

# Employment Barriers into US Healthcare Management Industry for New Facilities Management College Graduates

*by*

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## Abstract

**Purpose** – The purpose of this research is to better understand employment barriers into the healthcare facilities management (FM) industry for new FM college graduates.

**Design/methodology/approach** – A national survey was distributed to healthcare FM managers and directors to collect information on individual demographics, hiring practices, and opinions of FM college graduates. Designated survey respondents were also contacted for phone interviews.

**Findings** – Results indicate that strong homogeneousness demographics, backgrounds, and paths of entry among existing healthcare FM professionals has created an industry bias against candidates attempting to enter healthcare FM from non-traditional sources. The healthcare FM industry's principal source for new talent comes from building trade succession within healthcare organizations. However, continuing to rely on building tradespersons as the main path of entry into the healthcare FM industry may prove problematic. Most existing healthcare facility managers and directors will be retiring within 10 years, yet it is taking more than 17 years of full-time work experience to prepare building tradespersons to assume these roles. Younger professionals are more commonly entering the healthcare FM through the path of higher education. Although few new college graduates enter the healthcare FM industry, they are experiencing similar promotion timeframes compared to other candidate with many years of full-time work experience. Unfamiliarity with FM academic programs, work experience requirements, limited entry-level jobs within small organizations, and low pay also present challenges for new FM college graduates attempting to enter the healthcare FM industry.

**Originality/value** – This paper is valuable in establishing major barriers of entering the healthcare FM industry for new FM college graduates. Findings may facilitate development of interventions by healthcare organizations and universities to further open FM academic programs as a sustainable source of new talent to help address healthcare FM attrition.

## Research Details

### Introduction

There is a shortage of new talent entering the field of facilities management (FM), making the recruitment of new candidates into the profession a priority for the FM industry

(Sullivan et al., 2010; ASHE succession planning, 2017). Historically, there has been no clear career path into the FM profession, with new talent entering the field from varying sources (Sullivan et al., 2010). However, the recent growth of FM academic programs and strong industry demand for its graduates suggest a viable path from college into the FM profession is emerging (Call et al., 2018; Bilboa et al., 2000). There are currently 16 FM academic programs accredited by the International Facilities Management Associations (IFMA) in the United States that offer undergraduate or graduate degrees in facilities management (Call et al., 2018)

Healthcare facility managers strongly agree that there is a shortage of new talent entering the field, but the healthcare FM industry is hiring very few new college graduates for entry-level FM jobs (Call et al., 2018). Colleges have long been an important recruitment source for most organizations (Lindquist & Endicott, 1986), so the healthcare FM industry's meager utilization of FM academic programs as a source of new talent is perplexing. The purpose of this research is to better understand employment barriers into the healthcare FM industry for new FM college graduates to facilitate development of interventions by healthcare organizations and universities to further open FM academic programs as a sustainable source of new talent to help address the healthcare FM attrition problem. This paper will review current literature and research on this subject, analyze quantitative research data from existing healthcare FM professionals, and discuss findings and future research opportunities.

### Literature Review

An extensive literature review found limited published research on FM employment barriers for new college graduates. The American Society for Healthcare Engineering (ASHE, 2017) interviewed several facility professionals and identified some possible barriers into healthcare FM for new college graduates including limited availability of entry-level jobs, delayed career advancement from lengthy FM employment tenures, and students' unawareness of the healthcare FM profession and need for extensive training after graduation. The National Research Council (2008) highlights many of the competencies necessary for effective facility managers including communication, quality and innovation, technology, sustainability, and technical skills. Rynes et al. (1997) listed cyclical availability and long onboarding periods to reach adequate productivity levels as potential employment hurdles for new college graduates.

Call et al. (2018) demonstrated that there is an abundance of entry-level healthcare FM jobs being hired in the United States, but very few are being filled by new college graduates. Barriers for new FM college graduates to enter healthcare FM may be due to an industry preference for job candidates with strong building trade and healthcare experience, entry-level job descriptions that require numerous years of full-time work experience, and uncompetitive salaries for entry-level jobs.

The average salary for entry-level healthcare facility manager jobs is approximately \$55,000 annually (Call, 2018). The average salary for new FM college graduates is approximately \$65,000 annually (IFMA, 2017). This pay gap between new FM college graduates and entry-level candidates poses an obvious employment challenge, although the differential

may not be an accurate reflection of actual productivity gaps (Freeman, 1975; Fleisher & Kniesner, 1984; Rosen, 1974).

