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AMWA JOURNAL 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 as a professional organization.
FROM THE EDITOR
VICTORIA J. WHITE, MA, ELS

The View From the Editor’s Desk

This is it—my last issue as editor of the AMWA Journal. A moment ago—or perhaps it was 4 years ago—I was writing my introductory column, and now I am ready to sail off into the sunset.

Well, not exactly. I’m not really into sailing, and, as a longtime member of AMWA, I doubt that I will disappear over the horizon. AMWA has been too big a part of my professional development. From my first Florida Chapter lunch at the edge of the now-not-quite-so-new millennium, I have relied upon AMWA as a guiding light in matters of medical communication knowledge, skills, ethics, business advice, and inspiration. AMWA’s greatest strength is in its members, who generously pass along their wisdom in workshops, panel discussions, roundtables, online forums, chapter events, and webinars—and in journal articles.

My sincere hope is that you have found the journal to be valuable, a lasting resource that you can return to in the coming years. By temperament, I am drawn to collecting strands of information and viewpoints that I try to shape into a coherent whole. That’s been my approach as journal editor as well. No one article will ever provide all that you need, nor will one publication, but I hope that each article has something to offer someone. It could be a tip that makes you more efficient, a review that alerts you to the existence of a book you had never heard of, an update on regulatory requirements that helps you stay at the top of your game, or a research study that—even if preliminary—sets you on a path to greater understanding. The articles in these pages are strands for your consideration. Read and ponder them; then, if you have found the ideas and information useful, build upon them—or reject and build anew.

My perspective as editor has been shaped by my background as newspaper reporter, university communication office writer, peer-reviewed journal managing editor, freelance writer, and owner of a small business. It is important to note, however, that AMWA has a diverse array of members, who define their professional lives in different ways, who communicate to different audiences. By stepping aside, I will be able to free up some space in my life for other medical writing and editing activities; simultaneously, I will free up space for other perspectives within the journal. I can’t wait to see what’s to come.

This was a good moment for me to step down from the editor’s perch, but it’s not a step away from AMWA.

Joy and Thanks

It was nearing midnight one evening in August, and I was reviewing the corrections from the proofreaders who had scoured the text of the upcoming issue. It may have been the lateness of the hour that loosened up a buried emotion, but I had a startling response to a correction from volunteer Diana Mathis, who had written, not for the first time: “Delete the comma before and (single subject, compound predicate).”

My sudden thought? What an exquisite joy this has been!

Now, to be sure, it hasn’t all been exquisite joy, but I have learned so much from everyone I have encountered. I have had the opportunity to work with, and learn from, some of the best in the business. The journal benefits from professionals who care about every aspect of communication—commas, clarity, content. I am grateful for the care that so many people have put into the journal as they strived to make it all even just a little bit better. I have collected years of moments beyond the Exquisite Incident of the Compound Predicate, Single Subject in the Nighttime.

I have not thanked my colleagues nearly enough. I am indebted to the members of the journal’s Editorial Board, who have been indispensable in generating article ideas, finding authors, reviewing manuscripts, and writing articles themselves. Graphic designer Amy Boches continues to do beautiful work issue after issue. AMWA staff, in particular Executive Director Susan Krug, Deputy Director Shari Rager, and Manager of Communications Rachel Spassiani, have been key supporters and collaborators. Year in, year out, members of the AMWA Executive Committee have stepped up with timely news about the organization, and they have always been a pleasure to work with. On the Executive Committee, a special thanks to the individuals who have served as publications chairs these past few years—Anne Weber-Main, Deb Whippen, and Ann Winter-Vann—and to Lori Alexander, current president and my predecessor as editor.

Many AMWA members have provided anonymous peer reviews, and many authors have contributed articles to the journal. Tom Lang continues to be both an important
The television show *Grey's Anatomy* follows the careers of several surgeons from their days as interns to their days as attending physicians. I didn’t watch this show during its first 12 seasons on ABC TV, but over the past several months I have been binge-watching it on Netflix. I can’t vouch for the accuracy of the surgical procedures depicted, but the show has served to remind me of how much I enjoyed my very first medical editing position as director of the Publications Office of the Department of Surgery at the University of Kentucky. It was an exciting challenge to work with those exceptionally intelligent, confident, and driven surgeons. I particularly enjoyed my stint as the departmental photographer, when I was often called into the operating room to take photos of some particularly interesting procedures. I’ll never forget the first time I watched a kidney transplant. To watch the surgeons remove the clamps blocking blood flow into the newly transplanted organ and to see that kidney turn from a lump of white flesh into a dark red, fully functional organ was almost miraculous.

