

**THE IMPORTANCE AND VALUE OF
PROFESSIONAL MEMBERSHIP OF NURSING
HOME ADMINISTRATORS**

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ABSTRACT

This study examines the association between nursing home administrators (NHAs) professional membership, certification, and fellow status with quality indicators in nursing homes. Membership, certification, and fellow information (representing increasing levels of participation) originated from the American College of Health Care Administrators (ACHCA). ACHCA is a professional association which represents long-term care administrators. The Quality Measures reported on the Nursing Home Compare web-site, and facility information from the On-line Survey Certification of Automated Records (OSCAR) were used. The period of interest was 2010 and a

total of 19 quality indicators were examined. Data were analyzed through multivariate analyses using negative binomial regression. The results indicate NHAs who are members of ACHCA are associated with better quality in 6 of the 19 quality indicators examined; ACHCA certified member fellows are associated with better quality in 7 of the 19 quality indicators examined; ACHCA fellows are associated with better quality in 10 of the 19 quality indicators examined; and, ACHCA members (excluding certified, certified fellows, and fellows) are associated with better quality in 13 of the 19 quality indicators examined. These findings support the value of professional membership, as well as voluntary certification or fellow credentialing of NHAs with respect to quality improvement.

Key words: certification, fellow, nursing homes, quality improvement, professional membership

INTRODUCTION

Wing and Salsberg (2001) stated, "Nursing home administrators play a central role in the quality of life of nursing home residents in the U.S." Nursing home administrators (NHAs) are required to perform a multitude of work duties, many of which are vital components to the daily operations and quality of care in nursing homes. In addition, the demands placed on the long-term care administrator have significantly increased over the last 40 years (Pratt, 2010). As such, the education, training, and guidance given to NHAs may be extremely important components in helping hone the skills needed to conduct the daily operations and promote quality of care in nursing homes. In the research presented here, the association of the American College of Health Care Administrators (ACHCA) membership, nursing home administrator certification (CNHA), and Fellow status are examined in relation to quality of care.

Studies show that NHAs play a part in the lives of

the residents and the care they receive (Castle, Ferguson, & Hughes, 2009). In many nursing homes, the daily operations are executed under the direction of the top management team, typically consisting of a NHA and a Director of Nursing (DON). The top management team in each nursing home may operate differently from each other, but they all are responsible for the budget, staff training, overseeing quality programs, safety, and several other tasks (Wagner, McDonald, & Castle, 2012). All of which have the potential to influence the quality of care residents receive.

In a white paper commissioned by ACHCA and the NAB Foundation, *Effective Leadership in Long Term Care: The Need and Opportunity*, Dana and Olson (2007) discussed and reviewed the importance and uniqueness of the important role of leadership in the field of long-term care. This reflects the long held notion that top managers have a crucial impact on organizations (Thomas, 1988). Top managers influence profitability (Keller, 2006), can create or transform cultures (Hatch, 2000), and can promote effective or high-quality services (Rousseau, 2006) – to name just three.

ACHCA (The American College of Health Care Administrators) was established in 1962 and “is a non-profit professional membership” association (www.achca.org) for administrators of assisted living, post-acute, and skilled nursing facilities. The Institute for Credentialing Excellence (ICE) defines professional certification as “a voluntary process by which a non-governmental entity grants a time-limited recognition and use of a credential to an individual after verifying that he or she has met predetermined and standardized criteria. It is a vehicle that a profession or occupation uses to differentiate among its members, using standards, sometimes developed through a consensus-driven process, based on existing legal and psychometric requirements” (2009, p.6).

ACHCA provides members with educational opportunities, certification possibilities, and career development. The ACHCA certification program requires the applicant to meet both educational and experiential qualifications for eligibility, as well as to pass a test that demonstrates performance at an advanced level of skill and knowledge. In this research, ACHCA membership, certification, Fellow, and a combination of membership, certification, and Fellow status are examined.

