

The US Healthcare Facilities Management Industry's State of Hiring from Facilities Management Academic Programs

Steven Call,¹ Kenneth Sullivan,¹ Jake Smithwick^{2*}

¹Arizona State University

²University of North Carolina at Charlotte, 9201 University City Blvd., Charlotte, NC 28223, United States

*Corresponding Author: Jake.Smithwick@uncc.edu

ABSTRACT

The purpose of this research is to better understand the current state of US healthcare FM industry hiring practices from FM academic programs. A national survey was distributed to healthcare FM directors to collect quantifiable information on healthcare organizations and their hiring practices from FM academic programs. Survey respondents that hired directly from an academic program were contacted for phone interviews. Results indicate that the healthcare FM industry is hiring very few college interns and new college graduates for entry-level management jobs. This paper is valuable in establishing the current state of the US healthcare industry's hiring practices from FM academic programs. Results will be used to better understand the needs and barriers of entry-level FM employment from FM academic programs as a potential source for new talent to the healthcare FM industry.

INTRODUCTION

The facilities management (FM) industry is experiencing a high rate of attrition, with large numbers of managers retiring and a shortage of new FM professionals entering the field (Sullivan et al., 2010). This FM attrition problem may be exacerbated within the healthcare industry from a demand for FM professionals to possess unique experience in healthcare built and regulatory environments. This includes an understanding of complex power and mechanical systems, combined with an awareness of the myriad regulations from government agencies (ASHE succession planning, 2017; Shohet, 2002; Moy, 1995).

Highlighting the risk of having too few qualified facility managers to support the needs of hospitals and clinics across the United States, the American Society for Healthcare Engineering (ASHE) has designated the recruitment of new FM professionals as a top strategic initiative for their membership (ASHE strategic plan, n.d.; Barber, 2007). The healthcare FM workforce is shrinking and aging (Uomo et al., 2009; Carpenter, 2012; ASHE succession planning, 2017). The traditional succession model of transitioning into the FM profession from a building trade may become difficult to sustain from the decline of vocational education and challenge of attracting and retaining tradespersons (Sullivan et al., 2010; Benavot, 1983; Bigelo et al., 2017). Conventional recruitment efforts, that once worked in a more homogenous environment dominated by baby boomers, will be inadequate in the increasingly diverse and competitive workplace that is affecting both quantity and quality of labor (Lengnick-Hall,

1994; Taber & Hendricks, 2003; Beechler & Woodward, 2009).

Colleges and universities are a primary recruitment source for organizations to fill entry-level jobs (Lindquist & Endicott, 1986), and the benefits most organizations gain by employing highly-capable college graduates are well documented (Perna, 2003; Howard, 1986; Miner & Wachtel, 1995). Accordingly, Sullivan et al. (2010) proposed growing the number of FM academic programs to attract more new talent into the FM industry. The significant growth of these FM academic programs in the United States over the last decade suggests that universities are supporting this solution. Though still relatively few, there are now 16 FM academic programs accredited by the International Facilities Management Association (IFMA) in the United States that offer a bachelor's or master's degree in facilities management; there were only 9 such programs in 2010 (Sullivan et al., 2010; IFMA registry, n.d.) (Table 1). However, even with the growth of FM academic programs, the healthcare FM industry's state of hiring from FM academic programs is unknown.

The purpose of this research is to better understand the current state of US healthcare FM industry hiring practices from FM academic programs. This research does not seek to measure FM attrition and its impact to the healthcare industry, though this topic warrants serious consideration for future research.

LITERATURE REVIEW

An extensive literature review found no published research on the healthcare FM industry's hiring practices

TABLE 1.—IFMA Accredited US FM Academic Programs (Bachelor's and Master's)

2010	2018
Arizona State University	Arizona State University
Brigham Young University	Brigham Young University
Cornell University	Cornell University
Ferris State University	Ferris State University
Georgia Institute of Technology	Florida A&M
North Dakota State	Georgia Institute of Technology
Pratt Institute	Indiana University Purdue University at Indianapolis
Texas A&M University	Kennesaw State University
Wentworth Institute of Technology	New York City College of Technology
	Pratt Institute
	Rochester Institute of Technology
	South Seattle College
	Temple University
	University of Minnesota
	University of North Carolina Charlotte
	Wentworth Institute of Technology

from academic programs. The American Society for Healthcare Engineering (2017) offered some perceptions of healthcare FM on hiring from academic programs. It included suppositions that available entry-level healthcare facility manager jobs are scarce, students are generally unaware of the healthcare FM profession, the best college graduates require extensive training after graduation to become effective healthcare managers, and internships are an ideal method to introduce students to the profession in preparation for future healthcare FM employment.

