Select Results of the 2015 AMWA Salary Survey

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ABSTRACT

Beginning in 1989, AMWA has periodically conducted surveys to obtain up-to-date information from medical writers and editors about their income and various factors that may be associated with compensation levels, such as years of experience, highest level of education, type of degree, geographic location, type of work performed, work setting (freelance or employee; type of company for employees). The most recent survey, conducted in 2015, queried participants about their income from 2014.

An online survey instrument was used to collect responses. All AMWA members (N=4,421) were invited to participate, as were former members of AMWA and members of related organizations. Data were analyzed to determine salary levels for employees and freelances. The data for full-time employees were analyzed using multivariate regression models to identify factors associated with varying income levels.

Overall, 1,292 medical communicators (841 employees and 451 freelances) participated in the survey. For full-time employees, the mean salary was $90,200, which was lower than the 2011 mean of $92,867. For freelances, the mean gross full-time income was $131,400, which was higher than the reported figure of $116,000 in 2011. For full-time employees, the factors that were associated with differences in salary levels included type of work performed (writing, editing), primary employer, years of experience, education level, and geographic region. The survey findings are discussed within the context of current employment trends in medical communications, such as a decrease in the number of medical writers and editors employed by pharmaceutical companies.

Medical communication (writing and editing) is a well-established profession in the United States, yet in-depth analyses of salaries and professional characteristics have been scarce. Salaries documented on typical career websites are unreliable because of low numbers of respondents and a lack of clarity regarding the professional setting. The first AMWA Salary Survey was conducted in 1989 to address this lack of reliable salary information, and AMWA continues to conduct a salary survey periodically to ensure that salary data for medical communicators remain current.[1-6] The AMWA survey has been referenced by medical communication professionals as the largest salary survey regarding its number of respondents and the most comprehensive analysis of demographic and professional characteristics and salary. The survey offers an important service to AMWA members and other medical communicators, providing dependable salary information for employers of medical communicators to set salary ranges, for employees to discuss income perspectives, and for freelance/consultants to negotiate contract fees.

METHODS

An online survey (SurveyMonkey.com LLC, Portland, Oregon) was used to collect responses and was available from April 7 to May 20, 2015. The survey was announced and described to all AMWA members at that time (4,421 members), although not all members are actively working (ie, some are retirees, students, or recruiters). Several methods were used to encourage survey participation, including an announcement in the *AMWA Journal*, reminder email messages, and a traditional postcard announcement. To expand the number of potential respondents, AMWA solicited survey respondents from lapsed members as well as respondents outside its membership through invitations to members of sister organizations and announcements on LinkedIn writing groups.

The first survey question provided a specific definition of *medical communicator* and was designed to exclude

respondents who did not meet the criteria in the definition. Respondents had to be actively working either part-time or full-time as a medical communicator to be counted as a respondent. Respondents were instructed to answer every question that applied to them according to their status as an employee or a freelance. The survey requested demographic and professional details and income earned during the 2014 tax year. The 2015 AMWA salary survey retained questions from previous years (to demonstrate trends over time); these questions addressed such attributes as sex, age, educational level, years of medical communication experience, work status (full-time or part-time), type of primary employer, type of work performed (eg, writing, editing, or both), and career level (entry level to supervisor). Predefined assumptions were adopted to facilitate analysis of comparisons (Table 1). Some questions were rephrased in an effort to obtain more accurate responses, and some questions were presented in a different order than in previous surveys.

Table 1. Definitions and Assumptions for Group Comparison Analyses

Employed Writer	Freelance Writer/Editor
Taxes	
Filed by the employer	Filed by the writer/editor for performed "work for hire"
Income	
Gross Income (income before deducting taxes)	Gross Income (all income collected from clients); Net income (expenses subtracted)
Full-time/Part-time Status	
Full-time: works ≥32 hours/week	
Part-time: works <32 hours/week	

New questions in the 2015 survey were designed to capture data on employee benefits, which help to identify the additional value offered to full-time employees. Although not a benefit, working remotely has become an option for many employees, and a question was added to learn about this trend. For freelances, new questions were added to gather data on professional characteristics and expenses. Questions were refined and added to provide a better distinction between the salaries and hourly rates for writers and editors (Box 1).

