

---

# Factors Affecting the Continuing Education of Hospital CEOs and Their Senior Managers

*Stephen L. Walston, PhD, professor, University of Oklahoma; Ann F. Chou, PhD, MPH, MA, associate professor, University of Oklahoma; and Amir A. Khaliq, PhD, associate professor, University of Oklahoma*

---

## EXECUTIVE SUMMARY

This article examines the influences on executives' continuing education in hospitals. It uses data from a national survey on professional development conducted in 2009 by the American College of Healthcare Executives (ACHE) to explore how organizational and individual characteristics are related to the amount of continuing education (CE) taken by chief executive officers (CEOs) and the commitment to CE by their senior managers. Our findings suggest that the organizational characteristics of ownership, size, and region and the individual characteristics of gender, professional affiliation, and the focus of CE may influence how much CE CEOs take. CEOs from for-profit, larger hospitals and ACHE members tend to take less CE. Likewise, senior managers' commitment to CE is influenced by region, gender, the CEO's personal CE hours, and the focus of the CE.

Surprisingly, ACHE membership is associated with lower amounts of personal CEO CE. Also, female CEOs appear to engender greater commitment to CE in their senior managers. Finally, CE focused on change increases the senior managers' commitment, while a focus on new technology lessens it.

For those organizations seeking to meet current and future challenges by creating a learning organization, CE is essential. Understanding factors that influence the amount of and commitment to CE is important. We hope our research adds to this understanding and that leaders will seek to improve the dedication and value of CE in their organizations.

## ACKNOWLEDGMENT

The research was supported by a contract from the Foundation of the American College of Healthcare Executives. The American College of Healthcare Executives is an international professional society of more than 30,000 healthcare executives who lead our nation's hospitals, healthcare systems, and other healthcare organizations. The views expressed here are solely those of the authors.

For more information on the concepts in this article, please contact Dr. Walston at [swalston@ouhsc.edu](mailto:swalston@ouhsc.edu).

## INTRODUCTION

Healthcare managers face an increasingly challenging environment with greater cost pressures, technological innovations, and new governmental mandates. These demands require leaders to engage in continuous learning and professional development. New knowledge and novel solutions are necessary to solve our current and future problems. Senior leadership must have up-to-date professional skills that may be acquired through professional development and continuing education (CE).

Recent literature suggests that professional development is important for firms and for individuals. From an organizational perspective, investment in human capital is seen as the foundation of success, as knowledge has become one of the most valuable organizational resources of the twenty-first century (McLean 2005; Long 2004). Investing in professional development through training and professional networks improves skills and increases the retention of the best workers (Craig, Kimberly, and Cheese 2009; Squazzo 2009). Squazzo (2009) suggests that professional development is important in succession planning and organizational success. In healthcare, CE has long been required of clinicians, but recognition of CE has become a heightened priority for healthcare organizations and systems managers. Healthcare leaders and managers are encouraged to participate in internal and external training for the organization (Lee and Herring 2009). While some organizations have recognized the value of CE and may offer in-house, formal leadership development programs, others

provide little training even in basic skills (Hallier and Butts 1999).

From an individual perspective, organizational success may be related to the focus and dedication of leaders and staff to CE (Bolam 1993). The CEO must lead by example and action to create a learning organization that is prepared to meet imminent and latent challenges. CEOs must expand their horizons by discarding obsolete mental models that do not solve today's challenges and must advance learning to be more effective. Individual or organizational factors may influence the prevalence of learning and the amount of time a CEO devotes to CE. However, little research has been done to identify these factors.

To that end, this study examines the relationship of organizational and individual characteristics with (1) the amount of time hospital CEOs spend on CE and (2) the extent to which CEO attitude and focus on CE influence the dedication to CE among their senior executives. This research may benefit healthcare organizations looking to improve executive professional training by explaining the CEO's role and influence in facilitating CE within the organization.

## METHODS

### Data Collection

This study is based on a survey sponsored by the American College of Healthcare Executives (ACHE), which was sent to a random sample of 2,001 hospital CEOs across the United States in December 2008 via postal mail. A follow-up letter with a second copy

of the survey was sent to nonrespondents in January 2009. The two waves of survey dissemination received 583 responses (response rate = 29%). The survey was jointly developed with ACHE and was pilot tested on a number of hospital CEOs. The survey instrument included 30 questions in five domains: professional society membership, CE, credentialing, coaching, and impact of professional society affiliation. The data collected from the survey were then combined with hospital characteristics (e.g., region, size, ownership) derived from the 2008 American Hospital Association (AHA) Annual Survey to form our dataset. (A copy of the survey may be obtained from Dr. Walston.)