Sullivan et al. (2010) established the general FM industry's hiring practices from academic programs. A large majority of FM professionals possess degrees before entering the field. Younger FM professionals are more likely to consciously choose the profession compared to older FM professionals who usually entered the profession through the building trades. Most FM industry representatives value the creation of FM undergraduate programs and recruiting employment candidates from those programs. Cabral & Mindonca (2012) highlighted the value industry places on built environment graduates, with strong employability upon graduation and beyond. Bilboa et al. (2000) described how the robust industry demand has created a deficit of college graduates with construction and facilities management training. Consequently, competition to hire these students is stiff. To attract new college graduates, recruiting companies are raising entry-level salaries and increasing campus presence and interactions with faculty and staff (Christofferson et al., 2006).

METHODOLOGY

There is insufficient empirical data to establish the current state of healthcare FM hiring practices from FM academic programs. To secure the necessary data, surveys

were developed to collect information from healthcare organizations regarding their hiring practices from FM academic programs. Organizational demographics information was sought to understand structure, size, and market demand for entry-level healthcare facility managers, as well as specific hiring practices for full-time and internship jobs and respondents' opinions on this subject.

The scope of the study concentrates on the FM healthcare field within the United States. The research targeted members of ASHE holding director-level titles containing the words engineering, maintenance, physical plant, operations, support services, facility or facilities. The director-level title concentration sought to prevent redundant data from multiple managers within the same healthcare organizations, as healthcare organizations typically only employ a single FM director. However, as many healthcare organizations are also part of a healthcare system, titles containing the words system, corporate, regional, national, administrative, or executive were omitted as part of the study to prevent redundant data from multiple directors within the same healthcare system. Titles containing the words planning, construction, or design were also omitted to focus participation from healthcare professionals with primarily FM responsibilities, compared to design and construction or environmental services, though it is not uncommon for FM healthcare directors to have some overlap in these responsibilities.

DATA COLLECTION

Prior to a full survey, a pilot survey was developed using the available literature, past research, and input provided by a panel of seven healthcare FM experts. The expert panel operated under a two-step Delphi approach prior to release of the first pilot survey. The pilot survey was sent to 75 healthcare FM executives across the US. Twenty-one healthcare FM executives completed the survey for a 28% response rate. The results of this pilot survey are not included in the national survey data.

A national survey was then developed, without further input from an expert panel, based upon pilot survey results. The national survey was sent to 1,132 healthcare FM directors from the ASHE membership directory across all 50 states. Of the 1,132 healthcare FM directors contacted to participate in the survey, 291 completed the survey for a 26% response rate that represented 49 of 50 states (Figure 1). To encourage participation, at least one email was sent to the entire list of 1,132 healthcare FM directors and 820 were contacted by phone to encourage participation in the survey. Data collection was managed through a national survey administered by an online survey tool from Qualtrics®, which collected and stored all responses in an online database. Survey respondents who hired directly from an academic program were contacted for a phone interview to validate survey data accuracy and further explore the respondent's hiring practices and opinions.

