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See You in Sacramento: Preview of AMWA's 72nd Annual Conference
MISSION STATEMENT

The AMWA Journal expresses the interests, concerns, and expertise of members. Its purpose is to inspire, motivate, inform, and educate them. The Journal furthers dialog among all members and communicates the purposes, goals, advantages, and benefits of the American Medical Writers Association (AMWA) as a professional organization. Specifically, it functions to

- Publish articles on issues, practices, research theories, solutions to problems, ethics, and opportunities related to effective medical communication
- Enhance theoretical knowledge as well as applied skills of medical communicators in the health sciences, government, and industry
- Address the membership’s professional development needs by publishing the research results of educators and trainers of communications skills and by disseminating information about relevant technologies and their applications
- Inform members of important medical topics, ethical issues, emerging professional trends, and career opportunities
- Report news about AMWA activities and the professional accomplishments of its departments, sections, chapters, and members

The opinions expressed by authors contributing to the Journal do not necessarily reflect the opinions of AMWA or the institutions with which the authors are affiliated. The association accepts no responsibility for the opinions expressed by contributors to the Journal.

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ONLINE EXCLUSIVES

• REGULATORY INSIGHTS
• MEDIA REVIEWS
The June issue of the Journal is always the first to provide details of the AMWA annual conference, as it coincides with the launch of conference registration. Brian Bass, this year’s Annual Conference Administrator, along with his committee and headquarters staff, have developed an outstanding conference schedule. Exciting changes are in store for us, and you can read about just some of the details beginning on page 64.

I’m always surprised when AMWA members do not take advantage of the wonderful opportunities our annual conference provides. The two top draws of the conference are education and networking—things that benefit everyone. Each year, we draw nearly 1,000 attendees, or about 20% of our membership. But where is everyone else?

I knew from the beginning that I “simply must” attend the AMWA conference. I have gone to every conference since my first one in Miami in 2000. (I had joined AMWA the year before, but my new job kept me from attending that year.) I was incredibly shy then (those of you who know me realize how different that is!) and for the first few years, I spent most of my time in my hotel room, working, coming out only to attend workshops and maybe a session or two. I knew I had to be at the conference, but I hadn’t discovered the joy of participating to the fullest.

At one of those early conferences, I was waiting alone to be seated for lunch at the hotel restaurant. Another conference attendee—someone I had never met—came up to me and asked, “Do you want to join us for lunch?” I accepted hesitantly, wondering how the lunchtime conversation would go. But we found plenty to talk about, and we have since become close colleagues. I always remember that act of kindness—expressed by Barbara Snyder, our current president—and I try to replicate it at every conference.

I’m not the only one who has had such an experience. Ask anyone who has ever attended an AMWA conference and he or she will have a story about a similar act of kindness at the ready. Whenever I espouse the virtues of AMWA (which is quite often), I emphasize that AMWA is the friendliest, most gracious group of people you will find in a professional organization. So, if you haven’t come to a conference because you “don’t know anyone,” think again! Come, and you will soon be exchanging business cards with many colleagues, vowing to keep in touch. And you’ll be looking forward to seeing them at the next conference.

When I became the Journal Editor, my conference life changed. The conference was now a place to finally meet people I knew only through e-mail notes and occasional phone calls. I spent less time in my hotel room and more time at sessions and talking to presenters about contributing to the Journal. As I began to reap more and more from the conference, I felt a desire to give back. I started to think about what I could offer to the conference, and I became a roundtable leader, then looked into how to become a workshop leader, and last year, I moderated an open session for the first time.

I know that cost is an important factor that keeps some members from the conference, especially freelances, who make up a large part of our membership. But our conference registration fee is much lower than that for many other conferences. And it’s an exceptional value—with a wealth of sessions included at no extra fee, and this year, with three—yes, three—networking events. One pass of your business card or conversation with a new colleague could lead to a work assignment, which just might cover some of your conference cost!

The value of the conference extends beyond the possibility of new work. You can gain new knowledge and skills to take back to your job. You can add to your résumé by becoming a speaker or workshop leader. As with anything, the more you give, the more you get. Each time you become more involved in the conference, you will get paid back tenfold. Every year, I meet new people, learn new things, gain more insight into our profession, and leave the conference further enriched by my experience and my colleagues, both old and new.

Make sure to review the conference registration brochure—now available on the AMWA website (www.amwa.org)—to see how many sessions, workshops, and events would be beneficial, or maybe just fun. Go ahead, take that step and register! And learn from my mistakes. Get your work done before you go so you have no excuse to be in your hotel room. Don’t be shy—go to as many events as possible and start a conversation with the person next to you in a session or workshop. Want to join me for lunch?
ABSTRACT
It is essential to use plain language when writing medical content for lay readers. In this article, we describe best practices for improving the readability of informed consent documents for research studies. The scientific editors at MD Anderson Cancer Center have developed several resources to communicate complex medical information effectively to emphasize the most critical information. We use customized databases and glossaries defining hundreds of side effects and procedures in concise terminology that is validated by medical and literacy experts.

INTRODUCTION
In the field of oncology research, where 20-letter words are commonplace and the audience is largely made up of lay readers who are already in a fragile state of mind, it is essential to have a plan for communicating effectively, consistently, and, most of all, understandably.

The informed consent process is one area in which effective communication is essential. According to the Office for Human Research Protections (OHRP), this process involves three key features: “(1) disclosing to potential research subjects information needed to make an informed decision; (2) facilitating the understanding of what has been disclosed; and (3) promoting the voluntary nature of the decision to participate in the research.” An informed consent document (ICD) is one crucial piece of this consenting process.

As additional protection for subjects, an Institutional Review Board (IRB) is charged with making sure all research is done safely and ethically. The IRB, typically made up of doctors, researchers, and community members, reviews and approves new research studies, revisions to ongoing research studies, and all of the documents given to participants, including the ICD.

The ICD contains descriptions of the research goals, tests and procedures, costs, potential risks and benefits, treatment alternatives, and legal disclaimers. All of this content must be communicated in a way that facilitates a person’s ability to comprehend the ICD. ICDs are routinely revised during the course of ongoing research studies when new information arises that might affect participants’ willingness to continue taking part in the study, such as newly identified side effects. After being informed of the new information, participants are asked to sign the new version of the ICD if they agree to continue taking part in the study.

THE ICD LAY AUDIENCE
Potential study participants are often in distress when presented with an ICD. This puts them in a vulnerable position that may detract from their ability to comprehend complex written information. Documents for this audience must be accurate but have no excess detail. Readability is important, and word choice and style must be appropriate for the target audience. Many people who seek to participate in research have a low literacy level, may not be native English speakers, and may not be well versed in science. According to the National Center for Education Statistics, in 2003 14.5% of adults lacked basic prose literacy skills.

How best to meet the needs of individuals reading patient education documents has been a popular item of discussion at medical writing conferences. Tools such as the Flesch-Kincaid Grade Level Calculator have certain deficiencies that indicate limited use for improving readability, especially in an oncology setting. These tools do not take into account such factors as print size and type, color contrast between ink and paper, concept density, and unfamiliar context. Merely reducing the number of words per sentence or the number of syllables per word does not automatically make complicated material easier to understand. We have learned that in editing, the most important factors are experience, open debate between members of the editing team, participation in continuing education programs (such as AMWA’s annual conference), and the input of lay readers.

THE PROCESS FOR DEVELOPING ICDs AT MD ANDERSON
As a service to researchers, the IRB office at the University of Texas MD Anderson Cancer Center (MD Anderson) in Houston, TX, has a pre-review process conducted by a staff of 10 scientific editors whose goal is to make ICDs for research as clear and concise as possible. They edit ICDs before the documents are reviewed and approved by the IRB. The scientific editors attend all IRB meetings to assist with any ICD-related questions and make revisions according to IRB recommendations. Once studies are IRB approved, the scientific editors are responsible for pre-reviewing changes to the ICDs based on amendments submitted by study sponsors or revisions based on new safety information. The scientific editors also help with drafting and finalizing the revisions before the documents are returned to the IRB for review.

The scientific editors have developed several resources to communicate scientific information consistently and effectively. The following list has been implemented at MD Anderson, but...
similar documents could be created at any institution to optimize patient understanding.

**Boilerplate Database**
The scientific editors have developed a database of standard phrases and definitions that can be used when initially drafting an ICD. This database of terminology, referred to as the Boilerplate Database, includes commonly recurring medical words, phrases, and procedures, as well as procedural definitions and drug descriptions. The advantage of this type of database is that these phrases and definitions have been rigorously reviewed by several different parties, including scientists and lay people. We follow standard operating procedures for adding items to the Boilerplate Database (see box at right); these procedures may be applied to the development of a similar database at any institution.

Use of a boilerplate database, which can be customized and implemented in diverse clinical research settings, ensures consistency among ICDs within the institution, speeds the process of creating and editing ICDs for the research staff and scientific editors, and enables the editors to have IRB-approved language available to support document changes. This can be advantageous when working with the sponsors of clinical trials, as the language the IRB allows is already established.

**The Side Effect Glossary and Database**
Drugs can be associated with a wide variety of side effects. In one study, researchers found an average of 70 different side effects on prescription drug labels.

As a result, patients may experience information overload and may make the mistake of overlooking information that is important to their safety. The side effect section of the ICD must be carefully balanced to be as understandable as possible to lay readers while being sufficiently comprehensive.

The scientific editors maintain a database of IRB-approved side effect profiles for hundreds of drugs and procedures and a glossary of lay translations of side effects. Researchers composing their ICDs in MD Anderson’s software program can click a button to import IRB-approved side effect language directly into their electronic ICDs. The Side Effect Glossary and Side Effect Database are both models that can be implemented by other institutions in an effort to standardize their consent forms.

The Side Effect Glossary at MD Anderson lists more than 2,000 side effects translated from the technical description to a lay description.

The Glossary, which continues to expand every day, is required to be vetted through an ad-hoc committee of the IRB that is composed of doctors, research staff members, and community members. The committee also decides whether each side effect can be considered “serious” or not, according to the definition of the United States Food and Drug Administration (FDA): fatal; life-threatening; causing hospitalization, disability, permanent damage, or birth defects; or requiring intervention to prevent permanent impairment.

If a side effect is listed as

---

**PROCESS FOR ADDING TO THE BOILERPLATE DATABASE**

A new procedure is included in an ICD submitted to the scientific editors.

- A scientific editor researches the procedure to gain a better understanding before describing it.
- The scientific editor describes the procedure using lay language.
- The new description is sent back to the principal investigator (PI) of the study for review.

If the PI approves the description.

- The IRB reviews the description.
- The scientific editor makes IRB-suggested changes to the description on behalf of the PI, if necessary.
- The description is added to the Boilerplate Database.

If the PI does not approve the description.

- The PI revises the language.
- The scientific editor sends the description to the IRB for review (if the editor does not agree with the revision, he or she sends the description with comments).
- The IRB determines the final language to be used.
- The description is added to the Boilerplate Database.

Examples from the Boilerplate Database

**Vital Signs**
Your vital signs (blood pressure, heart rate, temperature, and breathing rate) will be measured.

**Electrocardiogram**
You will have an electrocardiogram (ECG) to check your heart function.

**Placebo**
A placebo is not a drug. It looks like the study drug but is not designed to treat any disease or illness. It is designed to be compared with a study drug to learn if the study drug has any real effect.

**Pharmacokinetic (PK) Testing**
PK testing measures the amount of study drug in the body at different time points.
nonserious and occurs rarely (less than 3% of the time), it can be omitted from the drug listing. This omission makes an impact, because many drugs have numerous side effects that occur in postmarketing studies but only rarely. By omitting those rare and nonserious side effects, the scientific editors are able to significantly reduce the length of consent forms and emphasize the more critical information. The length of consent forms is one of the primary roadblocks to the retention of study information by participants. The shorter the form, the better patients are able to retain the information.6

The IRB ad-hoc committee verifies the accuracy of all translations with a focus on what the patient may experience. The glossary is also designed to allow similar side effects to be combined. For example, if a drug listing includes “sloughing,” “desquamation,” “skin exfoliation,” and “local exfoliation,” these four side effects would be collapsed into one side effect, “skin peeling.” Again, by reducing duplication, the consent document is shorter and can hold the reader’s attention, leading to better comprehension and retention.

**TRANSLATING SIDE EFFECTS INTO LAY LANGUAGE**

In order to translate an FDA-approved drug’s side effects into lay language, the scientific editors use the MD Anderson formulary to compile all side effects that the drug is known to cause. When the likelihood of side effects is known, side effects are then grouped into three categories: likely (occurring in more than 20% of patients), common (occurring in 20%-30% of patients), and rare but serious (occurring in fewer than 3% of patients). This approach highlights the most common side effects by moving them to the top.

In each likelihood section, the scientific editors organize the side effects by body system (cardiac, dermatologic, respiratory, etc). Grouping by body system allows the scientific editors, principal investigators (PIs), research staff members, and, most important, patients, to be able to quickly locate side effects in the document.

Most side effects are listed concisely in a bulleted format. Side effects are listed in a three-column chart format to reduce the page count of the ICD. Certain side effects that require more description and that will not fit easily in a bulleted format, such as myelosuppression, are listed in paragraph format outside the chart.

At the beginning of the side effect section of almost every clinical ICD, the following boilerplate language is included.

> “While on this study, you are at risk for side effects. These side effects will vary from person to person. The more commonly occurring side effects are listed in this form, as are rare but serious side effects. You should discuss these with the study doctor. You may also want to ask about uncommon side effects that have been observed in small numbers of patients but are not listed in this form. Many side effects go away shortly after treatment is stopped, but in some cases side effects may be serious, long-lasting or permanent, and may even result in hospitalization and/or death.”

This introduction allows the subsequent bulleted side effects to be included without repetitive descriptors such as “serious” and “fatal.”

Some side effects are simple to convey, such as “loss of appetite” and “difficulty breathing.” Other side effects are more obscure, such as reversible posterior leukoencephalopathy syndrome (RPLS). The lay wording used for RPLS in ICDs is “brain damage that may be reversible (possible headache, confusion, seizures, and/or vision loss).” For the more obscure side effects, it is important to include the possible signs and symptoms so that the patient can better identify when he or she is having an adverse reaction. For example, instead of simply listing that a drug may cause a low sodium level, the editor would write, “low blood level of sodium (possible headache, confusion, seizures, and/or coma).”

Generic descriptions of what patients may experience are used instead of technical jargon for the actual problem (see box below). For example, terms like “palpitation,” “premature ventricular beats,” “prolonged QT interval,” and “AST wave changes” have precise meanings to experts but are all referred to as “irregular heartbeat” for lay readers.

**EXAMPLES FROM THE SIDE EFFECT GLOSSARY**

- “Amnesia” becomes “memory loss”
- “Pyrexia” becomes “fever”
- “Stevens-Johnson syndrome” becomes “very severe blistering skin disease (with ulcers of the skin and digestive system)”
- “Partial thromboplastin time increased” becomes “increased risk of bleeding”

Duplicate terms are removed if they are too similar. For example, “shortness of breath” and “difficulty breathing” do not both need to be listed and neither do “drowsiness” and “grogginess.” However, it might be misleading to not list “bleeding in the brain” in addition to “bleeding gums.” In that scenario, combining the terms and listing only “bleeding” would actually detract from the information that should be provided to potential participants.

For a non-FDA-approved drug, the scientific editors use the Investigator’s Brochure and study sponsor’s model consent form to identify the possible side effects. For many non-FDA-approved drugs, it is too early to fully understand the frequency of the side effects; grouping them by likelihood of occurrence would be misleading because of the low statistical power. In those cases, all known side effects are listed under a heading stating that the side effects have an unknown frequency.
Writing and editing side effect language in ICDs is a collaborative process between PIs, scientific editors, study sponsors, IRB members, and members from the lay community.

**CREATING TEMPLATES**
Scientific editors assist in creating ICD templates for all types of research conducted in the institution, including clinical, psychosocial, behavioral, and laboratory studies. The editors work collaboratively with the legal department and IRBs to develop these specialized ICD templates. Once a new template is released, the editors assist the PIs and research staff in updating all ICDs in the institution to the current ICD template.

The Boilerplate Database, Side Effect Database, Side Effect Glossary, and ICD templates are invaluable tools that foster consistency among ICDs across the institution while increasing the clarity of complex information. This consistent presentation facilitates the disclosure of relevant information to potential research subjects, thus allowing them to make a voluntary and informed decision about whether they wish to participate in the research.

For this process to continue to be relevant, it is vital that we as medical writers continue to communicate with each other about ways to make writing more understandable and to share the knowledge we learn. It would be easy to create these templates and databases and then proceed to rely upon them without ever bringing their accuracy into question again. This would be a dangerous complacency. What is fascinating about our profession is that new discoveries are made every day. We cannot allow those discoveries to pass by unnoticed. We must strive to consider everything, question everything. Only by doing that can we say we have done our very best to protect and inform those individuals who have entrusted the research community with their lives.

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**Author contact:** kgriffit@mdanderson.org

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**Help Define Our Profession » Participate in the AMWA Job Analysis Survey**

The AMWA Job Analysis Survey—the first survey of its kind in medical communication—is your opportunity to play an integral role in defining the scope of practice for medical writers. As defined for the survey, a medical writer is someone who currently writes, edits, or both in a broad array of areas, including biomedical research, clinical care, and health sciences.

The survey is the crucial first step in developing a certification examination for medical communication. Using best practices in the field, AMWA is working with Schroeder Measurement Technologies, Inc. (SMT), a leader in the development of certification and licensing programs. SMT drafted a set of key areas of knowledge, skills, and abilities (KSAs) relevant to medical writing after reviewing educational curricula, job descriptions, publications, guideline documents, and other resources relevant to medical writing. The survey domains and supporting elements were developed over 2 days of in-depth discussions and deliberations among SMT staff and members of the AMWA Job Analysis Panel, which consisted of some members of AMWA’s Certification Commission and additional AMWA members to achieve representation of all key medical writing areas. The domains and items were then vetted among even more individuals for further input and perspective.

The survey is available at [www.smttest.com/JobAnalysis/amwaja/survey.aspx](http://www.smttest.com/JobAnalysis/amwaja/survey.aspx). Act now: the survey closes on July 8, 2012. The value of this study is directly related to the number of medical writers who complete the survey. We encourage you to forward the survey link to other medical writers.

**References**

RESULTS OF THE 2011 AMWA SALARY SURVEY*

By Susan Bairnsfather

EPharmaTech, LLC, Shreveport, LA

As the leading professional organization for medical communicators, the American Medical Writers Association (AMWA) has periodically surveyed its membership monitoring the demographic characteristics and salaries of medical writers. The AMWA survey has been referenced by the profession of medical writers as the largest survey in terms of number of respondents and the most indepth analysis of demographic/professional characteristics and salary. For many medical communicators, the survey serves as the most dependable basis for setting salary ranges among employers and for negotiating salaries and contract fees among employees and freelances/consultants. The 2011 salary survey is the sixth survey conducted by AMWA; previous salary surveys were done periodically between 1989 and 2007. With each survey, AMWA has made improvements, adding newly requested questions to capture the interests of its membership. This 2011 survey also retained key questions so that this year’s results could be compared with those of prior surveys.

METHODS

SurveyMonkey software (SurveyMonkey.com LLC, Portland, OR) was used to collect responses to the survey. Many methods were used to notify AMWA’s 5,350 membership about the survey, including announcement of the survey in the March 2011 issue of the AMWA Journal, e-mails to members in April and at the launch of the survey (May 3), and a reminder e-mail to members during the time the survey was available (until May 25). A short slide presentation was posted by the author to the AMWA listserv to further promote participation in the survey, a parody on the term “ghost writers” as a means to portray writers who would be “missing from survey results” if they did not respond.