Data Handling

The survey data were exported from SurveyMonkey to Microsoft Excel to preserve all raw data. Raw data were then imported to SAS software (SAS Institute, Cary, North Carolina). Data were

Box 1. New Questions in the 2015 AMWA Survey

New questions for employees and freelances

What percentage of your work is done remotely? (None, 20%, 40%, 60%, 80%, All)

New questions for employees

Choose the number of employees in company or organization (Fewer than 50; 50–100; 101–499; 500–1,000; 1,001–4,999; 5,000–10,000; More than 10,000)

How many years have you worked in your current position? (Fill in whole number)

Specify other employee benefits you receive (check all that apply; 20 options, None, Other)

New questions for employees/freelances and freelances

Choose the level of editing you primarily do (for editors). (Macroediting, Microediting, Macroediting and microediting, Copyediting)

What is the structure of your freelance business? (LLC, Partnership, S corporation, Sole proprietor, Other)

What recurring operating expenses did you incur through your freelance business in 2014? (check all that apply; 10 options, Other)

New questions for freelances

How many years did you work as a medical communicator, as defined in the Introduction, before becoming a full-time freelance? (None, Less than 1 year, 1–2 years, More than 2 years but less than 5 years, More than 5 years but less than 10 years, 10 years or more)

Of the 3 top areas of medical communication services you provide, what percentage of your total working time did you spend providing services in each of these areas in 2014? (Fill in percentage.)

Do you subcontract work to writers, editors, research assistants, or others? (Often, Sometimes, Never)

What percentage of your work time do you spend marketing your freelance business (defined as creating, updating, and distributing promotional media [hard copy and electronic] and active solicitation of work)? (Less than 10%, 11–19%, 20–30%, More than 30%)

What percentage of your total annual revenue is spent on marketing your freelance business? (Fill in whole number.)

Did you contribute to a retirement account in 2014? (No; Yes, I contributed the maximum amount allowed by law; Yes, I contributed less than the maximum allowed by law)

cleaned programmatically for entry anomalies and errors; in addition, raw data for approximately 100 entries were adjudicated (by S.B.) when programmatic correction was not possible.

Statistical Analyses

Statistical analyses consisted of descriptive statistics for all survey questions (ie, percentages, means, standard deviations, medians, interquartile ranges, and ranges). After review of the results for possible trends, additional analyses were performed. Some questions (or variables) with limited responses were grouped with other variables to further analyze as notable categories. Salary data from full-time employees were analyzed using multivariate regression models for variables suspected of being possible predictors (ie, contributing factors) of salaries. The initial predictors in the regression models were identified based on experience gained during previous surveys. These predictors were sex, age, educational level, years of experience in medical communication, and employment according to the following 3 groups (grouped according to approximating mean salaries):

- Pharmaceutical or biotechnology company
- Medical device, communication, or advertising company
- All other employers

After review of the initial regressions, results were optimized for statistical significance and correlation. The optimized regression models were followed with exploratory regressions. Geographic region was included as an additional potential predictor of employee salaries. As with the salary survey conducted in 2007, geographic regions associated with cost-of-living differences were a statistically significant predictor in the regression model conducted for this survey.[5] Geographic regions of the United States were organized into 3 groups according to whether their composite consumer price index (cCPI) was low, medium, or high. In addition to the CPI[6] that is commonly calculated and reported by the US Department of Labor, the cCPI incorporates those items routinely omitted by the CPI, such as food, housing, various goods and services, and energy-based commodities (eg, the cost of utilities and transportation).[7]

Statistical analysis for freelances/consultants comprised descriptive statistics for incomes and contract fees. For these analyses, 2 designations were adopted: "freelance" (respondents who work solely on a freelance basis) and "part-time freelance" (respondents who work part-time as a freelance). Within the full-time and part-time designations, these groups were further separated into writers and editors. The following categories were compared.

- Full-time freelances vs *all* part-time freelances (part-time freelances plus part-time freelances who are also employed)
- Groups according to work they performed (eg, writers vs editors)
- Groups according to the marketed area of writing (regulatory writing, scientific publications, continuing education, marketing/advertising, or consumer writing)

For descriptive statistics, the standard deviations for some salary means and the corresponding ranges for the medians often reflected large variances and skews of the distribution about the mean. Additionally, data often exhibit a larger variance when samples with a "small n" are considered. For this reason, the means in this survey are generally reported along with the corresponding "n," standard deviations, and medians. This presentation of the data enables readers to consider 2 measures of central tendency. The range is sometimes also reported.

