three factors:

- Factor one represents satisfaction with the work environment and includes items in the work environment and global satisfaction sub-scales (excluding the two items related to performance evaluations and support with stress/burnout). It represents an omnibus or system-wide factor related to the quality of the work environment and global satisfaction.
- The second factor includes satisfaction with supervision, management and the two items related to performance evaluations and support with stress/burnout. It is related to human resource management practices (e.g., supervision, management, performance evaluations, and support in dealing with stress and burnout).
- Factor three represents satisfaction with training and includes four items in the training sub-scale. It represents training and orientation.

■ QUALITY IMPROVEMENT

Because My InnerView survey tools are designed to assist provider organizations in implementing quality-management and quality-improvement practices, our sub-scales are derived using a combination of both deductive and inductive approaches. While we believe that a purely inductive approach is useful to inform research, it is sometimes not as useful in the "real world" operational context. Scales or sub-scales derived using a strictly inductive paradigm may fail to inform provider organizations precisely where potential problems exist. A strictly inductive paradigm also impedes the provider's ability to take targeted actions to identify, define and correct existing problems.

Our surveys are designed to assist in implementing a systematic continuous quality-improvement (CQI) or quality-improvement cycle that enables provider organizations to apply basic problem-solving techniques within their organizations. Thus, our scales and sub-scales are meant to provide feedback that is "actionable." Because we are most interested in providing "actionable" data that can be turned into information that can ultimately be turned into knowledge about internal organizational systems and processes, we intentionally adopted a strategy that combines inductive and deductive approaches in line with grounded theory.

My InnerView researchers explored the interdependence of core systems such as leadership, organizational culture, clinical processes, human resources, management practices, environmental design, operations and information systems on performance outcomes such as customer and employee satisfaction. Our customer satisfaction surveys are integrated into My InnerView's overall quality-improvement system. Web-based resources are offered for performance measurement and

quality improvement that focus on a balanced set of performance metrics including satisfaction among residents, families and employees, and other organizational performance metrics representing clinical, human resource, state survey and financial performance.

The survey instruments provide very strong empirical evidence for the interrelationships among key parameters of organizational performance (e.g., customer satisfaction, state survey compliance, clinical performance, human resources (or workforce) performance and financial performance.) Thus, we have a strong empirical basis to support the predictive validity and construct validity of our instruments.

■ THE IMPORTANCE OF A SATISFIED WORKFORCE

My InnerView's research strongly supports the relationship between employee satisfaction and overall long-term care quality. The most comprehensive measure of overall quality in long-term care is the satisfaction of residents and families. The top five predictors of resident and family satisfaction on My InnerView survey results are all related to the quality of staff.

They are:

- The staff's care and concern for the resident/patient
- The competency of staff
- The quality of care provided by the nurses (RNs/LVNs/LPNs)
- The quality of care provided by the nursing assistants (CNAs/NAs)
- The respect shown to the resident/patient by staff

Additionally, there are strong relationships between both the satisfaction of staff as well as with the stability and lack of turnover of staff with the satisfaction of residents and their families.

Employee satisfaction and stability are related not only to turnover but to clinical outcomes and regulatory performance as well.

One source of construct validity for My InnerView's employee and family satisfaction surveys is provided by Grant (2004). This award-winning research paper found a strong positive correlation between family and employee satisfaction in nursing facilities. Because these data were drawn from independent sources, they provide strong support for the predictive validity of our survey instruments.

Clinical performance

Three clinical metrics are significantly correlated with both family and employee satisfaction.

- The proportion of residents without falls is positively correlated with family satisfaction ($p = .009$). It is positively correlated with employee satisfaction ($p = .005$).
- The proportion of residents without pressure ulcers shows a trend toward significance ($p = .076$). It is positively correlated with employee satisfaction ($p = .001$).
- The proportion of residents without catheters is positively correlated with family satisfaction ($p = .049$) and employee satisfaction ($p = .032$).
- The proportion of residents without weight loss or gain shows a slight trend towards statistical significance ($p = .138$) with employee satisfaction.

Workforce performance

All six measures of workforce performance are correlated with family satisfaction. Four of these measures are correlated with employee satisfaction.