ACHCA members are long-term care administrators who pay ACHCA's full membership fee. The certification process began in 1978 and requires that the licensed administrator pass the CNHA exam, have two years experience as a practicing administrator, have 40 continuing education (CE) hours completed, as well as other educational, experience, and career development requirements (Castle & Fogel, 2001). To become an ACHCA Fellow an applicant must be a full member for at least two years immediately prior to application and complete at least four years of education beyond high school. Furthermore, the applicant must give evidence of service beyond the ordinary demands of the administrator position to both the community and to the long-term care field. ACHCA rates the experience, education, and service of each Fellow applicant based on a specific scoring system. To become a Fellow, an applicant must accumulate 165 points on the Fellow application. Certified Fellows are ACHCA members who hold both the Fellow and certified credential.

These four levels of membership represent increasing levels of exposure and participation in ACHCA. That is a progression in exposure and participation from members, certified members, and fellows, to certified fellow members. Exposure and participation in ACHCA includes a variety of conference venues and educational opportunities.

Two major annual conferences are held for general membership and a Summer Leadership Conference which targets certified members, fellows, and certified fellow members are provided. ACHCA offers CE through approved online learning for all of the general membership. Furthermore, a selection of print-based educational material is offered as well as self-studies based on relevant leadership related texts. An online support system also offers members advice and support. However, it is noted that this current research study is cross sectional and, as such, the findings may not be causally related to ACHCA's educational or other offerings.

Prior research has shown there is a relationship between quality of care and NHAs who are members of ACHCA (Castle & Fogel, 2001). This prior study found that nursing homes with an ACHCA administrator had significantly lower numbers of health-related deficiencies (1.4 fewer). Furthermore, the study found that 29.6% of such facilities had no health-related deficiencies (Castle & Fogel, 2001). The study suggested that facilities with ACHCA administrators "do better because they have better leadership" (Castle & Fogel, 2001, p.15). Results also showed that facilities with ACHCA members who were also certified administrators had an even higher quality of care than facilities managed by an ACHCA member, alone. That is, 40% of the facilities managed by ACHCA members who were certified, had no health-related deficiencies; roughly 29% of facilities were restraint-free; and, approximately 28% of facilities were pressure ulcer free (Castle & Fogel, 2001).

No other studies were identified that examined certification of NHAs. Rowland, Cowles, Dickstein, and Katz (2009) examined the impact of medical director certification on nursing home quality. They found a positive association between certification and overall quality.

The prior research by Castle and Fogel used data from 1998. Thus, the information is now somewhat dated. Moreover, the nursing home industry has changed considerably in the intervening years. The current challenges NHAs face potentially make association membership and credentialing ever more pertinent. The current challenges NHAs face include increased competition from other providers such as assisted living; a sicker resident population; increased regulation; process innovations such as culture change; and, relatively lower levels of reimbursement (to name just five). Thus, the research presented here updates this prior work. Following this prior research we propose that (1) professional membership will be associated with high quality of care; and, (2) a progression in professional membership (i.e., members, certified members, fellows, certified fellows) will be associated with a progression of high quality of care.

METHODS

Primary Data

ACHCA 2010 member status (members, certified members, fellows, and certified fellow members) was identified from the 2010 ACHCA member master list (dated January 3, 2011). All other variables used (see below) were collected to match this time period.

Members are NHAs who pay ACHCA's full membership fee. Certified members have passed the CNHA exam, have two years experience as a practicing administrator, and have 40 CE hours completed. Fellows are ACHCA members for at least two years, have at least four years of education beyond high school, and have provided service to both the community and to the long-term care field. Certified Fellows are members who hold both the fellow and certified credential.

The sample examined in this research did not include the following types of membership: student, associate, bridge, retired, and retired fellow. In addition, educators and government employees were removed from the membership sample. The list was also purged of duplicates, leaving only practicing NHAs on the list. If an individual was an administrator for multiple facilities, only the facility listed first alphabetically was selected for inclusion in the study. Then, this list was merged with a list of nursing homes for which quality measures were available from Nursing Home Compare (described below). Lists were matched by facility name and state.