Although CEOs are a difficult cohort from which to obtain data by mail survey (Baruch 1999), the response rate of our study is consistent with the average response rate of 27 percent (Bartholomew and Smith 2006). Nevertheless, we conducted chi-square tests to detect differences, which would identify possible selection bias. We compared three organizational and two individual characteristics of our study participants to those of the full sampling pool. The three organizational factors were geographic region of the hospital, type of organizational control/ownership, and bed size. Regional differences in the sample were observed ( $p < 0.05$ ). More responses came from the Southern Region, which accounted for 41 percent of our responses. Likewise, differences were observed by hospital control/ownership ( $p < 0.05$ ). The response rate from respondents who worked for investor-owned hospitals was lower, at about 22 percent, compared with

37 percent of those who were employed by governmental and 39 percent non-governmental not-for-profit hospitals. On the other hand, our survey included CEOs representing 72 for-profit hospitals, which is reasonably close to the ratio of for-profit to not-for-profit hospitals in the United States. No differences were observed across hospital bed size.

The individual characteristics we examined to detect selection bias were age, professional affiliation, education, and gender. Only professional affiliation was significant. There was a higher rate of response for ACHE-affiliated hospital CEOs. Only 18 percent of non-ACHE-affiliated hospital CEOs responded to the survey, versus 41 percent of ACHE-affiliated hospital CEOs.

### Variables

Independent variables in these analyses include organizational factors and individual CEO characteristics. Organization-level measures include ownership, size, and the region in which the hospital is located. For-profit hospitals were coded with the value 1 if yes, with all other ownership types as the reference group. We operationalized organizational size by the number of hospital inpatient beds. For bivariate analyses, size was categorized into three groups based on distribution: fewer than 150 beds, 150 to 299 beds, and more than 299 beds. In the multivariate analyses, bed size was entered into the model as a continuous variable. The geographic variable was created by collapsing the nine regions in the AHA Annual Survey into four areas: Eastern, Central, Southern, and Western. As before, the variables were coded 1 if yes and

0 otherwise. The variable "southern" is the reference variable in our equations.

Individual level measures included CEOs' demographic characteristics, attitude toward the changing environment, age, gender (male = 1; female = 0), and ACHE membership (yes = 1; no = 0). Traditionally, executives at hospitals have been males (Arndt 2010). We created a binary variable to capture the level of CEOs' education: graduate education with either two master's degrees or a doctoral degree, compared with one master's degree or less education.

Three survey questions were asked to ascertain the importance of CE. Two related to change and one to technology. The CEO's CE focus on change was constructed by combining two Likert scales (1 [very unimportant] to 5 [very important]). The first asked the importance of CE to staying current with political changes, and the second asked the importance of CE to understanding changes in healthcare delivery. The CEO's focus on technology was created from a Likert scale question (1 [very unimportant] to 5 [very important]) that asked how important CE was to learning about new technology.

To evaluate objective 1, the dependent variable is the number of CE hours in which a CEO had participated in the past 12 months. CE was defined as instructional programs or processes that would bring the participants up to date in a particular area of knowledge or skills that may be obtained through in-person seminars at participant's facility or offsite; the use of electronic media, such as CDs or DVDs; online seminars; webinars; conferences with platform presentations; self study manuals/

guides; and books or journals discussion groups.

The second dependent variable used to study objective 2 reflects hospital CEOs' assessment of the degree of senior management involvement in CE. The variable is derived from a five-point Likert scale (1 [very little involvement] to 5 [highly involved]), as the CEO was asked to rate the involvement of their senior managers in CE in the previous 12 months.

### Analysis

Frequency statistics were compiled for all study variables to examine distributions and possible outliers. Bivariate analyses, using chi-square tests, were conducted to detect differences in the amount of CE CEOs received and to determine whether they varied by organizational factors, such as ownership status, hospital size, and region and by individual characteristics, such as age, gender, education, and ACHE affiliation. Mean comparisons were also performed through a Duncan-Waller test, which compares multiple means using ANOVA procedures. We reported only chi-square results, as those from the ANOVA procedures generally replicated chi-square test results.

Multiple regression analyses were used to identify factors that influence the amount of time CEOs participated in continuing learning and CEOs' assessment of the degree of senior management involvement in CE. CEOs' participation was modeled as a function of organizational ownership, size, and region and CEO age, education, gender, ACHE membership, and focus on change and technology. CEOs'

assessment of the degree of senior management involvement in CE was analyzed in two models. The first model was a function of objective variables: organizational ownership, size, and region and CEO age, education, gender, time served as CEO, ACHE membership, and ACHE Fellow status. The second model adds two perceptual variables regarding the degree to which the CE focused on change and learning about new technology.

## RESULTS

Exhibit 1 presents sample characteristics. The mean age of study participants was 53 years old. Although females far outnumber males in the healthcare workforce across the country (Lantz 2008), they account for only 18 percent of US hospital CEOs. The gender distribution of our sample reflects the national distribution: 19 percent of the CEOs in our sample were women. Nineteen percent of our sample hold a bachelor's degree in healthcare administration, 62 percent have earned a master's degree in healthcare administration, 11 percent have an additional master degree (most often a master's in business), and 2 percent hold a doctoral degree.

Seventy-eight percent reported that CE is important or very important to understanding the political and structural changes in healthcare delivery (a mean of 4.1 on the Likert scale), while 14 percent were indifferent and 9 percent considered it unimportant. In regard to the emphasis of CE on learning about new technologies, 70 percent felt it was unimportant or very unimportant (a mean of 2.2 on the Likert

scale); while just 10 percent felt it was important or very important.

