Relationship Between Nursing Home State Inspections and Consumer Satisfaction

Nursing homes that received fewer deficiencies on State Medicaid Recertification surveys were also the nursing homes that received higher satisfaction scores by responsible parties. The finding supports the notion that knowledge of state inspection results can assist in selecting a nursing home.

Michael W. Collier, General Living Centers, Inc.[1]
Frances C. Lawrence, Louisiana State University Agricultural Center[2]
M. E. Betsy Garrison, Louisiana State University Agricultural Center[3]
Pamela A. Monroe, Louisiana State University Agricultural Center[3]
E. Barry Moser, Louisiana State University Agricultural Center[4]

Building on a 1995 Consumer Reports study, the overall purpose was to examine the relationship between number of deficiencies from State Medicaid Recertification inspections and consumer satisfaction with nursing homes. Consumer satisfaction has been recognized as an important outcome variable and indicator of quality in nursing homes.

Nursing home satisfaction data were collected by a questionnaire mailed to the responsible party of every resident in a random sample of 16 nursing homes in a southern state. A total of 1,362 surveys were mailed, and 850 were returned in usable form for a response rate of 63.3%.

To measure satisfaction, a single global satisfaction item was used. Responsible parties were asked to rate their overall satisfaction with the nursing home on a scale ranging from 1 to 5 (1= very dissatisfied and 5= very satisfied). The combined responses of responsible parties in each nursing home on this global question were used to determine the average satisfaction level for each nursing home. Using data from State Medicaid Recertification surveys conducted by the Louisiana Department of Health and Hospitals, the number of standard deficiencies were determined for each of the 16 nursing homes for four years. The four-year block (1991-1995) was chosen because this time frame was used in the Consumer Reports article and deficiency data were available for four years.

To examine the relationship between number of deficiencies and consumer satisfaction, three models for weighting the four years were tested. Model one allowed the regression procedure in SAS to determine the weights for each year according to its own estimate for the best fit. Model two added the results from the four years , weighting all four years equally. Model three used a logical formula for weights giving greater weight to more recent years .

Multiple regression analysis was used to examine the relationship between State Medicaid Recertification surveys and responsible party satisfaction under the three models. The normal assumptions for regression analysis were checked. Diagnostic procedures for influence (DFFITS) and multicollinearity in regression were also conducted.

Satisfaction scores for individual facilities ranged from 3.67 to 4.52. One-way analysis of variance indicated the means for responsible parties' level of satisfaction differed among the 16 nursing homes, $F(15,823)=3.03, p=.0001$.

Using model one, the relationship between number of deficiencies and responsible party satisfaction was found to be significant [$F(5,9)=5.43, p=.04$]. Similarly, model two displayed a significant relationship [$F(2,12)=4.32, p=.04$]. Using model three, the relationship was not significant [$F(2,12)=2.96, p=.09$].

Model one explained the greatest amount of variance, ($R^2=.75$), followed by model two, ($R^2=.42$), and model three, ($R^2=.33$). Similarly, the amount of variance explained by the numbers of deficiencies from state surveys (partial R^2) were model one, partial $R^2=.64$, model two, partial $R^2=.31$, and model three, partial $R^2=.22$.

A significant relationship between responsible party satisfaction and results from state inspections was found. The nursing homes that received fewer deficiencies on the state surveys were also the nursing homes that received higher satisfaction scores by responsible parties. This finding supports the idea that state inspections correctly identify good nursing homes.

Endnotes
1.   Master's Student, School of Human Ecology.
2.   Professor, School of Human Ecology.
3.   Associate Professor, School of Human Ecology.
4.   Professor, Experimental Statistics.