Secondary Data

Value data. Several quality indicators for the analyses used came from Nursing Home Compare (www.Medicare.gov/NHCompare). Nursing Home Compare is a web-based report card providing information for all Medicare and/or Medicaid certified nursing homes. This data includes a series of Quality Measures. The Nursing Home Compare Quality Measures used in this analysis came from eHealth Data Solutions (ehds.com) who clean the data and compute Quality Measure percentiles (see below) for commercial use in the Value Data initiative (an initiative promoting quality improvement in nursing homes).

The Quality Measures reported are advantageous in several respects. They were subject to extensive testing, are derived from the Minimum Data Set (MDS), are readily available, and represent measures relevant to both consumers and providers (Abt Associates Inc., 2004). Moreover, the Quality Measures are becoming commonly used in empirical research (e.g., Alexander, 2008).

The Quality Measures used in the Value Data are from the MDS National Quality Indicator System for the Third Quarter of 2010. The information in this data

represents the time period of April through June 2010 which matches the time period of the 2010 ACHCA member master list.

The Quality Measure data provides the percentage of residents who trigger the measure(s) during the quarter. These data are used at the State level to target survey and quality monitoring activities. The Quality Measure data includes all nursing home residents in a given state. This data is also supplemented by Quality Indicator data for use by the survey and quality monitoring activities.

On-line Survey Certification of Automated Records (OSCAR). As part of state/federal annual nursing home inspection, surveyors record many characteristics of the nursing home (e.g., number of beds) and aggregate characteristics of residents (e.g., number with dementia). Facilities that accept residents with Medicare and/or Medicaid payments (97% of US nursing homes) are surveyed and these facility characteristics were matched to the ACHCA members. , The data are commonly used as a secondary source of nursing home characteristics (e.g., Decker, 2008).

Quality Indicators

Quality measures. At the time period of data availability for this study (i.e., 2010) CMS reported on 19 measures – these are called the core Quality Measures. The Quality Measures address specific areas of resident care, 5 are for short-stay residents and 14 are for long-stay residents. Long-stay measures are for those residents staying at a facility 3 months or more and short-stay measures are for residents staying at a facility less than 3 months.

The long-stay measures are, the percent of residents: whose need for help with daily activities increased; with moderate to severe pain; at high-risk resident with pressure sores; at low-risk residents with

pressure sores; with physical restraint use; more depressed or anxious; at low-risk residents with loss of bladder or bowel control; who had a catheter inserted and left in bladder; who spend most time in bed or in a chair; whose ability to move in/around room got worse. The short-stay measures are, the percent of residents: with delirium; with moderate to severe pain; and, with pressure sores.

The Quality Measures contained in Medicare.gov were used as percentiles in this research. Residents triggering the short-stay or long-stay measures were selected as the numerator. The denominator is defined by the count of those residents who have the necessary records and applicable clinical status to be available for inclusion in the Quality Measure calculation. A fraction is made by applying the numerators and denominators, and this is expressed as a percent ratio that normalizes for facilities with different resident census.

Independent Variables

Table 1 lists the facility characteristic variables that were used in this analysis as independent variables. The variables included in the analyses were derived from the prior research in this area that examined nursing home quality (e.g., Castle & Engberg, 2008; Decker, 2008).

Facility characteristic variables included in this research are size, chain membership, ownership, occupancy rate, nurse staffing measures, Medicaid resident occupancy, private-pay occupancy, and resident case-mix. The number of nursing home beds was used as a measure of size. Two classes of facility ownership were used, for-profit and not-for-profit. Two classes of multi-facility corporation membership were used, chain and non-chain. The overall occupancy rate is the percent of beds occupied by residents. The percent of residents paid for by Medicaid or private-pay were used as measures of Medicaid resident occupancy and private-pay resident occupancy respectively.

Three different types of nursing staff were included in the analyses: the number (measured as Full Time Equivalent [FTE]) of RNs, LPNs, and nursing assistants per 100 beds. An average Activities of Daily Living (ADL) score was used to represent case-mix. For each of three ADL questions (eating, toileting, and transferring) in the OSCAR, a score from 0 to 3 was used by using no assistance, moderate need for assistance, and high degree of need for assistance, respectively. We then calculated these scores, with higher scores indicating a greater average ADL impairment within the facility.