The mean bed size of hospitals was about 166 beds. Fifty-six percent of the study participants were CEOs of not-for-profit hospitals, 8 percent worked for proprietary hospitals, and 36 percent worked for government hospitals. CEOs from the Southern Region of the United States made up 41 percent of the sample, followed by 28 percent from the Central Region, 17 percent from the Western Region, and 12 percent from the Eastern Region.

Exhibit 2 demonstrates the variation in the amount of time CEOs spent on CE in the previous year. On average, CEOs in our sample spent 45 hours (standard deviation = 55.8) annually on CE. The median number of hours spent in CE was 36 hours. About 52 percent of the CEOs spent less than 40 hours; 35 percent spent between 40 to 79 hours; and 13 percent spent more than 80 hours in CE per year.

Exhibit 3 presents results from bivariate analyses of associations between organizational factors and the number of hours CEOs spent in CE. Differences were observed by bed size and ownership. Bivariate results suggest that hospital CEOs at smaller facilities spent more time in CE than those operating hospitals with more than 150 beds. Ownership type exhibited significant differences between for-profit and not-for-profit hospitals. CEOs of for-profit hospitals consistently reported fewer hours spent in CE. A larger proportion of for-profit hospital CEOs reported spending less than 10 hours in CE per year (19.4 percent versus 7.2 percent). The mean hours spent in CE were

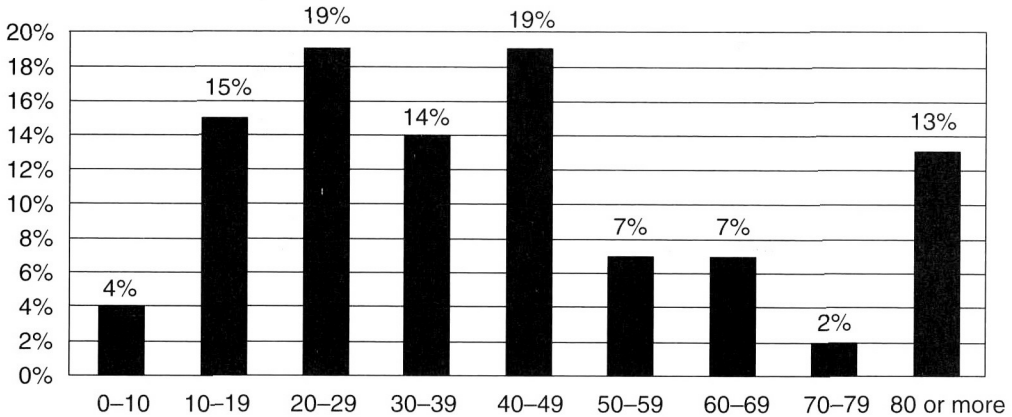
**EXHIBIT 1**  
**Respondent Characteristics (n = 583)**

|                                   | n (%)     | Mean (Std Dev) |
|-----------------------------------|-----------|----------------|
| <i>Individual Characteristics</i> |           |                |
| Age                               | 565       | 53.3 (8.0)     |
| Gender                            |           |                |
| Female                            | 106 (19%) |                |
| Male                              | 466 (81%) |                |
| Degree                            |           |                |
| Bachelor's                        | 107 (19%) |                |
| Master's                          | 357 (62%) |                |
| Two master's                      | 62 (11%)  |                |
| Doctoral                          | 10 (2%)   |                |
| Professional Membership           |           |                |
| ACHE affiliation                  | 425 (74%) |                |
| ACHE Fellowship                   | 269 (47%) |                |
| CE focus on change                | 574       | 4.1 (0.9)      |
| <i>Organizational Setting</i>     |           |                |
| Bed size                          | 575       | 165.6 (183.5)  |
| Ownership                         |           |                |
| Not-for-profit                    | 320 (56%) | 0.56 (0.50)    |
| For-profit                        | 47 (8%)   | 0.08 (0.27)    |
| Government                        | 208 (36%) | 0.36 (0.48)    |
| Region                            |           |                |
| Western                           | 97 (17%)  | 0.17 (0.37)    |
| Central                           | 161 (28%) | 0.28 (0.45)    |
| Southern                          | 235 (41%) | 0.41 (0.49)    |
| Eastern                           | 71 (12%)  | 0.12 (0.33)    |

34 hours for CEOs of for-profit hospitals and 45 hours for CEOs of not-for-profit hospitals.

Exhibit 4 presents bivariate results examining associations between CEO characteristics and the number of hours CEOs spent in CE. The number of hours did not vary by age, education, or gen-

der. The only individual characteristic that demonstrated statistical significance in relation to the number of CE hours was ACHE affiliation. Non-ACHE affiliates spent more time annually in CE than ACHE affiliates (54.5 hours versus 41.1 hours). A higher number of ACHE affiliates (22.6 percent) reported to have

**EXHIBIT 2****Number of CEO Hours in Past 12 Months**

participated in 10 to 19 hours of CE, while a higher number of non-ACHE affiliates (15.4 percent) reported 80 or more CE hours.