RESULTS

Demographic Data and Professional Qualities

Overall, 1,292 medical communicators answered the survey; the method of data collection did not allow us to categorize respondents as AMWA members or nonmembers. Approximately two-thirds of respondents were employees and one-third were freelances. Most respondents were women. Freelances were slightly older than employees and had more (self-identified) professional experience. Overall, about half of respondents had more than 10 years of experience. Approximately 59% had a degree in science (including medicine and pharmacy) (Table 2).

Employees

Approximately 30% of employee respondents were primarily writers, 18% were primarily editors, and 18% said they did an equal mix of writing and editing. Other work categories included writing and supervising; supervising and administration; research and writing; and project management. Full-time employees had been in their current position for a mean of 3.9 years (3.6 years for writers and 4.4 years for editors). The 3 leading employers were the pharmaceutical/biotechnology industry (pharma/biotech), contract research organizations (CROs), and communications/advertising companies (Figure 1).

The mean salary was $90,200 for full-time employees and $55,700 for part-time employees. Men earned approximately $4,200 more than women, a 4.4% difference that was not statistically significant ($P>.05$). Respondents who were primarily writers earned a mean of $10,300 more than respondents who were primarily editors; the salary was higher for respondents who were writers and supervisors (Table 3). Mean salaries for writers ranged from $68,100 for an entry-level position to

Table 2. Demographic Data/Professional Qualities: Comparison of AMWA Surveys

	Year of Survey		
Parameter	**2007**	**2011**	**2015**
Respondents, n (%)	1,704 (32)	1,193 (26)	1,292 (--)[a]
Employee, n (%)	1,183 (69)	819 (69)	841 (65)
Freelance, n (%)[b]	521 (31)	374 (31)	451 (35)
Employee/freelance, n (%)			104 (14)
Sex			
Women, n (%)	1,383 (83)	963 (84)	1,042 (84)
Men, n (%)	281 (17)	181 (16)	185 (15)
Age (mean years)			
Women	45	46	46
Men	47	48	47
Employee	44	45	45
Freelance[b]	48	50	50
Years of experience (%)			
<2	14	11	8
2–5	20	20	25
6–10	28	25	25
>10	38	43	42
Years of experience (mean years)			
Employee	9	11	11
Freelance[b]	13	15	17
Education level (%)			
Bachelor's degree	36	28	21
Master's degree	34	34	32
Advanced degree	30	38	40
Degree field (%)			
Science[c]	40	44	50
English	N/A	N/A	9
Medicine	4	4	5
Pharmacy	5	5	4
Journalism	5	5	4
Medical writing	N/A	N/A	4
Communications	4	4	4
Liberal arts	11	11	4

N/A = not applicable or not available

[a] *The percentage is unknown, as the total number of solicited medical communicators is unknown.*

[b] *Freelance respondents, as a comparison to employees, include only those who freelance and are not also otherwise employed.*

[c] *Science includes biology, medical technology, health sciences, and nutrition.*

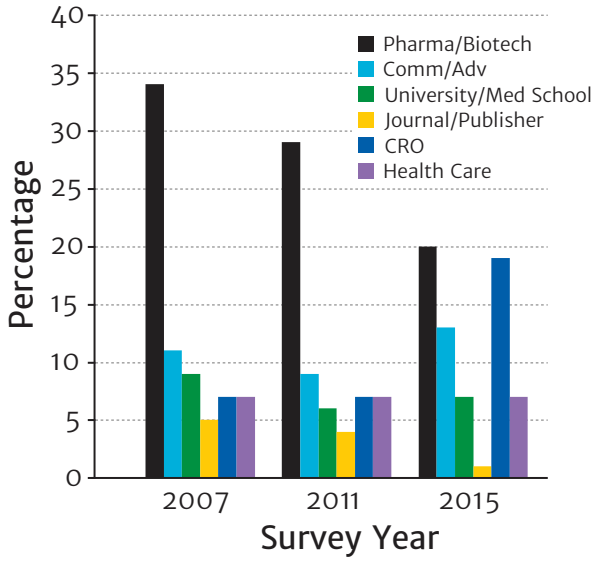

Figure 1. Comparison of the percentage of primary employers of respondents who are full-time employees in the current and the 2 most recent salary surveys.

$131,400 for a senior-level position with management responsibilities; the corresponding mean salaries for editors were $54,000 and $104,000, respectively. Company size was also a factor, with the highest salaries among respondents who worked in a company of more than 10,000 employees and the lowest salaries among respondents who worked in a company with fewer than 100 employees (Table 3).