I firmly believe that many of the characteristics that I observed in those surgeons have greatly affected the type of medical editor that I have become. So, at the risk of being simplistic, I’d like to share with you some of those characteristics—characteristics that are applicable not only to medical writing and editing but also to almost anything that we undertake in life.

**The first characteristic is precision.**

In my visits to the operating room I noticed that specific tools were used in the various surgical specialties. Plastic surgery, orthopedic surgery, otolaryngology, laparoscopic surgery—each specialty had some tools in common but also some unique tools that weren’t used in the other specialties. And the selection of tools varied not only by specialty but also by procedure; for example, plastic surgeons used certain tools to repair a child’s misshapen skull but different tools to repair sagging eyelids. The surgeons had to learn the techniques for using each tool to perform the task for which it was intended.

Similarly, we as medical writers have a myriad of tools from which to select. Of course, our tools aren’t made of stainless steel or titanium. Our tools are words, and a lack of precision in using them makes our writing unclear and ineffectual.

Let me give you a couple of examples of imprecision in word choice.

The medical literature clearly supports the need for therapies like this one.

In this sentence, the word *like* is misused. It indicates that there is a need for therapies like this one but not for this particular therapy. The correct wording would be such as this one.

Inhaling secondhand smoke during infancy increases respiratory infections.

A respiratory infection is a finite thing; it can’t be increased or decreased. What could be increased or decreased is the infection’s incidence, its severity, or its duration.

Saying what we actually mean to say is important for good communication.
The second characteristic is discipline.
The education of surgeons is called training. I'm certainly not an athlete, but I've learned that professional athletes train by disciplining themselves and by putting themselves in situations similar to those that they will face in competition.

Surgeons train in much the same way—by practicing their skills in situations similar to those they will face in the operating room. One training supply included in our surgery department's budget was pigs' feet, purchased at the grocery store. Why pigs' feet? Because the skin of those feet is similar to human skin, trainees use the pigs' feet to practice suturing techniques.

An inexperienced surgeon isn't just thrown into the OR and told to perform an appendectomy. The task is broken into parts—approach, incision, recognition of anatomical structures, suturing, etc. Each of the component parts of a surgical procedure is practiced until the new surgeon is ready to assist an experienced surgeon and, finally, to perform the entire procedure alone. It was in the surgery department that I first learned the mantra: See one, do one, teach one.

In the same way, our profession requires that we master particular skills, such as grammar, sentence structure, punctuation, transitional elements, paragraphing, rhetorical effect, microediting, macroediting, proofreading, copyediting, etc. Mastery of any skill, whether playing the piano, editing, or writing, requires practice. We can't master everything at once—we need to master one part and then move on to the next, always practicing and repeating the parts until we can finally master the whole. I haven't reached that point yet, but I'm trying!

We can practice our skills even when we aren't working on a particular editing job. I've often said that being an editor can be a curse—I've been known to "edit" our daily newspaper, the novels I read, and even cereal boxes! Finding bad writing isn't difficult. We see it every day, everywhere. Here are a couple of examples.

The first example comes from a World War II documentary that aired on television.

*Sprinting back to our lines, the grenades detonated.*

I've never seen a grenade sprint, but I would certainly run away if I ever did!

The second example comes from a novel I'm currently trying to read.

*He wouldn't trust them with a ten-foot pole.*

This sentence is, of course, a mixture of "I wouldn't trust them as far as I could throw them" and "I wouldn't touch them with a ten-foot pole." I may not be able to finish this novel, because it is chock-full of errors such as these!

We need to train our minds to recognize bad writing and to decide how to correct it, no matter where we see it.

The third characteristic is focus.

It always interested me when I entered an operating room to find that the room was often quite dark, with very bright lights focused on the surgical field. I also noted that the patient was draped and that the only part of the body that was visible was the part that was to be addressed surgically. I realize that draping has several purposes, not the least of which is its role in maintaining a sterile field. But I also think that the bright light and the draping help the surgeon focus on the task at hand.