The general FM industry has an aged workforce with many candidates entering the field without higher education (Sullivan et. al, 2010). Jackson (1991) and Schneider (1987) established that employers prefer to hire candidates like themselves, thus organizations with older workforces may tend not to hire many new college graduates. Notwithstanding the possible employment barriers for new college graduates, organizations with strong internal labor markets prefer hiring new college graduates to promote long-term employment relationships and enhance corporate cultural assimilation. More dynamic organizations, dealing with fluid market conditions and competition, prefer hiring new college graduates as greater value is placed upon open-mindedness, innovation, and creativity than prior work experience (Rynes et al., 1997).

### **Methodology and Data Collection**

The review of literature evinced insufficient empirical data to establish the employment barriers into the healthcare FM industry for new FM college graduates. To secure the necessary data, a pilot survey with 32 questions and a national survey with 44 questions were developed to address hypotheses established from available literature and past research:

1. The healthcare FM industry prefers to hire candidates with previous building trade and healthcare experience
2. Slow career advancement discourages new FM college graduates from entering healthcare FM
3. New FM college graduates are unaware of, or lack interest in, healthcare FM careers
4. New FM college graduates do not possess necessary skills to be effective entry-level healthcare facility managers

Survey data was collected from healthcare facility managers and directors regarding their employment and hiring experiences, past and current, from a combination of questions that included multiple choice and rankings on a Likert scale. Demographics information was sought to understand respondents' age, retirement timeframes, and educational attainment. Type and duration of work experience, hiring preferences and opinions, and familiarity with FM academic programs was also discovered. The scope of the study concentrates on the FM healthcare field within the United States. The research targeted members of ASHE holding manager and director-level titles with engineering, maintenance, physical plant, operations, support services, facility, or facilities. Job titles with planning, construction, or design were omitted to focus participation from healthcare professionals with primarily FM responsibilities, compared to design and construction or environmental services.

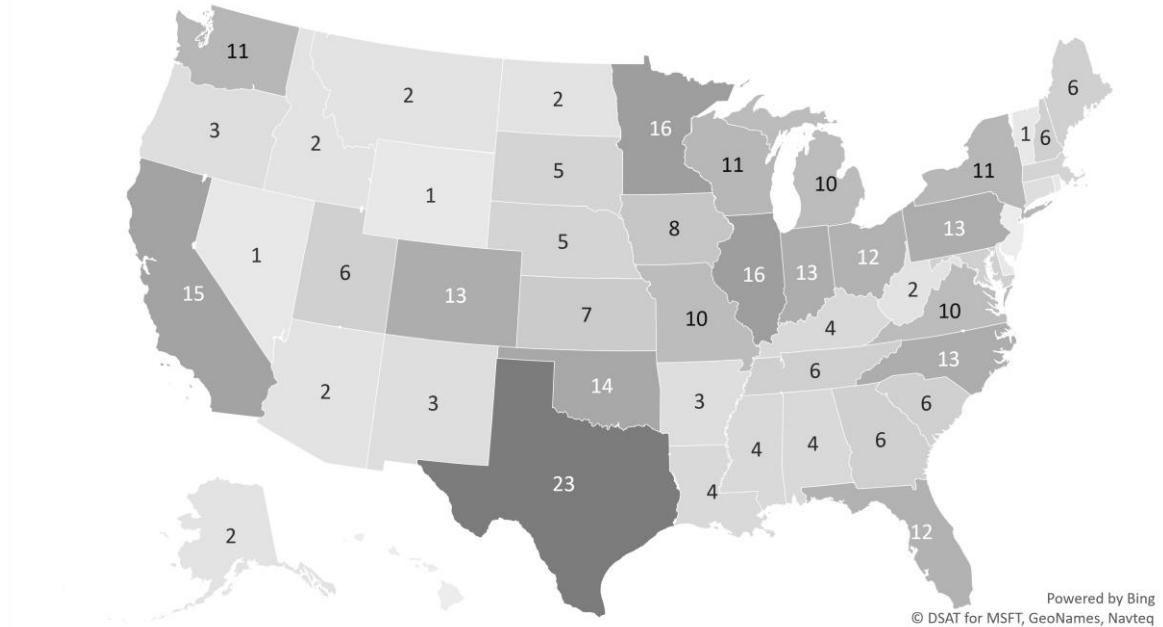
Prior to a full survey, a pilot survey was developed to understand potential employment barriers into healthcare FM for new college graduates and establish a basis for a full national survey. This pilot survey was sent to 71 healthcare FM executives across the United States. Fifteen healthcare FM executives completed the survey for a 21 percent response rate. The

results of this pilot survey are not included in the national survey data to ensure data consistency as some questions were added or modified for the national survey.