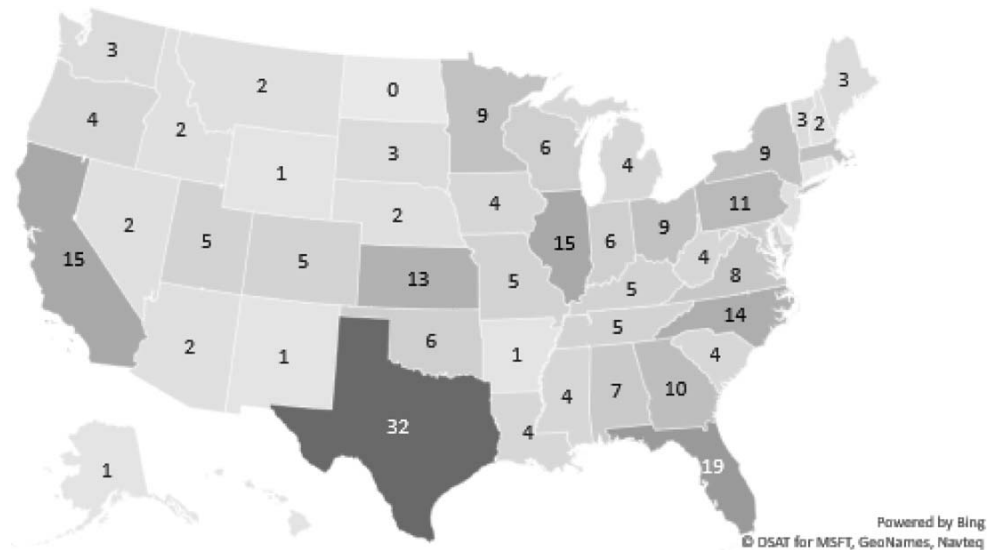


FIGURE 1.—National Survey Respondent Distribution

DATA RESULTS & ANALYSIS

Pilot Survey – Healthcare FM Industry’s Hiring Practices from Academic Programs

The pilot survey data describing the FM industry’s hiring practices from academic programs suggested that the healthcare FM industry was not hiring from academic programs.

Pilot survey respondents employ 322 entry-level facility managers and only 26 (8%) hold degrees. Pilot survey respondents hired a total of 41 entry-level facility managers over the past 12 months, and 8 (20%) were hired directly

from a university; however, only 1 of the 8 came from an FM academic program. Over the past 12 months, 11 interns were hired and 3 (27%) were hired for a full-time position within a year of internship completion. These data were not included in the national survey analysis.

National Survey - Healthcare Industry Demographics

Most healthcare organizations are non-profit; of the 291 respondents, 64 (22%) were from for-profit organizations and 227 (78%) were from non-profit organizations with 80% of organizations managing less than 2,000,000 total square feet of space (Figure 2). The average

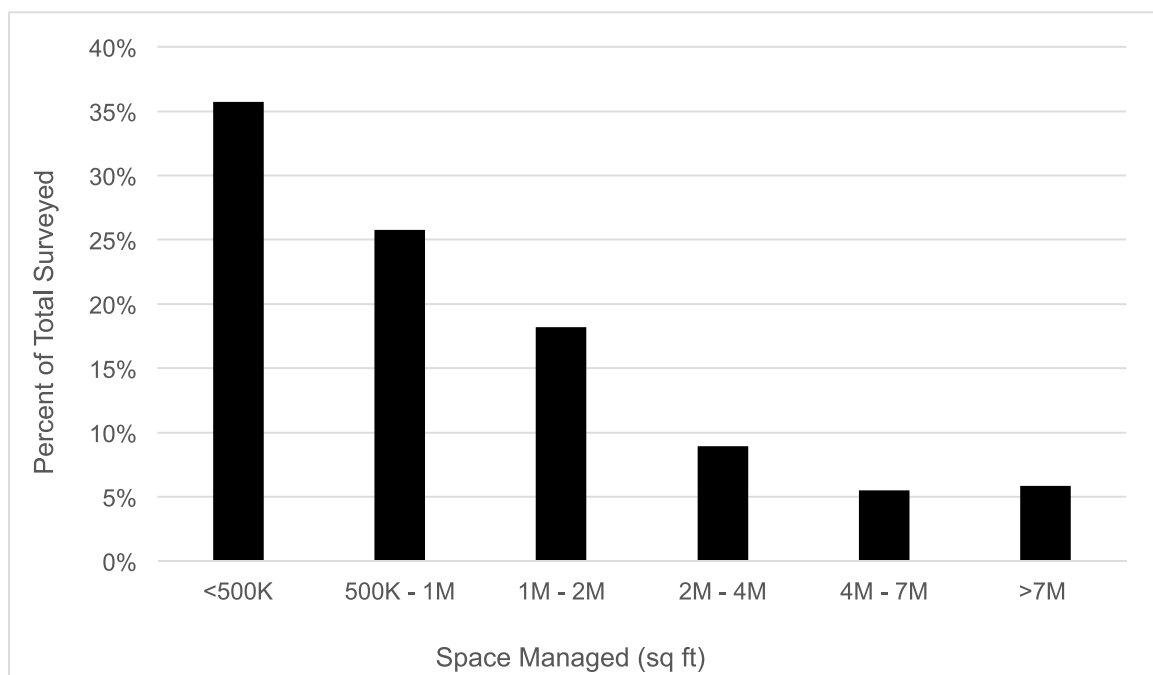


FIGURE 2.—National Survey Respondents’ Healthcare Organizations Grouped by Space (sq ft)