Table 1:
Descriptive Statistics of Certification Type for Nursing Home Administrators and Nursing Home Characteristics

	ACHCA Credential Type				
	Certified Mean (or %)	Certified Fellow Mean (or %)	Fellow Mean (or %)	Member Mean (or %)	All Other Facilities Mean (or %)
	N=58	N=60	N=129	N=649	N=14,221
Size (number of beds)	130	140	172	135	108
Chain member	57%	40%	27%	37%	61%
For-profit ownership	76%	47%	53%	57%	69%
Occupancy rate	86%	86%	88%	89%	83%
Nurse aide staffing (FTEs per resident)	0.07	0.06	0.07	0.06	0.06
LPN staffing (FTEs per resident)	0.14	0.15	0.11	0.13	0.14
RN staffing (FTEs per resident)	0.37	0.41	0.37	0.37	0.37
Medicaid resident occupancy	54%	60%	61%	62%	61%
Private-pay resident occupancy	27%	25%	26%	25%	24%
Resident case-mix (ADL score)	0.19	0.22	0.21	0.22	0.21

ACHCA = American College of Health Care Administrators; RN = Registered Nurse; LPN = Licensed Practical Nurse; FTE = Full time-equivalent; ADL = Activities of Daily Living.

Members = NHAs who pay ACHCA’s full membership fee; Certified members = passed the CNHA exam, have two years experience as a practicing administrator, and have 40 CE hours completed; Fellows = ACHCA members for at least two years, have at least four years of education beyond high school, and have provided service to both the community and to the long-term care field; Certified Fellow = ACHCA members who hold both the fellow and certified credential.

ANALYSES

Descriptive statistics (means and standard deviations) for the quality of care variables of interest, and for the organizational control variables (means, standard deviations, and percents) are presented in Table 2.

We examined the level of collinearity among the independent variables and multicollinearity, by using the variance inflation factor (VIF) test. The correlation between the variables was generally low.

Negative binomial regression was used in multivariate analyses to examine the association of ACHCA membership, certification, and Fellow status with the quality indicators (Table 3). The quality indicators are percentiles of specific negative events per nursing home. For many facilities, these counts were low or zero. Negative binomial regression is based on a generalization of the Poisson distribution that can account for the skewed nature of data. This allows for more unmeasured heterogeneity among the observations in the sample, which, can be manifested when several observations have low or zero events (Gardner, Mulvey, & Shaw, 1995). The coefficients are reported in incident-rate ratio form, which is similar to odds ratios; that is, estimates greater than one represent a positive association between the explanatory variable and the outcome. High values of the quality indicators are associated with lower quality because they indicate a high percentage of residents with the specified negative outcome; thus, coefficients less than one are representative of better quality.

Table 2:
Descriptive Statistics by Certification Type for Quality Indicators Variables Examined

	Certified Mean (or %) N=58	Certified Fellow Mean (or %) N=60	Fellow Mean (or %) N=129	Member Mean (or %) N=649	All Other Facilities Mean (or %) N=14,221
Long Stay Measures[^]					
1. ADL worse	56.98	55.75	56.63	52.19	47.96
2. Pain	49.68	41.88	46.18	47.22	42.85
3. Pressure ulcer high risk	49.13	50.98	48.71	48.11	47.81
4. Pressure ulcer low risk	35.79	32.83	34.52	34.67	34.68
5. Restraints	42.76	38.22	40.74	38.92	37.76
6. Incontinence low risk	36	40.06	45.75	43.73	49.51
7. Catheter	42.32	47.5	49.37	49.44	44.9
8. Bed or chair	45.78	42.24	49.14	45.16	42.84
9. Mobility worse	50.68	49.35	47.23	46.55	47.73
10. UTI	44.8	49.79	48.54	49.18	47.42
11. Mood	56.15	44.59	48.53	47.4	48.27
12. Weight loss	49.85	46.53	49.31	45.78	46.96
13. Flu shot	20.75	22.77	23.15	22.53	21.78
14. Pneumococcal vaccination	27.27	29.31	29.69	28.58	27.32
Short Stay Measures[^]					
15. Delirium	30.26	33.96	33.48	32.41	32.13
16. Pain	51.94	52.35	54.38	51.25	48.66
17. Pressure ulcer	48.5	49.45	42.94	44.18	47.86
18. Flu shot	36.18	37.8	41.28	38.2	36.06
19. Pneumococcal vaccination	40.05	43.09	43.46	40.31	38.07