A national survey, henceforth described as “the survey”, was developed based upon pilot survey results. The survey was sent to 1,909 healthcare facility managers and directors across all 50 states. Of the 1,909 healthcare facility managers and directors contacted to participate in the survey, 343 completed the survey for a 18% response rate that represented 48 of 50 states (Figure 1). To encourage participation, an email was sent to the entire list of 1,909 healthcare facility managers and directors; an attempt was also made to contact the entire list via phone, with 853 participants accepting a call directly or by voicemail. Data collection was managed through an online survey tool from Qualtrics©, which collected and stored all survey responses in an online database.

The five percent of survey respondents that never recruited new FM college graduates for entry-level healthcare FM jobs, but strongly agree that new FM college graduates have the necessary skills to be effective entry-level healthcare facility managers, were contacted for a single phone interview to better understand their reasons for not recruiting new FM college graduates.

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**Figure 1. Location of Survey Respondents**

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## Data Results & Analysis

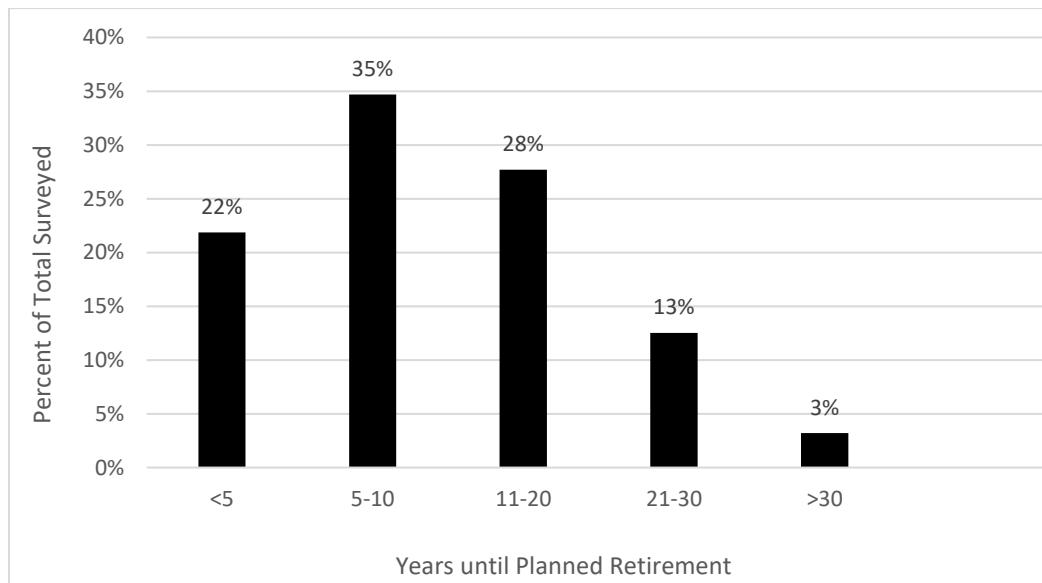
### Pilot survey

The pilot survey data suggested there may be employment barriers into healthcare FM from academic programs. All pilot survey respondents were 54 years of age or older and none entered the healthcare FM field as a college student. Pilot survey respondents had median 3 – 5 years of full-time building trade experience and 6 – 10 years of full-time management experience upon entering a management position in healthcare FM.

Most pilot respondents (73%) had never recruited a FM college graduate for a full-time entry-level healthcare FM job, with results suggesting that minimum experience requirements for entry-level FM jobs and college students' disinterest in healthcare FM as possible barriers into healthcare FM for new college graduates.

### *Survey data describing healthcare FM workforce age and education*

Demographic data show an aging healthcare FM workforce. Most respondents (60%) are 54 years of age or older; 31 percent of respondents are between 40 to 53 years of age, and 9 percent are 39 years of age or younger. Consequently, much of the healthcare FM workforce plans to retire within the next 10 years (Figure 2), with a significant increase in facility managers planning to retire within the next five years when compared to the general FM workforce in 2010 (Sullivan et. al, 2010). A chi-square test of homogeneity, used to assess differences in groups, confirmed a statistically significant difference between these two independent binomial proportions ( $p = .04$ ), highlighting the severity of the FM attrition issue within the healthcare industry.