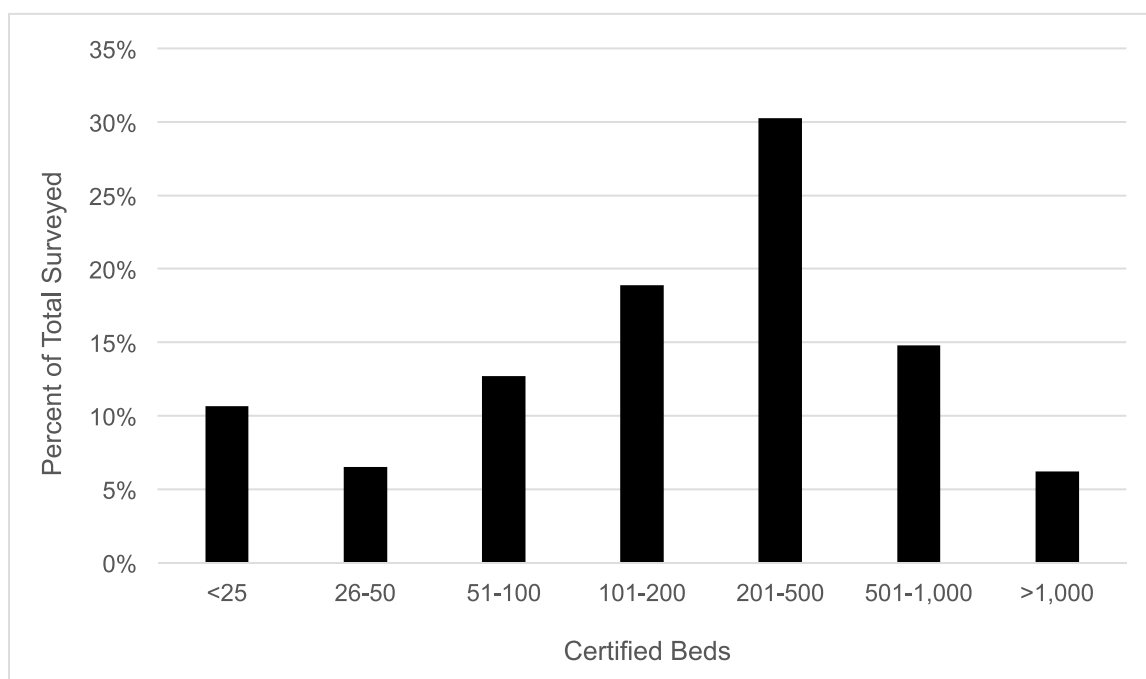


FIGURE 3.—National Survey Respondents' Healthcare Organizations Grouped by Certified Beds

space managed was between 500,001 to 1,000,000 square feet. Most space was healthcare occupancy at 65%, followed by business at 19% and ambulatory at 17%. Of the respondents' healthcare organizations, 79% manage less than 501 certified beds (Figure 3) with the average being between 201 – 500 beds.

National Survey - Data Describing FM Department Demographics

Respondents' healthcare FM departments maintain small management teams with an average of only two entry-level facility managers; a large majority, 83%, of their employees are employed inhouse. Respondents' healthcare FM departments have an average total staff size between 11 – 50 people. Most entry-level facility managers are also employed inhouse (83%). These managers have an average salary of \$50,000 – \$60,000 annually and 458 of 1,270 (36%) hold a degree, but only 87 of 1,270 (7%) hold an FM degree (Table 2). In addition to their plant operations and maintenance (POM) focused responsibilities, entry-level facility managers average 19% of their time managing construction activities and 2% of their time managing environmental services activities.