The survey requested demographic and professional details and income information on monies earned during the 2010 tax year. The same information was monitored in previous surveys, including those attributes reported by employed writers and freelances (as applicable): gender, age, education level, years of experience in the profession, work status (full-time or part-time), type of primary employer, type of work performed (writing, editing, mix, etc), and career level (entry level to supervisor). Predefined assumptions were adopted to facilitate analysis of comparisons (Table 1).

Responses were requested per instruction in the survey and grouped according to status as an employed writer and for freelance writers. However, if a respondent prematurely stopped answering questions in the survey, the remaining blank fields resulted in limiting the statistical analyses of the missing data.

Table 1. Definitions and Assumptions for Group Comparison Analyses

<table>
<thead>
<tr>
<th>Employed Writer</th>
<th>Freelance Writer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Taxes</strong></td>
<td></td>
</tr>
<tr>
<td>Filed by the employer</td>
<td>Filed by the writer for performed “work for hire”</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
</tr>
<tr>
<td>Gross Income (income before deducting taxes)</td>
<td>Gross Income (all income collected from clients); Net income (expenses subtracted)</td>
</tr>
<tr>
<td><strong>Full-time/Part-time Status</strong></td>
<td></td>
</tr>
<tr>
<td>Full-time – works ≥32 hours/week</td>
<td></td>
</tr>
<tr>
<td>Part-time – works &lt;32 hours/week</td>
<td></td>
</tr>
</tbody>
</table>

Data handling included directing the SurveyMonkey software to export data to Microsoft Excel, where all raw data were preserved. Raw data were then imported to SAS software (SAS Institute, Cary, NC). Data were first cleaned programmatically for entry anomalies and errors before subsequent analyses. Raw data for approximately 50 entries were additionally manually adjudicated twice (initially by the author and secondly by an independent quality control person) when it could not be corrected programmatically.

Descriptive statistics were calculated 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. Statistical analyses of full-time employed writers’ salaries were also conducted as multivariate regression models for those variables suspected of being possible predictors (ie, contributing factors) of salaries. The initial predictors in the regression models were patterned after previous surveys: gender, age, education level, years of experience in medical communication, and employment according to three groups (categorized according to approximating mean salaries):

- Pharmaceutical or biotechnology company
- Medical device, communication, or advertising company
- All other employers (university or medical school, association or professional society, journal or publisher, health care organization, contract research organization, and research organization)

*A slide presentation of the Salary Survey findings is available in the Members Only section of the AMWA website (www.amwa.org).
RESULTS

Overall, the response rate was 26% (n=1,393); this rate was somewhat lower than that for previous surveys. However, the demographic profile for the survey was still similar to the previous surveys (Table 2). Female gender has historically been predominant in AMWA; all survey results have captured this pattern, with a greater percentage of female respondents (72%-84%) than male respondents (16%-28%, Table 2). Survey results have also historically demonstrated that approximately two-thirds of respondents are employees and one-third are freelances. Since 2002, variance of only a few years has occurred in the “age” and “years of experience” categories. With respect to education level, the percentage of respondents with a bachelor’s degree decreased from approximately 34% in 2002-2007 to 28% in 2011; the percentage of respondents with an education higher than a master’s degree increased from approximately 30% in 2002-2007 to 38% in 2011. The percentage of respondents with science degrees increased to 44% in 2011, compared with 40% in 2007 and 34% in 2004.

The value of the AMWA certificate was personally viewed by writers and editors as an important achievement (40%) and was also considered to add professional credibility (35%). Although 15% of respondents stated that they had received unsolicited confirmation from clients/employers of the importance and value of the AMWA certificates, approximately 80% said that they had never asked for this input. This disparity leads to the idea that more writers and editors should be requesting this input from their clients and employers.

Employees

The distribution of full-time employees among primary employers demonstrated a decrease in the percentage of respondents employed in pharmaceutical and biotechnology companies, communications and advertising companies, journals and publications, and universities/medical schools (Figure 1). Some of these employees may have found employment within the health care sector or within the category reported as “other” (not shown), as the percentage of respondents in both of these employment categories increased.

The mean annual salary for full-time employees was approximately $93,000 (n=728, SD=$36,000; median=$88,000; interquartile range=$66,000, $110,000; Table 3). Salary was highest for respondents employed at biotechnology ($116,800) and pharmaceutical ($112,800) companies, followed by communication and advertising agencies ($93,400), medical device companies ($92,700), contract research organizations ($89,600), government agencies ($88,300), and medical education companies ($79,500). Compared with the 2007 survey, salary increased in most categories of primary employers (range: 3%-25%; Table 4).

Mean annual salary was positively associated with several factors: increased number of years of experience, writing as primary type of work, career level of manager or supervisor, level of education, and residence in a higher cost of living region of the United States. Compared with the 2007 survey, notable increases in salary were found in the following categories: government jobs (24%), “<5” and “11 to 15” years of experience (14% and 12%, respectively), employees with masters degrees (15%), mid-level and senior-level career with no management (14% and 13%, respectively), “research and writing” (30%) and “primarily writing” (21%) as types of work performed (Table 4). Salary was highest in New England ($109,700), followed by the West Coast (including western Canada; $106,100), areas outside the United States and Canada ($100,200), the New York-Delaware Valley area (including New York, New Jersey, Pennsylvania, Delaware, and eastern Canada; $97,100), the northern Midwest area (Canada; $91,800), and the mid-Atlantic area ($87,500) (Figure 2).
Table 2. Demographic Data/Professional Qualities: Comparison of AMWA Surveys

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Survey Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of surveys sent</td>
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</tr>
<tr>
<td>Respondents (n [%])</td>
<td>886 (33)</td>
</tr>
<tr>
<td>Employee (n [%])</td>
<td>N/A</td>
</tr>
<tr>
<td>Freelance (n [%])               a</td>
<td>N/A</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Women (n [%])</td>
<td>635 (72)</td>
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<td>N/A</td>
</tr>
<tr>
<td>Men</td>
<td>N/A</td>
</tr>
<tr>
<td>Employee</td>
<td>N/A</td>
</tr>
<tr>
<td>Freelance a</td>
<td>N/A</td>
</tr>
<tr>
<td>Years of experience (%)</td>
<td></td>
</tr>
<tr>
<td>&lt;2</td>
<td>10</td>
</tr>
<tr>
<td>2-5</td>
<td>21</td>
</tr>
<tr>
<td>6-10</td>
<td>29</td>
</tr>
<tr>
<td>&gt;10</td>
<td>40</td>
</tr>
<tr>
<td>Years of experience (mean yrs)</td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>N/A</td>
</tr>
<tr>
<td>Freelance a</td>
<td>N/A</td>
</tr>
<tr>
<td>Education level (%)</td>
<td></td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>40</td>
</tr>
<tr>
<td>Master's degree</td>
<td>34</td>
</tr>
<tr>
<td>Advanced degree</td>
<td>21</td>
</tr>
<tr>
<td>Degree field (%)</td>
<td></td>
</tr>
<tr>
<td>Science a</td>
<td>N/A</td>
</tr>
<tr>
<td>Liberal arts</td>
<td>N/A</td>
</tr>
<tr>
<td>Journalism</td>
<td>N/A</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>N/A</td>
</tr>
<tr>
<td>Medicine</td>
<td>N/A</td>
</tr>
<tr>
<td>Communications</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = not applicable or not available

a Freelance respondents, as a comparison to employees, include only those who freelance and are not also otherwise employed.
b Science includes biology, medical technology, health sciences, and nutrition.

Figure 1. Comparison of primary employers in the current and previous salary surveys. CRO=contract research organization.
Salaries for men were higher than those for women by a mean of ~$16,000 (Table 3); medians were similarly higher for men by $17,000. Several possible contributing factors toward overall salaries may have accounted for this phenomenon. Yet, when regression analyses were performed and the best model was selected, gender failed to reach significance (p>0.05) as a contributing factor.

The total percentage of respondents who reported having an AMWA certificate (total: 27%; core certificate: 11%; advanced certificate: 16%) was similar to the percentage in 2007. But the component percentages of the 2 certificates in 2011 revealed a shift toward the advanced certificate when compared with the 2007 survey (core certificate: 21%; advanced certificate: 6%). As in prior surveys, the mean salary was significantly higher for respondents who had an AMWA certificate than for respondents who did not have a certificate (p<0.0001, Wilcoxon test). This result should be considered with caution, however, as the regression analyses indicated that several variables contributed to medical writers’ salaries, and having an AMWA certificate failed to reach significance (p>0.05) as a contributing factor.

At first glance, the increase in mean salary (12.9%) seemed to outpace inflation since the 2007 survey and was reported to be 5.2% over 4 years. However, as mentioned previously, the CPI does not consider the inflation due to price increases for food, housing, health care, or energy-based commodities. Therefore, if all inflation factors were considered, the increase may not have exceeded the true inflation rate. Despite these limits of the CPI, survey results substantiated the fact that increases in mean salary out-paced CPI.

A forward stepwise multivariate regression was performed with the factors that had previously shown evidence of contributing to increases in salary: primary employer, years of experience in medical communication, career level (entry, middle, or management), education level, and type of work performed (writing, editing, etc). Geographic region was a newly added factor to the regression analysis with this survey. The regions of cCPI were grouped into distinct geographic regions according to three cutoff values of cCPI (“<95” vs “95 to 100” vs “>100”). Ad hoc regression analyses showed that including the geographic location of the employer was a valid predictor of salary.

Although three regression model analyses were conducted along with several permutations of their various

---

**Table 3.** Comparison of Gross Salaries for Full-time Employees in AMWA Salary Surveys

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross Salary (US $)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>38,887</td>
<td>49,967</td>
<td>67,351</td>
<td>74,016</td>
<td>82,232</td>
<td>92,867</td>
</tr>
<tr>
<td>Median</td>
<td></td>
<td>36,000</td>
<td>45,000</td>
<td>64,000</td>
<td>70,000</td>
<td>76,000</td>
<td>88,000</td>
</tr>
<tr>
<td>Interquartile Range¹</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>66,110</td>
</tr>
<tr>
<td><strong>Salary by Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women (mean)</td>
<td></td>
<td>36,135</td>
<td>N/A</td>
<td>64,556</td>
<td>71,775</td>
<td>79,609</td>
<td>87,315</td>
</tr>
<tr>
<td>Men (mean)¹</td>
<td></td>
<td>46,865</td>
<td>N/A</td>
<td>78,733</td>
<td>84,259</td>
<td>93,677</td>
<td>103,627</td>
</tr>
<tr>
<td>Difference: men vs women (%)</td>
<td></td>
<td>+30</td>
<td>N/A</td>
<td>+22</td>
<td>+17</td>
<td>+18</td>
<td>+12</td>
</tr>
<tr>
<td>Inflation rate since previous survey (%)</td>
<td></td>
<td>N/A</td>
<td>20.5</td>
<td>20.2</td>
<td>4.1</td>
<td>9.3</td>
<td>5.2</td>
</tr>
<tr>
<td>% gain of mean salary vs inflation</td>
<td></td>
<td>N/A</td>
<td>+8.0</td>
<td>+14.6</td>
<td>+5.8</td>
<td>+1.8</td>
<td>+6.7</td>
</tr>
</tbody>
</table>

N/A = not applicable or not available

¹Year of survey refers to the year in which the survey was conducted; surveys collected information for the prior tax year; for example, the 2011 survey collected salary information for income earned in 2010. Salaries beyond approximately 3 SD of the mean were excluded.

Interquartile range presented in $1000.

¹Responses for men were low in past surveys and in the 2011 survey (n=132; SD=47,600; median=97,000).
Table 4. Salaries for Full-time Employees According to Several Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>N</th>
<th>Mean (SD)</th>
<th>Median (Min, Max)</th>
<th>Mean % Change 2007-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Employer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biotechnology company</td>
<td>77</td>
<td>116,800 (37,000)</td>
<td>110,000 (55,000-200,000)</td>
<td>+10</td>
</tr>
<tr>
<td>Pharmaceutical company</td>
<td>150</td>
<td>112,800 (37,000)</td>
<td>108,500 (38,000-190,000)</td>
<td>+15</td>
</tr>
<tr>
<td>Communication and advertising</td>
<td>64</td>
<td>93,400 (32,000)</td>
<td>86,000 (42,000-180,000)</td>
<td>+12</td>
</tr>
<tr>
<td>Medical device company</td>
<td>32</td>
<td>92,700 (32,000)</td>
<td>92,500 (40,000-160,000)</td>
<td>+9</td>
</tr>
<tr>
<td>Other</td>
<td>35</td>
<td>95,700 (42,000)</td>
<td>110,000 (55,000-200,000)</td>
<td>+25</td>
</tr>
<tr>
<td>Clinical research organization</td>
<td>75</td>
<td>89,600 (30,000)</td>
<td>82,000 (55,000-200,000)</td>
<td>+17</td>
</tr>
<tr>
<td>Government</td>
<td>18</td>
<td>88,300 (31,000)</td>
<td>94,000 (45,000-160,000)</td>
<td>+24</td>
</tr>
<tr>
<td>Medical education company</td>
<td>48</td>
<td>79,500 (25,000)</td>
<td>80,000 (41,000-160,000)</td>
<td>+3</td>
</tr>
<tr>
<td><strong>Years of Experience in Medical Communications</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤5</td>
<td>181</td>
<td>76,800 (26,000)</td>
<td>72,000 (32,000-150,000)</td>
<td>+14</td>
</tr>
<tr>
<td>6 to 10</td>
<td>199</td>
<td>89,500 (30,000)</td>
<td>89,000 (35,000-180,000)</td>
<td>+4</td>
</tr>
<tr>
<td>11 to 15</td>
<td>106</td>
<td>102,500 (32,000)</td>
<td>99,500 (41,000-200,000)</td>
<td>+12</td>
</tr>
<tr>
<td>≥16</td>
<td>138</td>
<td>104,900 (33,000)</td>
<td>100,000 (50,000-200,000)</td>
<td>+4</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>204</td>
<td>82,000 (31,000)</td>
<td>75,600 (32,000-175,000)</td>
<td>+8</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>230</td>
<td>90,900 (33,000)</td>
<td>88,000 (37,000-190,000)</td>
<td>+15</td>
</tr>
<tr>
<td>Higher than Master’s degree</td>
<td>244</td>
<td>98,300 (30,000)</td>
<td>95,000 (38,000-190,000)</td>
<td>+4</td>
</tr>
<tr>
<td><strong>Career Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior, management</td>
<td>91</td>
<td>119,200 (30,700)</td>
<td>120,000 (62,000-200,000)</td>
<td>+7</td>
</tr>
<tr>
<td>Senior, no management</td>
<td>167</td>
<td>96,100 (29,000)</td>
<td>95,000 (39,000-180,000)</td>
<td>+13</td>
</tr>
<tr>
<td>Middle, management</td>
<td>101</td>
<td>99,200 (34,000)</td>
<td>94,000 (42,000-190,000)</td>
<td>+12</td>
</tr>
<tr>
<td>Middle, no management</td>
<td>277</td>
<td>79,100 (26,000)</td>
<td>74,400 (32,000-175,000)</td>
<td>+14</td>
</tr>
<tr>
<td>Entry</td>
<td>45</td>
<td>64,700 (23,000)</td>
<td>60,000 (35,000-150,000)</td>
<td>+8</td>
</tr>
<tr>
<td><strong>Type of Work Performed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision or administration</td>
<td>41</td>
<td>126,400 (36,000)</td>
<td>123,000 (61,000-190,000)</td>
<td>+5</td>
</tr>
<tr>
<td>Supervision/writing/editing</td>
<td>145</td>
<td>113,800 (40,000)</td>
<td>106,000 (43,000-200,000)</td>
<td>+15</td>
</tr>
<tr>
<td>Writing primarily</td>
<td>136</td>
<td>97,200 (32,000)</td>
<td>92,500 (43,000-190,000)</td>
<td>+21</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>90,300 (46,000)</td>
<td>69,500 (35,000-190,000)</td>
<td>+22</td>
</tr>
<tr>
<td>Writing/editing (equal mixture)</td>
<td>160</td>
<td>86,500 (25,000)</td>
<td>85,500 (37,000-175,000)</td>
<td>−5</td>
</tr>
<tr>
<td>Research and writing</td>
<td>42</td>
<td>82,100 (31,000)</td>
<td>78,500 (38,000-175,000)</td>
<td>+30</td>
</tr>
<tr>
<td>Teaching and writing</td>
<td>7</td>
<td>77,000 (25,000)</td>
<td>85,000 (42,000-108,000)</td>
<td>+11</td>
</tr>
<tr>
<td>Editing (primarily)</td>
<td>140</td>
<td>69,000 (25,000)</td>
<td>64,500 (32,000-200,000)</td>
<td>+7</td>
</tr>
</tbody>
</table>
predictors, the ones that best described the regression model ($R^2 = 0.613$ and $p<0.03$) were (in order of importance) primary employer, years of experience in medical communication, education level, type of work performed (writing vs editing, etc), and region of employment. Once the highest $R^2$ value was determined, the corresponding model demonstrated that gender failed to reach statistical significance and was dropped as a factor in the regression models. A predictive algorithm was developed to provide an estimate of the composite factors contributing to total salary (Figure 3).

**Freelances/Consultants**

Nearly one-third (31%) of respondents reported working as a freelance/consultant, a rate similar to that in previous surveys (Table 2). Most freelances worked part-time (58%), but more worked full-time in 2011 (42%) than in 2007 (36%, not shown). Freelances had an average of 4 more years of experience (mean total experience: 15 years) than employed respondents, which was consistent with the findings of the 2007 survey (Table 2).

Among all freelances, most respondents reported billing by the hour (78%), up by 14% since 2007), most billed for revisions by the hour (67%, up by 12% since 2007) and for any revision cycle (28%, up by 4% since 2007); 75% of respondents charge 20%-75% for rush jobs (not shown). More than 70% reported that 80% or more of their time was billable time, and 34% reported that they never reduced their rates for any reason. Additionally, 32% said that they had recently increased their rates (compared with 19% in 2007) and that their profits were average (40%) or better than average (37%) (not shown).

The distribution of mean gross income among all freelance respondents was the following: $116,000 (full-time freelances), $36,000 (part-time freelances), and $17,000 (part-time freelances who are also employed) (Table 5). The hours per week worked ranged from 16 hours for part-time freelances/employees to 44 hours for full-time freelances (Table 5).

When salaries were compared among only full-time freelances, the following results were found. The gross income for the three levels of education was fairly linearly graduated between degree levels at a median difference of $12,000–$13,000; the net income was a difference of $7,000–$9,000 (Table 6).