**Figure 2. Survey Respondents Grouped by Planned Retirement**

Survey data suggest healthcare FM workforce lacks higher education attainment, even when compared to the general FM industry. Only 53 percent of respondents have attained at least a bachelor's degree. This level of educational attainment is significantly less than the general FM population, as 76 percent of general FM professionals have attained at least a bachelor's degree (Sullivan et al., 2010). A chi-square test of homogeneity was run comparing educational levels of survey respondents to general FM respondents in the Sullivan et al. survey. The two multinomial probability distributions were not equal in the population,  $X^2(4) = 34.589$ ,  $p < .001$ . Observed percentages are presented in Table 1. Upon entering healthcare FM, 38 percent of respondents had attained at least a bachelor's degree; this educational level is also less than the general FM population, as 64 percent of general FM professional had attained at least a bachelor's degree prior to entering FM.

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**Table 1. Respondents' Education Levels Grouped by Healthcare and General FM Industry**

Education Level	Healthcare FM	General FM (Sullivan, 2010)
High School	6%	3%
Some College	20%	14%
Associates/Vocational degree	21%	7%
Bachelor's degree	36%	50%
	17%	26%
Master's degree		

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Younger healthcare FM professionals are entering the industry significantly more educated than older healthcare FM professionals. Age of respondents are delineated by generations to reflect different economic and social conditions. A chi-square test of homogeneity was run comparing educational levels of younger participants, born after 1978, and older participants, born 1978 or earlier, prior to entering healthcare FM. The two multinomial probability distributions were not equal in the population,  $X^2(5) = 15.593$ ,  $p = .008$ . Observed percentages are presented in Table 2. Younger respondents are almost twice as likely to enter healthcare FM with a bachelor's or master's degree than older respondents. Conversely, older respondents are four times more likely to have entered healthcare FM with no college experience compared to younger respondents.

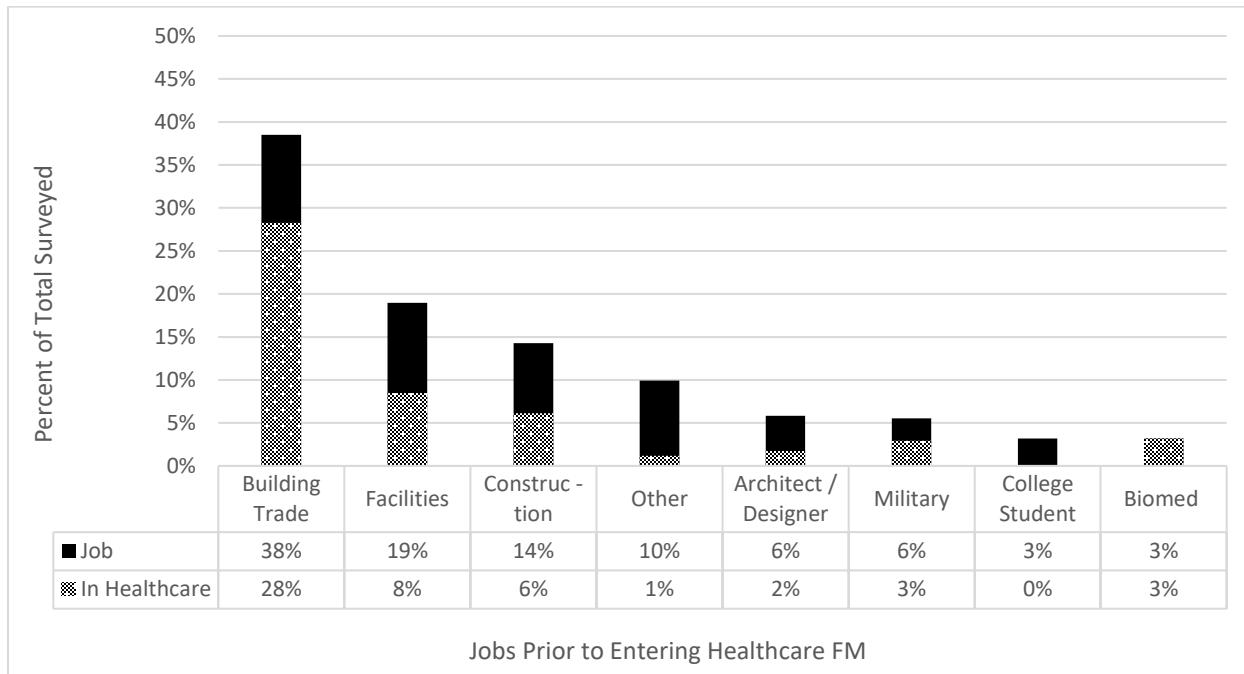
**Table 2. Respondents' Education Levels Entering Healthcare FM**