TABLE 2.—National Survey Key Information Summary for Entry-level Healthcare Facility Managers

Employed inhouse	83%
Annual salary (\$)	50,000 – 60,000
Hold a degree	36%
Hold a degree in FM	7%

National Survey - Healthcare FM Industry's Hiring Practices for Full-Time Jobs from Academic Programs

The data collected indicate that the US healthcare FM industry is hiring very low levels from academic programs for full-time, entry-level manager jobs. Of the 291 survey respondents, only 7 organizations (2%) hired at least 1 full-time, inhouse, entry-level FM job directly from a university over the past 12 months for a total of 8 hires; only 1 of the 8 came from an FM academic program. The extremely low levels of hiring from academic programs could be a major concern for the healthcare FM industry, as even specially trained FM students are not entering the field of healthcare FM.

The survey data suggest the lack of hiring from academic programs is not a result of limited entry-level FM healthcare job opportunities, as survey respondents alone hired 204 entry-level FM healthcare jobs over the past 12 months. Inhouse entry-level FM hiring activity was not evenly distributed, but all occurred within 117 (40%) of the respondents' healthcare organizations. Only 7 of the 117 organizations accounted for all university hiring. On average, these 7 organizations are larger than the average respondents' healthcare organization. They manage more space, beds, and staff. They also hire more entry-level healthcare facility managers and employ more existing entry-level facility managers with degrees (Table 3). Although there doesn't appear to be a clear statistical correlation between these factors and hiring levels from universities for entry-level FM healthcare jobs, the results suggest that a healthcare organization's size, hiring activity, and educational norms for entry-level managers may play a role in hiring levels from colleges and universities.

TABLE 3.—National Survey Organizational Average Size Comparison Between Survey Respondents' Organizations and Those that Hired Entry-level FM from Universities

	Area (sq ft)	Beds	Inhouse entry-level facility managers currently employed	Inhouse entry-level facility managers with degrees	Inhouse entry-level facility managers hired last 12 months
Average respondent's organization that hired from university	1,000,001 – 2,000,000	501 – 1,000	6.00	1.00	1.00
Average for all respondents' organizations	500,001 – 1,000,000	201– 500	2.00	0.00	0.00

Survey respondents strongly agree, on average, that there is a shortage of talent entering the healthcare FM profession, but opinions vary greatly on the importance of hiring from academic programs. There does not appear to be a correlation between a respondent's opinion on the importance of hiring from academic programs and actual hiring levels from academic programs. A strong agreement that recruiting from academic programs is important to healthcare succession planning, even from an FM director that has the authority to make hiring decisions, does not seem to affect actual entry-level hiring. Therefore, the lack of hiring from academic programs for entry-level FM healthcare jobs may be more of an organizational or systemic issue rather than a matter of individual opinion.

National Survey - Healthcare FM Industry's Hiring Practices College Internships

The data collected show healthcare organizations are hiring college internships at very low levels. Only 21 of the 291 (7%) of survey respondents hired at least 1 college intern over the past 12 months, and none were hired for a full-time, entry-level FM position within 12 months of

internship completion. This is surprising considering ASHE's strong support of, and even funding for, college internships within healthcare organizations (ASHE Internship, n.d.).

After phone interviews with 9 of the 21 respondents that hired interns, it appears that the primary focus of these internships was on building trades or construction, not on facilities management. On average, survey respondents that hired interns were satisfied with the intern's quality and skills (Figure 4), suggesting that the absence of hiring interns for full-time jobs is not a matter of dissatisfaction with overall intern quality or skillset. However, since very few internships were management focused, it is unclear if this postulation translates to entry-level healthcare FM hiring practices.

The data also suggest a relationship between a respondent's opinion on the importance of internships and actual hiring levels for internships. Survey respondents that hire interns are significantly more likely to strongly agree that internships are important to succession planning than those with lower scores (Table 4). When considering that a respondent's agreement level regarding the importance of