[^] Definitions can be found in Abt (2004).

Members = NHAs who pay ACHCA’s full membership fee; Certified members = passed the CNHA exam, have two years experience as a practicing administrator, and have 40 CE hours completed; Fellows = ACHCA members for at least two years, have at least four years of education beyond high school, and have provided service to both the community and to the long-term care field; Certified Fellow = ACHCA members who hold both the fellow and certified credential.

Table 3:
Regression Coefficients for the Effects of Certification on Nursing Home Quality Indicators

	Certified Vs. No ACHCA Affiliation	Certified Fellow Vs. No ACHCA Affiliation	Fellow Vs. No ACHCA Affiliation	Member Vs. No ACHCA Affiliation
Long Stay Measures				
1. ADL worse	0.91*	0.90*	0.89***	0.88***
2. Pain	0.98*	0.96	0.99	0.96**
3. Pressure ulcer high risk	0.95	0.98	1.01	1.03
4. Pressure ulcer low risk	0.95	0.97	1.03	0.95
5. Restraints	0.90*	0.90	0.96*	0.87**
6. Incontinence low risk	0.85*	0.89*	0.98	0.85**
7. Catheter	0.98	0.99	0.95*	0.94***
8. Bed or chair	0.97	0.93**	0.97**	0.96**
9. Mobility worse	1.01	0.99	0.99	0.99
10. UTI	1.04	0.98	0.97	0.79***
11. Mood	0.96*	0.94*	0.96*	0.94*
12. Weight loss	0.97	1.01	1.04	1.09
13. Flu shot	0.99	0.98	0.93***	0.86***
14. Pneumococcal vaccination	0.98	0.81**	0.91**	0.82***
Short Stay Measures				
15. Delirium	1.03	0.98	0.99	0.99
16. Pain	0.97*	0.96*	0.95**	0.95**
17. Pressure ulcer	0.93	0.89	0.88	1.01
18. Flu shot	0.97	0.95	0.94**	0.89***
19. Pneumococcal vaccination	0.88	0.89**	0.92***	0.95***

Notes: (1) Information from 27 regression analyses are presented, representing one regression model for each quality indicator of interest. In the rows the incident-rate ratio for negative binomial regressions are presented (2) Regression coefficients for the quality indicators of interest are presented for parsimony; all variables in Table 1 with the addition of state dummies were also included in each model (results for

all variables in the models included in Table 3 are available from the authors).

* $p < .05$; ** $p < .01$; *** $p < .001$.

^ Outcome variables were all coded so that lower scores represent better quality.

ACHCA = American College of Health Care Administrators; ADL = Activities of Daily Living.

Members = NHAs who pay ACHCA's full membership fee; Certified members = passed the CNHA exam, have two years experience as a practicing administrator, and have 40 CE hours completed; Fellows = ACHCA members for at least two years, have at least four years of education beyond high school, and have provided service to both the community and to the long-term care field; Certified Fellow = ACHCA members who hold both the fellow and certified credential.

In order to account for possible correlation of outcomes within markets, which can bias the standard errors of the estimates, the Huber-White sandwich estimator (i.e., robust standard errors) clustered by county was also used for all of the multivariate analyses (Zeger & Liang, 1992).

RESULTS

The sample consisted of 58 Certified members, 60 Certified Fellow members, 129 Fellows, and 649 Members. The comparison group for the analyses consisted of 14,221 other facilities.