Education Level	Younger (born after 1978)	Older (born 1978 or earlier)
High School	3%	13%
Some College	13%	24%
Associates/Vocational degree	15%	28%
Bachelor's degree	60%	27%
Master's degree	9%	8%

*Hypothesis 1: The healthcare FM industry prefers to hire candidates with previous building trade and healthcare experience*

Data collected illustrate that transitioning from the building trades to management is the main path of entry to healthcare FM, with 38% of respondents entering healthcare FM from the building trades (Figure 3). Employment succession from the building trades into management is common in the FM industry, but healthcare FM appears to transition noticeably larger proportion of tradespersons into management roles (Sullivan et al., 2010). Two-hundred and forty-five respondents (71%) entered healthcare FM from traditional sources as full-time building tradespersons, facility professionals, or construction professionals; of these respondents, 147 (60%) were working full-time in healthcare organizations prior to entering healthcare FM, emphasizing healthcare FM's preference for hiring candidates with healthcare experience. Additionally, healthcare FM shows a strong penchant for promoting internally, as 126 (86%) of those working in healthcare prior to entering healthcare FM were promoted within their same healthcare organization (Figure 3).

Only 3 percent of respondents entered healthcare FM as full-time college students; of this group of students, 82 percent had no full-time management or building trade experience prior to entering healthcare FM and most graduated from undergraduate programs in engineering, facility management, or construction management.



**Figure 3. Survey Respondents' Jobs Prior to Entering Healthcare FM**

Survey data confirms that healthcare FM is recruiting or hiring very few new FM college graduates. Only 5% of respondents have ever, at any point in their career, recruited a new FM college graduate for an entry-level healthcare FM job. Interestingly, respondents that have recruited new FM college graduates are more likely to have entered healthcare FM from non-traditional sources (other than building trades or facility and construction professions). A chi-square test of homogeneity was run comparing employment sources and the recruitment of FM college students. There was a statistically significant difference in their proportions of  $p = .036$ . Observed percentages are presented in Table 3.

**Table 3. Respondents' Employment Source Entering Healthcare FM with FM College Recruiting Activity**

Recruited FM College Student	Employment Source Entering Healthcare FM	
	Non-traditional	Traditional
No	91%	96%
Yes	9%	4%

Survey data suggest a possible association between college internships and new FM college graduate hiring. A chi-square test of independence was conducted between college

internship hiring and FM college recruiting; with 75 percent of cells having an expected count greater than or equal to five, there appears to be a statistically significant association,  $X^2(1) = 16.527$ ,  $p = .0005$ . Of the respondents that have recruited new FM college graduates, 50 percent hired college interns in FM; only 17 percent of all respondents hired a college intern in FM at some point in their career. Interestingly, very few healthcare organizations recruit previous interns for full-time entry-level FM jobs upon graduating from college; of the 216 respondents with an opinion on this matter, only 20 percent agreed by selecting 6 – 9 on the Likert scale (1 - strongly disagree to 9 - strongly agree and “I don’t know”) that their organization recruits previous interns for full-time entry-level healthcare FM jobs. This may be due to the tendency of healthcare organizations to centralize and control recruitment activity within the human resource department, reinforced by the fact that 37 percent of respondents didn’t know their healthcare organization’s internship recruitment activity.

Survey data illustrate that work experience requirements for entry-level healthcare FM job descriptions may be a recruiting barrier for new college graduates. Survey respondents average 18 years of full-time FM experience, 79 percent of which has been in a healthcare organization, though tenure length by position is unknown. Prior to entering healthcare FM, respondents averaged 7 years of full-time building trade experience and 5 years of full-time management experience, for a total of 12 years of combined full-time building trade and management experience prior to entering healthcare FM (Table 4). Survey respondents disagree, with an average Likert scale score of 4.70, that healthcare organizations’ work experience requirements for entry-level FM job descriptions allow full consideration of new college graduates. New FM college graduates’ cyclical availability, however, does not appear to be an employment barrier for new college graduates into healthcare FM; survey respondents agree, with an average Likert scale score of 5.44, that timing of job openings and students’ availability, typically after graduation in Spring or Fall, is not a barrier to hiring.