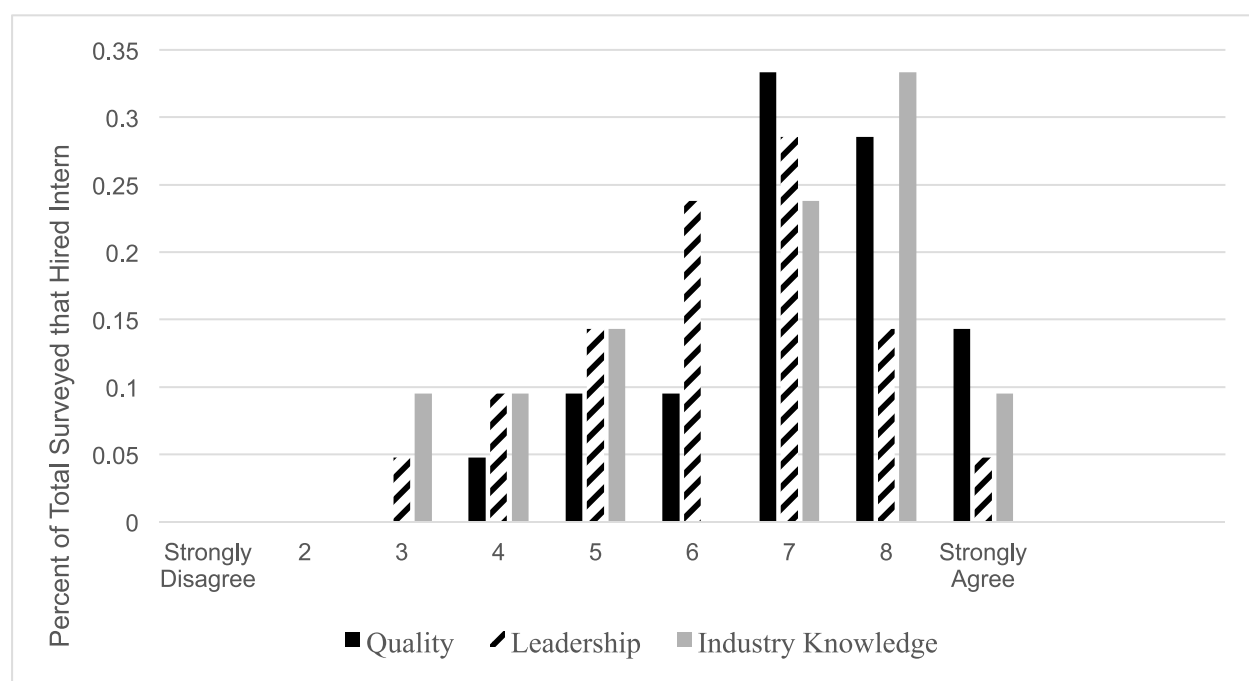
**FIGURE 4.**—National Survey Respondents' Agreement Levels on Demonstration of Satisfactory Skills by College Interns in Quality, Leadership, and Knowledge

TABLE 4.—National Survey Opinion on Importance of Interns: Comparing Respondents that Hired Interns to Average Respondent

	Strongly disagree that interns are important (Likert score 1 – 3)	Strongly agree that interns are important (Likert score 7 – 9)
Average respondent's agreement that hired intern	14%	57%
Average respondent's agreement	33%	29%

recruiting from academic programs doesn't increase the likelihood of entry-level hiring, the data suggest there may be fewer barriers to hiring interns compared to full-time, entry-level management jobs.

CONCLUSION & FURTHER RESEARCH

This study concludes that the healthcare FM industry is hiring very few college graduates for entry-level management jobs. It is perplexing to consider the lack of hiring from FM academic programs. Most healthcare FM directors agree there is a lack of new talent entering the field. The general FM industry strongly supports recruiting from FM academic programs, and the availability of specially trained FM students pursuing careers in FM is growing.

The lack of hiring from academic programs in healthcare FM does not appear to be an issue of limited jobs nor a matter of individual opinion regarding its importance. The research suggests that the lack of hiring may be related to organizational or systemic issues with a healthcare organization's size, overall hiring activity, and educational norms impacting entry-level FM hiring levels from academic programs.