As shown in Table 1, ACHCA members tend to work in larger facilities, and are less likely to be in chain facilities. However, characteristics such as private-pay resident occupancy and resident case-mix are approximately equal across all types of ACHCA members and all other facilities (i.e., non-members).

The results of the regression analyses are displayed in Table 3. For parsimony, the regression coefficients for the independent variables of interest are presented (i.e., Certified, Certified and Fellow, Fellow, Member). However, all variables in Table 2 were included in each

regression model (results for all variables in the models are available from the authors). In summary, for these other independent variables several staffing characteristic variables (i.e., higher nursing assistant staffing levels in 24 of 27 cases and higher RN staffing levels in 21 of 27 cases associated with high quality) were statistically significant ($p < .05$) and several facility characteristic variables (i.e., not-for-profit in 17 of 27 cases and high private-pay in 22 of 27 cases associated with high quality) were statistically significant ($p < .05$). Such findings are often identified in nursing home quality research, and provide some face validity to the findings in general.

ACHCA certified membership is associated with better quality in 6 of the 19 quality indicators examined. For example, the risk of incontinence (in low risk residents) is 15% lower in ACHCA certified ($p < .05$) facilities compared to those with no ACHCA affiliation. ACHCA certified member fellows are associated with better quality in 7 of the 19 quality indicators examined. For example, the receipt of pneumococcal vaccination is 19% higher in ACHCA certified ($p < .01$) facilities compared to those with no ACHCA affiliation. ACHCA Fellows are associated with better quality in 10 of the 19 quality indicators examined. For example, the risk of ADL decline is 11% lower in ACHCA certified ($p < .001$) facilities compared to those with no ACHCA affiliation. ACHCA members (excluding certified administrators, certified Fellows, and Fellows) are associated with better quality in 13 of the 19 quality indicators examined. For example, the risk of a UTI is 21% lower in ACHCA certified ($p < .01$) facilities compared to those with no ACHCA affiliation.

DISCUSSION

Our results support prior research that shows the important impact NHAs can have on nursing homes and

seem to indicate that professional membership could likewise be important in influencing NHAs ultimately supporting these type of positive practices.

In this study, ACHCA certified membership is associated with better quality in 6 of the 19 quality indicators examined; ACHCA certified member fellows are associated with better quality in 7 of the 19 quality indicators examined; ACHCA Fellows are associated with better quality in 10 of the 19 quality indicators examined; and, ACHCA members (excluding certified administrators, certified Fellows, and Fellows) are associated with better quality in 13 of the 19 quality indicators examined. These findings would appear to be important and operationally significant (as well as statistically significant).

If the percentile differences in the Quality Measures are compared, then facilities with an ACHCA administrator have better overall quality. Using a 100 bed facility as an example (and controlling for resident case-mix, etc.), ACHCA membership is associated with residents with 42 fewer quality issues than non ACHCA membership. Thus, the findings would appear to have both practical and statistical significance.

A survey examining how much time NHAs devoted to different activities (Castle, Ferguson, & Hughes, 2009) showed that NHAs believe that their time is spent dealing with external regulation and accreditation (17%), problem management with staff and family (12% and 9%), and acquisitions with current vendors (8%), as the top four time intensive activities. Very little time is spent directly addressing quality of care (i.e., quality assurance practices are listed as 4% of time and resident care policies and practices as 8%). We propose that one benefit of ACHCA membership is the ability to address these tasks such that more time can be devoted to leadership practices that influence quality of care. For example, ACHCA provides leadership and management education through its

conferences and webinars. In addition, ACHCA members have the opportunity to consult with other members through its online membership network. However, clearly more research needs to be done to examine the operational impact of ACHCA membership.

This information is potentially important. If professional membership (such as with ACHCA) was further promoted and expanded, this could be a relatively inexpensive means of improving the quality of care in nursing homes. Moreover, administrators' professional membership could be featured on web-sites such as Nursing Home Compare. If NHAs who are members of ACHCA provide better quality (or better management) than NHA's without the credentialing, families choosing a nursing home may find this information valuable. It may also become important to organizations such as managed care providers who may offer less stringent qualifying parameters to facilities who have ACHCA administrators or possibly accrediting bodies such as the Joint Commission, a voluntary accrediting body whose standards for quality of care include education and training level of administrators.