**Table 4. Respondents Average Years of Full-time Building Trade and Management Experience Before Entering Healthcare FM Grouped by Job**

Job Before Entering Healthcare FM	Average Years of Full-time Experience Before Entering Healthcare FM	
	Building Trade	Management
Building Tradesperson	10	3
Facility Professional	5	7
Construction Professional	10	9
Other	4	9
Architect/Designer	1	5
Military	3	8
College Student	<1	<1
Biomedical Professional	1	4

*Hypothesis 2: Slow career advancement discourages new college graduates from entering healthcare FM*

The survey data show that new college graduates achieve similar career advancement durations from entry-level healthcare FM jobs compared to other candidates, and prior building trade or management experience are not related to the durations of entry-level career advancements. A Pearson's product-moment correlation was run to evaluate the relationship between respondents' prior building trade and management experience and the time it took to advance to a more senior level healthcare FM job. Preliminary investigation showed a linear relationship for both normally distributed variables by Shapiro-Wilk's tests ( $p > .05$ ) with no outliers. There was not a statistically significant correlation between the time it took respondents to advance from entry-level FM jobs and prior building trade,  $r(294) = .031$ ,  $p = .597$ , or management experience,  $r(294) = .069$ ,  $p = .234$ .

It took survey respondents an average of 5 years from entering healthcare FM to receive their first job advancement to a more senior role (Table 5); it took respondents that entered healthcare FM as college students an average of 3 year to achieve the same advancement. A one-way ANOVA was conducted to determine if advancement times from entry-level healthcare FM jobs into a more senior role was significantly different based on respondents' job prior to entered healthcare FM. Respondents were classified into eight groups: building tradesperson ( $n = 132$ ), facility professional ( $n = 64$ ), construction professional ( $n = 49$ ), other ( $n = 36$ ), architect/designer ( $n = 20$ ), military ( $n = 20$ ), college student ( $n = 11$ ), and biomedical

professional ( $n = 11$ ). There were no outliers evaluated by boxplots and there was homogeneity of variance determined by Levene's test of homogeneity of variances ( $p = .526$ ). The difference in advancement times from entry-level healthcare FM jobs into a more senior role between groups was not statistically significant,  $F(7, 288 = 0.737, p = 0.526)$ .

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**Table 5. Respondents' Average Years in First FM Job Before Advancement to More Senior Role grouped by Job Before Entering Healthcare FM**

Job Before Healthcare FM	Average Years to Advance from Entry-level Healthcare FM Job
Building Tradesperson	5
Facility Professional	5
Construction Professional	5
Other	4
Architect/Designer	6
Military	5
Student	3
Biomedical Professional	4

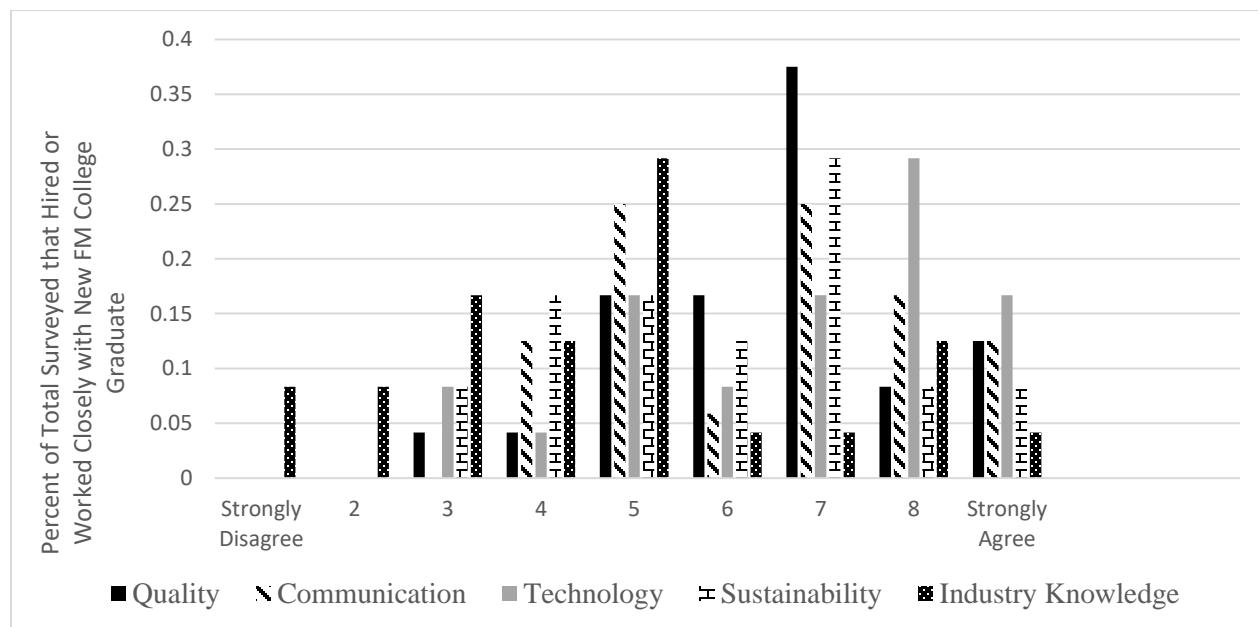
*Hypothesis 3: New FM college graduates are unaware of, or lack interest in, healthcare FM careers*

