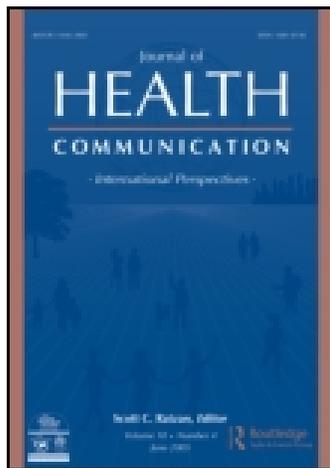


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Results From a National Survey of Health Communication Master's Degree Recipients: An Exploration of Training, Placement, Satisfaction, and Success

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The field of health communication has seen substantial growth in recent years, but existing health communication research literature contains little information on individuals who practice health communication in applied settings. This study reports the results of a national survey that targeted the alumni of 5 institutions that offer a master's degree in health communication. Of the 522 total graduates to whom the survey was sent, 398 responded. Survey results provided information in a number of areas including undergraduate education background; criteria used to determine what type of master's degree in health communication to pursue; strategies used to gain employment; employment sector of first job after graduation; salaries received after completion of a master's degree in health communication; satisfaction with career choice after completion of master's degree; satisfaction with type of master's degree in health communication received; satisfaction with career choice after completion of master's degree; and the degree to which respondents felt their master's program in health communication prepared them to meet core competencies in the field. These findings have significant implications for the health communication field and the programs that prepare individuals for a career as a health communication practitioner.

The health communication practitioner plays the lead role in the day-to-day creation, implementation, translation, and evaluation of health communication programs and initiatives throughout the United States and other countries. However, the research literature has yielded little information on the professionals who practice health communication in applied settings. The goal of the present study is to narrow that knowledge gap by providing a broader understanding of the world of the health communication practitioner, especially as it relates to academic preparation, core competencies, and career choices.

The need for such information becomes even more apparent when one considers the dramatic growth of the field. Freimuth (2012) shared her reflections on the evolution of the field after a 35 year career as a health communication scholar, teacher, and practitioner. In talking about a field

that has existed for at least the past four decades,¹ Freimuth identified evidence for the explosion of interest in health communication by pointing to the creation of specialized journals, the publication of books, the development of formal programs of study across the country, and the establishment of a health communication infrastructure that has led to multiple opportunities for academics and practitioners. Other important developments also include the creation of the Coalition for Health Communication that brings together scholars and frontline professionals and the tremendous interest in gatherings such the annual National Conference on Health Communication, Marketing, and Media that provide a forum for an exchange of ideas between those with an applied and theoretical focus. The U.S. Department of Health and Human Services also included objectives specifically addressing health communication in *Healthy People*

¹Identifying the exact starting point for health communication as a distinct field of study is a debatable proposition and depends on which of several criteria one applies (e.g., content of publications, sanctioned interest groups in professional organizations, courses offered at universities). See essays by Kreps, Bonaguro, and Query (1998) and Freimuth (2012) that have traced the genesis of the field in detail.

2010 and *Healthy People 2020* (U.S. Department of Health and Human Services, 2000, 2013).

The field has grown tremendously, but which measures do we use to take stock of its overall progress? When we examine the development of scholarship, we can rely on many tangible indicators, but what do we know of the world of the practitioner on the frontlines of health communication activity applying the concepts and theories developed within the academic world? Have they been adequately trained? What employment options do they have for making a difference? Does a career in health communication provide sufficient reward and satisfaction to attract our best talent?

The present study aimed to learn more about the preparation and careers of the health communication practitioner by directly gathering information from those who received formal training in the discipline and who now translate the knowledge they gained in the classroom into action. Specifically, we conducted a survey of individuals from across the country who received a master's degree in health communication to better understand the quality of their training and the characteristics of the roles they play within our field.

Literature Review

A Focus on Competencies and Training

Despite the growth of the field, there have been few systematic studies aimed at understanding the life of the health communication practitioner and/or the academic training necessary to be an effective professional. The studies that do exist have focused primarily on competencies and training with little attention to professional roles

Two decades ago, Maibach, Parrott, Long, and Salmon (1994) reported the results of working group sessions where they assembled a team of 15 experts in the field to discuss the future of health communication training at the graduate level. They identified competencies such as selecting the right media for messages and the ability to apply relevant theories to health communication initiatives as essential components for graduate education. In 1999, Fowler, Celebuski, Edgar, Kroger, and Ratzan surveyed more than 100 employers of health communication professionals to identify key skills and areas of knowledge necessary to compete for jobs. The results showed that the employers viewed written and oral communication skills, computer skills, leadership abilities, marketing skills, ability to use media effectively, project management skills, research and evaluation skills, and health and medical knowledge as fundamental requirements. Their data also led them to predict an increase in the next century in the need for employees with health communication skills. The Institute of Medicine (2003) also reported the views of an expert panel and identified many of the same core competencies as Maibach and colleagues (1994) and Fowler and colleagues (1999). The Institute of Medicine expressed concerns that too many people who were occupying positions as health communication practitioners lacked the necessary skills and knowledge to perform their responsibilities effectively.

The only published study that has used a sample exclusively comprised of individuals with a formal academic training in health communication was Edgar and Hyde (2005). They collected data in 2003 from 106 graduates of the collaborative master's degree programs at Emerson College and the Tufts University School of Medicine. The authors tracked the career paths of the graduates and also examined their educational background, salary expectations, core competencies, general satisfaction with their education in health communication, and emerging trends in the field. They found that individuals, who were generally satisfied with their graduate training in health communication, entered their programs from a large array of undergraduate fields, and they reported that the master's degree gave them the ability to work in a wide variety of organizations and employment sectors. Edgar and Hyde's respondents did not see a career in health communication as a path to wealth, but they did have an expectation for respectable salaries. In terms of key skills and knowledge necessary for doing their jobs, respondents identified knowledge of message strategy and campaign planning, knowledge of behavioral and communication theory, and presentation skills as the top three areas that had the greatest application for their careers. The respondents also named risk communication, crisis communication/bioterrorism, and Internet/e-learning as emerging trends for the field.