Salary for full-time employee respondents was positively correlated with several factors. Salary varied according to type of employer, ranging from a mean of $70,500 for government agencies to a mean of $125,200 for biotechnology companies (Table 4). Salaries were higher in geographic regions of the United States with a high cost of living compared with regions with a low cost of living (Figure 2).

Factors that had been previously tested for contributions to salary were considered for use in the regression analyses: educational level, sex, years of experience in medical communication, region (based on cCPI), type of work performed (writing, editing, etc), working position level (management/no management), and company category. A model including education level, years of experience, sex, company category, and working position was tested in the initial regression. Sex was found to not reach significance and was removed from the model. The regression was modeled with the following factors: education level, years of experience, company category, and working position. These factors accounted for approximately 46% of the variance in salaries (R^2=0.46, P<.001). Next, a further stepwise regression yielded a model with R^2=0.50 and included all the factors formerly found to exhibit significance, as well as the additional factor of a cost of living indicator as applied to various geographic regions. This model was used to

Table 3. Employee Salary by Job Category, Employment Level, and Company Size

Parameter	Salary (US $) Mean (SD)	Salary (US $) Median (Min; Max)
Job Category		
Writing/supervision (n=90)	117,600 (62,000)	116,000 (48,000; 450,000)
Writing (primarily) (n=219)	91,600 (41,000)	88,000 (45,000; 243,000)
Editing (primarily) (n=90)	81,300 (33,000)	78,500 (35,000; 185,000)
Research and writing (n=63)	80,800 (39,000)	80,000 (38,000; 175,000)
Employment Level		
Writers		
Entry level (n=37)	68,100 (27,000)	67,000 (38,000; 130,000)
Midlevel, no supervision (n=192)	84,600 (36,000)	81,000 (40,000; 175,000)
Midlevel, with supervision (n=69)	106,700 (42,000)	105,000 (45,000; 200,000)
Senior, no management (n=111)	105,900 (47,000)	107,000 (43,000; 243,000)
Senior, management (n=53)	131,400 (55,000)	135,000 (65,000; 220,000)
Editors		
Entry level (n=19)	54,000 (22,000)	49,000 (38,000; 90,000)
Midlevel, no supervision (n=111)	71,400 (22,000)	70,000 (34,000; 136,000)
Midlevel, with supervision (n=24)	90,300 (40,000)	85,000 (52,000; 175,000)
Senior, no management (n=55)	82,100 (31,000)	78,000 (41,000; 140,000)
Senior, management (n=12)	104,000 (54,000)	103,000 (59,000; 185,000)
Company size (no. of employees)		
>10,000 (n=189)	97,700 (46,000)	99,000 (34,000; 243,000)
5,000–10,000 (n=82)	92,200 (39,000)	89,000 (35,000; 216,000)
1,001–4,999 (n=87)	87,500 (42,000)	82,000 (39,000; 235,000)
500–1,000 (n=65)	95,100 (64,000)	83,000 (30,000; 454,000)
101–499 (n=161)	88,800 (40,000)	85,000 (42,000; 192,000)
50–100 (n=77)	78,100 (35,000)	75,000 (35,000; 175,000)
<50 (n=103)	78,800 (44,000)	75,000 (25,000; 240,000)

Table 4. Full-time Employee Salary According to Type of Employer

Factors	Salary (US $) Mean (SD)	Salary (US $) Median (Min; Max)	Mean % Difference 2011–2015
Primary Employer			
Biotechnology company (n=66)	125,200 (62,000)	118,000 (60,000; 220,000)	+7
Pharmaceutical company (n=146)	113,000 (49,000)	108,500 (38,000; 243,000)	0
Medical device company (n=36)	88,400 (32,000)	83,000 (40,000; 172,000)	−5
Communication and advertising (n=97)	85,900 (41,000)	82,000 (40,000; 220,000)	−8
Medical education company (n=48)	81,300 (33,000)	80,000 (39,000; 185,000)	+2
Clinical research organization (n=121)	81,100 (33,000)	80,000 (50,000; 170,000)	−9
Government (n=18)	70,500 (33,000)	75,000 (40,000; 117,000)	−20
Other (n=44)	80,500 (31,000)	79,000 (48,000; 190,000)	−16