The survey data suggests that many healthcare FM professionals are unfamiliar with FM academic programs; however, those familiar with FM academic programs believe FM college students are interested in working in the healthcare FM industry. Forty-five percent of respondents selected 1 – 4 or “I don’t know” when asked if they were familiar with colleges or universities that offer degrees in FM. Respondents with an opinion on FM college students’ interest in working in healthcare FM agree, with an average Likert score of 5.42, that FM college students are interested in working in healthcare FM. Further consideration of the data show that younger respondents are just as likely to be unfamiliar with FM academic programs as older respondents. A chi-square test of homogeneity was run comparing FM program familiarity levels of younger and older respondents; there was not a statistically significant difference between the two independent binomial proportions,  $p = .345$ . This fact suggests that familiarity to FM academic programs is not simply an issue of older generations unfamiliar with recent growth in these programs but may also be due to a lack of promotion within the healthcare FM industry and colleges that house FM academic programs.

*Hypothesis 4: New FM college graduates do not possess necessary skills to be effective entry-level healthcare facility managers*

The survey data indicate that most healthcare FM professionals do not believe FM college graduates possess the necessary skills to be effective entry-level healthcare facility managers. Thirty-nine percent of respondents did not know if FM colleges graduates possessed necessary skills to be effective entry-level healthcare facility managers; however, respondents with an opinion on the matter, averaging a Likert score of 4.98, disagree that FM college graduates possess necessary skills to be effective entry-level healthcare facility managers. The more familiar a healthcare FM professional is with FM academic programs, the more likely they are to agree that FM college graduates do possess necessary skills to be effective entry-level healthcare facility managers. Somers'  $d$  was run to determine the impact on respondents' opinion of FM college graduates' skills to be effective entry-level healthcare facility managers and familiarity with FM programs; there was a moderate, statistically significant, positive correlation between these factors ( $d = .244, p < .0005$ ).

Only 7 percent of respondents have ever, at any point in their career, hired or worked closely with an entry-level healthcare facility manager that filled the position as a new FM college graduates. However, these respondents agree that new FM college graduates demonstrate satisfactory skills, with an average Likert score of 6.54 for quality, 6.46 for communication, 6.75 for technology, and 6.00 for sustainability; the only disagreement by respondents, with an average of 4.63, was regarding new FM college graduates' demonstration of satisfactory industry knowledge (Figure 4).



**Figure 4. Survey Respondents Opinion of New FM College Graduates' Demonstration of Satisfactory Skills**

Surprisingly, survey data also indicate that recruiting activity doesn't change whether a healthcare FM professional agrees or disagrees that new FM college graduate have the necessary skills to be effective entry-level facility managers. Respondents that have recruited FM college graduates, and those who have not, share identical median Likert scale score of 5.00 regarding agreement that new FM college graduates have the necessary skills to be effective entry-level healthcare facility managers. Five percent of respondents that strongly agree that new FM college graduates have the necessary skills to be effective entry-level facility managers (7 – 9 on Likert scale) have recruited a new FM college graduate at some point in their career; four percent of respondents that strongly disagree on this topic (1 – 3 on Likert scale) have recruited a new FM college graduate at some point in their career.