![Figure 3. Gross income estimated by regression modeling. Begin with a salary of $47,000 for a writer or editor with a bachelor’s degree. Add the indicated amounts according to type of employer (if applicable), geographic area according to composite consumer price index (cCPI), years of experience, highest educational degree, and type of work performed. Super=supervisor, admin=administrator.](image)

| Table 5. Work Hours and Gross Incomes of Freelances/Consultants by Working Status |
|---------------------------------|-----------|-----------|-----------|
| **Status** | **Hours** | **Gross Income (US $)** |
| | **Number per Week** | **N** | **Mean (SD)** | **Median** |
| Full-time freelances | 44 | 137 | 116,000 (75,000) | 99,000 |
| All freelancers | 29 | 400 | 68,000 (67,000) | 51,000 |
| Part-time freelancers (not otherwise employed) | 21 | 165 | 56,000 (46,000) | 50,000 |
| Part-time freelancers/employees | 16 | 98 | 17,000 (27,000) | 7,000 |

| Table 6. Gross Incomes of Full-time Freelances/Consultants by Education Level |
|---------------------------------|-----------|-----------|-----------|
| **Education Level** | **Gross Income (US $)** | **Net Income (US $)** |
| | **N** | **Mean (SD)** | **Median** | **N** | **Mean (SD)** | **Median** |
| Higher degree | 44 | 127,000 (58,000) | 120,000 | 41 | 87,000 (47,000) | 85,000 |
| Master's degree | 53 | 111,000 (60,000) | 98,000 | 51 | 76,000 (40,000) | 76,000 |
| Bachelor's degree | 26 | 95,000 (50,000) | 85,000 | 24 | 79,000 (44,000) | 69,000 |
Both gross and net incomes were generally right-skewed, indicating that the majority of salaries were reported for lower median incomes than for mean incomes. Full-time freelances whose work was “primarily writing” reported the highest salary (mean gross income, $135,000) a mean increase of 23% over that in the 2007 survey (Table 7) and $37,000-$50,000 higher than the salaries for other freelance work performed. Also remarkable was the mean salary of approximately $85,000 for “primarily editing” work, an 85% increase over the salary reported in the 2007 survey. (Note that “primarily editing” was reported by 14 freelance respondents.)

The hourly rate was highest for those who worked as full-time freelances and primarily performed writing ($105), a rate that was $26/hour higher than the mean rate for full-time editing work, and a rate that was up $8 (8%) from the 2007 survey (Table 8). The 2011 AMWA survey was the first to ask freelance writers what type of writing/editing they contracted most often (regulatory, publications, continuing education, etc). Among freelance respondents, the highest hourly rate was garnered by those who were full-time regulatory writers ($120) and editors ($116) (Table 9). Freelances who worked full-time as regulatory writers also reported the highest salary ($142,000), a salary that was $28,000–$72,000 greater than the salary for freelances working in other settings (Figure 4). Because this analysis was new for the 2011 AMWA survey, future surveys will serve to further substantiate this comparison.

**DISCUSSION**

Despite the lower response rate for this survey, the results of the AMWA 2011 Salary Survey were believed to have captured the demographic profile of the AMWA membership as has been consistently reported in previous surveys. The results of the current survey demonstrated that the increase in medical writers’ salaries exceeded the inflation rate as calculated by the CPI.

### Table 7. Gross Incomes of Full-time Freelances/Consultants by Type of Work Performed

<table>
<thead>
<tr>
<th>Type of Work Performed</th>
<th>Gross Income (US $)</th>
<th>Mean % Change 2007-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primarily writing</td>
<td>135,000 (64,000)</td>
<td>+23</td>
</tr>
<tr>
<td>Supervision/writing/editing</td>
<td>98,000 (64,000)</td>
<td>N/A</td>
</tr>
<tr>
<td>Writing/editing (equal mix)</td>
<td>95,000 (49,000)</td>
<td>+25</td>
</tr>
<tr>
<td>Research and writing</td>
<td>93,000 (25,000)</td>
<td>+22</td>
</tr>
<tr>
<td>Primarily editing</td>
<td>85,000 (23,000)</td>
<td>+85</td>
</tr>
</tbody>
</table>

### Table 8. Hourly Rates of Freelances/Consultants by Working Status and Type of Work Performed (Writing or Editing)

<table>
<thead>
<tr>
<th>Type of Work Performed</th>
<th>Hourly Rate (US $)</th>
<th>Mean % Change 2007-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time freelances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>105 (28)</td>
<td>+8</td>
</tr>
<tr>
<td>Editing</td>
<td>79 (27)</td>
<td>-1</td>
</tr>
<tr>
<td>All freelances (including those also employed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>95 (30)</td>
<td>N/A</td>
</tr>
<tr>
<td>Editing</td>
<td>69 (30)</td>
<td>N/A</td>
</tr>
<tr>
<td>Part-time freelances also employed elsewhere</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>86 (58)</td>
<td>N/A</td>
</tr>
<tr>
<td>Editing</td>
<td>55 (26)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: Responses of both writing and editing were allowed.

### Table 9. Hourly Rates of Full-time Regulatory Writers and Editors

<table>
<thead>
<tr>
<th>Regulatory work (full-time)</th>
<th>Hourly Rate (US $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primarily regulatory work</td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>120 (22)</td>
</tr>
<tr>
<td>Editing</td>
<td>116 (28)</td>
</tr>
<tr>
<td>Regulatory work one of top three services</td>
<td></td>
</tr>
<tr>
<td>Writing</td>
<td>120 (25)</td>
</tr>
<tr>
<td>Editing</td>
<td>116 (28)</td>
</tr>
</tbody>
</table>

This finding was unexpected, given the depressed US economy. However, an online commentary reported that, although the hiring demand for the pharmaceutical industry fell in late 2008 and reached an all-time low in 2009, demand has gradually and slowly increased since then. For pharmaceutical/biotechnology companies, a higher employee/contractor demand was most likely due to the reported 7-year high recorded for drug approvals by the FDA.
in 2011. According to the FDA Center for Drug Evaluation and Research, 30 new molecular entities were approved in 2011; this number is in addition to product approvals by other FDA divisions, such as biologics, radiology and devices, and veterinary medicine. The writing and compilation for these drug submissions would have mostly been conducted in 2010, the same year for the salaries reported in the 2011 survey.

The regression model suggested that several factors contributed to the estimation of employee salaries and the best model described 61% of the variance of the model. In other words, the variables tested explained 61% of the variability in income. The factors for this survey (in order of importance) were type of work performed (writing, editing, etc.), primary employer, years of experience, education level, and geographic region according to cCPI. The geographic regions designating categories of cCPI are included in the slide presentation available on the AMWA website (www.amwa.org).

The 2011 survey also further separated freelance/consultant rates and salaries so that more freelance working statuses could be investigated/compared, such as full-time freelances, part-time freelances (not otherwise employed), and part-time freelances/employees. Full-time freelance respondents garnered the highest mean rates and salaries, followed by part-time freelances, and lastly part-time freelances/employees. Among full-time freelances, the highest mean hourly rate and salary were garnered by full-time regulatory writers.

Those participants who held an AMWA certificate reported higher incomes than those who did not have a certificate. The regression analysis failed to support this finding as statistically significant, and other predictive factors were proven to significantly contribute to total salaries.

**Survey Limitations**

As with all surveys, the results were dependent on the number of respondents answering each question. Some respondents did not answer all questions pertaining to their group (employed vs freelance, writer vs editor, etc); some respondents answered a few questions only and then quit the survey. Therefore, when an association for a given question was analyzed with a second question, the “n” can only be based on the number of 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, due to missing data, a given “n” presented for these survey results for a specific group in any table or figure may not equal the “n” of another similar group in another table or figure; likewise, the “n” for a collection of questions may not add to the “n” for an inclusive group, association, or analysis. The extent of missing data is a well-known limitation of surveys, which emphasizes the importance of full participation of respondents in completing all survey questions.

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 considering samples with a “small n.” For this reason, the means in this survey were mostly reported along with the corresponding “n,” standard deviations, and medians. When space allowed, the ranges were also included with the medians. This presentation of the data enables readers to consider the median values in lieu of the means where appropriate.

With the intent to make survey completion easier for respondents, all AMWA salary surveys have routinely requested only the gross salary and used this metric for all employee salary comparisons. The exclusive use of this metric produces myriad comparisons to consider and calls for extensive calculations as the primary metric for analyses. However, this strategy tends to overlook several other benefits for employees, such as the values of health benefits, 401K values, paid vacation, flexible spending accounts, bonuses, and stock options. Perhaps collection of this information might be considered in future surveys.

The percentage of male respondents (16%) for the survey accurately reflects the relative percentage of men in the AMWA membership as reported in earlier surveys. This low percentage makes it difficult to determine conclusive results of comparisons based on gender alone in subgroup analyses.

The overall response rate for the 2011 survey was lower than that for 2007. Other surveys conducted by AMWA may have created “survey fatigue” and reduced the response rate for this survey. Some pharmaceutical companies instructed employees not to answer the survey, which also occurred with prior surveys.
Recommendations for Future Surveys

Future surveys will provide the best profile of medical communicators’ salaries, freelance rates, and professional qualities if more members participate and if surveys are completely answered. AMWA welcomes the comments and suggestions of members concerning the survey, its findings, and ways to improve participation in future surveys. Some suggestions that have already been offered include extending the time period for the survey; sending out postcards for reminders; further emphasizing the importance of participation; promoting the survey through social media channels such as LinkedIn, Facebook, and Twitter; and enabling AMWA members to explicitly opt-out (so they are not counted as nonrespondents). Full participation is paramount to enabling the best analysis and painting the best portrait of our professional career qualities.

Acknowledgment

I thank Tinker Gray (who has conducted three previous surveys) for serving as an independent adjudicator of questionable responses. Many thanks are extended to the AMWA members who participated in the survey.

References

For those of us on the planning committee for the AMWA 72nd Annual Conference in Sacramento, every day brings exciting news. If I don’t share it with you right here, right now, I’m afraid I might just burst!

Post-conference survey results tell us that the number-one reason people attend the annual conference is for the workshops. That’s no surprise, as the AMWA educational program is second to none! The raised limits on the number of credit and advanced workshops registrants can take at the annual conference starting this year (now four and three, respectively) give attendees more reason than ever to join us in Sacramento. But our planning team is building such an excellent selection of open sessions, you’ll want to leave time to attend some of those as well.

The big, big news is that representatives of the United States Food and Drug Administration (FDA) will be leading two open sessions at this year’s annual conference. Laura L. Pincock, PharmD, MPH, of the Safety and Risk Communication Analyst Division of Health Communications, FDA/CDER/OCOMM/DHC Office of Communications, will lead the open session “FDA Drug Safety Communications: Principles, Practice, and Evaluation.” Lisa Hubbard RPh, from the FDA Office of Pharmaceutical Drug Promotion (formerly DDMAC), will lead “FDA Dos and Don’ts of Advertising and Promotion.” These sessions will be open to all conference registrants, and we have scheduled them so they have the least amount of potential conflict with other great conference sessions and activities. That’s no small feat when you consider how much we pack into this 3-day event! More big news is that Kelli Ham, MLIS, Consumer Health & Technology Coordinator for the Pacific Southwest Regional Medical Library of the National Library of Medicine (NLM), will be leading an open session in which she will update us on the Library’s latest information innovations involving apps, mobile sites, electronic health records and more, and show us how to successfully search databases such as PubMed, MedlinePlus, ClinicalTrials.gov, and PubMed Health.

As always, there will be a fantastic selection of open sessions of general interest to all AMWA members, plus a variety of informative special interest open sessions and practical short sessions. This year, there are open sessions and roundtables in key areas that are of growing interest to members, including writing for devices/diagnostics and for consumer audiences. There are a number of great new opportunities for editors, too.

The number-two reason people attend the annual conference is networking, and this year we responded to the growing interest for more networking opportunities with an unprecedented selection of offerings! The list begins with the conference favorites: networking at the welcome reception on Wednesday evening and at the AMWA Sablack Awards Dinner on Friday evening. In addition, we have added a free networking luncheon available to all conference attendees on Thursday afternoon, a speed networking open session on Thursday afternoon, and a wine and cheese networking reception on Thursday evening. There will also be a free networking breakfast in the exhibit hall on Friday morning (with a special prize drawing, so be sure to get your new Conference Passport stamped by all the conference exhibitors), and a free networking luncheon on Saturday afternoon. Sacramento is clearly the place to make new connections!
Giving conference attendees more of what they have told us they want has been a pivotal part of the planning for this year’s conference. The challenge has been finding enough time in the conference schedule to do everything we wanted to do. Anyone who’s been to an AMWA annual conference knows there isn’t a moment to spare in the schedule! In meeting the demand for more networking events, it was difficult to find time when these events could be held that didn’t conflict with something else. We realized there was an opportunity to turn the traditional time of the Chapter Greet and Go (Thursday evening) into the wine and cheese networking reception. For many members, the Chapter Greet and Go has been a means to an end—a place to “greet” fellow chapter members so everyone can “go” out to dinner and socialize. We encourage chapters to still organize off-site get-togethers and plan to meet right after the new networking reception. A bonus this year is that you’ll have more time to enjoy dinner and socializing with your chapter colleagues without rushing back, because no other AMWA events are scheduled that evening. I know the Chapter Greet and Go will be missed, but hopefully after a full night of networking and getting together with chapter colleagues, you’ll agree we made the right choice.

Our invited speakers at this year’s annual conference include Neal Baer, MD, and Mary Roach. Dr. Baer is Executive Producer of CBS-TV’s *A Gifted Man*, and Medical Expert Senior Fellow at the University of Southern California Center for Communication Leadership and Policy. He will give the keynote address on Thursday morning and receive the AMWA McGovern Award in honor of his preeminent contribution to medical communication. Mary Roach is the renowned author of *Stiff—The Curious Lives of Human Cadavers*, *Spook—Science Tackles the Afterlife*, *Bonk—The Curious Coupling of Science and Sex*, and her latest *Packing for Mars—The Curious Science of Life in the Void*. She will receive the prestigious Walter C. Alvarez Award for excellence in communicating health care developments and concepts to the public at the award luncheon on Friday. Detailed bios on Dr. Baer and Ms. Roach are available on the AMWA website.

An important first for this year’s annual conference is the use of social media both to communicate important information about the conference to AMWA members and to engage AMWA members during the planning process. Our call for submissions of proposals for short sessions, roundtables, and abstracts was phenomenally successful—in part because we talked about the many benefits of presenting at the annual conference on the AMWA LinkedIn Group page as well as on Twitter (140 characters at a time). In February, we asked AMWA members via several social media outlets to answer the question “If you could walk into a room and connect with a group of like-minded people on a particular professional topic, what would it be?” We got a fantastic response, and this helped us create what we believe will be a valuable experience for the free networking luncheon on Thursday.

EUREKA! Discover golden opportunities at AMWA’s 72nd Annual Conference. Could there possibly be a better reason to visit beautiful Sacramento, CA, this October? I hope to see you there.
Templates: The Basics of Document Automation

By Danny A. Benau, MSOD, PhD; Barbara Snyder, MA; and Peggy Boe, RN

Employers hire regulatory writers with the expectation that the writers are at least moderately skilled with software such as Microsoft Word, including having solid familiarity with using templates. A template is "something that establishes or serves as a pattern."1

There is no right or wrong regarding what a template should include, but a good basic template for regulatory documents should contain certain rudimentary elements, such as page orientation, margins, headers, footers, styles, and fonts. More sophisticated templates can be document-type specific by including the headings (outline) of the document, boilerplate text, and table formats that are reused to generate similar documents. Such customized content could still be a basic Word document that can be modified at will by the writer, with the file extension of ".doc," or the content could be a programmed set of styles that can be attached to any new Word document, to help ensure that preferred styles are maintained per regulatory specifications. The latter is likely to have a ".dot" file extension and, as a true programmed template, it must be housed in a specific location on your hard drive, where it will be available to you whenever you need it. A sophisticated template will also include its own custom toolbar nestled in the Microsoft toolbar, with custom tools that reduce the time required to perform specific functions (ie, create a specific table format with only a couple of clicks).

Before WordPerfect and Microsoft Word became available in the early 1980s, creating documents electronically was accomplished either through text editing programs used primarily for computer programming or dedicated word processors such as those put out by Wang Laboratories, Inc.2 or IBM.3 The default output formatting depended on the printer available to the text-editing system (eg, an IBM Selectric typewriter hooked into a mainframe computer) or word processor. Once word processing software was developed that was not dependent on a particular computer brand, the initial formats of documents could be specified so that the resulting documents have the same basic format without requiring the document authors to specify these defaults each time a new document was created. Successive updates of these software packages introduced "styles," which were combinations of formats of fonts, line spacing, and other character or paragraph attributes grouped under a single name that could be invoked from a styles menu. Toolbars with groups of commands clustered together by function could be invoked by single mouse clicks, and macros—custom mini-programs made available to the user through the template. Today, writers are able to design styles that are limited only by their imagination. However, because we are writing global regulatory documents, we need to save our stylistic imaginations for the party invitations we'll send after we have successfully submitted documents created in accordance with regulatory style specifications.

The properties of Word templates underwent a radical change between the Word 2003 and 2007 versions. When Word 2007 was released, the templates and styles were created to include XML capabilities, allowing users to "tag" bits of information for storage, similar to a database for content. As such, where older versions of Word used a single type of template with the extension ".doc" to create documents that had the extension ".doc," the newer versions now had two different types of document templates, identified by the following file extensions:

- .docx indicates that the template is XML compliant but does not have macros enabled and creates documents with a .docx extension.
- .dotm indicates that the template has macros enabled in addition to all the other properties found in a .dotx template and creates documents with a .docm extension.

Of note, many companies are still using versions of Word that create ".doc" and ".dot" files, sometimes because they think that the learning curve associated with upgrading to a more current version of Word is not worth the time it takes staff to adjust or the economic impact on other in-house legacy systems. Although Microsoft has been proactive in enabling some XML capabilities, few regulatory writers use the XML features on an individual document level. So, if you use one of the more advanced Word versions, consider yourself ahead of the curve, but if you still use some other version, availability and usability trump having the cutting-edge software.

All Word documents are based on at least one template, known as the “Normal” template (also called the global template). This template contains the basic style set and automation for all documents that may be created with the installed version of Word. When Word is started and a blank document appears on the screen, it is based on this Normal template. This template is named “Normal.dot” in pre-2007 versions of Word and “Normal.dotm” in versions 2007 and later.
In addition to the Normal template, all versions of Word after 1995 have come with a variety of templates for creating various documents, such as letters and fax cover sheets, but the real power for users is the ability to create custom templates designed for their specific needs. These will usually be saved to the template folder of the version of Word in which they are created. The location of the user template files varies with the version of Word (Table 1). If you use the Windows Vista or Windows 7 operating systems, you can search for the template folder location by going to the “Start” menu and using the search term %appdata%\Microsoft\Templates.

Using more sophisticated templates to create regulatory documents empowers the regulatory writer with company-approved styles, field codes, boilerplate text (ie, either headings or reusable statements), and additional toolbar icons to reduce the number of keystrokes for formatting (eg, headings, superscript and subscript, bulleted or numbered lists, in-text tables). Styles contain format commands, but also contain codes that can be picked up by other functions in Word. For example, when a heading style is used in text, the table of contents (TOC) can be automatically generated with the applicable TOC level heading. The text of the standard protocols and include optional text depending on the specific design of the study.

Other documents may not be appropriate for extensive templates: background packages being prepared for meetings with a regulatory agency, for example, will contain content that is dependent on the reason for the meeting. However, even documents that don’t lend themselves to common headings and boilerplate text could start from a template consisting of company-specified margins, headers, pagination style, font, etc.

In conclusion, knowledge of templates, their properties, and the ability to customize them can help the medical writer streamline document creation and facilitate review by presetting formats and automating routine tasks.

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References


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**Table 1. Common Locations of Template Files in Versions of Microsoft Word**

<table>
<thead>
<tr>
<th>Word Version</th>
<th>File location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003 (PC)</td>
<td>C:\Documents and Settings[your user name]\Application Data\Microsoft\Templates</td>
</tr>
<tr>
<td>2007 (PC)</td>
<td>C:\Users[your user name]\AppData\Roaming\Microsoft\Templates</td>
</tr>
<tr>
<td>2010 (PC)</td>
<td>C:\Users[your user name]\AppData\Roaming\Microsoft\Templates</td>
</tr>
</tbody>
</table>

Note: (PC) is the MS Windows Operating System; (Mac) is the Apple Macintosh Operating System; [your user name] is the user name that you use on your own computer.
Q – What are the pros and cons of working with a contract research organization (CRO)?