For editors and writers, focus is somewhat different, but it is still important and necessary. We need to learn to eliminate distractions that would keep us from concentrating on our work. Eliminating distractions is easier when we work in a private office than when we work in cubicles, but there are things we can do to focus ourselves on our work, such as wearing earphones, using a lamp or a well-placed light to help us focus on a page, and turning our backs to the office door or cubicle opening to avoid paying attention to people walking by.

I've often heard surgeons say that when they are concentrating in the operating room, a 6-hour procedure can seem to take only an hour. I'm sure all of you have had the same experience when you're really concentrating on your work.

But it's difficult to maintain this degree of concentration. Even surgeons need to take breaks during a particularly long and complicated procedure. When you feel your focus begin to slip, take a break. Get up and walk around. Go and get a drink of water or a cup of coffee. Clear your mind for a few minutes, and then get back to the job with renewed focus and concentration.

Focus requires dedication. Dedication to our work is something that we can control. No matter how unhappy we may be with our coworkers, our boss, our salary, our cubicle, we can choose to dedicate ourselves to our work. We need to develop the attitude that each job we do is important. While we are working on those jobs, we need to focus on them and do them to the best of our ability.

The fourth characteristic is lifelong learning.

When I worked in the surgery department, our chairman would sometimes call me from the operating room when he ran across an interesting or unusual situation. He'd ask me to perform a literature search on a particular topic and then read him the abstracts of a couple of pertinent articles so that he could continue the surgical procedure he was performing. I was always a bit nervous when this happened, because I was afraid that I'd miss THE article that would tell him what he needed to know.

Today, of course, the world has changed, and journal articles and a wealth of other information are just a mouse-click away. This availability of information makes lifelong learning
Surgery has come a long way. As a resident of Kentucky, I have learned that the first-ever successful abdominal surgery (successful meaning that the patient didn’t die) was performed on Christmas Day 1809, in Danville, Kentucky, about 45 miles from Lexington. Dr Ephraim McDowell successfully removed a 22.5-pound ovarian tumor from Jane Crawford, without benefit of anesthesia or antisepsis.1 Mrs Crawford lived for another 32 years after the procedure.

During the Civil War, the surgical procedure most commonly performed was amputation, again without benefit of antisepsis, although chloroform was available as an anesthetic. This procedure was so common because surgical technique had not yet advanced to the point that severely injured limbs could be saved. At that time, the most important surgical skill was speed.2

Two of the most important developments in modern surgery are microsurgery, which allows, for example, preservation of limbs that would otherwise be lost, and laparoscopy, or minimally invasive surgery. Minimally invasive surgery can often be better for the patient, because the incisions are much smaller, the damage to the tissues that surround the area of interest is minimized, and recovery times are shorter.

Now that I’ve been an author’s editor for more than 25 years, it seems to me that we need to learn to practice minimally invasive editing. Let me explain what I mean.

Some editors whom I know don’t actually edit; they rewrite. Beloved AMWA workshop leader Edie Schwager and I discussed several times the fact that rewriting isn’t editing. In fact, editing is much harder than rewriting. Rewriting is akin to amputation—it’s removing most of the text that the author wrote (except the idea) and replacing it with text that the editor writes. When we give a rewritten piece back to the author, the author often feels that his work has been chewed up, and he doesn’t understand why the editor made the changes that were made. After all, the author probably believes that his writing was good and just needed some “minor polishing.” He can’t understand why so much of his own writing was amputated.

My approach to editing is much different. I try to correct defects rather than amputate them. I try to preserve as much of the author’s original language as possible. This means that I start with microediting (like microsurgery). I’ve learned that many of the flaws in a document involve errors in grammar, punctuation, and sentence structure. I can correct those errors while doing minimal damage to the material I’m editing, thereby preserving the author’s style and much of the author’s language.

In addition, if I’m asked to do so, I can justify (or explain) each of the changes I’ve made by appealing to an authoritative source, such as the AMA Manual of Style. In this way, the authors can (if they choose) learn to correct their errors and become better writers. By editing in this way, I’m being not only an editor but also a teacher.

Performing this kind of editing requires finely honed skills. It’s not enough to say, “Well, my version just sounds better.” We need to learn the reasons behind the changes we suggest, and we must learn how to explain why the edits we make are necessary for improving the document.