The group of respondents that strongly agree that new FM college graduates have the necessary skills to be effective entry-level healthcare facility managers, but have never recruited new FM college graduates for entry-level healthcare FM jobs, were contacted for phone interviews. Twenty-one percent responded to the phone interview question of why they have never recruited new FM college graduates if they believe they have the necessary skills to be effective entry-level healthcare facility managers. Fifty-five percent of these respondents stated that small healthcare organization's do not have entry-level healthcare FM jobs for new college graduates as available jobs in small organizations are limited to building tradesperson or FM director; this supports the suggestion by Call et. al (2018) that large healthcare organizations are the industry's primary source of entry-level healthcare FM jobs. Forty-five percent of respondents expected candidates to possess some healthcare experience.

### *Conclusion & Further Research*

Strong homogeneousness demographics, backgrounds, and paths of entry among existing healthcare FM professionals has created an industry bias against candidates attempting to enter healthcare FM other than from traditional sources in building trades, facilities operations, or construction. The healthcare FM industry's principal source for new talent comes from building trade succession within healthcare organizations. Continuing to rely on the promotion of internal building tradespersons as the main path of entry into the healthcare FM industry, however, may prove problematic. The majority of existing healthcare facility managers and directors will be retiring within 10 years, with almost a quarter of this workforce retiring in less than 5 years. Alarmingly, it is taking more than 17 years of full-time work experience to prepare building tradespersons for these roles. Upon entering the healthcare FM industry, most candidates have limited higher education attainment but possess many years of full-time trade and management experience within healthcare. Consequently, most healthcare FM professionals don't believe new FM college graduates have the necessary skills and experience to be effective entry-level healthcare facility managers and don't attempt to hire new FM college graduates for an entry-level healthcare FM job. However, healthcare FM professionals familiar with FM academic programs do believe new FM graduates are interested

in working in healthcare and possess necessary skills to be effective entry-level healthcare facility managers. Accordingly, the few healthcare FM professionals currently hiring and recruiting FM college graduates usually entered the healthcare FM industry as students or from other non-traditional sources.

Younger professionals are more commonly entering the healthcare FM industry through the path of higher education. Although very few new college graduates ultimately enter the healthcare FM industry, they are experiencing similar promotion timeframes compared to other candidate with many years of full-time building trade, management, and healthcare experience. This reality is significant as the industry develops strategies to address the healthcare attrition problem.

Remarkably, even if a healthcare FM professional strongly believes new FM college graduates possess necessary skills to be effective entry-level healthcare facility managers, it does not affect their recruitment activity. This fact suggests that barriers other than a general bias against new college graduates still exist. A reason for this recruitment dearth appears to be limited entry-level healthcare FM jobs within small healthcare organizations, as only building trade or director-level jobs exist. Pay is also a major employment barrier into healthcare FM for new FM college graduates. The average new FM college graduate has limited prior full-time work experience. Nonetheless, upon graduation they currently enjoy salaries approximately \$10,000 more per year than the average entry-level healthcare facility manager. Considering the average entry-level healthcare facility manager enters the field with 12 years of full-time work experience, the real pay gap may be closer to \$30,000 annually. As new FM college students encounter restrictive work experience requirements and excessive pay gaps within healthcare FM, they will undoubtedly seek other industries that are actively recruiting for their services at market salaries.

The results of this research indicate a need for a structured framework of healthcare FM learning outcomes for new FM college graduates, elucidating the distinct skills and competencies healthcare FM professionals expect for entry-level FM candidates. Even FM professionals that are overwhelmingly satisfied with the overall quality of new FM college graduates, having hired or worked closely with them in an entry-level healthcare FM role, still believe new FM college graduates lack necessary healthcare industry knowledge. This educational framework would provide a clear and direct path of study and experience for future healthcare FM professionals. This framework may also strengthen the linkage between FM academic programs and the healthcare FM industry, generating a sustainable recruitment source of new college graduates with healthcare FM specific training to help address healthcare FM attrition.

Further research may be warranted to better understand the healthcare FM industry's unfamiliarity with FM academic programs and benefits to promoting awareness. Additionally, exploring faculty and students' familiarity with FM academic programs at colleges and universities that house these programs may be meaningful in promoting awareness, especially among students with undeclared majors and their academic advisors. Insight into how these FM academic programs recruit students, both internally and externally, may highlight opportunities to attract prospects with backgrounds and experiences that complement formal

academic training to yield new FM graduates with ideal work and education blends for enhanced employability in healthcare and other distinct industries. With such a strong focus on building tradesperson succession to management in healthcare FM, measuring possible attrition in this field may also be valuable to understand its impact to the healthcare industry; furthermore, exploring building tradespersons' motivation and will to manage is useful to recognize within this context.

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