- CNA turnover is negatively correlated with family satisfaction ($p = .001$). It shows a weak trend toward significance with employee satisfaction ($p = .124$).
- Nurse turnover is negatively correlated with family satisfaction ($p = .000$) and employee satisfaction ($p = .014$).
- CNA stability (i.e., retention) is positively correlated with family satisfaction ($p = .015$). It shows a weak trend toward significance with employee satisfaction ($p = .166$).
- Nurse stability is positively correlated with family satisfaction ($p = .000$). It shows a trend toward significance with employee satisfaction ($p = .070$).
- CNA absenteeism is negatively correlated with family satisfaction ($p = .034$) and employee satisfaction ($p = .000$).
- Nurse absenteeism is negatively correlated with family satisfaction ($p = .002$) and employee satisfaction ($p = .000$).

Financial performance

Occupancy is the only measure of financial performance that is currently tracked by My InnerView's Quality Profile™.

- Occupancy is positively correlated with family satisfaction ($p = .021$) and employee satisfaction ($p = .032$).

Higher family satisfaction as measured by My InnerView's family satisfaction scale is significantly correlated (at $p < .05$ or less) with more residents without falls, more residents without catheters, lower CNA turnover, lower nurse turnover, higher CNA stability, higher nurse stability, lower CNA absenteeism, lower nurse absenteeism and higher occupancy.

Higher employee satisfaction as measured by My InnerView's employee satisfaction scale is significantly correlated (at $p < .05$ or less) with more residents without falls, more residents without pressure ulcers, more residents without catheters, lower nurse turnover, lower CNA absenteeism, lower nurse absenteeism and higher occupancy.

Earlier analyses that we completed show associations between state survey compliance and customer satisfaction among families and employees. Facilities with higher state survey compliance have higher family and employee satisfaction.

This analysis highlights the fact that both family and employee satisfaction are associated with My InnerView's clinical, workforce and financial performance metrics, as well as with state survey compliance. These data provide solid empirical evidence for the interrelationships among different measures of organizational performance tracked by My InnerView systems.

This analysis also provides strong empirical evidence for the reliability and validity of our survey tools, specifically for our instruments assessing family and employee satisfaction in nursing facilities. We are in the process of conducting more sophisticated multivariate analyses looking at the predictors of customer satisfaction. This ongoing work should lead to better predictive models and improve our theoretical understanding of organizational systems and processes that drive performance.

■ MY INNERVIEW'S RESEARCH ON NATIONAL SATISFACTION RATES IN SENIOR CARE SERVICES

My InnerView is an applied research firm that measures satisfaction among nursing facilities nationwide and other senior care services providers. In 2007, My InnerView published the largest, most comprehensive study ever produced on the satisfaction of residents, their families and employees in America's nursing homes. The study was in over 4,000 nursing facilities, representing fully one fourth of the facilities in the country. Results of that research indicate that 82% of residents and families and 63% of employees would recommend their facility as a place to work or to receive care.

Workforce satisfaction

These data come from confidential surveys completed by nursing home employees and returned directly to My InnerView during 2006 and 2007. The surveys were completed by individual employee respondents and mailed directly to My InnerView using a self-addressed stamped envelope included in the survey packet. In the 2007 analysis, 161,908 long-term care employees responded to the survey.

A four-point scale ("excellent," "good," "fair" or "poor") is used to rate job satisfaction in five areas:

- 1 Training
- 2 Work environment
- 3 Supervision
- 4 Management
- 5 Global satisfaction

CRONBACH'S ALPHA COEFFICIENTS FOR SATISFACTION SURVEY SCALE AND SUB-SCALES

WORKFORCE

	NUMBER OF ITEMS	CRONBACH'S ALPHA	N
Training	4	.85	95,744
Work environment	9	.86	89,543
Supervision	3	.90	103,836
Management	2	.91	104,251
Global satisfaction	3	.90	104,594
Workforce satisfaction scale	21	.95	81,597

Figure 1

CONSUMER

	NUMBER OF ITEMS	CRONBACH'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
Consumer satisfaction scale	24	.97	45,345

Figure 2

The workforce survey includes 21 items corresponding to five sub-scales. Additional questions gather demographic and background information.