Query, Wright, Bylund, and Mattson (2007) took a different approach to understanding health communication training by focusing on the pedagogical practices of university professors. They surveyed instructors from 77 institutions who said that they were either teaching an undergraduate and/or graduate level health communication course at the time of data collection, or were planning to teach a health communication course in the near future. The survey concentrated on institution and departmental characteristics, learning goals for students, teaching strategies, and course content areas. When asked about the perceived importance of various content areas and health communication courses, respondents identified provider-patient issues and health campaigns as the most important areas. The survey participants viewed health communication theory as the least important content area, which contrasted with the findings from the expert panel assembled by Maibach and colleagues (1994) and the health communication practitioners surveyed by Edgar and Hyde (2005). In both of those studies, respondents placed a high value on understanding and applying theory.

The most recent investigation to center on practitioners came from a study conducted by McKeever (2014). She conducted an online survey of 372 health communication professionals and academics who had attended either the 2008 or 2009 National Conference on Health Communication, Marketing, and Media sponsored by the Centers for Disease Control and Prevention. McKeever focused less on the details of the careers of her respondents and more on their thoughts about training needs for the next generation of practitioners. Specifically, she explored the perceived need for graduate education for employment as well as core skills

and knowledge needed for a successful career in the field. Her participants agreed overall that a graduate degree is important for working in health communication. For example, McKeever found relatively high levels of agreement with the statements “Graduate education is more important now than it used to be to get a job in health communication” and “In the future, it will be even more important to have at least a master’s degree to get a job in health communication.” McKeever’s participants also provided consistently high levels of agreement with the statements “Coursework that includes working with real clients or campaigns is important for individuals seeking employment in health communication” and “It is important that a health communication master’s program is interdisciplinary, meaning that it includes coursework from multiple departments or schools.”

Summary and Research Questions

The few studies that do exist on careers and preparation of health communication professionals have focused primarily on core competencies and training at the graduate level. Two decades ago, Maibach and colleagues (1994) emphasized the importance of graduate training in health communication, and the recent McKeever (2014) study presented strong evidence that a master’s degree serves as a fundamental qualification and foundation for a career in health communication. Edgar and Hyde (2005) reported findings on a variety of elements of the training and careers of individuals with a master’s degree in health communication, but those data were collected in 2003. These few studies provide an important foundation, yet we have no recent information on the quality of graduate education for individuals at the master’s level or on key aspects of their careers.

As the health communication field continues to grow and more opportunities become available for practitioners, these information gaps must be met. Those who wish to pursue a career in health communication deserve to know what to expect, and those charged with the responsibility of training the next generation of professionals require solid data for thinking about optimal construction of curricula and for providing evidence-based career advice. The need for these data becomes even more essential when one considers the dramatic increase in new master’s degree programs in health communication. In 2003, Cline attempted to pinpoint the current academic institutions with established programs in health communication. She operationalized programs as structures where institutions “have formal tracks, emphases, concentrations, specializations, certificates and/or degree programs in health communication; that is, these institutions have committed faculty and curricular resources to developing the area of health communication in a systematic way” (p. 5). Cline concluded that 11 institutions met her criteria. In a little more than a decade, the number of colleges and universities offering academic training in health communication has skyrocketed. When applying her same definition today, an informal Google search resulted in identifying more than 40 institutions in the United States offering a master’s degree either with a dedicated curriculum or a

concentration in health communication. That number includes institutions that offer a master’s degree in health communication with instruction entirely online. Graduate programs have started in other parts of the world as well (Miranda, Vercellesi, Pozzi, & Bruno, 2008). There is no evidence that this trend will slow in the future. Given the need for more contemporary data, the current investigation sought to fill the information gap by answering the following research questions:

- RQ1: What are the typical areas of academic preparation individuals have had before pursuing a master’s degree in health communication?
- RQ2: What criteria do individuals use to decide what type of master’s degree in health communication to pursue?
- RQ3: How satisfied are individuals with the type of master’s degree they received in health communication?
- RQ4: What job search strategies have individuals employed successfully to gain employment after receiving a master’s degree in health communication?
- RQ5: In which employment sectors do individuals most typically find jobs after receiving a master’s degree in health communication?
- RQ6: What salaries do individuals receive after receiving a master’s degree in health communication?
- RQ7: After receiving a master’s degree in health communication, how satisfied are individuals with their career choice?
- RQ8: To what degree do individuals with a master’s degree in health communication feel their programs adequately prepared them to meet core competencies?

Method

A Five-Institution Collaboration

To answer the research questions, investigators from Emerson College and the Tufts University School of Medicine aimed to conduct a 10-year follow-up to the data collected in 2003 by Edgar and Hyde (2005) at the same two institutions. To gain a broader understanding of the training and careers of individuals with a master’s degree in health communication, the Emerson College/Tufts University team built on the previous data collection by expanding the project to a five-institution collaboration. The goal was to enlarge the population geographically by including institutions in other areas of the country. The team also wished to collect information from individuals who received their degrees under the umbrella of a variety of educational models (i.e., type of department/school offering the degree and type of degree). A perusal of the websites of current programs showed us that the overwhelming majority of programs are housed either in a department of communication, a school of medicine, a school of public health, or function as collaboration between two of the three types of academic units. We also found diversity in degree type.

The most common model is for institutions to confer a more traditional Master of Arts (MA) or Master of Science (MS) degree, but there are a number of schools of public health and medical schools that offer an Master of Public Health (MPH) with a health communication concentration. The Tufts University School of Medicine is the only institution that offers students the option of pursuing an MS in health communication or an MPH with a concentration in the same area.

The collaborative effort resulted in a total of five schools participating from New England (Emerson College and Tufts University in Boston), the Mid-Atlantic region (The George Washington University in Washington, DC), the Midwest (Michigan State University in East Lansing, Michigan), and the West Coast (University of Southern California in Los Angeles). Table 1 provides summary information for each institution, including the type of degree the program confers, the year the program began, the number of graduates as of December 2012, and links to the respective websites of each program.

Participants

The population for the study was all graduates of the health communication master's degree programs from the five institutions starting with their first graduating classes and ending with those who received degrees in December 2012. All five schools had actively maintained databases of their alumni. As of December 2012, the five institutions combined had conferred graduate degrees in health communication on a total of 582 individuals. For that population, the schools had a total of 522 e-mail addresses. For the individual institutions, Emerson College had 226 graduates from its

program and had updated e-mail addresses for 209 of those alumni. Eighty-four people received the MS from Tufts University, and the institution had current contact information for 74. For the MPH version of the Tufts University degree, 59 had graduated, and 50 were in the active database. Michigan State University had conferred degrees on 84 individuals, and it had current e-mail addresses for 60 of them. Of the 89 total graduates from The George Washington University, the institution had e-mail addresses on file for all 89 alumni. University of Southern California had 40 individuals graduate from its program during that timeframe and had up-to-date information for all of its graduates.