The sixth characteristic is teamwork. During a surgical procedure, the movements of the surgical team often seem to be choreographed. Each participant has a particular spot around the table; the scrub nurse anticipates the surgeon’s needs and has the appropriate instrument ready at the appropriate time; the assistant holds the retractors or applies suction; and the surgeon performs the complicated task of surgery while often simultaneously teaching the assistant and other trainees about the procedure. In the operating room, every person has a specific role to play.
My experience has shown me that the best editing work (and sometimes the best writing work, as well) is done by teams. In every editorial office I’ve managed, I’ve instituted a team approach to editing. One editor was assigned to be the lead editor on the project, and a second editor was assigned to be the assistant editor who read through and commented on the project after the first editor had completed it. This practice worked especially well for me at St. Jude Children’s Research Hospital—the material to be edited was very scientifically complex, and I’m not a scientist, so I often edited the work for language and then had one of our PhD-scientist editors read through it to ensure that my beautifully crafted sentences still made sense! I could return the favor by reviewing their edited pieces and commenting from the point of view of a person educated in the humanities. We learned from each other.

Many of you who work in the pharmaceutical industry are used to working in teams. And even those of us who have worked primarily in academic settings are used to working with a group of authors, each of whom contributes something specific, whether it be statistical analysis, a review of the appropriate medical literature, or a discussion of the clinical significance of the report.

As team members, we need to know our roles, and we need to play those roles to the best of our ability. We need to know who’s in charge, and we need to complete our assignments on time and as carefully and thoroughly as possible.

The seventh characteristic is mentoring. The surgeons I worked with often credited their success to older surgeons who had mentored them. I believe that each of us should have a mentor, whether formally or informally. I’ve had several mentors throughout my association with AMWA. One of them, of course, was Edie Schwager, author of the long-standing “Dear Edie” column in the AMWA Journal. I’ve never met anyone so willing to share her time, her knowledge, her opinions, and her friendship as Edie was. Another of my mentors was Guy Whitehead, a long-time AMWA workshop leader who died earlier this year. I miss both of them very much.

At this point, at the risk of omitting some very important people, I must acknowledge those who have greatly contributed to my work with AMWA. First, I thank Tom Lang, who gave me my first opportunity to teach a workshop at the Ohio Valley Chapter’s old Deer Creek Conference. I also thank Mary Knatterud, who asked me to lead my first workshop at the annual conference when the early arrival of her daughter prevented her from presenting her punctuation workshop. I thank 2 past presidents of AMWA: Barb Good, who gave me my first position on the Executive Committee, and Marianne Mallia, who guided me so generously and patiently through my year as AMWA president. And, of course, I thank Nancy Taylor, an acclaimed AMWA workshop leader who has worked on so many projects with me and who really shares in this award. And if you have participated in one of my workshops, I thank you, too, because your comments and constructive criticism have enabled me to continually improve those workshops.

Because I’ve been blessed to have such wonderful mentors in my editing and writing career, I’ve tried to serve as a mentor for others who are beginning their careers. I’ve been able to participate in the formal training of several young editors, and I’ve also been able to teach several authors how to improve their writing. I find these activities rewarding.

Let me encourage each of you to find a mentor, if you don’t already have one. Even better, find several mentors! Seek out the qualities you wish to emulate and practice them.

For those of you who are more experienced, I encourage you to mentor someone. You may set up a formal mentoring relationship with frequent face-to-face meetings, or you may choose to develop a more informal relationship. Either way, I believe that sharing our knowledge and skills with others is very important.

And let me remind you of one other thing: you never know who’s watching. Others may be learning your bad habits as well as your good ones! So be the best you can be every day, and you may find yourself mentoring someone without even knowing it.

Conclusion
People who demonstrate the characteristics I’ve discussed are the people with whom I want to work. I was honored to be able to work with so many surgeons who demonstrated these characteristics, and I’ve tried to demonstrate them in my own work life. I hope that this presentation has in some small way inspired you to become even better than you already are, to work even harder, and to become even prouder of your work as you continue the process of lifelong learning.

I am both honored and humbled by this award. If you had told me in 1990 when I joined AMWA that one day a North Dakota farm girl would be standing before you on an occasion such as this, I wouldn’t have believed you. I thank all of those involved in the nomination and selection process, in particular Bari Harvey and his committee. Thank you for this award. I will cherish it.