A – I have an interesting history with CROs. I was a full-time employee of a CRO for 3 years, I have worked for CROs as a freelance, and on behalf of one my pharmaceutical clients, I currently manage projects by its CRO’s writers. I could tell you some stories.... But in the interest of journal space, I would like to point out just a few things to consider if you are contemplating a freelance project with a CRO:

• Is the CRO presenting you to their client as one of their “employees”? If you work for a CRO as a freelance, then you technically are a subcontractor for the CRO, and not all clients want their CROs to use subcontractors. You should ask the CRO whether it plans to reveal to the client your independent status. It can get tricky if you are supposed to “pretend” to be a CRO employee to the client. I’ve worked for a few small specialty contract companies that come right out and say they offer medical writing services through the use of a qualified subcontractor (well, more eloquently than that), and that is a great way to be upfront about things.

• Will you be considered part of the CRO team? Will the CRO and client include you in important meetings and let you give input on major decisions and timelines? Know what your role is and how much authority and autonomy you will have. Ask who will be your main CRO contact but more important, ask whether you will be allowed to contact sponsor representatives directly (with a cc: to CRO personnel, of course).

• Will you be paid on time, regardless of client payment by the CRO? Payment considerations are extremely important! Understand what your time reporting and invoicing requirements are. Especially for smaller CROs, make sure they understand that your payment is NOT contingent on their payment from the client and that you expect on-time payment as set forth in your contract.

• Will you be asked to have your CV reformatted and a CRO e-mail address established? I have often been asked by CROs to submit my CV in Word format so that they can reformat it per their house style and/or print it on their company letterhead. Always ask to review the final version of your CV that the CRO plans to present to the client to make sure nothing important has been changed. Also, ask to always be notified when the CRO submits your CV to a potential client. You don’t want to be caught off guard if one of those potential clients contacts you and you had no idea where they got your name and information! I have also been asked to use e-mail accounts set up for me with an address that uses the CRO company name (to be used for all project-related communication). This is also tricky, as it sometimes results in awkward technical issues on your computer and also requires you to remember to actually check additional e-mail accounts.

• Has the CRO asked you to provide input on proposals to their potential clients? If so, is it understood (either with a verbal or written agreement) that you will be the assigned writer if the project is awarded? Proposals take time (and expertise!), and either you should get paid to work on them, or if you don’t get paid for that effort, then it should be made clear that you expect to be the writer on the project. Once the project is awarded, I recommend you ask to see the final proposal (at least the medical writing part) to ensure that the numbers you gave are actually reflected in the document. If not, the client should provide justification for any adjustments (especially if the hours/dollars are fewer than you proposed).

— Sherri Bowen

Q – Can you (and should you) take your freelance business global?

A – This may be a trick question. If you have a profile on LinkedIn or a website, your freelance business is already global whether you have intentionally “gone global” or not. Potential clients anywhere in the world can find out about you. Likewise, if you’ve ever done a project for an xUS (ie, outside the United States) audience, the reach of your freelance business is already global. But what about intentionally and actively marketing yourself to do business with clients outside the United States? That’s what I call taking your freelance business global!

I’ve done business with several clients based outside the United States, and I do have a presence in several xUS markets where potential clients can learn about me and hopefully become motivated to contact me about freelance opportunities. Ironically though, the xUS clients who have hired me came to me via US channels. One is a director for the Japanese office of a major US pharmaceutical company who was referred to me by one of his colleagues in the United States, one is a director of an Asia-based medical communications company who found me through an employee in one of the company’s US offices, and one is a
vice president in the US office of a medical communication company headquartered in the United Kingdom. Some of the work I have done for these clients has been for global markets, some exclusively for xUS markets, and some exclusively for the US market.

So the answer to the question is yes, you can take your freelance business global. You probably already have, and it may be easier than you think. Marketing your experience in global markets to your US-based clients may be all you need to open the door. The answer to the parenthetical question is also yes, you should take your freelance business global. What could be bad about expanding your potential client base? But there are a few considerations to keep in mind before you take your freelance business global.

- **Time zones**—Can you be at your best on a teleconference at 11:00 pm? Also, as a freelance who juggles many projects simultaneously, working with a client that is a dozen time zones away can make it difficult to keep all the balls in the air. Whereas I can usually pick up a half day or more to work on another project while the first client is reviewing the draft I just sent them, having a client at work while I’m asleep narrows, or even closes, that window of opportunity to juggle multiple assignments.

- **Payment logistics**—My xUS-based clients have paid me via check cut from a US bank by their US office, and via wire transfer into my bank account in US funds. If a client is paying from outside the United States, wire transfer is definitely the best method of payment. But no matter how you’re paid, you always, always want to be paid in US dollars! I have also heard of freelances accepting payments from outside the United States via PayPal, but I don’t have experience with this. (See next question-and-answer for more information on getting paid by international clients.)

- **Legal logistics**—A contract is a contract. Once fully executed, it’s enforceable. But if a client outside the United States stiffs you, it’s very unlikely that you will fly to the client’s country, hire an attorney, and hang out until the matter is resolved. Therefore, I recommend background checks (the AMWA Freelance Listserve is a great place to start) and maintaining an open and continuous line of communication with the client throughout the project.

— Brian Bass

**Q** – What is the best way to be paid by a client outside the United States?

**A** – I ask for an advance, have the money wired directly to my account, and do not allow more than $5,000 worth of hours to accrue without sending another invoice. My financial institution requires that such deposits be made in US dollars. I have set these rules because there is so little legal recourse for “collecting” from an international client. And because of this higher risk, I do not accept many international clients.

Once the client tells me she or he has arranged the transfer of funds (or on the due date), I call into my bank’s automated system to verify that the money has been deposited. If payment has not been received, I contact the client immediately and, if I feel it is necessary, I stop work until the payment is received. If currency-conversion or wiring fees should be applicable, the international client would be responsible for paying them—such fees are either shown as a line item on the invoice or factored into the project cost.

Some people are using PayPal and Visa cards; however, fees are involved with both of these payment methods. Wiring the money directly into your account does not involve the deduction of fees, i.e., you receive the full payment. Check with your own bank about possible transaction fees; if the bank charges fees of any kind for the international wire or direct deposit, open an account with another institution that does not charge for wiring or direct deposits.

— Cathryn Evans

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The improvement of health care depends, in part, on the continuing education of physicians, and improving the way physicians practice medicine requires that physicians learn, retain, and use what they are taught during the care and management of their patients.

Both continuing medical education (CME) and continuing professional development (CPD) are aimed at improving physicians' clinical competence and skill, but they each have a different focus (Box 1). In the past, CME and CPD providers had two priorities: produce good educational content and have the content authored by the best clinical experts available. A common assumption was that great content conveyed once by a highly regarded authority, presented in a single format, was sufficient to teach physicians what they needed to know to improve patient outcomes. The CME/CPD provider's role, which ended at the conclusion of the activity, was essentially limited to delivering credible content to the audience. It was up to the activity participants to learn what they could and to figure out for themselves how to overcome any barriers that might prevent implementation of the recommendations they had learned.

These educational activities were highly influenced by what the faculty believed physicians should learn and how they should learn it. Educational content was typically delivered in a manner that was most comfortable for the faculty—usually as a didactic lecture accompanied by a bulleted PowerPoint presentation. Not only was it rare for physicians to have an opportunity to practice what they were taught while participating in the actual activity, but programs were not designed to aid retention and implementation of what was learned.

Fortunately, a paradigm shift began about 6 years ago when the Accreditation Council for Continuing Medical Education (ACCME), the organization that accredits CME providers, updated the criteria providers must meet in order to offer CME/CPD for credit. ACCME now encourages CME/CPD providers to take a new approach to physician learning. In fact, three of ACCME's criteria for accreditation address learning specifically (Box 2). In an effort to create activities that effectively convey information that is translated into improved clinical practice, CME/CPD providers are becoming aware that they have to develop activities that involve more than expert faculty. They are beginning to take into account how physicians learn best in general, and how to

BOX 1

CME and CPD: What's the Difference?

Continuing medical education (CME) consists of educational activities that serve to maintain, develop, or increase the knowledge, skills, and professional performance physicians use to provide services for patients, the public, or the profession. The content of CME is that body of knowledge and skills generally recognized and accepted by the profession as within the basic medical sciences, the discipline of clinical medicine, and the provision of health care to the public.

Continuing professional development (CPD) consists of education that enables physicians to maintain their clinical competence, broaden their knowledge and skills, and develop personal qualities necessary for the execution of professional and technical duties throughout their working life. The content of CPD teaches physicians how to respond to challenges in relationships and communication, changing health needs, and the social, political, and economic factors of the practice of medicine.

BOX 2

ACCME Criteria for Accreditation Emphasizing Physician Learning

Criterion 2 states CME providers must know the educational needs to improve knowledge, competence, or performance that underlie the professional practice gaps of their own learners.

Criterion 4 states CME providers must generate educational intervention that includes content that takes into account learners' current level of knowledge, skill, and experience.

Criterion 19 states CME providers must look beyond learning to performance and teach physicians strategies that will help them overcome obstacles to implementation of what they learn in the CME activity.
accommodate individual learners in particular.

For CME/CPD writers, this shift has required a re-examination of adult learning theory and consideration of individual learning styles and needs. The best writers understand that each learner comes to a CME/CPD activity with his or her own level of knowledge and experience, each has a different capacity to learn and integrate new information into his or her knowledge base, and each has a specific learning style that most readily facilitates processing and retention of educational content.

In this issue, we look at the similarities and differences between physicians and adult learners of other professions and explore seven principles of learning that the best CME/CPD writers follow when creating medical education. Our guest author, Fred Pampel, PhD, provides us with an example of a CME/CPD activity that incorporates many of these principles (see page 72).

Characteristics of Physician Learners

Much of what we know about adult learning stems from models, theory, and research that emerged in the 1980-1990s. Two of the most influential theorists, Malcolm Knowles and K. Patricia Cross, identified specific traits common to most, if not all adult learners (Box 3). As medical writers, many of you have engaged in some form of learning to hone your craft or add to your skill set. No doubt, you will find these traits apply to you.

BOX 3

CHARACTERISTICS OF ALL ADULT LEARNERS

- Have the ability to learn
- Are self-directed
- Use experience as a resource
- Look for practical learning that is applicable to their own experience
- Learn by choice
- Prefer direct feedback
- Have changing needs for learning as stages in career change
- Learn best when information is presented in their preferred learning modality (visual, auditory, read/write, kinesthetic)
- Are more likely to be motivated to learn if they understand the benefit

As adult learners, physicians share these traits. However, a number of factors make physicians different from adult learners of other professions. For example, the problems physicians must solve are typically more complex than the types of problems other professionals address; clinical problems are often vague or overly complex (like muscle pain or indigestion) and may have no readily seen solution or may have multiple solutions. Physicians must develop cognitive skills and ethical reasoning abilities not required of other types of professionals and then apply those skills and knowledge to individual patient cases. Furthermore, if they fail to make the correct decisions they can cause great harm and even death, or find themselves in a malpractice suit.

Although CME/CPD is based on principles of adult learning, it must include elements specific to physician learners, and we now know there are factors that motivate physicians to learn and can improve the learning process. Physicians learn best when education:

1. Occurs in the context of patient care
2. Applies directly to clinical problems they are trying to solve
3. Accommodates the limitations on their time
4. Includes an opportunity for individual feedback
5. Provides strategies to overcome barriers that may prevent implementation of recommendations

When CME/CPD writers consider these factors, the resulting educational activities can be very effective in improving practice performance and patient health outcomes.

Seven Principles of Physician Learning

The best CME/CPD writers follow seven principles of physician learning when developing continuing education. These principles are adapted from the work of several adult learning theories.

1. Physicians are more likely to learn if they understand their own gaps in competency.

Physicians should be given opportunities to reflect on their practice; this involves analyzing and assessing their own performance and comparing it to best practice standards. When learners are given this opportunity, motivation to learn and change the way they practice is more likely.

2. CME/CPD activities should focus on clinical problems and should provide information that physicians can use in practice.

Most physicians are in a continuous search for information that can help them solve specific patient problems or give them opportunities for improving their practice of medicine in general. The ultimate goal of CME/CPD is the improvement of actual practice and not just retention of new information. We know from research that physicians are more likely to learn and change their behavior the closer the content addresses the specific clinical problems they encounter.

3. Interaction with other learners reinforces learning and increases the potential for practice improvement.

Learning is more likely to translate into behavior change if the physician has an opportunity to interact, not only with the content, but also with other learners. The vast majority of physicians work in social environments where interaction
with colleagues is possible and common. Therefore, if CME/CPD provides the opportunity for personal interaction with other learners, CME/CPD will be more effective.

4. Formal CME/CPD activities should provide opportunities for active learning.
Historically, medical education has depended almost exclusively on information dissemination through didactic lectures and printed materials, which involves passive learning: a learner is simply an observer and absorbs the information presented. But physicians learn best by doing. Actively involving learners is more effective than simply presenting them with information. Active learning:
• Recreates the social environment within which the new information will be used
• Provides an opportunity for practice and feedback
• Keeps learners interested and engaged

5. Learning is more effective if physicians’ experience and knowledge is taken into account.
Physicians’ level of knowledge and experience are critical in new learning situations because physicians learn in relation to what they know and have experienced. Each physician who enters an educational activity has different “walking-in-the-door” knowledge and experience. Writers who take this into account include educational content that brings the learning curves of novices and beginners closer to those of more skilled and experienced learners.

6. CME/CPD should allow practice and provide feedback.
For effective learning to occur, CME/CPD must provide opportunities to practice what is taught and encourage self-assessment and constructive feedback from teachers and peers. Practice and feedback prompt physicians to reflect on the task at hand and help them see how they can improve their practice.

7. Translation of learning into practice is more likely if physicians are engaged in learning before and after a CME/CPD activity.
In the past, CME/CPD was offered as a one-time event. We now know that learning complex clinical content requires more than one exposure. The best CME/CPD programs engage learners before the activity starts and after it ends. This not only enhances learning and application of what is taught but also allows for assessment of how effective the education was in improving clinical practice.

Author disclosure: The author notes that she is the president and founder of InQuill Training, which provides educational programs for medical writers.

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References

**PRINCIPLES OF PHYSICIAN LEARNING IN ACTION**

The following excerpt is taken from a homework assignment written by Fred Pampel, a student enrolled in the InQuill program, CME/CPD Training for Medical Writers. (It has not been edited for Journal style.) The assignment was to design an educational activity for physicians at a regional health maintenance organization (HMO) that provided the highest likelihood of improving the way the physicians practiced medicine. Students chose the clinical topic for this assignment; Fred chose to address chronic pain. If this were an actual program, a CME writer would work in conjunction with faculty to create the written elements presented in each phase.

Fred is Emeritus Professor of Sociology and currently a Senior Research Associate at the University of Colorado Institute of Behavioral Science in Boulder and a freelance medical writer. He has published books and research articles on topics relating to social aspects of health, tobacco use, and inequality. He has taught graduate statistics and authored a short textbook on logistic regression.
Treating Chronic Pain in Primary Care
By Fred Pampel, PhD

This CME aims to improve the primary-care treatment of patients with chronic noncancer pain with opioid therapy by primary-care physicians in the HMO. Primary-care physicians tend to undertreat pain and underprescribe opioid medications, in part because of the risks of abuse and addiction.1 When prescribing opioids, however, they often fail to use safeguards to prevent abuse and addiction.2 This CME course follows guidelines set forth by an expert panel and the Food and Drug Administration to both manage chronic noncancer pain with long-term opioid therapy and curtail risks to patients of abuse and addiction.

Physicians in this regional HMO have already received information on best practices for pain management through distribution of guidelines, presentations, workshops, letters, and computer programs. However, few changes have followed—information alone has not translated into action. The literature on learning and CME predicts such results. Making information available does not mean it will be conveyed to recipients, and conveying information does not mean recipients will act on it.

Pre-CME Activities
These pre-CME activities rely on proven methods of active learning to ensure that physicians receive, master, and apply best practices for patient care. They will enable learners to reflect on their current practices and assess the gap between what they do and what they should do when treating chronic pain. This reflection and self-assessment will prepare them for the CME activity and motivate them to learn and change the way they manage patients. The pre-CME activity will also provide an initial measurement of competence that can be compared to competence after completing the CME activity to determine if stated learning objectives have been reached.

The pre-CME activity has three phases and will be posted online three weeks before the scheduled CME will take place.

Phase I: Recognition of Current Practice
Learners will first complete a survey to determine what they know about opioid treatment for chronic noncancer pain and establish how they currently treat patients with this condition.

Phase II: Case Reviews
Learners will review three case studies of patients with chronic noncancer pain. The case studies will take the form of vignettes—two or three paragraph summaries of the source of the pain, the history of treatment, and any special characteristics of the patients. The vignettes will mix the case attributes in ways that avoid making the proper treatment choice too simple or obvious. Participants will be asked to specify the treatment they would prescribe via multiple-choice questions.

After participants respond, they will be given feedback from faculty based on recommendations from established clinical guidelines. In each case, the correct treatment will include the prescription of opioids and will specify the importance of assessment for patients’ risk of opioid abuse and follow-up from the physician to ensure correct use of the medication.

Phase III. Comparison of Current Practice with Best Practice
Learners will be asked to briefly describe:

1. How their treatments differ, if at all, from guideline recommendations
2. How patients can benefit from implementation of guideline recommendations
3. How their practice could improve from more effective care of patient pain

The results of the pre-CME activity will determine the knowledge and practice of each learner and be a valuable aid to the faculty in matching the course material to the audience background.

References
Designing your own Zen zone in the office is about creating a mindful space in which to work better and more productively. This concept became important for me when I transitioned from working at home to working in an office—with co-workers and other distractions. Therefore, I needed to create a sanctuary where I could relax, escape office politics, and really get down to business.

After earning a bachelor’s degree in philosophy and as a long-time practitioner of Tai Chi and frequent recipient of acupuncture, I am familiar with alternative and non-Western thinking and methodology for relaxation. However, as a writer, I know the value of good research. Hence, I brushed up on Far East history and the concepts of Zen and Feng Shui.

**History of Zen and Feng Shui**

Zen is a school of Buddhism born in China in the 7th century CE (Common Era). The word “Zen” is the Japanese pronunciation of the Chinese word “Chan,” which is derived from the Sanskrit word “dhyana,” which translates to “meditative state.” In short, Zen is the attainment of enlightenment.1 Zen Buddhism was brought to North America in the early 1960s by the venerable Hsuan Hua. Today, Buddhism is the fourth most widely practiced religion in the world.2

Feng Shui has its origins in Chinese astronomy, possibly as early as the Neolithic era (9500 BCE), and is a system of aesthetics and placement used to improve life through positive energy (chi). The goal of Feng Shui is to situate items on the physical sites of the best and most freely flowing chi.3

The Bagua—the map of Feng Shui—provides a guide for the practitioner to exactly place items in a room. It acts as a blueprint that can be theoretically placed over the layout of a room to determine the best locations for specific items in order to derive the most energy.4 The Bagua also incorporates aspects of life, such as relationships, wealth, career, and fame, by correlating colors and materials with these aspects (ie, the color red for fame and the element of water for career prosperity).

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**“What’s With Zen, and Why Should I Care?”**

You might care if you’re under stress. Although used in our everyday vernacular, “stress” is a relatively new term that was coined by Dr Hans Selye in the 1950s. In fact, Selye wrote a magnum opus on the subject, which was more than 1,000 pages long and had 5,000 references.5

Stress isn’t all bad. So-called “good” stress is referred to as eustress and is meant to get humans moving.6 Think about writing an article on a topic you love and that feeling of excitement that keeps moving you toward completion. That is eustress.