Instrument

Using the instrument from Edgar and Hyde (2005) as a foundation, we created an instrument that would allow us to gather information about the following: detailed contact information; complete job history since graduating with a master's degree in health communication; educational history before obtaining the health communication degree; reasons for choosing one type of degree over another (e.g., why someone pursued an MPH instead of an MA or MS); satisfaction with degree and career choices; sector of health communication for first postdegree and current jobs; information on how they obtained jobs; salaries for first and current jobs; satisfaction with their health communication education; an assessment of how well their education prepared them to meet core competencies; and improvements that they would like to see in health communication graduate instruction.

Because part of the survey included contact information, anonymity could not be guaranteed for the entire

Table 1. Summary information for collaborating institutions

Institution	Degree offered	Year established	Total number of graduates as of December 2012	Program website
Emerson College (School of Communication)	MA	1994	226	http://www.emerson.edu/academics/departments/communication-sciences-disorders/graduate-degrees/health-communication
Tufts University School of Medicine	MS, MPH	1994 (MS), 1997 (MPH)	84 (MS), 59 (MPH)	MS: http://publichealth.tufts.edu/Academics/HCOM-Program MPH: http://publichealth.tufts.edu/Academics/Public-Health-Program/MPH-and-Combined-Degree-Programs/MPH-Concentrations/Copy-of-Health-Communication
Michigan State University (College of Communication Arts and Sciences and the College of Medicine)	MA	1998	84	http://cas.msu.edu/places/departments/communication/programs/graduate/masters/health-risk-communication/overview/
University of Southern California (Keck School of Medicine)	MPH	2003	40	http://mph.usc.edu/health_communication.php
The George Washington University (Milken Institute School of Public Health)	MPH	2006	89	https://sphhs.gwu.edu/programs/public-health-communication-and-marketing-mph

instrument. We wanted to provide the opportunity, however, for the alumni to answer the evaluative and salary portions of the survey with the confidence that their answers could not be linked back to specific individuals. To solve the problem, we used SurveyMonkey, an online survey development and implementation tool. After creating the questions for the survey, we divided it into two sections. The first section, which was not anonymous, included the questions on contact information and job history. We placed the job history questions in the nonanonymous section because the principal investigators from the individual institutions already knew enough about the career paths of graduates that they would be able to identify the answers of a substantial percentage of the respondents. The second section of the survey, which was anonymous, contained all of the other questions.² Using a programming function in SurveyMonkey, we constructed the online survey so that the questions from the two sections appeared on screen for the respondents in consecutive order with the anonymous portion appearing first. After creating a complete working draft of the survey, we contacted a graduate from each of the six degree programs to participate in a pilot study.³ On the basis of their comments, we made numerous changes to the questions and format to improve clarity and ease of use before final programming in SurveyMonkey.

Procedure

Approximately 1 week before survey launch, principal investigators from each of the five institutions sent an email explaining the study to every graduate of the program for whom they had a valid e-mail address. The wording was the same for all recipients except for minor adjustments to personalize the email for the specific school from which it originated. The emails came directly from the principal investigators at the respective schools, and the principal investigator signed the e-mail for his or her alumni.

All five institutions launched within approximately 1 week of each other in early April 2013. After the initial launch, we kept the survey open for approximately 2 months. Individual principal investigators from each of the five institutions sent reminder emails every 1–2 weeks to the alumni from their respective schools who had not yet completed the survey. When we closed the survey in June 2013, a total of 398 individuals responded to at least some portion of Part 1, and 374 total alumni responded to at least some portion of Part 2. We sent the survey to a total of 522 e-mail addresses for an overall response rate of 76.2% (i.e., 398 out of 522). Response rates for the individual schools varied. Of the 209 Emerson College graduates to whom

the survey was sent, 187 responded (89.5%); 50 of the Tufts University MS graduates and 33 of the Tufts University MPH graduates from the sampling frames of 74 and 59, respectively, responded (67.6% and 66.0%); of the 60 Michigan State University alumni, 45 responded (75.0%); The George Washington University had 55 respondents out of 89 alumni (61.8%); and 28 of the 40 University of Southern California graduates responded (70.0%).

Human Subject Approval

The institutional review boards for all five institutions approved the survey instrument and the data collection procedure before survey launch.

Results

Educational Background

We asked respondents to identify their undergraduate majors. They had the opportunity to list a second if they were a double major. The results show that the participants have a wide array of educational backgrounds with approximately 75 majors identified. Table 2 shows the top 10 majors for all graduates combined for all years as well as the results for those receiving an MA or MS and for those who graduated with the MPH. For all graduates combined, communication studies was the major most frequently identified at 16.4% with psychology second at 9.9% and biological sciences and English tied for third at 8.1%. For the MA/MS alumni, the most commonly identified major by far was communication studies with 19.6% of the respondents identifying that field of study. There were no other majors that exceeded the 10% mark with English second at 9.2% and psychology third at 7.7%. Psychology was the most popular major for the MPH portion of the sample with 16.0% followed by biological sciences at 11.3% and communication studies at 8.5%. An educational background in science or a health-related field was more common for those who pursued the MPH with biological sciences, health sciences/promotion/education, community health, and public health all in the top 10. For science or a health-related field, only biological sciences and dietetics/nutrition appeared in the top 10 for the MA/MS graduates.

Degree Choice

To better understand why someone interested in pursuing a master's degree in health communication chooses to matriculate in an MA/MS program or in an MPH program with a health communication concentration, we asked respondents to identify the reasons that drove their final decision. We gave them a list of options and asked that they check all that apply. For analysis purposes, we focused on the past 5 years of graduates (i.e., 2008–2012) in our sample because the MPH programs are relatively new, and this is the time period in which more information has been available about degree options. Table 3 highlights the results for the MA/MS alumni. The most frequent response was "I preferred what the MA or MS curriculum offered over

²All data presented in this report came from questions in which the respondents had a menu of answers from which to choose. The exception is the question in which respondents reported undergraduate majors. That was an open-ended question. Two of the authors coded the data for that question based on a simple category system.