References
Using medical jargon makes you look smart, right? Not so, said Roxanne Khamsi, long-time health reporter and chief news editor at the international biomedical journal Nature Medicine. In fact, she said, the more jargon you use, the less professional you seem.1

Khamsi, winner of the 2016 Alvarez Award for excellence in communicating health care developments and concepts to the public, finds the Alvarez Award especially meaningful because Walter C. Alvarez spent much of his career communicating with wide audiences through his newspaper column. Alvarez’s “drive to communicate science clearly is something that really inspires me and continues to be something I work towards,” Khamsi said.

Why Do Medical Writers Use Jargon?

Many writers have the impression that using technical words conveys authority. Khamsi, however, thinks it undermines what we do and fails to engage people. Unfortunately, as the number of words in our language increases, this proliferation of words makes it challenging for medical writers to make their content clear, Khamsi said.

In a survey of 110 Stanford undergraduates1 who were asked about their writing habits, 86% admitted to changing the words in an academic essay to more complicated language to sound more valid or intelligent, Khamsi said. However, use of such jargon may actually make the writer look worse. Khamsi cited a study in which medical fellows who used jargon were rated as less professional by actors playing the role of patients.2 As the jargon increased, the “patients” perceived the fellows to be less empathetic. This is disappointing, Khamsi said, because the purpose of communication is to connect with someone else.

Readers of Medical Content Have Changed Over Time

Medical communicators’ work has become more challenging in the Internet era. Two decades ago, medical journals were typically disseminated only by mail. Now, the Internet gives access to such content to the public—even patients are using PubMed. In Khamsi’s experience, patient groups and patient advocates are reading Nature Medicine’s articles online, even though the journal’s core audience is biologists and researchers.

What Are the Repercussions of Jargon?

Khamsi recounted her visit with near-centenarian Bernard Lown, MD, inventor of one of the earliest defibrillators and a winner of the Nobel Peace Prize. Lown described a patient—Mrs S—whom he had met 6 decades earlier. She had what he called a “mild heart condition.” Lown was a fellow at the time and under the mentorship of a Dr Levine. Entering Mrs S’s hospital room with an entourage of trainees, Dr Levine greeted her warmly and told his trainees, “This is Mrs S, and she has TS.” When Dr Levine left, Dr Lown asked why Mrs S looked upset, to which she responded, “You heard him—I have TS.” Lown asked, “What do you think TS means?” She responded, “You know, terminal situation.” “No, it means tricuspid stenosis and you’re fine,” Lown said. “You’ve been living with it for a decade.” Unfortunately, she didn’t believe Dr Lown. Mrs S’s health deteriorated and she died of heart failure soon thereafter. “The word TS was like a hex,” Lown said. “It was a powerful lesson of the power of the mind and it shifted my whole research.… Words matter.”

Jargon Can Be Counterproductive

Classic science journalism wisdom says not to overestimate your readers’ knowledge or underestimate their intelligence. To wit: although professional audiences may be well-versed in medical terminology, nontechnical audiences are not likely to be. Khamsi described an article about phenylketonuria that she wrote for Nature Medicine. In the article, she wrote: “Her reason for skipping meat is a genetic condition, whereby her body cannot tolerate more than a few grams of protein each
day. At age 28, she has never eaten a hamburger.” Khamsi said she instead could have written “…metabolism of the alanine side chain.” But, she said, “I wanted to have the reader empathize with what it was actually like to have this disease.” Clearly, the nontechnical audience would better understand the words Khamsi chose.

Inclusion and Exclusion Criteria in Medical Writing
So then, what are some of Khamsi’ s tips to avoid jargon in medical writing?
• Use short, simple words when possible.
• Use direct language when possible, for example, “in mice” instead of “in vivo.”
• Do not use technical terms unnecessarily.
• Do not use words and acronyms with double meanings (like TS in the example by Dr Lown).
• Introduce concepts first, then use the technical terms, which will improve comprehension.

Reiterating Dr Lown’s wisdom, Khamsi reminded us, “Words matter.”

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References
KevinMD.com may now be one of the most popular health education websites, with hundreds of thousands of visitors each month, but it wasn’t so long ago that social media tools to educate patients and share connections with them did not exist. In his address at this year’s annual conference, Kevin Pho, MD, a board-certified internist and winner of the AMWA 2016 McGovern Award for preeminent contributions to medical communication, shared his social media journey and his views on how social media can transform medical communication and people’s lives.