Bad stress is characterized by two types: acute or chronic. Acute stress is short term and not necessarily negative. Evolutionarily, this type of stress increased heart rate and the production of adrenaline. For example, this may have helped in the escape from saber-toothed tigers.7,8 To use a more modern example, acute stress can aid in getting out of the way of a speeding car.

Chronic stress, however, is never positive. It is ongoing and taxes the immune system by never giving it any time off. As humans, we respond to chronic stress in a variety of ways. We may suffer from anxiety, loss of sleep, or cognitive impairment. Chronic stress can lead to coronary heart disease and diabetes—possibly related to the release of cortisol—increased blood pressure with subsequent stroke, and increased effects of irritable bowel syndrome. Work issues are more strongly associated with health complaints than any other life stressors.7-10 In the workplace, these stressors can also lead to decreased productivity and job burnout.11

The good news is that the majority, if not all, of the most common at-work stressors are within our control. These include, but are certainly not limited to, the following, which are noted with ways to avoid each stressor.

- **Noise:** Close your office door or invest in noise-canceling headphones.
- **Improper or harsh overhead lighting:** Opt for several inexpensive lamps.
- **Irregular work hours:** Are the hours self-imposed? If not, it may be necessary to discuss this with your boss.
- **Excessive workload:** Learn when to say “no” (this is especially true for freelancers.)
- **Job-role ambiguity:** Get a clear definition.
• Unrealistic objectives: Again, discuss these with your boss and clear the air.
• Job insecurity: OK, maybe not everything is under our control....

You can de-stress your work environment in other ways as well (see box).

Ways to Be “In” with “Zen”
Eastern philosophy encompasses many ways to be mindful and calm in this modern world of distraction and stress. First, close your eyes and breathe. The simple act of closing one’s eyes changes the brain waves, which can help reduce stress.12 Second, avoid being reactive. This means acting without thought of your actions or the consequences. A simple example of reactivity is responding immediately to the audible “ding” of an e-mail. Instead, read the e-mail and take a minute to think about your response, especially if you’re angry or irritated. Or, write your response in the heat of the moment, but don’t send it for some time afterward, when you can review it in a cooler state of mind. Third, always ask yourself, “What am I doing, and why?” Actions without an intelligible response might not be worth the effort. Finally, have a mantra. One that I find relaxing is, “Don’t sweat the small stuff.” Feel free to adopt this one. You might just find that it helps you through those stressful moments.

If you’re having a hard time quieting your mind, try exercise. Sometimes, wearing out the body brings peace to the thoughts.13 For the office (or airplane), chair yoga is ideal. Arch your back and inhale deeply, then bend forward and let out a hearty exhale. Repeatedly flex and extend your feet to get the blood flowing, and stretch your arms overhead. Also, making small circles with your neck can help release the stress that builds up after continued viewing of the computer screen.14

Finding Your Way with Feng Shui
I rearranged both my office and home according to the Feng Shui principles, complete with river rocks in my bathroom sink as a visual reminder to not allow my energy to go down the drain. (That one was fun to explain to a plumber). Other tips include sitting at your desk so that you are facing the door, with the wall at your back (Table 1). This lends a sense of power that others cannot sneak up on you and that you have a sturdy and solid foundation behind you. Place water elements, such as photos of the beach or a mini waterfall, in the career section of your office (using Bagua, this is the front center of your home or office). Dim the lights or bring in soft lamps. Incorporate nature into your work life with plants, rocks, and other natural decorating elements.

After these changes, did I feel more inspired? Was I better able to do my job? Actually, yes. But the changes were probably due to a greater awareness of my surroundings. I had placed every item in my office according to the Feng Shui

Quick Tips on De-stressing Your Work Environment

- Prioritize tasks and decline nonessential tasks
- Delegate responsibilities
- Take time to do a quality job
- Limit distractions
- Telecommute, if it’s an option
- Practice the Mayo Clinic’s 10-minute rule*, which suggests committing to a dreaded task for just 10 minutes, after which time you may find that you want to stop or that you can actually carry on


<table>
<thead>
<tr>
<th>Bad Office</th>
<th>Good Office</th>
</tr>
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<tbody>
<tr>
<td>• Situated so that your back is to the door; a ninja (or supervisor) can attack at any time</td>
<td>• Situated so that the door is in your view, to always be prepared; no sneak attacks</td>
</tr>
<tr>
<td>• Harsh overhead lighting, typically fluorescent</td>
<td>• Soothing lighting</td>
</tr>
<tr>
<td>• Messy to the point of distraction</td>
<td>• Abstract art or art with natural motifs</td>
</tr>
<tr>
<td>• Loud</td>
<td>• Plants, to bring the outside in</td>
</tr>
</tbody>
</table>

Table 1. Good vs Evil: Office Edition
Bagua, and I was now working in a thoughtful environment, which had a positive effect on my creativity and, as a result, my productivity. I was able to meet deadlines that would have normally been impossible, or at least highly painful, and I found myself finding new, inventive ways to deal with old, lingering workplace distractions.

Author disclosure: The author notes that she has no commercial relationships that may pose a conflict of interest with the contents of this article.

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References

Completing the Circle
When the topic of creating a professional and productive Zen zone was discussed at the 2011 AMWA Annual Conference, AMWA attendees asked many questions and shared several suggestions; we all then went on to live and work in peace and harmony. Omm...

• Q: What types of plants grow well in an office?
  A: Those that need little care, such as philodendrons, spider plants, and cacti.

• Q: What’s a good reference for learning more about Feng Shui?
  A: Try Spear’s Feng Shui Made Easy [see References].

• Audience suggestion: Put on classical music while working to relax, but also stimulate, the mind.

• Audience suggestion: Say one’s prayers, devotionals, or meditations first thing in the morning to set the tone for the day.

• Audience suggestion: Hire a Feng Shui designer to create a perfectly harmonious in-home workspace.
Managerial Effectiveness: A Quick Guide to Setting Clear Expectations

By Janice M. Sabatine, PhD
President, Avanti Strategies, LLC; Cranberry Township, PA

As an experienced medical writer, you have spent years honing your skills—perhaps you have earned an AMWA certificate, become a certified Editor in the Life Sciences, and have an advanced degree in a scientific or humanities discipline. Your skills may have developed to the point that you have been promoted, or you own a freelance business and have taken on employees or subcontractors. In these cases, your daily tasks involve more than just writing, they now include managing and leading other people—colleagues, clients, and vendors. To be an effective manager in the medical writing field, or any field, requires clear, concise communication.

One of the most important types of communication in the workplace involves setting expectations, ie, requesting that someone else do something. This article highlights what you need to know about yourself and others to be a good interpersonal communicator. It outlines a five-step process for setting clear, effective expectations of those you lead. To execute this process with maximum benefit, it is essential that you first understand yourself—your strengths, weaknesses, and motivation.

Know Thyself
To communicate well with others and to be an effective manager and leader, you must first know yourself. How well do you really know your strengths, weaknesses, and what drives you? As Marshall Goldsmith explains in his best-selling book What Got You Here Won’t Get You There, you have achieved your current success because of the many strengths you have. However, you have also achieved your current success despite your weaknesses. It is not enough to be a skilled and experienced professional; you must be skilled in personal interactions. This skill grows in importance as your career progresses. As Goldsmith puts it, “…interpersonal behavior is the difference-maker between being great and near-great, between getting the gold and settling for the bronze.”

Strengths
Your strengths led to your current success. How do these strengths manifest in your work? Focus on observable behaviors, not your skills. To help you identify your strengths and describe their impact, answer the following questions:
- What do you do well?
- What is the positive impact or outcome of your strength in action?
- What feedback have you gotten regarding this strength?

Weaknesses
Your weaknesses are the obstacles to moving forward in your career. You need to identify them before you can correct them. Calling your weaknesses areas for improvement or limiting behaviors may be less of a bitter pill. Whatever you call them, weaknesses are the behaviors that get in your way, hold you back, and have a negative impact on your work outcomes and your goals. The next step is to fine tune a description of your weakness to make it an observable behavior. If you can't observe it or measure it, you can't do anything about it. To help you identify and describe a crucial weakness, answer the following questions:
- What could you do better than you are doing now?
- What does this behavior look like?
- When does it happen? In particular circumstances? With particular people?
- What is the negative impact of this behavior?
- What would be the positive impact of changing this behavior?

For example, you may identify your weakness as poor interpersonal communication skills. However, the inability to communicate clearly with others is actually the outcome. It is a symptom of a weakness that is deeper. It might be that you are uncomfortable with conflict. The observable behavior may show up as failing to convey unpleasant but necessary information to an employee as a means to avoid an argument. Try to describe your weakness as clearly as possible and consider the negative impact it has on your success.

Motivation
Understanding what motivates you is a key step in evaluating your effectiveness, because passions taken to an extreme can become weaknesses. For example, you might be driven to continually acquire new knowledge. Such a motivation serves you well in moving ahead in your field of expertise, but if it is taken too far, you may be perceived by coworkers as a know-it-all. Your employees may hesitate to ask you necessary questions for fear of appearing unintelligent. Consider how your motivators serve you and whether they may have become a weakness.
**Setting Expectations**

As a supervisor or manager, you are responsible for making sure that certain tasks get done well and on time. Often, you assign your employees the responsibility for these tasks. You can maximize the chances that the task will get done well by setting clear expectations. An effective process for setting clear expectations involves the following five steps:1

1. Pre-work
2. Communication
3. Commitment
4. Consequences
5. Coaching

**Pre-work**

Setting clear expectations occurs well before you utter the first directive. The first step in pre-work is considering how your weaknesses might affect how you set the expectation. For example, if you are uncomfortable with conflict, how will you set an expectation with someone likely to argue or resist? Furthermore, think about the motivations of those for whom you are setting the expectation. How can you integrate the task into what motivates them?

The next step in pre-work is clearly and comprehensively identifying the who, what, when, where, why, and how of the task to be done. This step is important because it helps you identify missing information. It also helps you make important decisions about things that you may not have considered yet. Colleagues cannot meet your expectations if you are not clear about exactly what you want and expect.

**Communication**

Make time to meet with the people to whom you will be assigning the tasks. Do not convey the information in passing. Keep your meeting focused on the task. Clearly explain the who, what, when, where, how, and why that you articulated for yourself during the pre-work. Try to integrate the work into what is important to your employee. Ask questions to determine whether your employees need additional information.

**Commitment**

It is not enough to simply verbalize the specifics of the task to your employees. It is important that you ensure their agreement. Listen carefully; be sensitive to their tone as well as their word choices. Pay careful attention to body language. Make sure they understand clearly what is expected. For this you need their feedback. A simple question such as “What do you think?” can help you determine buy-in and bring out any potential obstacles. It can be helpful to ask what they anticipate as difficulties so you can address them early on. This is a crucial step. You must make sure your employees are committed and clearly understand what is expected of them. Do not assume they heard and understood everything you said. In a group setting, you might ask each person to recap what’s on their to-do list before you end the meeting. One-on-one, you might ask each person to repeat their action items to ensure you told them everything.

**Consequences**

Your employees may need to understand what is at stake to engage their motivation. Be clear about both positive and negative consequences. What is the advantage of completing the project as expected? Do not avoid articulating the negative consequences of a job poorly executed. People perform best when accountability structures are set, clearly defined, and consistently followed. Everyone, including you, needs to know whom they are accountable to, whom they are accountable for, and what they are accountable for.

**Coaching**

Providing an opportunity to monitor progress is a key and often overlooked step in maximizing the success of the assigned task. Don’t walk away from the meeting without establishing a time to follow-up. This will be an opportunity for you to offer recognition for work well done. It is a chance to offer help or support around obstacles that may have arisen. It is also an opportunity to recognize that the expectation was not clearly understood and to reset the course before the deadline. As a coach, you need to listen well, watch closely, and ask the right questions. Do not underestimate the importance of this step. Set a specific follow-up meeting time. Do not simply tell your employee that you will be available if they have any questions. Setting a specific follow-up time increases accountability; everyone knows that they are expected to report on their progress, and this helps them to be prepared. Conversely, if no progress has been made or they are not prepared to report on it, you become aware of a potential performance issue before the project is due.

The next time you set an expectation of those you supervise, rate how well you executed these five steps. Acknowledge those areas that you did well and identify steps you could improve on the next time. Remember, implementing a new behavior takes practice. You will make progress and you may also regress. The important thing is to keep practicing until it becomes second nature.

**Author disclosure:** The author notes that she has no commercial associations that may pose a conflict of interest in relation to this article.

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**References**

The Society for Technical Communication (STC) is an individual membership organization dedicated to advancing technical communication. The Society’s members include every field of the technical communication profession across every industry and continent, with members in almost 50 countries. The Society is currently working to grow their presence in China and the Indian subcontinent.

The lines of technical communication and medical communication have been blurred. The Bureau of Labor Statistics considers medical communication to be one type of technical communication. However, most medical communicators do not think of themselves as part of a larger group of “technical” communicators. Some do, though, with approximately 10% of respondents to the most recent (2010) AMWA membership survey saying that they also belong to STC, making it the fifth-leading additional membership for AMWA members. STC publications, meetings, and annual conference offer opportunities to learn more about the technology of writing, including software that enhances writing and publication. Another technical writing specialty is procedure writing and documentation, which might be of interest to writers in pharmaceutical companies and medical manufacturers.

STC’s more than 60 geographic chapters produce a wide array of events throughout the year designed to advance the knowledge of members, promote technical communication education globally, and enhance networking with others in the profession. In addition to the geographical chapters, more than 20 Special Interest Groups (SIGs) are virtually targeted at specific areas of the profession such as technical editing, usability, and content strategy. Among the SIGs that may be of particular interest to medical communicators are Scientific Communication; Environmental, Safety, and Health Communication; Marketing Communication; and Emerging Technology.

The Society provides a wide variety of education in support of the profession and the members. Live webinars are held several times a month. STC certificate programs allow members to explore a subject in-depth through multiple online courses over a period of several weeks; participants develop practical skills, interact with the instructor, and exchange ideas and tools virtually with other participants.

The 2012 STC Summit (annual meeting) was held on May 20–23, 2012, in Rosemont, IL, and offered more than 80 sessions organized by 10 tracks. You can access many slide presentations from the Summit at http://summit.stc.org.

STC produces two award-winning publications. Intercom, a monthly magazine, publishes articles about the issues and topics that drive the conversation in the world of technical communication, providing practical examples and applications of technical communication to promote readers’ professional development. Technical Communication (peer reviewed) is published quarterly and includes both quantitative and qualitative research while showcasing the work of the field’s most noteworthy writers. Another publication is the Salary Database (drawn from the United States Bureau of Labor Statistics Occupational Employment Statistics) and is available to members for a small fee and to nonmembers for a higher fee.

STC dues, which start at $215, are based on a la carte member choices of services and levels of education. In addition to receiving member rates for all educational opportunities, membership benefits include access to the STC Job Bank as well as STC’s social networking site, MYSTC.

STC has made some important steps to heighten awareness of medical communication among its members. One such step was to request an article about AMWA and medical communication for an issue of Intercom. (This article is available on the AMWA website at www.amwa.org/default/prof.devo/stc.medicalcommunication.2010.05.pdf.) In addition, STC has agreed to circulate AMWA’s Job Analysis Survey to its members, giving the organization the opportunity to help in determining how medical writers are defined in the future (see page 54).

Through enhanced relationship-building with AMWA, STC leadership is anticipating a more productive partnership with AMWA. “We want to work cooperatively to ensure that both organizations benefit each other’s members,” says Kathryn Burton, FASAE, CAE, STC’s Executive Director/CEO. “We already offer reciprocal member rates for events such as conferences and educational opportunities and advertise each other’s conferences in our publications. We look forward to sharing knowledge and professional growth opportunities.”

Author disclosure: The author notes that she has no commercial interests that may pose a conflict of interest in relation to this article. The author is a fellow of STC.

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Reference
They're quick to read, they provide instant answers, but they're often incomplete or downright wrong—they're abstracts. So concludes a recent blog entry from health technology assessment consultant Winifred S. Hayes, the most recent of many warnings to be skeptical of abstracts.

As Hayes points out, research has shown that many published abstracts have serious gaps or inaccuracies. The issue was first highlighted in a 1999 JAMA article that found discrepancies between full text and abstracts in 18% to 68% of articles published in six major medical journals. This seminal research caused the publishing community to renew efforts to improve abstracts. Sadly, Hayes says, the problem has not gone away. Three more recent studies (within the past 8 years) showed that published abstracts in various medical disciplines still lacked key data or had inaccuracies.

The sorry state of abstracts was an impetus to the CONSORT group to publish, in 2008, a guideline for abstracts for randomized trials. In their discussion of the new guideline, the CONSORT authors documented cases in which readers had made clinical decisions from abstracts (although they shouldn't have) because the full text was unavailable.

Lack of time, lack of access to full text (in the developing world, especially), or unwillingness to pay for full text—all of these have led clinicians to reach conclusions solely from abstracts. Hayes and others have expressed concern that incomplete and inaccurate abstracts are not only misleading but also harmful to patients' health.

As I have argued in a recent article on writing effective abstracts, investigators do not set out to produce poor-quality abstracts. Often they do not understand the importance of the abstract and treat it as an afterthought. They may cut-and-paste the abstract from a previous conference presentation, without considering changes made to their data and conclusions when they prepared the paper for journal submission. They may forget to revise the abstract after revising the manuscript. All of these can lead to discrepancies or missing data.

Abstracts are a key juncture where medical writers and editors can add value and prevent dangerous misinterpretations. We cannot prevent readers from using or misusing abstracts, but we can ensure abstracts are complete and accurate. We can target abstracts for special attention at each step along the way, bringing them up to standard. Let's start with the CONSORT checklist, an invaluable aid for ensuring that abstracts for randomized trials have all the data needed. While some of my AMWA colleagues have quibbles about the checklist, I take it for what it is: a guideline. However, it is limited to randomized trials; a broader approach is taken by Annals of Internal Medicine, which sets out headings for abstracts of original research, cost-effectiveness studies, and systematic reviews/meta-analyses. I advise writers and editors to use the abstract headings from Annals as an additional checklist to ensure all important points are covered.

In my experience, peer reviewers are inconsistent in commenting on problems with the abstract. Therefore, it falls to manuscript editors to check all details in abstracts against the full text and point out any gaps, discrepancies, or missing data. Statements in abstracts should also match the full text in tone and strength of claim. Writers and editors should remember to recheck abstracts after any revisions to the full text.

Abstracts are the only part of the article most readers ever read. Today, they are widely reproduced in electronic databases, forming the basis of most electronic searches. They are therefore how articles are discovered, interpreted, and judged. The time and effort writers and editors put into abstracts are well spent. Someone's life may depend on it.

References
Journals and Pharma Collaborate on New Recommendations to Close Credibility Gap in Industry-Sponsored Research

Medical communicators involved in reporting clinical research have new guidelines available to them to help further enhance research conduct and disclosure. The guidelines, “Ten Recommendations for Closing the Credibility Gap in Reporting Industry-Sponsored Clinical Research,” were published in the May issue of *Mayo Clinic Proceedings* and are available free on the journal’s website (http://download.journals.elsevierhealth.com/pdfs/journals/0025-6196/PIIS0025619612002984.pdf). The guidelines were developed through a roundtable hosted by the Medical Publishing Insights and Practices (MPIP) initiative (see sidebar). The guidelines offer 10 recommendations that “although framed in the context of industry sponsorship... would enhance the credibility of clinical research publications in general, regardless of the funding source,” the authors note. The following are the recommendations.