³Five institutions participated in the present study, but throughout the Method, Results, and Discussion sections, we refer to six programs because the Tufts University School of Medicine offers both the MS degree and the MPH with a concentration in health communication.

Table 2. Top 10 majors for graduates (all years)

Top 10 majors: All graduates	<i>n</i>	% of total (<i>n</i> = 372)	Top 10 majors: MA/MS	Total	% of total (<i>n</i> = 260)	Top 10 majors: MPH	Total	% of total (<i>n</i> = 106)
Communication studies	61	16.4	Communication studies	51	19.6	Psychology	17	16.0
Psychology	37	9.9	English	24	9.2	Biological sciences	12	11.3
Biological sciences	30	8.1	Psychology	20	7.7	Communication studies	9	8.5
English	30	8.1	Biological sciences	18	6.9	Health sciences, promotion, and education	8	7.5
Sociology	23	6.2	Advertising/public relations	18	6.9	Anthropology	6	5.7
Journalism	23	6.2	Journalism	18	6.9	Community health	6	5.7
Advertising/public relations	20	5.4	Sociology	14	5.4	Public health	6	5.7
Foreign languages	15	4.0	Dietetics/nutrition	12	4.6	Sociology	6	5.7
Anthropology	14	3.8	Foreign languages	11	4.2	English	5	4.7
Dietetics/nutrition	13	3.5	Business	8	3.1	International relations/affairs	5	4.7
Health sciences, promotion, and education	13	3.5	Anthropology	8	3.1	Total (of 106 respondents)	80	75.5
			Political science	8	3.1			
Total (of 372 respondents)	279	75.0	Total (of 260 respondents)	210	80.8			

Note. The totals for MA/MS and MPH graduates combined do not equal to the total number of participants who identified their major because some participants did not indicate the degree that they received.

the MPH curriculum” (50.5%) followed by “the MA or MS allowed me to take more skill-based courses in health communication” (42.3%) and “I thought the MA or MS would make me more marketable for employment once I completed the degree” (30.6%). The results for the MPH graduates appear in Table 4. The number one response for that group corresponded closely to the top response for their MA/MS counterparts in that 69.0% said, “I preferred what the MPH curriculum offered in addition to courses in health communication.” The second most popular response was “I thought the MPH would make me more qualified for a particular type of job I had in mind” (51.2%) closely followed by 47.6% of the respondents saying, “I thought the MPH would give me a better chance of getting a job once I completed the degree.”

We also asked respondents to report their level of satisfaction with their choice for type of degree. On a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), the MA/MS alumni indicated how satisfied they were with their choice to pursue that type of degree instead of an MPH, and the MPH graduates used an identical scale to record their level of satisfaction with the degree they received instead of pursuing an MA/MS. For the MPH alumni from the years 2005–2012 (again, going back to 2005 provides a

reasonable number of MPH grads in the analysis for comparison), 72.0% gave a numerical response of a 4 or 5 with only 3.0% using the bottom two options of the scale. The overall mean response was 4.19. For the MA/MS alumni, the mean satisfaction rating was 3.98 with 72.4% in that portion of the sample marking either a 4 or a 5 on the scale. Only 6.7% (11 graduates total) provided a 1 or 2 rating.

Methods for Finding First Jobs

To learn how graduates found their first jobs after completing the health communication degree, we asked them to choose from a list of 15 options. To highlight the most recent trends, our analysis focused only on graduates from the past 5 years with all degree types combined (i.e., 2008–2012). Table 5 shows the most common response (23.8%) was “responding to a posting that you found at a website on your own.” The second most common response (12.7%) was “getting hired where you did an internship or practicum.” In addition, the data highlighted the importance of personal connections. Six of the categories related to jobs secured through a personal or professional contact: responding to a notice forwarded by a faculty member or a notice posted by someone from your program (9.9%), contact made through a personal or family friend (9.9%), contact made through a professional

Table 3. Rationale for pursuing an MA/MS instead of an MPH (2008–2012 graduates)

Rationale	<i>n</i>	%
I preferred what the MA or MS curriculum offered over the MPH curriculum.	56	50.5
The MA or MS allowed me to take more skill-based courses in health communication.	47	42.3
I thought the MA or MS would make me more marketable for employment once I completed the degree.	34	30.6
I didn't know that getting an MPH with a health communication concentration was an option at the time.	31	27.9
The school I wished to attend only offered the MA or MS.	28	25.2
The MA or MS was less expensive in overall tuition than the MPH.	16	14.4
I thought the MA or MS would lead to a higher earning potential than the MPH once I completed the degree.	11	9.9
There was no MPH health communication option in the geographic area where I wished to study.	9	8.1
Other	17	15.3

Table 4. Rationale for pursuing an MPH instead of an MA/MS (2008–2012 graduates)

Rationale	<i>n</i>	%
I preferred what the MPH curriculum offered in addition to courses in health communication.	58	69.0
I thought the MPH would make me more qualified for a particular type of job I had in mind.	43	51.2
I thought the MPH would give me a better chance of getting a job once I completed the degree.	40	47.6
I thought having the MPH would make me a stronger candidate for pursuing another degree in the future.	20	23.8
I thought the MPH would lead to a higher earning potential than the MA or MS once I completed the degree.	15	17.9
The school I wished to attend only offered the MPH.	12	14.3
Other	14	16.7

colleague or network (8.3%), contact through an acquaintance of a faculty member (4.4%), networking with alumni from the program (2.8%), and contact made through a fellow student (2.8%). Those six categories combined accounted for 38.1% of the methods for finding first jobs. Very few (2.2%) found jobs through information from the career services center at their own institution.

Careers in Health Communication

The survey provided an opportunity for the respondents to identify the sector in which they landed employment for their first job after completing the master's degree as well as the sector in which they were working at the time of data collection. Table 6 shows that for all alumni combined across all years the most common sectors for first jobs were nonprofit advocacy or voluntary organization (12.5%); educational institution (12.2%); advertising, public relations, marketing, or consulting agency (for profit) (9.5%); federal government (8.9%); state and local government (8.9%); and hospital or medical practice (8.9%).