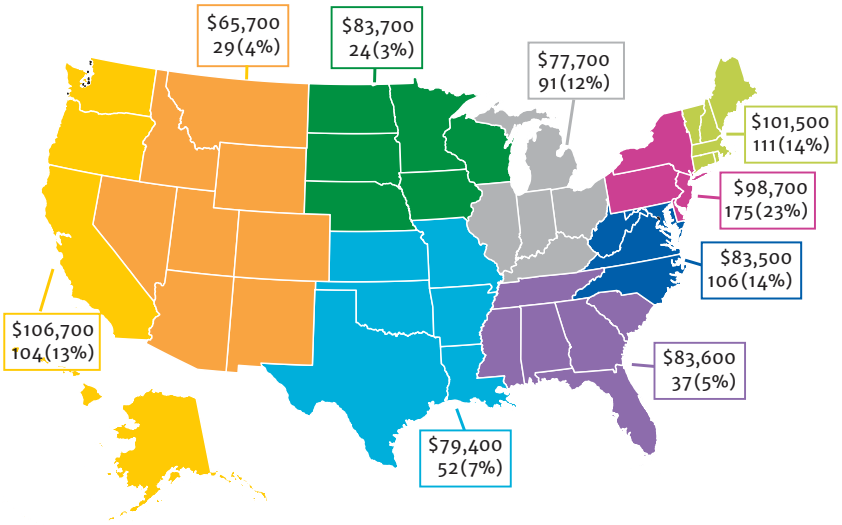

Figure 2. Salary according to region of the United States for full-time employees. Data are presented as means, with the number (percentage) of respondents who are employees. Data from respondents outside the United States not shown. *Map outline ©Freevectormaps.com.*

generate a predictive algorithm for salaries (Figure 3). This algorithm starts with a base salary of $29,400 for an employee with a bachelor's degree. According to the algorithm, the most highly paid employee would be a writer with an advanced degree employed in a senior management position at a pharmaceutical or biotechnology company in a region with a high cCPI.

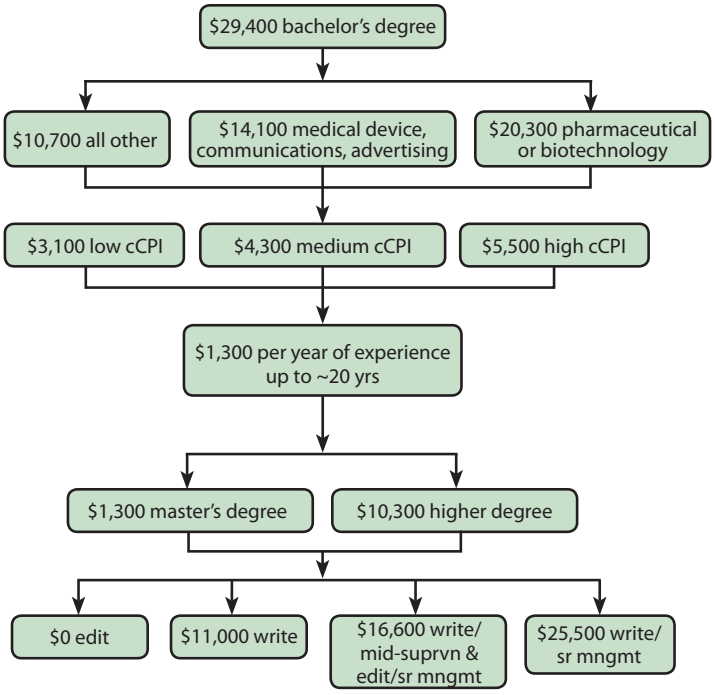

Figure 3. Employee salary estimated by regression modeling.

With regard to benefits considered to be part of an employment package, the most common benefit was health insurance, which was offered to 86% of full-time employee respondents; approximately 4% of employee respondents reported that they received no benefits (Table 5). An annual cash bonus was a benefit for 53% of employee respondents. Stock options/grants were a benefit for nearly one-quarter of full-time employee respondents, with a value of 1% to 10% of the annual salary as the most common range.

Approximately 27% of employee respondents worked remotely 20% of the time (ie, the equivalent of 1 day per week) and 21% worked remotely all of the time; 39% worked entirely onsite.

Freelances

Freelances most commonly worked in the areas of scientific publications (54%), continuing medical education (41%), and regulatory writing (34%). (The question permitted respondents to choose more than 1 category.) Full-time freelances had a mean of 12 years of experience; part-time freelances had a mean of 10 years. Full-time freelances worked a mean of 44 hours per week, and part-time freelances worked a mean of 22 hours.