Figure 1 shows the internal consistency of these measures. 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. All coefficients for these measures exceed the 0.80 threshold.

Customer satisfaction

These data were gathered through mailed resident and family satisfaction surveys that were completed and returned to My InnerView during 2005, 2006 and 2007. The survey is comprehensive and of a manageable length to avoid excessive burden on respondents. Respondents are asked to rate nursing facilities using a four-point scale ("excellent," "good," "fair" or "poor"). Additional questions gather demographic and background information, but no personally identifiable data are collected.

The customer survey includes 24 questions encompassing four sub-scales:

- 1 Quality of life
- 2 Quality of care
- 3 Quality of service
- 4 Global satisfaction

Figure 2 shows the internal consistency of these measures. 146,382 long-term care residents and their family members responded to the survey in the 2007 analysis.

Nineteen percent of the respondents were residents of the facilities. These resident respondents consist of residents who are cognitively, emotionally and physically able to provide meaningful feedback on the survey, either on their own or with assistance. My InnerView provides in depth protocols for determining which residents are eligible to receive the survey and for selecting and training those most suitable and appropriate to assist residents needing assistance.

Predictive validity

My InnerView researchers have found strong positive correlations between customer and workforce satisfaction assessed using My InnerView's satisfaction survey instruments. Data from other sources including clinical outcomes (e.g., CMS' quality indicators or QIs), workforce performance (e.g., tracked by My InnerView's Quality Profile™), and state survey data (e.g., collected in the federal OSCAR system) are predictive of these customer and workforce satisfaction metrics. Because these data elements are taken from independent sources, there is strong empirical evidence for the predictive validity of My InnerView's survey instruments.

Weighting procedures

Since the participating nursing facilities represent a convenience sample rather than a random stratified sample, national estimates of customer and workforce satisfaction are based on a standard weighting methodology that My InnerView researchers used to adjust for facility characteristics within each state and nationally. To address missing data for individual survey items, values are imputed using selected demographic and location characteristics for each respondent. All imputations are done using the standard Hotdeck procedure available in Stata© software.

■ ABOUT MY INNERVIEW

My InnerView began operations in 2001. We have been providing services related to surveying satisfaction levels in elder care services since that time. Our customer base grew from approximately 120 skilled nursing home customers in 2001 to over 6000 customers across multiple services types in 2007.

In July of 2003, we were selected as the data partner for the Georgia Quality Program. In addition to conducting resident, family and employee surveys for the entire state of Georgia, we also provide the data platform for measuring multiple performance metrics for their quality incentive program. We continue to serve the needs of our provider partners and the state association.

In the fall of 2004, we submitted a proposal to The Alliance for Quality Nursing Home Care and we were subsequently awarded the contract to conduct customer satisfaction surveys for the majority of the organizations that were part of the Alliance at that time. The surveys conducted as part of that proposal were resident, family and discharge surveys. We have continued to service the needs of these Alliance companies since that time, and we have added services beyond the scope of the original proposal for many of these clients.

In 2006, we published the first national satisfaction report on resident and family satisfaction in skilled nursing facilities for surveys conducted in 2005. This was followed in 2007 by the second annual report showing results for surveys conducted in 2006. In 2007, we also published the first national report on workforce satisfaction.

In May of 2008, we will publish the third report on national satisfaction which will show results for resident and family surveys conducted in 2007, as well as employee surveys conducted in 2007. This groundbreaking research and publication has served as a benefit to national and state provider organizations as they work with legislators and others to set the policy agenda for the future.

Figure 3 shows our national benchmarking database, as reported in the national reports, grew.

NATIONAL DATABASE		
	FACILITIES	RESPONDENTS
2005 resident/family	2,224	70,966
2006 resident/family	2,899	92,433
2007 resident/family	4,116	146,382
2006 employee	1,933	106,858
2007 employee	2,779	161,908

Figure 3

In December 2005, we received McKnight's Readers Choice Award as a provider of satisfaction surveys.

In March of 2007, we announced our partnership with the state of Oklahoma as the data partner for their Pay-for-Performance Program.