When comparing the type of degree received, the results show a marked contrast between those who received the MPH and those who completed the MA/MS. Table 6 indicates that a large percentage of the MPH alumni found first jobs in one of five sectors: educational institutions (15.2%); federal government (13.3%); nonprofit advocacy or

voluntary organization (13.3%); advertising, public relations, marketing, or consulting agency (11.4%); and state or local government (11.4%). The five sectors combined make up 64.6% of the first jobs for the MPH graduates. Those same five sectors are in the top six sectors for the MA/MS, but the five categories combined totaled less than half (47.1%) of the first-job sectors for the MA/MS alumni (i.e., 12.0% for nonprofit advocacy or voluntary organization; 11.2% for educational institutions; 8.9% for advertising, public relations, marketing, or consulting agency; 7.7% for state or local government; and 7.3% for federal government). A job in a hospital or medical practice tied for second most common sector for the MA/MS graduates (11.2%), but only 3.8% of the MPH respondents found employment in that sector immediately after completion of the degree.

The MA/MS alumni secured initial employment after graduation in a variety of other industries including the health insurance industry (5.8%), the pharmaceutical or biotech industry (5.4%), health information publishing (3.1%), the medical devices industry (2.7%), the disease management industry (2.7%), news media organizations (1.5%), the physical fitness or health food industry (1.2%), health websites (0.8%), and video/film production companies (0.4%). Those nine sectors together accounted for 23.6% of the first jobs for the MA/MS graduates. For the MPH

Table 5. Methods of finding first job after completion for all programs (2008–2012 graduates)

Method	<i>n</i>	%
Responding to a posting you found at a website on your own	43	23.8
Getting hired from where you did an internship or practicum	23	12.7
Contact made through a personal or family friend	18	9.9
Responding to a notice forwarded to you by a faculty member from your program or a notice posted by someone from your program on a website or listserv	18	9.9
Contact made through a professional colleague or network	15	8.3
Contact made through an acquaintance of a faculty member	8	4.4
Placing a cold call or sending an unsolicited résumé to an employer	7	3.9
Contact made through a fellow student	5	2.8
Networking with alumni from the program	5	2.8
Responding to a university-/collegewide career services center posting	4	2.2
Contact made by headhunter or employment agency	3	1.7
Answering a newspaper ad	2	1.1
Speaking with a potential employer at a job fair	2	1.1
Other	28	15.5

Table 6. Sector of first job after completion of degree (all years)

Sector	All graduate respondents*	% of total (n = 369)	MA/MS respondents	% of total (n = 259)	MPH respondents	% of total (n = 105)
Nonprofit advocacy or voluntary organization	46	12.5	31	12.0	14	13.3
Educational institution	45	12.2	29	11.2	16	15.2
Advertising, public relations, marketing, or consulting agency (for profit)	35	9.5	23	8.9	12	11.4
Federal government	33	8.9	19	7.3	14	13.3
State and local government	33	8.9	20	7.7	12	11.4
Hospital or medical practice	33	8.9	29	11.2	4	3.8
Health insurance industry	18	4.9	15	5.8	3	2.9
Pharmaceutical or biotech industry	16	4.3	14	5.4	2	1.9
Health information publishing	8	2.2	8	3.1	0	0.0
Disease management industry	7	1.9	7	2.7	0	0.0
Medical devices industry	4	1.1	7	2.7	0	0.0
News media organization	4	1.1	4	1.5	0	0.0
Physical fitness or health food industry	3	0.8	3	1.2	0	0.0
Health website	2	0.5	2	0.8	0	0.0
Video/film production company	1	0.3	1	0.4	0	0.0
Pursuing another degree	11	3.0	3	1.2	7	6.7

Note. The totals for MA/MS and MPH graduates combined do not equal to the total number of participants who identified their employment sector because some participants did not indicate the degree that they received.

graduates, only a total of 4.8% accepted first jobs in one of those nine industries.

We also gave respondents the option to indicate that they chose to pursue another degree after the master's degree instead of seeking employment. For the MPH alumni, 6.7% enrolled in another degree program, and only 1.2% of the MA/MS graduates pursued the same route.

Salaries

To learn about income, we first asked respondents to report the salary they received for their first job after completing the health communication master's degree. The question allowed them to record their answers on a drop-down box with salary ranges starting at less than \$25,000 annually. The scale ascended with \$5,000 increments ending in a category of \$80,000 or more annually. We also asked them to report their current salaries. That scale began with the response of less than \$25,000 annually and ended with a category of \$100,000 or more.

The sample included graduates who received their degrees as early as 1995, but for starting salaries we chose to focus on reporting the most relevant current data. Table 7 offers a compressed portrait of starting salaries for the three most recent graduating classes (i.e., 2010–2012). Focusing on that 3-year period provides a more accurate portrait of recent starting salaries for the reader. Table 7 shows that for all graduates in the 2010–2012 time period 40.3% received a starting salary of \$50,000 or more; 23.4% started at \$60,000 or higher; and 12.1% started their post-degree careers with a salary at \$70,000 or higher.

Table 7 also separates the data by those who received the MA/MS degree and those who received the MPH version of

health communication training, but we also include the MA/MS data with the Michigan State University graduates extracted. We did this because all five institutions have seen a consistent pattern where a substantial portion of their graduates seek employment in an area geographically close to the degree-granting institution. Four out of the five institutions included in the study (i.e., Emerson College, Tufts University, The George Washington University, and University of Southern California) are located in three metropolitan areas in the country with some of the highest costs of living—Boston, DC, and Los Angeles. Michigan State University is located in East Lansing, Michigan. That area of Michigan has a much lower cost of living than the other three cities, and Michigan was one of the hardest hit areas of the country in the U.S. economic recession in the latter part of the past decade.

When comparing starting salaries between the MA/MS and MPH graduates during that 3-year period, the dollar amounts are quite similar, especially when the Michigan State University graduates were removed from the analysis. For example, Table 7 shows that 42.3% of the MA/MS graduates (minus the Michigan State University alumni) received a starting salary of \$50,000 or more compared with 43.1% for the MPH graduates. When the Michigan State University graduates are included in the analysis, 36.5% of the MA/MS respondents made \$50,000 or more to start in that timeframe. The table also indicates a relatively small percentage received starting salaries of \$70,000 or more (13.5% for the MA/MS graduates minus Michigan State University and 10.3% for the MPH alumni).