The mean gross income for full-time freelances was $131,400 (Table 6). The mean hourly rate for *all* freelances was $111 (median, $105) for writing and $73 (median, $67) for editing. Most freelances (61%) reported primarily billing by the hour, and 65% reported that 80% or more of their work time was billable (Figures 4 and 5). The proportion of freelances who said that their business profitability was better in 2014 than in 2013 was 41%; only 17% said that their business profitability had worsened over that time period.

For both freelance writers and editors, the top 3 areas generating the most income were (in order) regulatory writing, continuing education materials, and scientific publications; incomes for writers and editors were confounded by skewed results in each medical communication area (means of $168,600 to $116,300 but medians of $175,000 to $116,000, respectively).

Table 5. Most Common Benefits for Full-time Employees

Benefit	Percentage of Respondents (n=747)
Health insurance	86
Dental insurance	78
Life and/or disability insurance	75
Retirement savings plan, with matching contribution	75
Flexible medical spending account	57
Professional development (membership dues, educational events)	55
Annual cash bonus	53
Performance bonus	30
Long-term care insurance	30
Tuition reimbursement	28
Stock options	25
None	4

Table 6. Gross Income for Freelances by Working Status

Status	Gross Income (US $)	
	Mean (SD)	Median (Min; Max)
Full-time freelances (n=153)	131,400 (79,000)	114,00 (20,000; 450,000)
All freelances (n=345)	103,100 (71,000)	88,000 (16,000; 450,000)
Part-time freelances (not otherwise employed) (n=191)	82,400 (61,000)	69,000 (16,000; 400,000)
Part-time freelances/ employees (n=78)	7,000 (9,000)	9,000 (500; 44,000)

Excluded entries adjudicated as outliers >5×SD.

Additional data obtained from freelance respondents related to business structure, billing processes, and time spent marketing will be the focus of an article in an upcoming issue of the *AMWA Journal*.

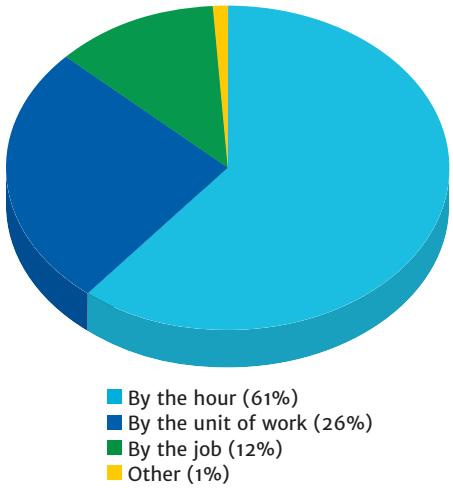

Figure 4. Freelances' primary billing method.

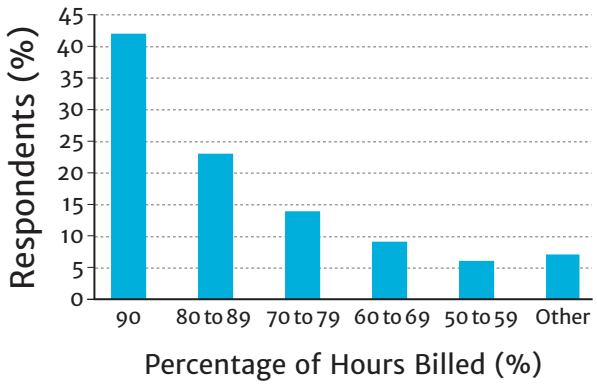

Figure 5. Freelances' percentage of billable work time.

DISCUSSION

The 2015 AMWA Salary Survey represented the first year the survey was opened to nonmembers, and this strategy may have helped to increase the number of respondents, which was higher than in 2011 (by approximately 100). It is unclear, however, whether the addition of data from nonmembers affected the overall results or how it should affect comparisons of data from previous surveys. Still, the demographic profile for the survey was similar to that in previous surveys, continuing to reflect the demographics of the AMWA membership.