In assessing the hours CEOs spend on CE, we found that hospital ownership, bed size, geographic location, and professional affiliation have affected the amount of time a CEO spent on CE, as Exhibit 5 shows. For-profit hospital CEOs had significant results in Model 1 and near-significant results for fewer CE hours in Model 2 ( $-14.90$ ;  $p < 0.05$  and  $-14.04$ ;  $p < 0.10$ , respectively). Likewise, larger bed size had a negative effect on CE time by the CEOs. This was significant in Model 1 and near significant in Model 2 ( $-0.03$ ;  $p < 0.05$  and  $-0.23$ ;  $p < 0.10$ , respectively). However, CEOs in the Western Region had a positive relationship with CE hours compared with their counterparts in the Southern Region ( $14.75$ ;  $p < 0.05$  and  $14.71$ ;  $p < 0.05$ , respectively) in both models. The significant individual characteristic is ACHE membership with a negative

relationship to the amount of CE hours ( $-12.36$ ;  $p < 0.05$  and  $-12.65$ ;  $p < 0.05$ , respectively) in both models.

Exhibit 6 examines CEOs' assessment of their senior managers' involvement in CE. A significant organizational predictor was the Central Region in Model 1 ( $0.16$ ;  $p < 0.05$ ) and the Western Region in Model 2 ( $0.20$ ;  $p < 0.05$ ), which were positively associated with increased senior management involvement in CE. CEO gender, the amount of CEOs' CE, and the reasons for and focus of CE were the individual characteristics most closely associated with senior managers' CE commitment. The relationship between male CEOs and senior staff CE involvement was negative ( $-0.29$ ;  $p < 0.01$  and  $-0.26$ ;  $p < 0.01$ , respectively) in both models. Greater annual CEO CE ( $0.003$  and  $0.002$ ;  $p < 0.001$ , respectively for Models 1 and 2) and the focus of CE on change ( $0.10$ ;  $p < 0.01$ , Model 2) were significantly associated with the CEO's perception of increased CE involvement of senior

**EXHIBIT 3**  
**Organizational Factors and CEO Continuing Education**

|                   | < 10 hrs | 10 to 19 hrs | 20 to 29 hrs | 30 to 39 hrs | 40 to 59 hrs | 60 to 79 hrs | 80 or more hrs | n   | Chi-square Analysis |       |
|-------------------|----------|--------------|--------------|--------------|--------------|--------------|----------------|-----|---------------------|-------|
| Geographic Region |          |              |              |              |              |              |                |     |                     |       |
| Western           | 15.5%    | 16.6%        | 15.5%        | 20.0%        | 14.4%        | 8.3%         | 10.3%          | 97  |                     |       |
| Central           | 5.0%     | 17.4%        | 14.9%        | 25.5%        | 17.4%        | 8.1%         | 11.8%          | 161 | DF                  | 18.0  |
| Southern          | 8.5%     | 23.0%        | 16.6%        | 20.4%        | 17.5%        | 6.0%         | 8.1%           | 235 | Value               | 15.2  |
| Eastern           | 9.9%     | 23.9%        | 16.9%        | 18.3%        | 15.5%        | 7.0%         | 8.5%           | 71  | Probability         | 0.65  |
| n                 | 50       | 115          | 90           | 121          | 94           | 40           | 54             |     |                     |       |
| Bed Size          |          |              |              |              |              |              |                |     |                     |       |
| <150              | 9.5%     | 17.8%        | 13.9%        | 22.3%        | 16.2%        | 7.2%         | 13.1%          | 359 | DF                  | 12    |
| 150 to 299        | 4.6%     | 25.2%        | 21.4%        | 21.4%        | 14.5%        | 8.4%         | 4.6%           | 131 | Value               | 25.4  |
| 300+              | 11.8%    | 24.7%        | 18.3%        | 18.3%        | 19.4%        | 4.3%         | 3.2%           | 93  | Probability         | 0.013 |
| n                 | 51       | 120          | 95           | 125          | 95           | 41           | 56             |     |                     |       |
| Ownership         |          |              |              |              |              |              |                |     |                     |       |
| Not-for-profit    | 7.2%     | 20.0%        | 16.1%        | 22.3%        | 17.0%        | 7.6%         | 9.8%           | 511 | DF                  | 6     |
| For-profit        | 19.4%    | 25.0%        | 18.1%        | 15.3%        | 11.1%        | 2.8%         | 8.3%           | 72  | Value               | 16.74 |
| n                 | 51       | 120          | 95           | 125          | 95           | 41           | 56             |     | Probability         | 0.010 |