For the results on current salaries, we chose to focus on the data for all graduates since 2005 (see Table 8). We identified 2005 as the starting point because going back to that

Table 7. Starting salary for graduates (2010–2012 graduates)

Salary	All graduate respondents	% of total (n = 124)	MA/MS respondents	% of total (n = 63)	MA/MS minus MSU* respondents	% of total (n = 52)	MPH respondents	% of total (n = 58)
≥\$50 K	50	40.3	23	36.5	22	42.3	25	43.1
≥\$60 K	29	23.4	15	23.8	14	26.9	13	22.4
≥\$70 K	15	12.1	8	12.7	7	13.5	6	10.3

Note. The totals for MA/MS and MPH graduates combined do not equal to the total number of participants who identified their salaries because some participants did not indicate the degree that they received.

*Michigan State University.

Table 8. Current salary for graduates since 2005

Salary	All graduates respondents	% of total (n = 241)	MA/MS respondents	% of total (n = 152)	MA/MS minus MSU* respondents	% of total (n = 127)	MPH respondents	% of total (n = 83)
≥\$50 K	159	66.0	101	66.4	87	68.5	52	62.7
≥\$60 K	125	51.9	81	53.3	72	56.7	39	47.0
≥\$70 K	80	33.2	50	32.9	47	37.0	28	33.7
≥\$80 K	43	17.8	28	18.4	27	21.3	14	16.9
≥\$90 K	26	10.8	18	11.8	18	14.2	7	8.4
≥\$100 K	17	7.1	13	8.6	13	10.2	4	4.8

Note. The totals for MA/MS and MPH graduates combined do not equal to the total number of participants who identified their salaries because some participants did not indicate the degree that they received.

*Michigan State University.

date provides a reasonable number of MPH grads in the analysis for comparison. The table indicates that almost two thirds (66.0%) of all graduates in that time period reported a current salary of \$50,000 or higher with 7.1% earning more than \$100,000.

As with the data on the starting salaries, the comparative results between MA/MS and MPH graduates were quite similar. For example, Table 8 also indicates that 66.4% of all of the MA/MS graduates from that time period reported a current salary of \$50,000 or more. The percentage went up only slightly to 68.5% when the Michigan State University data were extracted. In comparison, 62.7% of the MPH alumni receiving degrees during those years said that they currently make \$50,000 or more. The table shows that some graduates since 2005 from both types of degree programs have reached the six-figure salary range, but the numbers are modest (i.e., 8.6% for all MA/MS graduates, 10.2% for the MA/MS alumni minus Michigan State University, and 4.8% for those with the MPH degree).

We also examined the salaries for those who graduated at least 10 years before the collection of the survey data (i.e., graduates from 1995 to 2003). We did not compare alumni from the two types of degree programs because the vast majority of the graduates from this portion of the sample are degree recipients from the early days of the Emerson College MA and Tufts University MS programs. Table 9 highlights a pattern of respectable salaries for those who have been in the field for 10 or more years. An overwhelming number of the graduates (85.2%) reported making more than \$50,000 a year, and exactly one third (33.3%) said they currently have a six-figure salary.

Satisfaction With Career Choice

Satisfaction was measured in multiple ways. First, we wished to learn about overall satisfaction with career choice. Using a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), alumni responded to the statement, “In retrospect, pursuing graduate training in health communication has been a good career choice.” The mean rating for all years across all programs was 4.14. Only a very small number expressed dissatisfaction by marking a 1 (1.1%) or a 2 (4.0%) on the scale. When we examined the results only of our most recent graduates (2010–2012), satisfaction with career choice was almost identical to all graduates combined with an overall mean of 4.13.

Core Competencies

We presented the alumni with 11 core competencies for a health communication professional and asked them to rate each competency on the basis of how well they believed that

Table 9. Current salaries for graduates who received degrees 10 or more years ago

Salary	Respondents	% of total (n = 81)
≥\$50 K	69	85.2
≥\$60 K	63	77.8
≥\$70 K	51	63.0
≥\$80 K	41	50.6
≥\$90 K	34	42.0
≥\$100 K	27	33.3

Table 10. Mean ratings of graduates for core competencies (2010–2012 graduates)

Competency	All graduates mean rating	MA/MS mean rating	MPH mean rating
Use theory to develop strategies and messages to promote health	6.09	6.29	5.89
Describe target audiences on the basis of essential characteristics	6.05	6.14	5.98
Use written communication to effectively engage audiences	5.98	6.20	5.78
Conduct formative research to develop strategies and messages to promote health	5.85	5.99	5.72
Design interventions to improve health outcomes	5.80	5.88	5.73
Understand the strengths and weaknesses of a broad range of communication channels	5.78	5.75	5.81
Use oral communication to effectively engage audiences	5.57	5.58	5.59
Understand how to implement interventions once they have been designed	5.37	5.43	5.31
Understand the major ethical dilemmas faced by practitioners in health communication	5.34	5.52	5.16
Incorporate social media into health communication strategy	5.23	4.99	5.51
Understand how to design program evaluation	5.20	5.28	5.09

Note. Means are based on a 7-point scale ranging from 1 (*not at all prepared*) to 7 (*extremely well prepared*).

their graduate programs prepared them to demonstrate the competency. They used a 7-point scale ranging from 1 (*not at all prepared*) to 7 (*extremely well prepared*). We created the list on the basis of competencies described in mission statements and learning objectives of the individual programs. Table 10 provides the mean ratings for all graduates for each of the 11 competencies as well as a comparison of the mean ratings between the MA/MS and MPH graduates. For this particular analysis, we included graduates only from the past 3 years (i.e., 2010–2012), because those graduates did their coursework within curricula that most closely resemble the six programs in their current incarnations. For all alumni, the three competencies that received the highest mean scores were “use theory to develop strategies and messages to promote health” ($M=6.09$), “describe target audiences on the basis of essential characteristics” ($M=6.05$), and “use written communication to effectively engage audiences” ($M=5.98$). The two lowest mean scores appeared for “incorporate social media into health communication strategy” ($M=5.23$) and “understand how to implement interventions once they have been designed” ($M=5.20$).

Discussion

The data allow us to paint an in-depth portrait of the health communication professional who has received training at the master's degree level as preparation for entering the field as a practitioner. Through the five-institution collaboration, we were able to gather information from hundreds of individuals across the country who completed their degrees from 1995 to 2012. The high response rate (76.2% overall), national scope, and data across time permit us to draw conclusions about the population with a relatively high degree of confidence. The results allow us to better understand the background of the individuals who pursue the degree, their job seeking

strategies as well as the areas in which they find employment, their income levels, satisfaction with professional choices, and their preparation to meet core competencies.