Survey results indicated a 4% difference in salary between men and women, which is the smallest gap since the salary survey began in 1989. Previous differences were reported as 30% in 1989, 18% in 2007, and 12% in 2011.[1,5,6] The current gap reflects a similar percentage found among other industries (1% to 4%), with broad findings indicating that men do not earn substantially more money than women when they have similar experience and hold the same job.[7]

Pharma/biotech, CROs, and communications/advertising were the 3 primary employers of medical communicators. In 2015, a higher percentage of medical writers reported working for CROs (19%) than in 2011 (9.8%), and the percentage of medical communicators employed by pharma/biotech was lower (28% compared with 20%). This finding is consistent with the trend in recent years of increased outsourcing in the pharmaceutical industry. The finding also has an impact on the results for the mean salaries for employees, as salary tends to be lower in CROs than in pharma/biotech companies, as evidenced in both the 2011 and 2015 surveys. The mean income will therefore decrease as the proportion of medical communicators employed by CROs increases and the proportion of medical communicators employed by pharma/biotech companies decreases. The higher percentage of respondents working for communications/advertising may have also contributed to an overall lower mean salary for employees. The percentage of respondents employed in the communications and advertising companies sector was higher than that in previous surveys.

Other resources on salaries for medical writers are available, but most are not specific in their definition of a medical writer. For example, the *Occupational Outlook Handbook* by the Bureau of Labor Statistics, US Department of Labor, includes medical writers within the category of technical writers, whereas other resources seem to include only medical writers in the pharmaceutical industry. In addition, some resources base salaries on a low number of respondents or do not indicate the number of respondents. The average salary according to these resources is approximately $72,000 to $79,000, much lower than the mean salary for employees in our survey ($90,200).[8-10] In one resource, the median entry-level salary is noted to be $59,405, which is also lower than in our survey ($67,000).[11] These resources do acknowledge that many factors affect salary, including geographic location, years of experience, level of education, work setting, and company size, all factors that were found to influence salary in the AMWA survey.

The only resource on income with specific findings for medical writers and editors applies only to freelance income. The Editorial Freelancers Association (EFA) conducted a survey of its members a few years ago to gain insight into editorial rates; the exact year of the survey and number of respondents

is unknown (but was fewer than 700) (EFA, personal communication). According to the survey results, the rate for freelance medical writing was $60 to $70 per hour; this rate is higher than that for any other writing category in the survey (eg, fiction, grants, journalism, sales, tech, and trade) except for "nonspecified," which is associated with an hourly rate of $40 to $100.[12] The rate in the EFA survey is $35 to $45 less than the median hourly rate reported by full-time freelance respondents in the AMWA survey ($105). The EFA survey demonstrated a range in editing rates, from an hourly rate of $30 to $40 for basic copyediting to $40 to $60 for substantive or line editing.[12] These editing rates are lower than the median hourly rate in the AMWA survey ($67), but the EFA editing category is not specific to medical communication. The EFA also notes that the rates should be used only as a guideline because they "vary considerably depending on the nature of the work, the time frame of the assignment, the degree of special expertise required, and other factors."[12]

Factors Associated with Employee Salary

In the 2015 AMWA Salary Survey, full-time employee respondents in the biotechnology and pharmaceutical companies earned the highest salaries, followed by communications/advertising, medical device companies, and CROs. Compared with the 2011 survey, the mean salary for full-time employees was $2,667 lower: it was $92,867 in 2011 and $90,200 in 2015. The median salary remained unchanged at $88,000.

The results of the current survey suggest that in recent years, full-time employee salaries have not kept pace with the inflation rate as calculated by the CPI. From 2007 to 2011, the inflation rate was 5.2%; the difference in salaries between the 2007 and 2011 surveys was +12.9%. From 2011 to 2015, the inflation rate was 7.0%, yet mean salaries were 2.9% lower in the 2015 survey than the 2011 survey (although median salaries were equal). The percentage of employees in CROs (+60%) and communications/advertising increased (+6%), and the lower salaries in these work settings compared with those in pharma/biotech, may explain the lower mean value. Additionally, a greater percentage of experienced employees may have transferred from employee to freelance status, which may partially explain the lower mean salaries.

Although the hiring demand for the pharmaceutical industry reached an all-time low in 2009, demand has gradually increased since then.[13] Salary levels in the pharmaceutical industry appeared to remain flat between 2011 and 2015 (Table 4).

The greatest decreases in mean salary for full-time employees were associated with government agencies, CROs, and communications/advertising companies; the greatest increases were associated with biotechnology companies and medical education companies. However, given the small number of respondents who reported working for government agencies, it is doubtful that the decrease in mean salaries would have been appreciably influenced by the respondents.

The regression model suggests that several factors contribute to the estimation of employee salaries, and the best model described about 50% of the variance of the model. In other words, the variables tested explained 50% of the variability in income. The factors for this survey (in order of importance) were type of work performed (writing, editing), primary employer, years of experience, education level, and geographic region according to cCPI.