1. Ensure clinical studies and publications address clinically important questions.
2. Make public all results, including negative or unfavorable ones, in a timely fashion, while avoiding redundancy.
3. Improve understanding and disclosure of authors’ potential conflicts of interest.
4. Educate authors on how to develop quality manuscripts and meet journal expectations.
5. Improve disclosure of authorship contributions and writing assistance and continue education on best publication practices to end ghostwriting and guest authorship.
6. Report adverse event data more transparently and in a more clinically meaningful manner.
7. Provide access to more complete protocol information.
8. Transparently report statistical methods used in analysis.
9. Ensure authors can access complete study data, know how to do so, and can attest to this.
10. Support the sharing of prior reviews from other journals.

“Intended as a ‘call to action’ for all stakeholders, these recommendations provide a roadmap for authors, editors, and publishers to improve standards applicable to all medical research studies and publications by highlighting critical areas that merit attention in terms of policies, education and other activities,” notes Maja Zecevic, PhD, corresponding author of the guidelines and North America Senior Editor, *The Lancet*. Dr Zecevic, along with coauthor Juli Clark, are AMWA members.

AMWA applauds the MPIP co-sponsors for collaborating with journal editors to characterize the credibility gap in reporting industry-sponsored research and to identify potential approaches to resolve it. AMWA also encourages its members to review the guidelines and take steps to adhere to them. The new guidelines, along with several other relevant guidelines, are available through the AMWA website at www.amwa.org/default.asp?id=461.

About the Medical Publishing Insights & Practices (MPIP) Initiative

MPIP was founded in 2008 by members of the pharmaceutical industry and the International Society of Medical Publication Professionals (ISMPP) to elevate trust, transparency, and integrity in publishing industry-sponsored studies. MPIP seeks to promote more effective partnership between sponsors and journals to raise standards in medical publishing and expand access to study results. MPIP is a collaboration co-sponsored by Amgen, AstraZeneca, Bristol-Myers Squibb, GlaxoSmithKline, Janssen, Merck, Pfizer, Takeda, and ISMPP. Additional information about MPIP is available at its website (www.mpip-initiative.org).
When it comes to medical and health content, there's no question that many good medical websites exist that provide balanced and correct information. In contrast, social media channels such as Twitter and Facebook enable rapid dissemination of medical information—accurate or otherwise—with little filtering or commentary from experts. When social media contain bias, pseudoinformation, and inaccuracies, it becomes difficult to distinguish between hype and real evidence. That's where the curated content from Webicina.com becomes useful.

What's the benefit of curated content? As social media have exploded, the multitude of platforms we have to crawl through to find accurate content is enormous. With blogs, podcasts, Facebook groups, community sites, mobile applications, Twitter profiles, and even YouTube channels competing for our attention, finding the best information relevant to our needs can be a challenge.

**Webicina.com** ([www.webicina.com](http://www.webicina.com)), a free service, sifts through the medical social media clutter on more than 80 medical topics so that consumers and medical professionals can find medically reliable content online. Webicina staff searches these medical social media sources manually, without search engines or algorithms, and compiles this information into curated medical social media collections. These collections, which are also available for the Android or iPhone, comprise popular web 2.0 tools, such as blogs, community sites, mobile applications, and slideshows, that are specific to a medical specialty or condition. For example, click on the diabetes collection ([www.webicina.com/diabetes/news-and-information-on-diabetes/#package_container](http://www.webicina.com/diabetes/news-and-information-on-diabetes/#package_container)) and you'll find links to relevant online information about the disease. When you click on the Slideshow button, up pops a page with links to diabetes slideshows. Click on podcasts, and you'll find links to downloadable audios about diabetes. If you're trying to determine what's already available online for a certain disease state or medical condition, Webicina is a good place to begin.

Webicina also offers a dynamic, multilingual aggregator that enables users to identify the specific resources related to a medical specialty or medical condition they want to follow and then compiles that information in one personalized location. Click on the PeRSSonalized Medicine icon to reach the customizable platform where you can read the latest online content in four categories: medical journals, medical news, medical blogs, and web 2.0 tools. For example, the Medical News tab offers the most recent medical news from the BBC, CNN, MedLine Plus, and *MedPage Today*, among others. The Medical Journals tab links to content from the *British Medical Journal*, *Journal of the American Medical Association*, and *The New England Journal of Medicine*, to name a few. You determine whether you want to monitor these news sites and journals or different ones, making it easier to follow the medical publications in your field of interest.

In the absence of specific FDA guidance for pharma on the use of social media, Webicina has taken the bold step of drafting social media guidelines for pharma. The first version of the Open Access Social Media Guidelines for Pharma ([www.webicina.com/pharmaguide/webicina-open-access-social-media-pharma-guide.pdf](http://www.webicina.com/pharmaguide/webicina-open-access-social-media-pharma-guide.pdf)) was released in December 2011. The outcome of this collaborative document was the identification of several key principles of social media, such as protecting patients, informing healthcare professionals, being transparent, reporting adverse events, and following applicable codes and regulations in social media. While not meant to be the final word on the topic, this draft guidance was intended to start the social media conversation and to encourage collaboration among consumers, professionals, and pharma, thus serving as an impetus for the FDA to develop its own guidance.

The force behind Webicina is Dr. Bertalan Meskó, a 2009 graduate of University of Debrecen, Medical School and Health Science Center. A medical blogger, Dr. Meskó runs the popular ScienceRoll blog. He also manages medical projects at Wikipedia and organizes scientific events in Second Life. To ensure transparency and efficiency, the Advisory Board of Webicina includes key opinion leaders in health 2.0, participatory health care, and the e-patient movement.

Webicina weeds through the social media noise to find the most relevant disease- and specialty-specific content so that you don't have to. With a few clicks of the mouse, you can personalize it to compile most everything you want to read and track in one location. It's a time-saving resource, to be sure.
According to the results of the 2011 AMWA Salary Survey, LinkedIn was the most popular social media platform used by AMWA members (80%), followed by Facebook (65%), and Twitter (14%). In addition, creating content for nonprint media, including compact discs, podcasts, social media, video, and the Web, accounted for an average of 16% of respondents’ paying work that year.

Let’s compare these results with those of the 2011 Medical Communications Managers survey sponsored by Metri-Mark, Inc. This survey was completed by a small sample of 140 managers and nonmanagers working in some capacity in the medical-communications industry. Among manager respondents, LinkedIn was the social media platform used most often (37%) to enhance business-related activities and relationships, followed by Twitter (15%), Facebook (13%), and SharePoint (9%). Among nonmanagers, LinkedIn remained in the top spot, used most often by respondents (38%), followed by Facebook (12%), Twitter (10%), and SharePoint (7%).

Despite the popularity of LinkedIn for business networking among medical communications professionals, including AMWA members, it is interesting to note that 24% and 28% of managers and nonmanagers, respectively, reported never using LinkedIn. What about you? How well are you using LinkedIn to enhance your business relationships?

CME Blogs

In the past few years, the amount of continuing medical education (CME) programs and needs assessments I write has expanded to become at least half of my business. I love this kind of work, both for its ability to dive deep into a topic as well as the requirement that it provide fair balance and an unbiased presentation of the information. I’m continually warned that “CME is dead,” however, and that I should focus my efforts elsewhere. I respectfully disagree, and think the following blogs support my own contention that CME will remain an important part of the medical world, no matter who funds it.

My CME Blog:
http://mycmeblog.blogspot.com
This blog is written by Joshua Callman, who is, according to his LinkedIn profile (he doesn’t have an “about me” on his homepage, which is annoying), a self-employed instructional and interactive design consultant. He has the credentials to write this blog, however, given his previous job as CME director at Stanford University School of Medicine. A quick scan of some recent posts shows topics on the importance of digitally sharing information between CME professionals; how doctors think (and the educational value of the mistakes they make); and a “disambiguation glossary” for those of us who write CME.

Continuing Medical Education:
http://continuing-medical-education-cme.blogspot.com
OK, this one is from a CME provider (MW Institute) but I chose it because it is pretty typical of what you’ll find from these types of blogs, namely, self promotion of the company and its CME program offerings.

NeuroscienceCME Weblog:
www.nscmecblog.com
I chose this blog because it represents the third type of CME blog I found: one that offers information in a particular therapeutic area that might be helpful for those of us writing needs assessments. This one is for clinicians, educators, and researchers in the neurosciences.

Conversations in CME with Floyd Pennington:
convcme.wordpress.com
You may not give a hoot about Floyd Pennington (who is president of CTL Associates, Inc., a CME company) but his musings and postings about regulations, educational initiatives, certification, and pharma funding make it worth adding to your RSS feed.

I have to say, however, I was surprised at the dearth of quality CME-focused blogs I found. Which suggests that the field is ripe for those of us who provide CME-focused content to start our own!
### LinkedIn Group Update

**Transitions—Never Too Late or Too Early**

*By Mali R. Schantz-Feld, MA*

Freelance Medical Writer, Seminole, FL

Shared experiences continue to make our LinkedIn group a place to discover new directions! Recently, several threads focused on transitions.

Louis Neipris, MD, a physician and medical writer, wanted to hear from others engaged in writing consumer content. He received a formidable 29 replies, including one from Joanne Zeis who writes on consumer health topics for a multimedia behavioral health company. She noted that “2012 is the first year that we’ve received résumés from physicians for our open writing positions.” Group members were thankful to exchange ideas with other consumer medical writers—and when someone expressed the hope that consumer medical writing would be chosen as a session topic at the AMWA conference in October, it started a chain reaction to action. Michael Hanley suggested a get-together at the annual conference, and Joanne contacted the AMWA Annual Conference Coordinator about possibly setting up a networking session for consumer health writers.

In another thread, Amanda Jacobson recently transitioned from bench science to medical writing and wanted to hear about other similar career changes. Meredith Rogers shared, “I much prefer sitting in my office with my dog at my feet writing than sitting in a P3 lab all alone counting cells at midnight.” Other bench scientists’ responses about their transitions spanned regulatory writing, grant writing, technical writing, consulting, and a host of other “specialties.”

Meredith posed an interesting question later in the thread: “How many of us had ever heard of medical writing before finding a job in it? I know I never had and that’s after 6 years of elementary school, 2 years of junior high, 4 years of high school, 4 years of college, and 5 years of grad school (taking classes with medical students). Until that fateful day when I just happened to chat up a person who did medical writing, I had never heard the term. How do we change that?”

AMWA and our active and helpful LinkedIn groups are changing that. Check out the LinkedIn group, start a chat, meet some new colleagues, and who knows—maybe change your life along the way. F. Scott Fitzgerald sums up this issue’s column, “For what it’s worth: it’s never too late or, in my case, too early, to be whoever you want to be.”

Looking forward to connecting with you on LinkedIn!

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### Calendar of Meetings

**American Medical Writers Association**
October 4-6, 2012
Sacramento, CA

**Public Relations Society of America**
October 13-16, 2012
San Francisco, CA
Web site: [www.prsa.org](http://www.prsa.org)

**American College of Clinical Pharmacy**
October 21-24, 2012
Hollywood, FL
E-mail: accp@accp.com
Web site: [www.accp.com](http://www.accp.com)

**Association for Business Communication**
October 24-27, 2012
Honolulu, HI
Web site: [www.businesscommunication.org](http://www.businesscommunication.org)

**Regulatory Affairs Professionals Society**
October 26-30, 2012
Seattle, WA
Web site: [www.raps.org](http://www.raps.org)

**American Public Health Association**
October 27-31, 2012
San Francisco, CA
Web site: [www.apha.org/meetings](http://www.apha.org/meetings)

**National Association of Science Writers Workshops/Council for the Advancement of Science Writing New Horizons in Science Conference**
October 28-29, 2012
Research Triangle, NC
Web site: [www.casw.org](http://www.casw.org)

**Alliance for Continuing Education in the Health Professions**
January 30-February 2, 2013
San Francisco, CA
Web site: [www.acme-assn.org](http://www.acme-assn.org)

For a complete list of meetings, visit Conferences > Related Meetings on the AMWA website ([www.amwa.org](http://www.amwa.org)).
In the last issue of the Journal, I described the ongoing desire of AMWA leaders and staff to provide members with relevant content and resources. Here, I’ll discuss two specific areas in which AMWA is significantly investing, to build on our strengths and expand our capacity for future growth. These activities will help ensure that AMWA provides the best return on your investment (whether that’s your membership dues or the time you donate to AMWA as a volunteer).

Technology and Infrastructure
The major technology and infrastructure at AMWA headquarters is over 8 years old and in great need of updating. To that end, the AMWA Board of Directors approved funding for a new Association Management System (AMS), an advanced software solution that will streamline our administration and data systems. After completing a technology review and needs assessment, AMWA headquarters staff sent out a request for proposals and has been working with demos from the vendors to ensure that we select a new system that will allow us to centralize data and reporting, improve the way we track activities, and strengthen our e-commerce function. In addition, AMWA’s internal telecommunication and data services were upgraded to provide enhanced functionality for call management and expanded bandwidth to accommodate the new software.

These changes will mean AMWA staff can provide more direct customer service and devote more time to working with volunteer leaders to develop and improve member services. A tangible benefit for members will be the ability to access your records, transcripts, financial transactions, and AMWA member profile.

Certification
The goal of certification is to define key competency areas within the field of medical writing and establish basic standards by which knowledge related to those areas can be assessed uniformly. After much discussion, last year the Board of Directors approved the forming of a Medical Writing Certification Commission to initiate, evaluate, maintain, and oversee a credentialing program for medical writers.

The AMWA Board approved the use of funds from our reserve accounts to support the activities of the Certification Commission. Because this is new territory for AMWA leaders, we sought expert help and contracted with a testing agency, Schroeder Measurement Technologies, Inc. (SMT). The following are the members of AMWA’s first Certification Commission: Thomas Gegeny, MS, ELS (Chair); Karen Potvin Klein, MA, ELS (Chair-Elect); Sue Hudson; Marianne Mallia, ELS; Barbara Gastel, MD, MPH; Robert Bonk, PhD; and David Clemow, PhD; with Susan Krug (AMWA Executive Director) and me as ex officio members.

In consultation with the AMWA Executive Committee, AMWA staff, and SMT, the Certification Commission has the following charge.

- Lead the organization in developing policies and procedures that adhere to certification best practices.
- Implement and maintain a highly-reliable, content-valid credentialing program.
- Ensure that administrative and financial resources are in place to manage the certification program.
- Become familiar with best practices concerning governance and administration based on established standards in the testing industry.

The first step was for AMWA and SMT to methodically analyze the job we collectively refer to as "medical writing" to determine what elements of practice and knowledge are important to assess, provide explicit specifications for use during the examination development process, and help ensure legal defensibility of the resulting content. Read more about this endeavor on page 54.
SLATE OF CANDIDATES FOR 2012-2013 ELECTION

Each year, the slate of AMWA officers is chosen by the Nominating Committee, which consists of the president-elect (who serves as chair) and six voting members who are not members of the Executive Committee (EC). The Nominating Committee receives from AMWA headquarters the names and biographies of all members meeting the criteria for the three elective offices: President-elect, Secretary, and Treasurer. Members of the committee discuss the potential candidates and select one candidate for each position. The names of these candidates are then presented to the Board of Directors for approval at its spring meeting.

The following candidates were approved by the Board of Directors at its spring 2012 meeting:
- President-elect: Brian Bass
- Secretary: Stephen Palmer, PhD, ELS
- Treasurer: Christine Wogan, MS, ELS

President: The president-elect automatically assumes the office of president at the annual business meeting held during the annual conference of the following year. The 2012-2013 AMWA president will be Douglas Haneline, PhD. Doug, a teacher of literature and writing for more than 35 years, has been at Ferris State University, MI, since 1984. He teaches research writing, advanced composition, medical writing, science fiction, American and British Literature courses, and Introductory Latin. Doug is a doctoral graduate of Ohio State University, with prior degrees from Middlebury College and the University of Delaware. Doug has been an AMWA member since 1986 and Fellow since 1992. His previous AMWA service includes the following: Secretary; Administrator of Awards; Administrator of Education; Annual Conference Administrator; chair of the Medical Book Awards Committee; President of the Michigan Chapter; and member of the following national-level task forces: Certification, Academic Freedom and Conflicts of Interest, AMWA-Higher Education Partnerships, and Alternative Learning Technologies. In addition, he has been the coordinator of Annual Conference Special Interest (Educator) Sessions, a member of the AMWA Journal Editorial Board, and a member of several committees, including the Development, Nominating, Swanberg Award, Fellowship, Publications, Education, and Constitution & Bylaws. Outside of AMWA, Doug served on the Michigan Humanities Council, the state affiliate of the National Endowment for the Humanities. He was a peer reviewer for the Higher Learning Commission’s Academic Quality Improvement Program and Program to Evaluate and Advance Quality.

President-elect: The president-elect (1) must be a Fellow of AMWA, (2) must have held at least two different positions on the EC in the past, (3) must have served on the EC for a minimum of 2 full years, and (4) must be a current member of the EC when his or her name is being considered by the Nominating Committee.

Nominated for President-elect is Brian Bass. Brian is President of Bass Advertising and Marketing, in Robbinsville, NJ. He earned a BA in Communications from Ramapo College of New Jersey. Brian joined AMWA in 1994 and became a Fellow in 2001. Currently he is Administrator of the Annual Conference. His previous AMWA service includes the following: Administrator of Development; Administrator of Public Relations; leader and member of the Eric Martin Award Committee, the McGovern Award Committee, Fellowship Committee, and many other committees; President-elect, President, and Immediate Past President of the Delaware Valley Chapter; Delaware Valley Chapter Education chair and Princeton Conference chair; annual conference workshop leader, open session moderator and speaker, and roundtable leader; and AMWA Journal freelance forum panelist.

Secretary: The secretary must have served in at least two different positions on the EC within the 5 years immediately preceding his or her consideration by the Nominating Committee and must be a Fellow of AMWA.

Nominated for Secretary is Stephen Palmer, PhD, ELS. Steve is a Senior Scientific Medical Writer at the Texas Heart Institute in Houston, TX. He earned a PhD in social and health psychology at the State University of New York at
Stony Brook, where he also earned his MS. He holds a BA from Wesleyan University. Steve joined AMWA in 2002 and became a Fellow in 2011. Currently Steve serves as Administrator of Awards. His previous AMWA service includes the following: Administrator of the Annual Conference; Administrator of Chapters & Membership; Annual Conference roundtable, coffee klatch, and open session leader and speaker; member of Medical Book Awards, Constitution and By-Laws and many other committees; Southwest Chapter program chair, President, Immediate Past President, and Board delegate.

**Treasurer:** The treasurer must have served at least 1 full year on the Budget and Finance Committee within the 5 years immediately preceding his or her consideration by the Nominating Committee.

Nominated for Treasurer is **Christine F Wogan, MS, ELS.**

Chris works in Houston, TX, at MD Anderson Cancer Center, where she is Program Manager for Division Publications. She earned a BA in biology at Swarthmore College and an MS in biological sciences at the University of Houston at Clear Lake. Chris has a distinguished record of service in AMWA. She joined AMWA in 1989 and was named a Fellow this year. Currently she serves on the Budget and Finance Committee. Her previous AMWA service includes the following: Administrator of Awards; Journal peer reviewer; Southwest Chapter Director-at-Large, Treasurer, President, and Immediate Past President; and Annual Conference Editing/Writing Sections chair; workshop leader, open session panelist and moderator, and roundtable leader.

**Procedure for Additional Nominations**

According to AMWA’s Bylaws (Article III.2b), additional nominations for president-elect, secretary, or treasurer may be made by any member whose dues and special assessments are current, provided that any such nomination is submitted in writing to the secretary of AMWA at least 30 days before the annual business meeting (at the annual conference in Sacramento, CA, October 6, 2012). Any individuals so nominated must meet the criteria outlined in the Bylaws (Article III.1.a through 1.d) for their names to be placed on the ballot. Such a nomination must state clearly the qualifications of the candidate, must be signed by 50 members in good standing as of the date of receipt of the nomination, and must be accompanied by a letter from the candidate stating that he or she is willing to serve if elected.