First, the results reveal that individuals pursue graduate training in health communication after completing a bachelor's degree in a wide variety of disciplines. It is not surprising that communication studies is the most common undergraduate major represented in the sample overall, but the majority landed in health communication after studying within other disciplines that do not directly focus on communication. The hard sciences and other areas of social science are well represented, as is English and other humanities. In fact, for those who completed the MPH version of the degree, more matriculants came from a psychology background than any other discipline. The results provide important insight for graduate directors developing recruitment strategies for their programs. The data clearly show that the interdisciplinary nature of health communication provides a good match for individuals with a vast array of interests.

This interpretation seems even more plausible when we look at data from some of the other questions on the survey. We specifically asked those who received an MPH why they made that degree choice instead of the MA or MS and vice versa. When we looked at the past 5 years of graduates, we found that approximately half of those who got the MPH said that they went that direction because they thought the MPH would make them more qualified for a particular kind of job they had in mind; they also believed that the MPH would increase their odds for employment after graduation. The data from the survey provide no evidence that one type of degree increases one's overall chances for finding employment as a health communication practitioner. Respondents across degree type and from all five institutions consistently have found jobs within the health communication field. There were few instances out of our hundreds of respondents

where alumni reported that they took jobs outside of their chosen area of study. What the data do not tell us is whether people secure jobs in their sector of choice. That is, we did not ask people to tell us about the jobs they applied for but did not get. For example, someone within our sample might have matriculated through an MPH program because he or she had the goal of working within government and felt that degree label would be more recognizable and understandable within the public sector. We do not know if specific original employment goals matched ultimate outcomes.

Respondents named a variety of strategies that led to the successful acquisition of a job. We focused this portion of our analysis specifically on the past 5 years of graduates to identify most recent trends. The evidence suggests that the traditional method of searching through published job ads can lead to success because the largest number of respondents by far said that they initially learned about the job through a website posting they found on their own. The traditional approach of finding leads through an institution's career placement service yields few results for health communication graduates. It is not surprising that the results reinforced the notion that field experiences and personal connections matter greatly as respondents consistently identified internships and contacts made through faculty, friends, alumni, professional acquaintances, and fellow students as key avenues to find employment.

Diversity appears not only in background but also in the career choices that individuals make once they complete their degrees. The coauthors of this study from the five represented institutions all have been asked many times by prospective students, "So what can I do with a master's degree in health communication?" The results provide the opportunity to answer that question with definitive data that go far beyond anecdote. Respondents identified a substantial number of sectors in which they landed first jobs after graduation. The six types of organizations that rose to the top were nonprofit advocacy or voluntary organizations; educational institutions; advertising, public relations, marketing, or consulting agencies that are for profit; federal government; state and local government; and hospital or medical practices. What is most interesting about these results is that no one sector tends to dominate. For example, the sector named by the largest number of respondents was nonprofit advocacy or voluntary organizations, but that category accounted for only 12.5% of the overall sample. Three sectors tied for fourth on the list (i.e., federal government, state and local government, and hospital or medical practice), but the overall percentage of 8.9% for each category was only slightly behind the sector that placed first.

The results for employment sectors for first jobs was the one area where there was a marked contrast between those who received the MA/MS degree and those who pursued the MPH version of graduate training in health communication. For the MPH graduates, the large majority (almost two thirds) clustered in the six categories mentioned in the previous paragraph with the exception of the hospital or medical practice sector. In contrast, the distribution for the MA/MS degree recipients was substantially wider. For

example, almost a quarter of the MA/MS graduates combined also landed first jobs in the health insurance industry, the pharmaceutical or biotech industry, health information publishing, the medical devices industry, the disease management industry, a news media organization, a physical fitness or health food industry organization, a health website, or a video/film production company. However, fewer than 5% of the MPH graduates combined accepted positions in these sectors. We believe that the most likely interpretation of this difference has less to do with the preparation the degrees offer and more with self-selection. Individuals who choose the MPH likely saw that degree as the more ideal fit because they knew from the start that they wanted a career in an area with a more traditional public health focus such as a government agency or nonprofit organization. Those who went the MA/MS route might have been more attracted to a degree choice that appeared to have more of a generalist orientation.

In addition to wanting to know about the types of jobs one can obtain after receiving a master's degree in health communication, prospective students also frequently wish to learn what to expect in terms of earning capacity. This is a crucial question as those considering a career in health communication assess the return on investment a graduate degree will yield, especially for those who incur loan debt to further their education. We asked respondents to report their starting salaries for their first jobs after graduate school as well as current salaries. The results provide mixed news. That is, initial positions after graduation might not be financially lucrative, but there is compelling evidence that one can attain a reasonable level of financial success over time. Examining the data only from the past 3 years of graduates shows that only approximately 40% of the respondents finishing their degrees from 2010 to 2012 accepted first jobs that paid them more than \$50,000 per year. However, results also show that a third of those who completed their graduate training 10 or more years ago now have six-figure salaries. A career as a health communication practitioner does not guarantee wealth, but opportunities for monetary advancement exist for those who stay the course. There was little evidence to suggest the type of degree one gets (i.e., MA/MS vs. MPH) influences salaries. Regional differences on the other hand do seem to matter as one might expect. Overall, our salary data appear to be consistent with available reports on earning potential for individuals with MPH degrees with other concentrations as well as for those with advanced training in nutrition and health education (American Public Health Association, 2011; U. S. Department of Labor, Bureau of Labor Statistics, 2014a, 2014b).

Perhaps the best news from the data is that practitioners appear to be quite happy with their decision to enter the health communication field. This trend appears across the years as well as with more recent graduates. Remarkably, when specifically asked if health communication has been a good career choice, only about 5% of our hundreds of respondents expressed dissatisfaction. We believe that any discipline would be elated to see such positive results. Of course, we do not know about satisfaction levels for those

who did not respond to the survey, but again, our response rate was extremely high by any standard for survey research.