Merger Announcement

In December 2008, My InnerView entered into a definitive merger agreement with National Research Corporation. National Research Corporation, headquartered in Lincoln, Nebraska, is a leading provider of performance measurement, improvement services and governance education to the healthcare industry in the United States and Canada. Under this merger, My InnerView and National Research Corporation will offer tools, services and research to providers across the entire care continuum. This relationship will enable My InnerView to enhance the products and services we provide to our clients in senior care services. The ability to combine the knowledge that National Research Corporation brings in the acute care sector with the knowledge that My InnerView brings in the senior care sector should promote a much better understanding of the needs, expectations and satisfaction of those accessing healthcare services from birth through the continuum of senior care services.

Select readings on workforce and customer satisfaction

¹ Customer satisfaction in long-term care is important

Patient satisfaction is an important indication of quality of care. To improve quality of care, it is important to understand what drives patient satisfaction.

Johansson, P., M. Oleni, et al (2002). *Patient Satisfaction With Nursing Care in the Context of Health Care: A Literature Study*. Scandinavian Journal of Caring Sciences 16(4): 337-344.

The patient's voice is increasingly important in an era of person-centered care. In the past, quality has been measured by regulatory compliance. Patient quality of life and satisfaction are increasingly becoming important measures of quality.

Cleary, P. (1999). *The Increasing Importance of Patient Surveys Now That Sound Methods Exist, Patient Surveys Can Facilitate Improvement*. Br Med Assoc. 319: 720-721.

² Customer satisfaction is analogous to quality

Family satisfaction and resident satisfaction are both important indicators of quality, but each group tends to have a slightly different view of what constitutes quality. Residents place higher value on autonomy and quality of life, and families tend to prioritize quality of care.

Grant, Leslie, Michael Davern, et. al (2007). *2007 National Survey of Consumer and Workforce Satisfaction*. Wausau, WI: My InnerView. http://www.myinnerview.com/_media/doc/general/2007natrpt.pdf

Peak, T. and S. Sinclair (2002). *Using Customer Satisfaction Surveys to Improve Quality of Care in Nursing Homes*. Health and Social Work 27(1): 75-79.

Customer satisfaction is also highly correlated with clinical measures outcomes and workforce stability. Facilities with higher customer satisfaction tend to have better clinical outcomes, lower staff turnover and higher staff retention.

Grant, L., Gulsvig, J., et al (2006). *Measuring Excellence: The New Quality Agenda*. Provider. October 2006. http://www.myinnerview.com/_media/doc/general/2006_Oct_ProviderMeasuringExcellence.pdf

Conversely, staff turnover is lower and retention is higher when employees are satisfied.

Lu, K., P. Lin, et al (2002). *The relationships among turnover intentions, professional commitment, and job satisfaction of hospital nurses*. J Prof Nurs 18(4): 214-9.

Irvine, D., Evans, M. (1995). *Job Satisfaction and Turnover Among Nurses: Integrating Research Findings Across Studies*. Nursing Research 44(4): 246.

Turnover is a direct link between employee satisfaction and quality of care. Facilities with high staff turnover have lower quality of care.

Olson, D., Tellis-Nayak, V., et. al (2007). *Working Together To Achieve Success: Quality Care Begins With Satisfied, Committed Employees*. Provider, October 2007. http://www.myinnerview.com/_media/doc/general/Oct07ProviderSupplementachievesuccess.pdf

Castle, N., Engberg, J. (2005). *Staff Turnover and Quality of Care in Nursing Homes*. Medical Care 43(6): 616.

³ Employee satisfaction is predictive of customer satisfaction.

Family satisfaction, resident satisfaction, and employee satisfaction are correlated. They have a major influence on each other, and having satisfied employees is crucial for having satisfied families.

Grant, L. (2004). *Organizational Predictors of Family Satisfaction in Nursing Facilities*. Senior Housing and Care Journal 12(1): 3-13. http://www.myinnerview.com/_media/doc/general/whatsnextstep.pdf

Blizzard, R. (2003). *Engagement Unlocks Patient Satisfaction Potential*. Gallup Poll News Service.