> **Questions about the structure and governing bodies of AMWA?** Review two articles previously published in the *AMWA Journal*.1,2

> **Questions about how the AMWA election works?** Visit [www.amwa.org](http://www.amwa.org) and review new Election Process FAQs posted in the members only section.

**References**


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**Chapters Unite!**

The AMWA annual conference provides an opportunity to get together with your fellow chapter members, and it’s never too early to plan your chapter get-together. It’s always been as easy as 1-2-3 to organize a great chapter dinner at the conference. This year, you need to remember to do just one more thing:

1. Review the local restaurant offerings online [(at, for example, http://downtownsac.org/category/downtown-directory/eat/)](http://downtownsac.org/category/downtown-directory/eat/) and narrow your choices down to about three restaurants with different menus.
2. Send an e-mail to your chapter members inviting them to your chapter dinner, and ask them to select their favorite restaurant and to RSVP.
3. Call the restaurant to reserve a table for the number of your guests.
4. Select a meeting place at the hotel or convention center and send a note to your guests with the time and place to meet.

Have fun enjoying the evening with new and old colleagues in your chapter!

By Judith M. Pepin, PhD


The American Medical Writers Association (AMWA) is holding its financial position despite a still-recovering economy. At the end of the last fiscal year (July 1, 2010, through June 30, 2011), expenses exceeded income by $25,681.08. Our investments have tracked slightly above the financial indices. We have done fairly well by continuing to sustain membership and reduce expenses wherever possible, with an exciting look to the future.

How Should This Report Be Interpreted?

This financial report provides a snapshot of the financial status of a dynamic organization. AMWA’s fiscal year begins on July 1, so income from the annual conference, which accounts for about one-third of AMWA’s total income, is realized in the first half of the fiscal year. Because many sources of income have associated expenses, differences between income and expenses (eg, excess of income over expenses) should be considered, as well as variances from the budget and changes from the previous year. When differences between income and expenses are compared with differences from the previous fiscal year, the change is reported as net gain over (or loss from) the previous fiscal year.

What Are AMWA’s Sources of Income?

Membership dues and annual conference registrations accounted for 76% of the $1,601,303 income for fiscal year 2010–2011 (Figure 1). Membership was sustained and, after subtracting expenses related to membership, AMWA realized a net gain of $15,437 in this category compared with last year. Education also had a net gain ($45,640) over last year. Revenue from enrollments in the Essential Skills and Specialty Area certificate programs together more than tripled from last year. Further, sales of the older self-study modules (Basic Grammar, Punctuation, and Sentence Structure) were higher this year than last year and the new Elements of Medical Terminology module was released, increasing our revenue in this category. Revenue from registrations for the 2010 Annual Conference was up more than 8% ($21,935) compared with the 2009 conference. In addition, revenue from workshops, conference sponsors, and exhibits increased this year compared with last year. Overall, there was also a net gain of $31,330 from the annual conference this year compared with 2010.

What Are AMWA’s Expenses?

Staff salaries and associated expenses such as payroll taxes and benefits accounted for 40% of the total expenses of $1,517,511 (Figure 2). Personnel-related expenses (wages, payroll taxes, and 401k match) were lower due to the decreased number of staff during 2010-2011. As of June 30, 2011, AMWA had a total of six full-time employees and one part-time employee, in addition to an Executive Director. Among their many responsibilities, staff members work on educational programs; support membership services; maintain the website, Freelance Directory, and Jobs Online listings; market AMWA’s products and services; coordinate meetings; implement AMWA’s awards programs; and perform bookkeeping.

Annual conference expenses were the second-highest expense category (21%). The largest expense was meal functions, which are heavily subsidized by AMWA. However, these expenses were $10,053 less in 2010 (Milwaukee) than in 2009 (Dallas). Other major conference expenses (> $10,000) were (in descending order): non-workshop audio/visual (AV) support ($34,276), bank charges for credit card use ($28,395), workshops (AV, monitors, etc) ($25,873), hotel/convention center charges ($23,550), postage and shipping ($10,649), and printing and design ($10,572).

Administration expenses (17%) increased $10,942 from last year. Office rent was the largest subcategory and was $14,803 more than last year. Other administrative expenses exceeding $10,000 were for computer services ($27,162), bank/credit card charges ($22,657), depreciation ($14,310), and telephone/Internet access ($11,845). The remaining major expense categories were publications ($80,051) and membership ($18,189).

Other expenses representing more than 1% (16%) were (in descending order): insurance (5.6%), education (4%), Board of Directors (BOD) and Executive Committee (EC) meetings (2.8%), and Web and Internet technology (1.5%). Insurance includes health, dental, life, and disability for the AMWA staff and Executive Director and liability for AMWA officers. EC/BOD expenses include EC travel and hotel rooms for January, April, and July meetings, and food for BOD meetings held in April and at the annual conference. Education expenses were mainly for onsite workshops and the self-study modules.

What Lies Ahead in the Current Fiscal Year?

In January 2011, then-Executive Director Donna Munari, in consultation with then-President Melanie Fridl Ross, then-President-elect Barbara Snyder, and I, prepared the 2011-2012 AMWA budget. Based on experience and information available at that time, we budgeted $1,617,345 in income (Figure 3) and $1,602,930 in expenses (Figure 4) for a projected excess of $7,415. The 2011-2012 budget antici-
Figure 1. Sources of AMWA’s income during fiscal year 2010–2011 (July 2010–June 2011). The amounts are from the final financial report for June 2011.

*Other = Jobs Online (3.0%), Freelance Directory listings and access (1.9%), interest income (1.2%), special projects (<1%), publications (<1%), awards (<1%), product shipping/handling (<1%), general fund contributions (<1%), Web and Internet (<1%).

Figure 2. AMWA’s expenses during fiscal year 2010–2011 (July 2010–June 2011). The amounts are from the final financial report for June 2011.

*Other = insurance (5.6%), education (4.0%), Executive Committee/Board of Directors (2.8%), Web and Internet technology (1.5%), Freelance Directory + depreciation (<1%), special projects (<1%), unrelated business income tax (<1%), awards (<1%), product shipping/handling (<1%), miscellaneous (<1%), Jobs Online (<1%).

Figure 3. Anticipated sources of AMWA’s income during fiscal year 2011–2012 (July 2011–June 2012). The amounts are from the budget approved by AMWA’s Board of Directors at the 2011 spring meeting.

*Other = Jobs Online ads (2.8%), Freelance Directory (1.7%), certificates of deposit interest income (<1%), special projects (<1%), publications (<1%), awards (<1%), mailing label sales (<1%), general fund contributions (<1%), Web and Internet (<1%).

Figure 4. AMWA’s anticipated expenses during fiscal year 2011–2012 (July 2011–June 2012). The amounts are from the budget approved by AMWA’s Board of Directors at the 2011 spring meeting.

*Other = insurance (6.0%), Executive Committee/Board of Directors (2.1%), Education (3.3%), Web and Internet (<1%), special projects (<1%), awards (<1%), Freelance Directory + Depreciation (<1%), unrelated business tax (<1%), mission-related miscellaneous (<1%), certification (<1%), miscellaneous shipping/handling (<1%), Jobs Online (<1%).

What About the Long-Term?
As a general rule, nonprofit organizations should have operating funds of 25% to 33% of annual expenses budgeted (for AMWA, this was $381,551 to $503,647 for fiscal year 2010–2011). This year, despite the sluggish economy and less-than-stellar return on investments, as of June 30, 2011, our operating funds (cash and cash equivalents totaling $510,896; Table 1) was just above the target range.

Nonprofit organizations also should have reserves of 6 to 12 months of annual operating expenses (for AMWA, $763,101 to $1,526,202 for fiscal year 2010–2011). AMWA’s reserves are defined as its short-term investments in certificates of deposit (CDs) that mature in 1 to 5 years and long-term investments in mutual funds (60% various stocks and 40% bonds) that are managed by Morgan-Stanley Smith Barney. As of June 30, 2011, our short-term and long-term reserves amounted to $1,005,504 (Table 1), which is within the target range.
As of June 30, 2011, the Endowment Fund balance was $197,211.65, the interest of which continues to be used on special projects consistent with the Fund’s mission statement and as determined by the BOD.

Table 1. AMWA Balance Sheet as of June 30, 2011

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<tr>
<th>Assets</th>
<th>$510,895.58</th>
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<tbody>
<tr>
<td>Cash and cash equivalents (operating funds)</td>
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<td>Short-term funds (maturity 1 to 5 yr) (reserves)</td>
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<td>Accrued interest on short-term investments</td>
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<td>Miscellaneous bank receivable</td>
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<td>Long-term investments (reserves)</td>
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<td>Total accounts receivable</td>
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<td>Prepaid expenses and supplies inventory</td>
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<tr>
<td>Fixed assets (furniture, equipment)</td>
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<tr>
<td>Other assets (McGovern and Endowment Funds, deposits, inventory assets)</td>
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<tr>
<td><strong>Total assets</strong></td>
<td><strong>$2,023,749.19</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Liabilities and Net Assets</th>
<th>$1,324,891.74</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>$94,650.60</td>
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<tr>
<td>Unearned (deferred) income</td>
<td>$365,535.81</td>
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<tr>
<td>Total liabilities</td>
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<tr>
<td><strong>Total equity/assets</strong></td>
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<td>Net income</td>
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<tr>
<td>Total net assets</td>
<td>$1,563,562.78</td>
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<tr>
<td><strong>Total liabilities and equity</strong></td>
<td><strong>$2,023,749.19</strong></td>
</tr>
</tbody>
</table>

In summary, AMWA has weathered another year of a slow economy and downturn in investments and we have continued positive financial health with respect to the current market as we have observed a favorable upswing that has continued. Keeping this in mind, and with continued conservative investing, we are planning and budgeting for the year ahead.

Acknowledgment
I thank the members of the 2010-2011 Budget and Finance Committee for their help in reviewing reports and budget information: Kate Casano, Alison Woo, Maryalice Ditzler, Laura Wright, Linda Rowe, Christine Wogan, and ex officio members: Barbara Snyder, Jane Krauhs, Melanie Fridl Ross, and Donna Munari.

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10 Things to Do When Business Is Slow

Answers from AMWA members (freelances) to the question “What do you do when business is slow?”

1. I first give thanks to the Freelance’s Deity. After all, I didn’t become a freelance to work 52 weeks a year!

   —Peter Aiken, PhD

2. I work on side projects that I hope will turn into a second career.

   —Jim Radke, PhD

3. My most recent undertaking is to volunteer for a couple places where I can put to use some version of my professional writing and communication skills—not only to occupy myself and do some good, but also in the hope that someone who actually has some paying projects may see what I can do and at least initiate a conversation.

   —Steve McGuire, MA

4. I have a pile of articles on areas of interest, filed as paper on my desk, and electronically in my computer. I often hold onto links for recorded Webinars, too. Reading and reviewing this backlog of content is my “training” time. I like to go out of the house to do this (e.g., a coffee shop); it’s a pleasant change and it helps me to focus only on the reading material.

   —Caitlin Rothermel, MA, MPHc

5. Make sure my AMWA Freelance Directory ad, website, résumé/CV, and any other items representing me are current.

   —Candice Hughes, PhD

6. I have a rule that I should follow more carefully about sending out one potential new client query per slow day.

   —Tara Hun-Dorris, MMC, ELS

7. As a way to reconnect to former clients, send them an abstract of a paper that would be of interest.

   —Kathy Molnar-Kimber, PhD

8. I write or call my current customers and say, “I worked on _______ recently. I was wondering if that might help you in _______.”

   —Lana Christian, MT, MA

9. When business is slow, that means my clients’ businesses are slow. So I invest my time in meeting with my clients to brainstorm about what I can do for them for free to help them build their businesses.

   —Brian Bass

10. I approach clients, current and potential, from the perspective of their needs, not mine. In other words, I don’t ask if they have work for me; instead, I offer solutions to their problems (e.g., getting projects off their desks, getting manuscripts accepted for publication, providing materials that will sell their products).

   —Katharine O’Moore-Klopf, ELS

Compiled by Faith Reidenbach, ELS, CMPP. Topic suggested by Cindy Hamilton, PharmD, ELS. Thanks to all of the many freelances who responded!
Keeping Fresh: How to Stay on Top of Changes in Technology

By Hilary Graham, MA

University of Texas MD Anderson Cancer Center, Houston, TX

Technology is constantly evolving, and staying current is no easy task. But keeping your knowledge up to date can save you time and money, protect your data, improve productivity, enhance your professional brand, and garner you more business. In addition to providing general strategies for keeping on top of technology trends, this article also suggests some specific websites and useful products.

While some people still rely on the morning newspaper to stay informed, many get their news throughout the day on their smartphone, tablet, or computer. Consider navigating to the technology section of your favorite news outlet. Some of my favorite technology sections are the following.

- Austin360 Digital Savant Blog (www.austin360.com/blogs/content/sharedgen/blogs/austin/digitalsavant/index.html)
- The Daily Beast Innovation (www.thedailybeast.com/innovation.html)
- Huffington Post Tech Section (www.huffingtonpost.com/tech)
- NPR Technology (www.npr.org/sections/technology)
- NPR All Tech Considered (www.npr.org/blogs/alltech-considered)
- Salon Tech Tips (techtips.salon.com)
- Slate Technology (www.slate.com/articles/technology.html)

The preceding news outlets discuss technology trends as part of their broader news coverage, and others are strictly devoted to technology news. Examples include the following.

- Cnet (www.cnet.com) provides product reviews, news, price comparisons, free software downloads, daily videos, and podcasts.
- Gizmodo (www.gizmodo.com) offers reviews of gadgets, gizmos, and cutting-edge consumer electronics.
- Lifehacker (www.lifehacker.com) offers tech-related productivity tips and news and articles on how to get things done. It helps you work smarter and save time through recommended downloads, websites, and shortcuts.
- Mashable (www.mashable.com) is your source for anything and everything on Web 2.0 (ie, social media and information sharing) and applications. Three to five daily posts feature top lists, startup reviews, and comprehensive, industry-specific comparative articles.
- PCWorld (www.pcworld.com) offers quick access to authoritative reviews of technology products, pricing information, updated tech news, and downloads of free-ware and shareware.
- WIRED (www.wired.com) provides in-depth coverage of trends in technology and its effects on business, entertainment, science, and society. Wired.com covers games, culture, gadgets, entertainment, and other tech-related news through its blogs, regular reviews, and videos.
- Zdnet (www.zdnet.com) offers technology news, comments, and product reviews focusing on IT hardware, software, and security.
- 10,000 Words (www.medibistro.com/10000words) is specifically devoted to technology developments related to journalism and communications.

For platform-specific news, or for people looking to switch computer platforms, check out these websites.

- MacRumors (www.macrumors.com)
- AppleInsider (www.appleinsider.com)
- Cult of Mac (www.cultofmac.com)
- Microsoft News Center (www.microsoft.com/presspass/default.mspx)
- Techspot (www.techspot.com)

Consider subscribing to RSS feeds. Don’t have time to visit all these sites individually on a regular basis? Sign up for an RSS feed. RSS is an acronym for Really Simple Syndication, but what you need to know is that it is a method of delivering content to you via free feed-reader or news-aggregator software, such as Google Reader (www.google.com/reader) or Feedreader (www.feedreader.com). Simply go to the Web page you are interested in following and sign up by clicking on the RSS icon. Then you can either bookmark the RSS site, or add it to your feed reader. New content on your favorite news sites and blogs will be delivered to you all in one place.

Rely on your colleagues’ shared expertise. Professional organization forums are a great place to ask questions or to
learn about new software programs. Also consider joining groups on LinkedIn. In addition to networking, great practical discussions occur in the group forums.

Venture outside your comfort zone. Consider attending a technology conference or joining a professional association meeting slightly outside your field. One of the most innovative technology conferences is SXSW Interactive, where Twitter was launched in 2007, and Foursquare in 2009. The Society for Technical Communication, the National Association of Science Writers, and the Association of Women Communicators all have membership segments that include technology gurus at the forefront of Web development, social media, and emerging technologies.

Listen to informative podcasts. To find some, venture to the iTunes store and search for “Tech” or just browse categories that interest you. Podcasts like Marketplace Tech Report, CNET Tech Review, WIRED’s Gadget Lab, This Week in Tech, and TED lectures are some of my favorites. Podcasts are generally free so there is no harm in trying them out.

I hope this brief overview has inspired you to embrace the continual progress of technology by visiting a new website now and then, polling your colleagues, attending a new conference, listening to a new podcast, or downloading a new piece of software.

### Computer getting sluggish?

Once a month, try clearing your cache—that’s sort of like your computer’s scratch pad, where it parks temporary files it accesses regularly. Periodically removing these files can keep them from bogging down your applications. For more information and instructions on cleaning up a cluttered cache, visit www.brighthub.com/computing/mac-platform/articles/2309.aspx (Mac) or www.addictivetips.com/windows-tips/clear-windows-7-cache (Windows 7 and 8).

— Jeanne McAdara-Berkowitz, PhD

Biolexica, Longmont, CO

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### TECH TALK REVIEWS

#### SNAGIT
For Mac and PC
Available as 30-day free trial; afterward, a licensed copy (that you can use at home AND work) is $39.95

Wouldn’t it be nice to be able to capture images from any source, immediately open them in a capable editor, and then manipulate and save them in any graphic file format you need? Enter Snagit (www.techsmith.com/snagit.html) from TechSmith. This program is a powerhouse of tools you can use for a wide variety of assignments requiring graphics manipulations.

Snagit captures screenshots, images, Web pages, videos (save as AVI only), and parts thereof, with a super-easy interface and a setup that is quick and effortless. As you capture an image, it automatically opens (and is saved) in an editing environment that allows you to cut, combine images, add callouts or special effects, and apply many other edits. Use it to create great tutorials or one manuscript figure from the six graphs the authors sent you. Snagit will rise to the challenge.

— Adi Ferrara, ELS

Freelance writer and editor, Bellevue, WA

#### 1PASSWORD (www.agilebits.com)
Mac, Windows, iPad, iPhone, Android
$49.99 single-user license for Mac or PC, other platforms/licensing options vary

If you get as tired of trying to remember passwords as I do, it is tempting to reuse the same one or a slight variant and even more tempting to keep favorite ones long past the recommended lifespan. The Mac/PC program 1Password has saved me a good deal of frustration and made me a safer computer user. 1Password lets me rapidly access my long list of log-ins and the corresponding passwords directly from any log-in browser window (including Chrome, Firefox, Internet Explorer, Safari), from desktop, tablet, or smartphone. I use it for two Macs and an iPhone, and it keeps all the info sync’d seamlessly, too. The program rates the strength of the passwords I develop or creates and inserts stronger ones for me. I can store also credit card numbers and other information securely. I am now a happier, saner writer.

— Mary E. King, PhD

King Medical Communications, Boulder, CO
The bandage was wound around the wound.

I recognized that sentence, as well as numerous other examples I encountered, in a recent e-mail from a friend. But there was an unfamiliar heading: Paraprosdokian. So I did what I always do: I went to my Webster’s Collegiate, nothing there; then to my other dictionaries, and could not find such a word. So I went to the all-time, all-reliable Oxford English—no such word.

Meanwhile, an old sentence kept swirling through my head: When I saw the tear in my skin, I shed a tear. As a last resort (How about: As a last resort, I vacationed at a fancy resort?), I went to my computer—to Google. In Wikipedia, I found what I had been looking for.