The four levels of membership examined represented increasing levels of exposure and participation in ACHCA. As such, we expected that NHAs with the most amount of involvement with ACHCA would be associated with the highest performance. We found all levels of membership were beneficial; however, contrary to our expectation NHAs with the least amount of involvement with ACHCA (membership only) were associated with the highest performance. Thus, our findings identify that professional membership (at all levels) is associated with better quality; however, the finer distinction of additional benefits of increasing levels of membership was not substantiated.

ACHCA membership provides needed training

materials and mentorship. However, we were not able to examine how ACHCA membership improves quality of care. Some recent research has examined NHA characteristics believed to promote success in the industry (Siegel et al., in press). This may help explain our unexpected finding. Further examining these factors is a needed next step for research.

LIMITATIONS

One area not addressed in this research or prior research, because of reliance on cross-sectional data, is the causal influence of ACHCA membership on quality of care. Nursing homes with more favorable outcomes may hire or attract the most talented top managers, rather than vice versa. With cross-sectional data, we cannot discount this possibility.

Our findings may indicate that by virtue of the benefits made available by ACHCA to members they are better able to perform their daily activities and this translates into higher performing nursing homes. However, again with cross-sectional data, we cannot rule out the possibility that NHAs may be a self-selected group of high-performers who value membership in a professional organization. Future research might study how many ACHCA members come from high-performing nursing homes at the point of joining and how many are from otherwise typical nursing homes and subsequent improvement in quality measures is observed.

An additional limitation of this study is the lack of tenure data with administrators and their respective facilities. We recognize that the length of time and leadership stability at a facility may have an impact on organizational performance. One indicator of this relationship in this study is the evidence supporting individuals who have reached the Fellow status, in part

based on years of experience and tenure in the field, as having a positive relationship with better outcomes.

Staffing ratio data on Nursing Home Compare consists of point prevalence data, representing a 2 week look back. This is provided by the facility during their most recent survey and certification. This staffing data has potential inaccuracies, but is one of the few readily available sources of staffing information (Castle, 2008).

Several quality indicators are used in the analyses; however, these do not necessarily provide a comprehensive picture of nursing facility quality. Nursing Home Compare measures are primarily clinical outcome quality indicators. Many other quality indicators exist, including quality of life and satisfaction. Reflecting the orthogonality of quality indicators (Castle & Engberg, 2008), these may not necessarily follow the same patterns of findings as the clinical quality indicators examined.

Moreover, our research focus was limited to NHAs. It is recognized that quality of care is influenced by the top management team (Castle, Ferguson, & Hughes, 2009) consisting of the NHA and DON (Director of Nursing). The quality measures examined are likely influenced by a complex interaction between both the NHA and DON.

CONCLUSION

Smith, Shortell, and Saxberg (1977, p. 12) describe nursing home administration as “the critical variable affecting quality of care.” Our findings would seem to confirm this. However, we have much to learn regarding what influences NHAs in providing quality of care. Defining, evaluating, and measuring quality in a long-term care setting is an extremely difficult and convoluted task and understanding the effect of leadership on quality is even more difficult (Wiener, 2003). In this research, the value of professional membership, advanced certification,

and the achievement of Fellow status are significant characteristics of successfully performing NHAs. The benefits of a professional membership and advanced levels of proficiency and experience embedded within the professional association have a positive impact on the outcomes of organizations. The education, networking opportunities, and leadership standards promoted by the associations are viewed as important assets that lead to the affiliations noted in this study with higher performance and better levels of quality care and outcomes.

This field has a unique opportunity to encourage and enhance the professional development and performance of their leaders in this noble profession serving the needs of our frail elders and others requiring and deserving the best long-term health care services across the country. Promoting the investment in professional association membership and advanced levels of education and experience recognition is a recommendation that deserves attention as well as heightened awareness and support.

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