The higher mean gross income for freelances ($131,400) in comparison with employees ($90,200) may give a first impression that it is more lucrative to be a freelance than a salaried employee. However, this first impression is quickly discounted when employee benefits and freelance expenses are considered. The US Bureau of Labor Statistics notes that benefits represent approximately 30% of the total compensation package for an employee in private industry.[14] The 2015 Salary Survey marked the first time full-time employees were queried about benefits such as health insurance, bonuses, or stock options, and the results indicate that a high percentage of employee respondents received typical benefits packages. Thus, the total compensation value for full-time employee respondents with a standard benefits package would be $117,260, not the salary of $90,200. On the other hand, freelances in 2015 reported gross and net incomes demonstrating that they spend 30% to 35% of their gross income on expenses and overhead (data not shown), which reduces their mean income to a range of $85,410 to $91,980.

Although it is not a benefit per se nor related to salary, telecommuting is becoming more common, with 20% to 25% of the current US workforce working remotely at least some of the time.[15] According to the 2015 survey results, the rate of telecommuting among medical communicators is much higher than that among the general workforce, with 48% of employees reporting that they worked remotely at least some of the time. Earlier AMWA surveys did not ask about telecommuting. Telecommuting is changing the way medical communicators work and is increasingly blurring the distinction between freelances and employees with regard to key job features.

Freelances

The mean gross income for full-time freelances was approximately 13% higher in the 2015 survey ($131,400) than in the 2011 survey ($116,000). Freelances in the 2015 survey did not report a higher number of working hours, as the mean number of hours was the same in both surveys for full-time freelances (44 hours) and was similar for part-time freelances (21 hours in 2011 and 22 hours in 2015). Since 2011, the hourly rate for full-time freelance writers increased by $6, from a mean of $105 to a mean of $111 in 2015; however, the hourly rate for

full-time freelance editors was $6 lower, decreasing from a mean of $79 to a mean of $73. Business profitability was similar in 2015 and 2011, with 41% reporting a better profit than in the previous year, compared with 37% reporting "better than average" in 2011.

The percentage of freelances who bill by the hour was lower in the current survey than in the 2011 survey (61% vs 78%). Whether to bill by the hour or charge a project-based fee has been debated for years, with most experts agreeing that each billing method has its advantages and disadvantages.[16] The decrease in the percentage of freelances billing by the hour may indicate that more freelances are billing on a project-fee basis because of advantages associated with this billing method. This decrease also may be associated with level of experience, as freelances in the current survey had more cumulative years of experience than the freelance respondents in 2011. More experienced freelances may bill by the hour less often than do freelances with less experience; however, we did not analyze billing practices according to experience.

Approximately 42% of freelances reported that 90% of their time was billable. Interestingly, with 44 hours as the mean number of working hours, these freelances have approximately 40 hours of billable time per week. The percentage of freelances who reported that 80% or more of their time was billable (65%) was slightly lower in the current survey than in the 2011 survey (70%).The 3 areas of medical communication that drew the highest incomes for freelance writers in 2015 were the same in 2011 (regulatory writing, continuing education materials, and scientific publications), but continuing education materials was associated with the second highest income in 2015 and the third highest in 2011.

Survey Limitations

As with all surveys, these results were dependent on the number of respondents answering each question. Some respondents did not answer all questions pertaining to their group (eg, employee vs freelance, writer vs editor); some respondents answered only a few questions. Therefore, when an association for a given question was analyzed with a second question, the "n" will reflect only those respondents who answered both questions; likewise, a respondent had to have answered *all* of the individual questions to be counted for an analyzed group of associations. Consequently, because of missing data, the reported "n" in various analyses will differ. The extent of missing data is a well-known limitation of surveys and reiterating this phenomenon directly conveys the importance of full participation of survey members and completion of survey questions.

An additional limitation of the survey is the potential for selection bias. People who participate in a survey may differ in important ways from the population of medical communicators as a whole, so the generalizability of the results is unclear.

The substance of key questions remained the same in the 2011 and 2015 surveys, but how questions were phrased and the order in which they appeared differed. These differences may have influenced how respondents answered the questions or how many questions they answered, thus affecting the interpretation and comparison of results.

Despite these limitations, the AMWA Salary Survey continues to be the best representation of the range of salaries in the field of medical communication.

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