A paraprosdokian is a figure of speech in which the latter part of a sentence or phrase is surprising or unexpected in a way that causes a reader or listener to reframe or reinterpret the first part. It is frequently used for humorous or dramatic effect.

Now I was starting to understand. A few examples came to mind.

If I agreed with you, we’d both be wrong.
War does not determine who is right—only who is left.
I didn’t say it was your fault; I only said I was blaming you.
The last thing I want to do is hurt you, but it’s still on my list.

So it’s mea culpa. My ignorance—after all these years, I had never bumped into this word even once. Or is it just that someone coined a new word recently and it never managed to get into standard dictionaries?

Then I realized that I had written some paraprosdokians in previous columns going back several years. Among the ones I liked best are the following.

From an invalid, the application was invalid.
I wanted to subject the subject to more testing.
The relationship of editor to author is knife to throat.

Another one I like is the universally famous line (written by Pascal).
I didn’t have time to write you a short letter, so I wrote you a long one instead.

There are also those laughable miswritings quoted from actual patient charts. To me, they fit the definition of paraprosdokians.
She has no rigors or chills, but her husband says she was hot in bed last night.
Between you and me, we ought to get this lady pregnant.
Patient has chest pain if he lies on his side for a year.
The patient left the hospital feeling much better except for her original complaints.

Allow me to present a couple of my own creations; I believe they may fit the definition.
He thinks his writing is manuscripts.
Good writing is done by the seat of the pants—keeping it glued to the computer chair long enough.
Critics call his writing magnificent.

Interestingly, every time I typed paraprosdokian into my computer, it came up red-underlined—wrong spelling, a word the software didn’t understand. Maybe now I feel a little better about my “ignorance.”

So paraprosdokian is not a common word. It is not pedestrian. It is not in any dictionary that I could find. It is not acceptable to my spell-check (a new one, by the way). Obviously, paraprosdokian is not pedestrian: You can laugh all you want, but you cannot walk away from it. (Sorry, this is merely a pun.)
Web Design from Scratch
www.webdesignfromscratch.com

Don’t yet have a website? If you are a freelance, having a website is essential to building your business, but if you are a non-geek like me, the thought of designing your own website may seem utterly inconceivable. “Web Design from Scratch” is a site that can help you shorten that learning curve. Collectively, the tutorials provide great tips and tricks on Web design and cover everything you need to know from the basics to website production. There are even tips to increase your productivity and suggestions for going green.

As you work through each tutorial, you will find that many of the topics are listed in multiple sections, so you can pick and choose what seems relevant from each section. The Basics section contains the essentials you would expect, such as “The Basics of Making a Web Page,” where you will learn about HTML (hypertext markup language) and page structure, as well as find out how to create HTML pages using a text editor, how to save pages and link them together, and how to upload the pages to a live Web server. Other topics include enhancing design elements, writing landing paragraphs and Web copy, and avoiding grammatical errors. (We don’t need that, do we?)

If you did not grow up in the computer age, terms such as HTML and the like can be quite intimidating. Web Design from Scratch provides separate tutorials on HTML and CSS (cascading style sheets), JavaScript, and search engine optimization (SEO). These are “must-read” topics, and the tutorials presenting them are surprisingly easy to understand.

The Web tutorials not only discuss the technical aspects of building a website, but they also cover the marketing aspects that draw potential clients to your site. Browse through the tutorials and you can find topics on affiliate marketing, marketing a small Web business, and making every page on your site an ad. All in all, the tutorials on Web Design from Scratch are comprehensive in scope and engaging to read. Even if you never thought you could build your own website, bookmarking Web Design from Scratch and learning the skill sets they offer will help you become a full-fledged geek in no time!

By Barbara Woldin
Freelance Writer/Editor, High Bridge, NJ

Grants and Funding: Extramural Programs;
NIH Grant Tutorials

Some months ago, someone on the AMWA listserv had a question about grant writing resources, and the consensus was that the National Institutes of Health (NIH) would likely have the most comprehensive and up-to-date information. Seasoned and wannabe grant writers alike will find that using the NIH Grant Tutorials not only takes them through the whole process but also gives them an understanding of just what the grant reviewers expect.

To help viewers prepare successful grants, the NIH Grant Tutorials page provides three how-to sections to guide you through the planning, writing, and submitting stages: grant-writing tip sheets for NIH research grants, grant writing tips for small business grants (Small Business Innovation and Research or SBIR grants), and electronic submission of grant applications. In the section on NIH research grants, you can download separate PDF files such as Grant Application Basics, How to Plan a Grant Application, How to Write a Grant Application, and Quick Guide for Research Grant Applications. There is a tip sheet for new NIH grant applicants and a checklist for writing a grant. Another section describes what kinds of mistakes are often seen in grant applications, the list of which is given in terms of the review criteria NIH uses: Significance, Approach, Innovation, Investigator, and Environment. These review criteria are tied into the section I found most helpful, namely, Annotated Samples of Successful Grants. Each example includes a summary describing why the grant was particularly outstanding, with annotations throughout the research plan indicating where review criteria were fulfilled. Although grant writing can be arduous, availing yourself of the NIH Grant Tutorials will make the process go more smoothly and help you become an expert in grantsmanship.
Health literacy is an issue not foreign to our profession. We medical communicators routinely encounter the need for medical information to be presented in a manner suitable to the target audience; this need is especially critical for the segment of our population with limited literacy skills. I thought that I understood this need through my own research on analyzing documents concerning Medicare. However, a trip to Prague, the Czech home of Franz Kafka, heightened my awareness of this issue.

In November 2011, I visited Prague to speak at a writing conference regarding my use of community outreach in the Professional Writing program at Widener University. In my courses, students often team with community agencies that reach out to the disenfranchised. After a decade of “experiential community engagement” (my term for this pedagogy), I sometimes wondered why health literacy posed such challenges. But by my third evening in Prague, I experienced the Kafkaesque vulnerability engendered when the world’s rules just elude our grasp.

After my one free day of touring this charming—albeit freezing—medieval city and my next day at the conference, I developed a sore throat. During the night, my throat and ears hurt so severely that I literally had to punch my thigh to distract myself when swallowing. The next morning, a Sunday, I asked the hotel concierge to help me get to a doctor.

At this point, I should clarify that I do not speak, read, or write Czech. The closest that I come would be polite niceties, food items, and swear words of my Polish heritage. A taxi driver who spoke almost no English took the extra effort to get me oriented at the hospital, providing his card so that I wouldn’t be left without a return ride. That still didn’t make it easier to figure out the hospital’s administrative procedures; I did my best by following the locals—even though most seemed as perplexed as I was. Compounding my linguistic limitations was the essentially complete loss of my voice. How would I communicate with the ER doctor?

Through points, nods, and grimaces, I conveyed my symptoms. Still, I began to realize that the vulnerability engendered by illness obfuscates understanding, even for someone with solid health literacy. Consider, for example, my trepidation when asked through which nostril I preferred a scope to be inserted. With no voice, I could not ask the many questions in my mind; I simply pointed to the right. After several minutes, the doctor diagnosed acute viral laryngitis that had swollen my vocal cords. She sought to assuage my fears as she calmly explained, “I’m not going to admit you to the hospital right now. It’s not serious; you won’t suffocate. But come back immediately if you get worse or develop a fever.”

I left the ER with several written prescriptions: gargles, sprays, and small tablets that I think were Echinacea. The pharmacists in the hospital’s pharmacy joined me in charades about how to use the gargles and sprays. Although I left a bit unsure of whether the spray was for my nose or mouth, at least I felt tremendously better because of their concern. (In fact, I was able to return to the conference the following day. Without a voice, though, I relied on a new colleague to read my paper. Members of the audience remained patient as I wrote down replies to their questions on my presentation.)

As for the prescribed treatments, did I make any mistakes with the directions? Most likely. Should I have asked more questions? Of course. Could I have done anything differently? Not really. My lack of a voice (literally and figuratively) limited my ability to communicate, even though I understood how to follow seemingly simple medical directions. My limited literacy under these circumstances had circumscribed the level of interaction possible with my health care providers in Prague. Now, at least, I was beginning to glimpse the complexity of health literacy.

What I also began to understand was the importance of a sense of care and compassion. The extra time spent by the doctor when others were waiting to be seen on a Sunday morning, the charades played by the pharmacists amid a shop of curious customers, and the tender hand of the taxi driver on my shoulder after he found me wandering the parking lot—these expressions of humanity did more to quell my vulnerability at being ill in a Kafkaesque world than gargles, sprays, and pills. To paraphrase Kafka, effective communication of medical knowledge is much more complicated—particularly for those vulnerable because of health literacy issues.

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“A New View of Health Literacy via Prague and Franz Kafka

By Robert J. Bonk, PhD
Associate Professor of Professional Writing, Widener University, Chester, PA

“It’s easy to write prescriptions, but it’s tougher to get through to people.”
Franz Kafka, A Country Doctor (1919)
I can’t exactly say why I signed up for an improv class. I hate public speaking so much that even teleconferences make me nervous.

But recently our Sunday paper profiled a local comedy club called DSI Comedy. The club’s artistic director described the basic principle of improv in two words: “YES, AND.” YES means accepting everything your improv partner says. AND means furthering his or her statements. The artistic director told of one student who took Improv 101 and realized she’d been saying “no” her whole life without realizing it.

I have to admit I’m kind of stubborn, and I enjoy being right. I would argue most editors have a fair dose of BUT NO within them. We have grammar books and style guides to prove how wrong a given sentence is. But I started to wonder: what if, for exactly 2.5 hours per week, I gave my mental editor a rest and let “yes, and” take over?

I signed up for Improv 101, and on the first night of class, I saw something on the syllabus that made me want to flee the club: “Student Showcase.” In 6 short weeks we would be in front of people and saying things we had not rehearsed. Surely they wouldn’t do that to students, would they?

YES, they sure would. AND our instructor, Justin, told us we would be awesome. Where was a BUT NO when I needed it?

In the first class, we played games to interact and think faster. Before every game, Justin told us, “Watch where the energy is moving.” It sounded rather new-age-y, until he pulled an imaginary dagger out of his back pocket. With a kung-fu noise, he launched the dagger at a student. The student clasped his hands around the dagger and launched it at someone else.

Justin wanted big sound effects and movement and lots of energy. I wanted to go home, curl up in my warm bed, and read a book. I stayed though, only to work through my first improv scenes on stage. They were halting and painful affairs in which momentum would lurch forward only to come to an abrupt stop as my mind went blank. Sometimes it felt like my energy had gone home and went to bed without me.

But I maintained faith in YES, AND. I went back every week, and in the process I learned a few things.

**Say yes.** Assuming you are not asked to jump off a bridge, saying yes to adventurous thought is liberating and can lead to hilarity. In one scene, my partner and I were given the setup of vacationing on an oil rig. You don’t see vacation packages for 6 nights on an oil rig, but taking the leap mentally with my partner got me laughing so hard I could barely finish the scene.

**Further the conversation.** Contribute new ideas that build on what someone has said. This enhances relationships on and off stage.

**Pay attention.** With improv, all you have is material generated by you and your partners. For those of us who frequently tune out family members to think about to-do lists, paying close attention to others is like waking from reverie.

**Initiate action.** Do something, even if it’s not quite logical. Once my partner and I were given the prompt, “python.” Suddenly I was holding an imaginary rat to feed the python. I don’t think pythons even eat rats, but at least we had something to work from.

**Take a risk.** For me, risky behavior is standing in front of people and making things up as I go. But doing so in class led to several moments where I was surprised by my own mind, and each time was a gift to my esteem.

**Play.** In adulthood, it’s easy to let your life become one big list of chores and obligations. Even planning a vacation can seem like work. Improv has helped me recapture some of the magic of childhood, when I felt like anything was possible.

The day before the performance for Improv 101, my anxiety set in. Shouldn’t I be going over some notes? Formulating a back-up plan? I could do nothing except get a good night’s sleep.

I wouldn’t say I knocked ‘em dead, in part because I was knocked pretend-dead early in my one big scene. But for a few moments I was up on stage under the bright lights and speaking as purposefully as I could.

Even though my big scene ended quickly, my experience with improv is ongoing. I’m now taking Improv 201. And I can tell you why: after spending my days marking up grammar errors and logic flaws in manuscripts, it’s fun to be in a YES, AND place for a while.

Jennifer King, PhD, ELS, is president of August Editorial, Inc. Her e-mail address is jking@augusteditorial.com.
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Template Tips
By Daniel Benau, Peggy Boe, and Barbara Snyder

1. Before starting any regulatory writing project, find out whether you are expected to use a standardized template. Many companies have their own regulatory templates, and often they are governed by standard operating procedures (SOPs). Check whether the template you are given is a “.doc” or a “.dot” file. If it is a “.doc,” ask whether there is also a “.dot” file to ensure that you are using company-approved styles.

   • If you are sent a “.dot” file, be sure to download it to the appropriate template folder (see Table 1 on page 67 of the Journal).
   • After the template is downloaded, you will still need to attach it to your Word document.

   In Word 2003 and Word 2011:
   a) Choose “Tools” and “Templates and Add-Ins.”
   b) Click the “Add” button on the middle right of the dialog box that appears.
   c) A dialogue box called “Add Template” appears; click on the .dot file whose styles and macros you wish to attach to your document.
   d) The template that you selected should appear with a checked box to the left in the window of the Templates and Add-Ins dialog box.
   e) Click “OK” at the bottom of the dialog box. Your template is now attached, and you should have access to the styles and macros of the template to which the document has been attached. Note that the “Normal” template remains attached as well.

   In Word 2007 and 2010:
   a) Open the document that needs a new template attached.
   b) Go to the large MS logo icon to the left of the Home tab (Word 2007) or the File tab to the left of the Home tab (Word 2010), on the ribbon bar.
   c) On the bottom right (Word 2007) or second from the bottom (Word 2010), choose the Options command to open an Options dialog box.
   d) Select “Add-Ins” from the list of options that appears on the left side of the dialog box; a dropdown menu will open.
   e) At the bottom of the dropdown menu is a line labeled “Manage,” which has a dropdown list starting with “COM Add-ins.” Click on the down arrow and select “Templates.”
   f) Click “Go.”
   g) A Templates and Add-Ins dialog box will appear. The template name that appears is the template currently attached to the document.
   h) Click “Attach.”
   i) An Attach Template dialog box will appear.
   j) Select the template you want to attach and click “Open.”
   k) The template is now attached, and you’re almost done.
   l) Go back to the Templates and Add-Ins dialog box.
   m) Select “Automatically Update Document Styles.”
   n) Click “OK” to change the style of the document to adopt those of the template you’ve chosen.

2. Styles are embedded in the pilcrow sign (¶), also known as “the paragraph sign,” at the end of every paragraph (word, line, sentence, etc). If you need to copy and paste content from one document to another, highlight everything EXCEPT that symbol. Then use “Paste Special,” and (typically) “unformatted text,” to avoid carrying unwanted styles into your template. The pasted text will adopt the style embedded in your document instead of the one you copied from.

3. Use various heading level styles throughout your document consistently. If you do, you’ll be able to automatically generate the Table of Contents, by choosing “Insert”→ “Reference”→ “Index and Tables”→ “Table of Contents.”

4. To align text in the Table of Contents (TOC) and Lists of Tables and Figures:
   • Use a tab between the heading number and the title rather than spaces. In the example that follows, section 6 and 6.1 are left aligned in the TOC. Section 6.2 is not aligned, because spaces were used instead of a tab.
6. Adverse Events
6.1 Analysis of Adverse Events
6.2 Common Adverse Events

5. Similarly, for in-text tables, do not use the spacebar to indent content within a cell—use the tab ruler at the top. Using the tab ruler will help render the document to a clean pdf with the intended indents; using the space bar may not keep the indents intact.

6. To view the styles present in your document to make sure the styles are compliant:
   • In your toolbar, choose “View”→ “Normal”
   • You should see a display of the style of each paragraph in the left margin.
   • To close out of that screen, choose “View”→ “Print layout.”
How to Write and Publish a Scientific Paper, 7th ed.
Robert A. Day and Barbara Gastel
Santa Barbara, CA: Greenwood Press (an imprint of ABC CLIO); 2011

Robert Day and Barbara Gastel have teamed together to write the seventh edition of How to Write and Publish a Scientific Paper. This comprehensive book first answers the question, “What is scientific writing?” and then goes into historical perspectives and the beginnings of the IMRAD story, which started with Pasteur. He developed the idea that a paper should be written so that the same results could be reproduced if the procedure was followed exactly. IMRAD, the acronym for introduction, methods, results, and discussion, forms the organization scheme for most scientific papers today.

The authors have divided the book into eight parts: Some Preliminaries, Preparing the Text, Preparing the Tables and Figures, Publishing the Paper, Doing Other Writing for Publications, Conference Communications, Scientific Style, and Other Topics in Communication. The 41 chapters focus on two separate tasks: how to write the sections of the scientific paper and how to publish the paper. All the chapters are well written and chock full of valuable information. The section on other topics included helpful information that is not usually seen in books on scientific writing. For example, I was especially interested in a section on writing grant proposals and progress reports. The authors also address such important topics as how to work with the media, preparing oral presentations, and how to provide peer review. An appendix of four sections is a fine reference for acceptable word title abbreviations, words and expressions to avoid, and helpful websites.

Although one would not read this book from cover to cover, the sections are self-sustaining and can be read as a topic of interest may arise. I recommend this book for the library of medical writers.

Robert A. Day and Nancy Sakaduski
Santa Barbara, CA: Greenwood Press (an imprint of ABC CLIO); 2011

In this book, Robert A. Day and Nancy Sakaduski present a basic guide to English grammar that is specifically tailored to the needs of scientists and medical and science writers. The book is organized in 20 chapters, each of which is self-sustaining. This basic guide to the fundamentals of English addresses such problems as redundancies, abbreviations, acronyms, jargon, foreign terms, e-mail, online publishing, blogs, and writing for the Web.

This third edition of the book is full of suggestions and updated examples—not generic, but rather specific examples from science. One helpful chapter (chapter 3) provides advice on self-editing. Chapter 20, new with this edition, discusses electronic media, a growing force in all fields.

This book is an excellent one for reference. It should be a welcome addition to the medical writer’s library.

AMWA receives many books on techniques of writing. This month, we review three important books for a medical writer’s library: How to Write and Publish a Scientific Paper, Scientific English, and Listen, Write, Present.
Listen, Write, Present. The Elements for Communicating Science and Technology
Stephanie Roberson Barnard and Deborah St. James
New Haven, CT; Yale University Press; 2012

Stephanie Roberson Barnard and Deborah St. James are communications specialists who have designed this lovely book specifically for medical communicators. This book is one that you will read from cover to cover. Divided into four basic sections, the book presents the topics: Plan, Listen, Write, Present, Meet, and Serve. The thesis that the authors present is that good leaders must learn not only to communicate within their field of expertise but also to reach people outside the field. Many people who were trained in science did not learn these skills in school.

Sound, common sense advice is given to the science communicator. Plan. Before you begin to write or speak, stop. A few minutes of planning can save hours of backtracking and misunderstanding. Listen. The skill of active listening is taught. The authors show how to use eye contact, to listen politely, to interrupt politely, and to accept criticism with grace. Write. One of the biggest communication shortfalls is the quality of writing. The authors take the reader in steps, using bulleted points and pertinent illustrations. Present. One of the most challenging things for a science communicator is producing an interesting presentation. Who has not experienced “death by Powerpoint”? The authors tell explicitly how to create slide presentations with pizzazz to get your message across.

This sleek book is easy to read—almost the type you will not put down. It is a book that all medical writers and presenters should have in their libraries.