We wished to know how well we are preparing graduates to meet basic core competencies for the profession. For our analysis, we focused specifically on graduates from the past 3 years because they received their education from the programs through curricula structures most closely matched to current ones. Overall, our programs appear to be getting it right, especially with regard to applying theory, describing target audiences, and using written communication to effectively engage audiences. One potential problem area that stood out was the ability to incorporate social media into strategy. This competency received one of the lowest ratings for how well the graduates felt prepared. With technology constantly changing, all health communication programs must find ways to meet the challenge of incorporating instruction on cutting-edge practices into graduate training.

Implications

Our findings indicate there remains a strong market for health communication graduates as evidenced by the positions held by alumni from our graduate programs. Even if only a modest percentage of the nonrespondents are employed in health communication positions, the placements of our alumni and the job prospects for our current students are quite outstanding. To continue this level of success, health communication programs need to be responsive to the current market needs and open to new content, particularly in the realm of new technology and social media as innovations rapidly evolve. To meet the need, health communication programs might need to look beyond faculty with traditional doctoral-level training to identify appropriate subject matter experts to enter graduate classrooms to diffuse cutting edge knowledge and skills to students. Including individuals without doctoral degrees as part of graduate faculties might require some institutions to rethink roles for and status of non-tenure-track faculty.

As a strategy to keep our alumni involved and up-to-date in their fields, programs also should consider offering workshops, speaker series, or webinars for their alumni. Continual follow-up with alumni to gain their feedback about curriculum, graduate program experiences, and their current workplace needs is essential for programs to remain current in being responsive to the evolving needs of the field. Overall, our results reveal that individuals seeking to apply to master's degree programs in health communication can remain optimistic about the future of the field, and should be encouraged by our findings in regard to the level of training they will experience as well as the positions that will be available to them upon completion of their degrees.

Limitations and Future Research

Although the survey elicited a great deal of information from graduates across a broad array of topics, there are questions we did not pursue that would have resulted in an even more comprehensive portrait of the training and experience of the

health communication practitioner. For example, we did not learn about the level of experience of the respondents before the time they pursued the graduate degree and how that experience might influence employability after graduation. We also collected no information about what initially attracted individuals to the health communication field. What other career options were they considering?

We recommend that future research pursue some of these additional questions, and other studies should collect data from other populations. For example, our sample was biased in that we only included individuals who completed degrees through a traditional brick-and-mortar educational experience. Several universities have created health communication master's degree programs in the past few years that offer instruction exclusively online. There are no published data that compare traditional offerings to online degrees. We also need data from potential, current, and past employers of health communication practitioners to better understand perceptions of training and required skill sets.

In addition, we collected limited demographic information because of concerns with protecting the anonymity of our respondents, but the majority of the collaborating institutions know anecdotally that the students who have enrolled in our programs overwhelmingly have been white women from the United States in their 20s. All programs should ask themselves whether they are doing enough to recruit the appropriate mix of individuals for the next generation of health communication professionals who will best be able to meet the needs of diverse populations in the United States and abroad.

Future evaluations should also assess exposure to emerging areas in health communication including infomatics and health literacy. In 2010, health literacy became an important part of health policy, with several initiatives designed to make information more accessible. These efforts included the federal government's Plain Writing Act, the Patient Protection and Affordable Care Act of the Obama Administration, *Healthy People 2020* guidelines, and the U.S. Department of Health and Human Services' National Action Plan to Improve Health Literacy (U.S. Department of Health and Human Services, 2010, 2013).

References

- American Public Health Association. (2011). Ask the editor: What salary ranges can I expect after I complete my MPH. *APHA Newsletter*. Retrieved from http://www.apha.org/about/careers/newsletter/2011/1/ask_editor.htm
- Cline, R. J. (2003, May). *A guide to graduate programs in health communication*. Paper presented at the annual conference of the International Communication Association, San Diego, CA.
- Edgar, T., & Hyde, J. N. (2005). An alumni-based evaluation of graduate training in health communication: Results of a survey on careers, salaries, competencies, and emerging trends. *Journal of Health Communication, 10*, 5-25.
- Fowler, K., Celebuski, C., Edgar, T., Kroger, F., & Ratzan, S. C. (1999). An assessment of the health communication job market across multiple types of organizations. *Journal of Health Communication, 4*, 327-342.
- Freimuth, V. S. (2012). Reflecting on the accomplishments of health communication. *Journal of Health Communication, 17*, 745-746.

- Institute of Medicine. (2003). *Who will keep the public healthy? Educating public health professionals for the 21st century*. Washington, DC: The National Academies Press.
- Kreps, G. L., Bonaguro, E. W., & Query, J. L. (1998). The history of and development of the field of health communication. In L. D. Jackson & B. K. Duffy (Eds.), *Health communication research: Guide to developments and directions* (pp. 1–15). Westport, CT: Greenwood Press.
- Maibach, E., Parrott, R. L., Long, D. M., & Salmon, C. T. (1994). Competencies for the health communication specialist of the 21st century. *American Behavioral Scientist*, 38, 351–360.
- McKeever, B. W. (2014). The status of health communication: Education and employment outlook for a growing field. *Journal of Health Communication*, 19, 1408–1423.
- Miranda, G. F., Vercellesi, L., Pozzi, E., & Bruno, F. (2008). Improving health communication: Supporting the practice of health communication. *Health Information and Libraries Journal*, 26, 39–46.
- Query, J. L., Jr., Wright, K. B., Bylund, C. L., & Mattson, M. (2007). Health communication instruction: Toward identifying common learning goals, course content, and pedagogical strategies to guide curricular development. *Health Communication*, 21, 133–141.
- U.S. Department of Health and Human Services. (2000). *Healthy People 2010: Understanding and improving health* (2nd ed.). Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health, & Human Services. (2010). *National action plan to improve health literacy*. Retrieved from <http://www.health.gov/communication/hlactionplan>
- U.S. Department of Health and Human Services. (2013). *Healthy People 2020*. Retrieved from <http://www.healthypeople.gov/2020/default.aspx>
- U. S. Department of Labor, Bureau of Labor Statistics. (2014a, April 1). *May 2013 national occupational employment and wage estimates United States*. Retrieved from http://www.bls.gov/oes/current/oes_nat.htm#29-0000
- U. S. Department of Labor, Bureau of Labor Statistics. (2014b, January 8). *Occupational outlook handbook, 2014–2015 edition: Health educators and community health workers*. Retrieved from <http://www.bls.gov/ooh/community-and-social-service/health-educators.htm>