**EXHIBIT 4****Individual Factors and CEO Continuing Education**

|                          | < 10 hrs | 10 to 19 hrs | 20 to 29 hrs | 30 to 39 hrs | 40 to 59 hrs | 60 to 79 hrs | 80 or more hrs | n   | Chi-square Analysis |       |
|--------------------------|----------|--------------|--------------|--------------|--------------|--------------|----------------|-----|---------------------|-------|
| Age                      |          |              |              |              |              |              |                |     |                     |       |
| < 45 years               | 13.2%    | 20.8%        | 13.2%        | 19.8%        | 13.2%        | 12.3%        | 7.6%           | 106 | DF                  | 12    |
| 44 to 54 years           | 8.0%     | 19.0%        | 19.4%        | 19.0%        | 20.3%        | 6.3%         | 8.0%           | 237 | Value               | 10.6  |
| > 54 years               | 7.5%     | 22.1%        | 14.6%        | 24.6%        | 13.8%        | 5.4%         | 12.1%          | 240 | Probability         | 0.08  |
| n                        | 51       | 120          | 95           | 125          | 95           | 41           | 56             |     |                     |       |
| Professional Affiliation |          |              |              |              |              |              |                |     |                     |       |
| Non-ACHE                 | 9.7%     | 16.9%        | 15.9%        | 23.6%        | 14.4%        | 4.1%         | 15.4%          | 195 | DF                  | 6.00  |
| ACHE affiliate           | 8.1%     | 22.6%        | 16.4%        | 20.3%        | 17.4%        | 8.6%         | 6.8%           | 385 | Value               | 17.50 |
| n                        | 50       | 120          | 94           | 124          | 95           | 41           | 56             |     | Probability         | 0.008 |
| Education                |          |              |              |              |              |              |                |     |                     |       |
| Bachelor's               | 2.6%     | 15.8%        | 15.8%        | 23.7%        | 18.4%        | 15.8%        | 7.9%           | 38  | DF                  | 12    |
| Healthcare<br>master's   | 8.4%     | 23.0%        | 16.3%        | 20.7%        | 15.7%        | 7.0%         | 9.0%           | 357 | Value               | 8.9   |
| Doctorate                | 10%      | 20.0%        | 0.0%         | 20.0%        | 30.0%        | 10.0%        | 10.0%          | 10  | Probability         | 0.71  |
| n                        | 32       | 90           | 64           | 85           | 66           | 32           | 36             |     |                     |       |
| Gender                   |          |              |              |              |              |              |                |     |                     |       |
| Male                     | 9.1%     | 21.4%        | 15.7%        | 19.7%        | 16.7%        | 6.8%         | 10.6%          | 472 | DF                  | 6     |
| Female                   | 7.5%     | 16.8%        | 17.8%        | 29.0%        | 15.0%        | 8.4%         | 5.6%           | 107 | Value               | 7.63  |
| n                        | 51       | 119          | 93           | 124          | 95           | 41           | 56             |     | Probability         | 0.27  |

**EXHIBIT 5**

**Regression Results for the Amount of CEO Time Spent on CE Annually (Two Regression Models)  
(n = 576)**

| Independent Variables                 | Model 1                        |      | Model 2                          |      |
|---------------------------------------|--------------------------------|------|----------------------------------|------|
|                                       | Objective Data                 |      | Including Perceptual Focus of CE |      |
|                                       | Coefficient                    | S.E. | Coefficient                      | S.E. |
| <b>Organizational Characteristics</b> |                                |      |                                  |      |
| For-profit (Not-for-profit)           | -14.90*                        | 7.5  | -14.04+                          | 7.54 |
| Bed size                              | -0.03*                         | 0.01 | -0.23+                           | 0.01 |
| Western Region (Southern)             | 14.75*                         | 6.91 | 14.71*                           | 6.93 |
| Eastern Region (Southern)             | -0.67                          | 7.79 | -1.34                            | 7.86 |
| Central Region (Southern)             | 3.31                           | 5.85 | 2.82                             | 5.87 |
| <b>Individual Characteristics</b>     |                                |      |                                  |      |
| Male (female)                         | -9.4                           | 6.28 | -8.42                            | 6.32 |
| ACHE member (Not member)              | -12.36*                        | 5.2  | -12.65*                          | 5.36 |
| Age                                   | -0.01                          | 0.3  | 0.01                             | 0.3  |
| Two master's or doctorate             | 10.19                          | 7.21 | 9.85                             | 7.28 |
| CE focus on change                    |                                |      | 4.02                             | 2.73 |
| CE focus on new technology            |                                |      | -0.33                            | 2.8  |
| Model fit:                            | F value = 2.76 ( $p < 0.001$ ) |      | F value = 2.45 ( $p < 0.01$ )    |      |
|                                       | R-Sq = 0.04                    |      | R-Sq = 0.05                      |      |

+  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

management. A focus on new technology was also significant but negative (-0.11;  $p < 0.01$ , Model 2).

**DISCUSSION**

Knowledge has become one of the most important resources of the 21st century. The most valuable asset in today's organizations is the cognitive talent and intelligence of its personnel. The CEO, as the firm's leader, must lead by example and action to create a learning organization that is prepared for change. Continuing professional development is

not a luxury but a necessity. As knowledge workers, healthcare professionals have a critical stewardship and must continue to broaden knowledge and skill sets (Murphy and Cross 2006). In our rapidly changing world, continuous learning is critical for leaders, as their initial professional training will not equip them for new and evolving challenges (Roscoe 2002).