Additional research is necessary to understand the barriers and needs for entry-level FM employment and the potential benefits of increasing hiring levels from FM academic programs. With typically small management teams, could it be that healthcare FM departments do not have sufficient resources to effectively develop college graduates and prefer hiring experienced managers that can make a more immediate impact? Could small management teams also limit or slow succession and career growth opportunities that may discourage new graduates from entering the healthcare FM field? With extremely low levels of existing entry-level healthcare facility managers with degrees, could there be a bias in healthcare FM against hiring new college graduates? Could human resource experience requirements be preventing new graduates from receiving adequate consideration for employment? As vocational education declines, and the evolving FM industry demands professionals with a more comprehensive skill set and capacity, could healthcare FM departments be focused too exclusively on tradespersons as the source to fill future management roles? Is the average level of pay competitive enough to attract new FM graduates into healthcare FM? Could the relatively small number of FM academic programs be inadequately preparing students for the healthcare environment? Are healthcare industry leaders and recruiters even aware of the existence of these FM academic programs? Are FM academic programs

reluctant to invest in healthcare-specific education with such low levels of recruitment from the healthcare FM industry? Considering answers to these questions will add understanding to the healthcare FM industry's relationship with FM academic programs and explore the prospect of higher education as a source of new healthcare FM talent.

References

- American Society for Healthcare Engineering, (2017). *Succession Planning: Preparing for the Future of Your Facility and Your Career*. Chicago, IL: Ed Avis.
- American Society for Healthcare Engineering strategic plan (n.d.). Retrieved from <http://www.ashe.org/governance/strategicplan.shtml>
- American Society for Healthcare Engineering Internship Program (n.d.). Retrieved from <http://www.ashe.org/education/internship/index.shtml>
- Barber, A. (2007). Recruitment. In *Encyclopedia of Industrial and Organizational Psychology* (pp. 667–670). SAGE Publications, Inc.
- Beechler, S., Woodward, I., (2009). The global “war for talent.” *Journal of International Management*. 15(3), 273–258.
- Benavot, A. (1983). The rise and decline of vocational education. *Sociology of Education*. 56, 63–76.
- Bigelow, B., Zarate, V., Soto, J., Arenas, J., Perrenoud, A. (2017). Attracting and Retaining Tradespeople, an Evaluation of Influencers on Construction Workers in Two Different Trades in Texas. *International Journal of Construction Education and Research*.
- Bilboa, D., Collins, C., Waseem, M., Burt, R. (2000). A Study of the Supply and Demand for Construction Education Graduates. *International Journal of Construction Education & Research*.
- Cabral, A., Mendonca, A. (2012). The economic and technical contemporary paradigm and the transition to work of higher education graduates in engineering, manufacturing, and construction. *International Journal of Social Sciences and Humanity Studies*. 4(2), 61–70.
- Carpenter, D., Hoppszallern, S. (2012, July 1). 2012 Salary Survey, *Health Facilities Management*.
- Christofferson, J., Wynn, K., Newitt, J. (2006). Assessing Construction Management Higher Education Strategies: Increasing Demand, Limited Resources, and Over-enrollment. *International Journal of Construction Education and Research*. 2(3), 181–192
- Howard, A. (1986). College Experiences and Managerial Performance. *Journal of Applied Psychology Monograph*. 71(3), 530–552.
- IFMA Foundation FM academic registry (n.d.). Retrieved from <http://fmacademicregistry.org>
- Lengnick, H. (1994). The AMA Handbook for Employee Recruitment and Retention. *Personnel Psychology*. 47(1), 225.

- Linguist, V., Endicot, F. (1986). *Trends in the employment of college and university graduates in business and industry (47th annual report)*. Evanston, IL: Northwestern University.
- Miner, J., Wachtel, J. (1995). How Deficiencies in Motivation to Manage Contribute to the United States' Competitiveness Problem (and What Can Be Done about It). *Human Resource Management*. 34(3), 363–387.
- Moy, F., Jr. (1995). Facility “wellness”: Health facilities management. *Facilities*. 13, 45–48.
- Perna, L. (2003). The private benefits of higher education: An examination of the earning premium. *Research in Higher Education*. 44(4), 451–472
- Shohet, I. (2003). Key performance indicators for maintenance of health-care facilities. *Facilities*. 21, 5–12.
- Sullivan, K., Georgoulis, S. W., & Lines, B. (2010). Empirical study of the current United States facilities management profession. *Journal of Facilities Management*, 8(2), 91–103.
- Taber, M. E., Hendricks, W. (2003). The Effect of Workplace Gender and Race Demographic Composition on Hiring Through Employee Referrals. *Human Resource Development Quarterly*. 14(3), 303–319.
- Uomo, P., Schwieters, J. (2009). Improving healthcare recruitment: the Jupiter Medical Center Experience. *Healthcare Financial Management*. 63(4), 100–106.