Our findings suggest that both organizational and individual factors influence the amount of time CEOs spent in CE. The negative association



**EXHIBIT 6****Regression Results for the CEOs' Perception of Senior Managers' Focus on Continuing Education Efforts (Two Regression Models) (n = 576)**

| Independent Variables          | Model 1<br>Objective Data       |        | Model 2<br>Including Perceptual Focus of CE |        |
|--------------------------------|---------------------------------|--------|---|--------|
|                                | Coefficient                     | S.E.   | Coefficient                                 | S.E.   |
| Organizational Characteristics |                                 |        |   |        |
| For-profit (Not-for-profit)    | -0.11                           | 0.11   | -0.08                                       | 0.32   |
| Bed size                       | 0.0003                          | 0.0002 | 0.0003+                                     | 0.0002 |
| Western Region (Southern)      | 0.18+                           | 0.10   | 0.20*                                       | 0.10   |
| Eastern Region (Southern)      | -0.02                           | 0.11   | -0.02                                       | 0.11   |
| Central Region (Southern)      | 0.16*                           | 0.08   | 0.15+                                       | 0.08   |
| Individual Characteristics     |                                 |        |   |        |
| Male (female)                  | -0.29**                         | 0.09   | -0.26**                                     | 0.09   |
| ACHE member (Not member)       | 0.04                            | 0.07   | -0.02                                       | 0.07   |
| Age                            | 0.002                           | 0.004  | 0.002                                       | 0.004  |
| Two master's or doctorate      | -0.01                           | 0.10   | 0.01  | 0.10   |
| Annual CEO's CE                | 0.003***                        | 0.001  | 0.002***                                    | 0.001  |
| CE focus on change             |                                 |        | 0.10**                                      | 0.04   |
| CE focus on new technology     |                                 |        | -0.11**                                     | 0.04   |
| Model fit:                     | F value = 4.15 ( $p < 0.0001$ ) |        | F value = 5.16 ( $p < 0.0001$ )             |        |
|                                | R-Sq = 0.07                     |        | R-Sq = 0.10                                 |        |

+  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

between ownership and CE involvement can be explained by the greater focus of for-profit hospitals on "bottom-line" performance, which often exhibits lower employee costs and profit-maximizing behaviors that may restrict funding for educational opportunities (Carter, Massa, and Power 1997). For-profit hospitals are also more frequently focused on shorter time horizons and have efficiency motivations that may characterize CE as loss in productivity and thereby reduce the funding and focus on CE (Mark and Harless 2007). Hospital lead-

ers are often under heavy pressure to achieve monthly budgets and produce significant operating profits. As such, funding and time off for CE can become an easy target for reductions.

Organizational size may also affect the amount of annual CE in which a CEO participates. Larger hospitals are more complex and may require greater commitment to job responsibilities, leaving less time for CE. The literature has offered two perspectives on the relationship between organizational size and learning. The first suggests

that larger organizational size promotes rigidity through formalization, standardization, and resource dependency that fosters inertia and hinders learning (Hannan and Freeman 1984; Kelly and Amburgey 1991). The other indicates that increased size facilitates expertise and mechanisms for learning and change. Greater size may also add greater resource slack and market power that could be used to promote learning (Pfeffer and Salancik 1978; Kimberly 1976). However, the latter perspective may be tied to organizational goals and philosophy on CE and the willingness of leadership to dedicate resources for CE. Our research supports the first perspective.

Contrary to expectations, CEOs who had membership in the predominant professional organization for US health-care administrators, ACHE, spent less time on CE. ACHE is the largest professional organization for healthcare executives, with a membership of over 30,000 (ACHE 2010), and it provides many educational courses and a certification program for its members. It is likely that CEOs who are ACHE members feel connected to the industry as a whole and that ACHE membership provides educational experiences through networking and interactions that cannot be quantified but that allow members to reduce their needs for traditional or structured CE. On the other hand, nonmembers without the credentials and validation a professional organization provides may feel inclined to seek more CE to ensure their competencies.

In examining CEO perception of senior management's CE involvement, our findings showed that CEO gender,

personal dedication to CE, and the focus of CE appear influential. Male CEOs perceived less CE commitment from their senior managers. Many would argue that given the glass ceiling effect, female CEOs who have attained the executive positions have had to work harder and learn more to achieve advancement in comparison with their male counterparts (Ragins, Townsend, and Mattis 1998). Some recent research has suggested that females are less likely to pursue CE (Gumus et al. 2009). Our research does not support this, but showed that female CEOs may inspire a greater commitment to learning in those reporting to them.

The two foci of CE had different effects on CEO perception of senior management's CE involvement. As expected, the focus of CE on change is positively correlated with senior managers' commitment to CE. Learning is an important element of ensuring successful organizational change. However, the CEOs' emphasis on learning new technology had a negative relationship to senior management's CE commitment. Change may be action oriented and goal directed, which may encourage the commitment of executives, while CE focused on technology may be more passive in nature. The strongest association was between the amount of a CEO's personal CE and the commitment of their senior managers. It has been suggested that a healthcare organization's readiness to transition to a learning organization is directly tied to the amount of time a CEO spends on his or her own development (Lee and Herring 2009). The example and dedication of the CEO has a direct effect on his or her

subordinates. Our findings suggest that the time CEOs invest in CE may influence the CE involvement of their senior leadership.

Interestingly, there was a positive relationship between geographic location and CEO's number of CE hours and senior management's commitment to CE involvement. This finding may reflect the fact that the Western Region has been an early adopter of various innovations and ways to organize within healthcare. Healthcare facilities in the West were among the first to implement managed care, health information technology, pay-for-performance, and other innovations. Hence, CEOs in the Western Region of the United States may have worked in an environment that is open to new ideas and the continuous learning that is required to implement them.

### Limitations

Our research has a number of limitations. First, as with all surveys, our data are subject to recall bias, as CEOs were asked to provide information based on their perceptions and recall. We have sought to limit this through our survey selection design and analyses. The survey was field tested for construct validity by hospital CEOs, and a random sample of 2,001 hospitals across the United States was selected. Second, we surveyed hospital CEOs rather than all levels of staff, therefore our results captured only attitude and action toward CE by the top leader. On the other hand, obtaining permission to access and survey employees in this large number of hospitals would be difficult if not impossible. CEO responses are a reasonable

proxy, as CEOs are decision makers on organizational policies, including those surrounding CE. CEO opinions have also commonly been used to represent firm outcomes in research, as they are highly influential in orienting the organizational climate (Cycycota and Harrison 2006; Nieva and Sorra 2003). Researchers have found that the CEO's attitudes, perceptions, and actions heavily influence the success and outcomes of firms (Collins 2001). Third, related to our focus on hospital CEOs, the generalizability of our results to other segments or settings of the healthcare industry may not be applicable. Finally, we lacked certain information that would have strengthened our examination of CE. For example, our data did not have a variable to measure the resources expended by the organization on CE. Depending on budget constraints, organizations may be selective about restricting CE to a small group of employees rather than allowing it organization-wide.

### CONCLUSIONS

Leaders lead by example. Leaders model and encourage behaviors that are frequently replicated in their organizations (Murphy and Cross 2006). CEOs can affect the culture, roles, values, and practices of their organizations by their actions and behaviors (Shearer, Hames, and Runge 2001; Schein 1992; Shamir, House, and Arthur 1993). Good leaders improve their firms' values and cultures (Huang, Cheng, and Chou 2005). Logically, executives who devote significant time to their own development will have an impact on creating a culture of learning

in their organizations. Executives' efforts in personal development can encourage widespread organizational improvement. Executives set the course for the organizations they lead, and where they direct their attention is where their employees will most likely follow.

Research has shown that individuals who engage in continuous, lifelong learning and education increase their organizational performance, become more creative and innovative, are better able to help their organization adapt, and are able to gain competitive advantage (McLean 2005). Although most employees believe in taking charge of their own learning and career development, organizational direction from their leaders has been critical in motivating employees to invest time and energy in professional development (Mallon and Walton 2005; Thomson et al. 2001). Our research identifies individual and organizational factors that influence the amount of CE CEOs and their subordinates seek. We hope our work assists organizations to better understand these influences and motivates them to encourage effective CE and learning. Only by improving commitment to learning will organizations be prepared for the forthcoming challenges in healthcare.

## REFERENCES

- American College of Healthcare Executives (ACHE). 2010. "About ACHE." [Online information; retrieved 9/10/10.] [www.ache.org/aboutache.cfm](http://www.ache.org/aboutache.cfm).
- Arndt, M. 2010. "Education and the Masculinization of Hospital Administration." *Journal of Management History* 16 (1): 75-89.
- Bartholomew, S., and A. Smith. 2006. "Improving Survey Response Rate from Chief Executive Officers in Small Firms: The Importance of Networks." *Entrepreneurship Theory and Practice* 30 (1): 83-96.
- Baruch, Y. 1999. "Response Rate in Academic Studies—A Comparative Analysis." *Human Relations* 52 (4): 421-438.
- Bolam, R. 1993. *Recent Developments and Emerging Issues in the Continuing Professional Development of Teachers*. London: General Teaching Council for England and Wales.
- Carter, R., L. Massa, and M. Power. 1997. "An Examination of the Efficiency of Proprietary Hospital Versus Non-Proprietary Hospital Ownership Structures." *Journal of Accounting and Public Policy* 16 (1): 63-87.
- Collins, J. 2001. *Good to Great*. New York: HarperCollins.
- Craig, E., J. Kimberly, and P. Cheese. 2009. "Business Insight (A Special Report): Human Resources—How to Keep Your Best Executives: The Key: Make It Easier for Them to Leave." *Wall Street Journal*, October 26.
- Cycyota, C. S., and D. A. Harrison. 2006. "What (Not) to Expect When Surveying Executives: A Meta-Analysis of Top Manager Response Rates and Techniques over Time." *Organizational Research Methods* 9: 133-60.
- Gumus, G., N. Borkowski, G. Deckard, and K. Martel. 2009. "Gender Differences in Professional Development of Healthcare Managers." *Leadership in Health Services* 22 (4): 329-39.
- Hallier, J., and S. Butts. 1999. "Employers' Discovery of Training: Self-Development, Employability and the Rhetoric of Partnership." *Employee Relations* 21 (1): 80-94.
- Hannan, M., and J. Freeman. 1984. "Structural Inertia and Organizational Change." *American Sociological Review* 49: 149-64.
- Huang, M., B. Cheng, and L. Chou. 2005. "Fitting in Organizational Values: The Mediating Role of Person-Organization Fit Between CEO Charismatic Leadership and Employee Outcomes." *International Journal of Manpower* 26 (1): 35-51.
- Kelly, D., and T. Amburgey. 1991. "Organizational Inertia and Momentum: A Dynamic Model of Strategic Change." *Academy of Management Journal* 34 (3): 591-612.
- Kimberly, J. 1976. "Organizational Size and the Structuralist Perspective: A Review,

- Critique, and Proposal." *Administrative Science Quarterly* 21 (4): 571–97.
- Lantz, P. 2008. "Gender and Leadership in Healthcare Administration: 21st Century Progress and Challenges." *Journal of Healthcare Management* 53 (5): 291–304.
- Lee, B., and J. Herring. 2009. *Growing Leaders in Healthcare: Lessons from the Corporate World*. Chicago: Health Administration Press.
- Long, S. 2004. "Really... Why Do Executives Attend Executive Education Programmes?" *Journal of Management Development* 23 (7/8): 701–15.
- Mallon, M., and S. Walton. 2005. "Career and Learning: The Ins and the Outs of It." *Personnel Review* 34 (4): 468–90.
- Mark, B., and D. Harless. 2007. "Nurse Staffing, Mortality, and Length of Stay in For-Profit and Not-for-Profit Hospitals." *Inquiry—Excelsus Health Plan* 44 (2): 167–87.
- McLean, J. 2005. "Education: The Driving Force Behind Growth and Prosperity." *British Journal of Administrative Management* (April/May): 18.
- Murphy, C., and C. Cross. 2006. "The Motivation of Nurses to Participate in Continuing Professional Education in Ireland." *Journal of European Industrial Training* 30 (5): 365–84.
- Nieva, V. F., and J. Sorra. 2003. "Safety Culture Assessment: A Tool for Improving Patient Safety in Healthcare Organizations." *Quality and Safety in Healthcare* 12: 17–23.
- Pfeffer, J., and G. Salancik. 1978. *The External Control of Organizations*. New York: Harper and Row.
- Ragins, B., B. Townsend, and M. Mattis. 1998. "Gender Gap in the Executive Suite: CEOs and Female Executives Report on Breaking the Glass Ceiling." *Academy of Management Executive* 12: 28–42.
- Roscoe, J. 2002. "Continuing Professional Development in Higher Education." *Human Resource Development International* 5 (1): 3–9.
- Schein, E. 1992. *Organizational Culture and Leadership*. San Francisco: Jossey-Bass.
- Shamir, B., R. J. House, and M. B. Arthur. 1993. "The Motivational Effects of Charismatic Leadership: A Self-Concept Based Theory." *Organization Science* 4 (4): 577–94.
- Shearer, C., D. Hames, and J. Runge. 2001. "How CEOs Influence Organizational Culture Following Acquisitions." *Leadership and Organizational Development Journal* 22 (3): 105–113.
- Squazzo, J. 2009. "Cultivating Tomorrow's Leaders: Comprehensive Development Strategies Ensure Continued Success." *Healthcare Executive* 24 (6): 70–71.
- Thomson, A., C. Mabey, J. Storey, C. Gray, and P. Iles. 2001. *Changing Patterns of Management Development*. Oxford: Blackwell.

## PRACTITIONER APPLICATION

*Greg L. Terrell, FACHE, senior vice president and COO, Norman Regional Health System, Norman, Oklahoma*

In uncertain economic times for many healthcare institutions, continuing education (CE) is often seen as low-hanging fruit in the hunt for expense reductions. For hospital executives, CE was historically often directly linked to off-site, ACHE-sponsored seminars whose total cost could exceed several thousand dollars per session. Without even considering industry economics, such costs drove a number of participants away, especially more seasoned, experienced CEOs who felt that the subject matter, in having to span the spectrum of audience experiences, did not offer them the depth of new knowledge they desired for the price they were paying.

The rapid growth of electronic and self-directed CE opportunities has addressed some of the cost considerations. However, at the end of the day, the two most

important factors in seeking CE are the individual's passion for the pursuit of educational opportunities and the corporate culture toward education, which in many cases is a direct result of the CEO's individual attitude toward CE.

This article identifies and attempts to quantify many of the factors at play in determining the importance of CE for today's senior healthcare executives. The article looks at the CE pie from several different perspectives, with some interesting findings. Data is stratified by such factors as age, sex, educational level achieved, professional society membership, tax status, and so on. One area the article touched on briefly was the issue of the perceived importance of the subject matter of the educational offering. The example given was that the subject of new or emerging technologies was scored as unimportant to a large majority of the survey participants. Organizations such as ACHE should take this type of finding to heart as they design future educational offerings. Surely in this era of unprecedented healthcare reform and with all healthcare organizations facing uncertain financial futures, the opportunities to identify and provide timely and relevant educational experiences are abundant.

Likewise, this article demonstrates that it is incumbent upon today's senior leaders in our field to embrace the value of ongoing education and the need for us to set the example to our staffs and future leaders in this time of great transition.