Embrace on the Journey of Social Media
In 2004, Pho founded KevinMD.com, which has developed into a highly influential website with more than 2,000 contributing authors sharing their stories and insights. Contributors include doctors, patients, medical students, and policy experts.

Pho began to realize the power of the Internet to bring medical information to the public when he was appointed an “expert” for Google Answers, a service the company operated from 2002 to 2006 to respond to questions from users.

The health questions Pho received were general at first, then they became more personal appeals for advice and second opinions. “They would email me high-resolution images of every body part imaginable,” he said. As the email load increased, he said, “I realized then that patients just weren’t getting the information they needed in the exam room….I realized how the Internet could play a role in filling that information void.” When he first learned what a blog was through his brother-in-law, he launched KevinMD.

“One of the reasons that I became a doctor was to give patients voices when they felt vulnerable,” Pho noted, and the Internet allowed patients’ voices to be heard. He started...
to write blog posts to share his expertise in medicine with the public. A few months later, the anti-inflammatory drug Vioxx was recalled because of cardiovascular risks, spreading fear and uncertainty among patients. To ease the panic, Pho wrote a blog post on the issue of Vioxx, and his advice was well appreciated by patients.

“I realized then that patients just weren’t getting the information they needed in the exam room….I realized how the Internet could play a role in filling that information void.”

Educate Patients
According to the Pew Research Center, 72% of Internet users search online for health information. Of great concern, however, is that many organizations and celebrities with no medical background post, tweet, and share health information that is often inaccurate or misleading but nonetheless influences decision making. For example, measles re-emerged as a public health threat in 2014 after years of inaccurate assertions that vaccines cause autism. Research published in 2011 on the 10 largest Facebook groups dedicated to diabetes management showed that 27% of posts promoted products, including supplements and “natural cures,” that were not approved by the FDA.

Pho has encouraged doctors to use social media to interpret health care news, guideline changes, medication recalls, and new drugs and to “become filters for patients and help elevate wisdom on the Web.”

As an example of engaging the public and elevating the wisdom, Pho played a YouTube video of Robert Hamilton, a California pediatrician, demonstrating how to soothe a crying baby; the charming video has garnered more than 20 million views and attracted widespread media attention.

Pho provided several examples from his website of doctors and patients sharing information, providing a human side to medicine.

“Social tools have shown me the great power of my voice; they show me the ability to really transform health care… and to reach hundreds of thousands of people I never would be able to in the exam room in Seattle, Washington,” said Wendy Sue Swanson, a pediatrician who contributes to KevinMD.com.

“There is power in knowing that you are not alone… Sharing patients’ stories and being part of something bigger than yourself is crucial to emotional health, and emotional health is crucial in maintaining physical health,” said Kerri Morrone Sparling, a blogger and speaker who shares her battles with diabetes.

A surgeon shared her experience with depression and burnout. “The result of burnout is depression,” the surgeon said. “I clearly wasn’t performing to the best of my abilities, and my patients’ complications were increasing…. We need to look after ourselves individually and as a group. It’s time to admit that we are human.” By sharing hidden challenges in the medical profession, the humanized health professionals can build stronger connections with patients.

Embrace Opportunities and Challenges
Because of his increased prominence through social media, Pho has been able to make his voice heard in the mainstream media and by policymakers. He has written for the New York Times and USA Today, been interviewed on television news, and participated in policy debate with other medical experts.

Although there are many positives to using social media in health care, there are risks. “I’ve seen careers of young physicians derailed because of inappropriate use of social media,” Pho said. However, in consideration of the tremendous potential of social media to connect with and educate patients, to demystify the misperception of health care professionals, and to allow more voices to reach policymakers, Pho strongly encouraged more people in the health care arena to use social media responsibly and embrace the possibilities.

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References
WEEDING OUT THE MYTHS: HOW COLORADO PUBLIC HEALTH OFFICIALS AND PROVIDERS ARE MANAGING RECREATIONAL MARIJUANA

Speakers:
Elise Eller, PhD
Freelance Medical Writer, Eller Medical Writing, LLC, Lafayette, CO
Mike Van Dyke, PhD, CIH
Chief of the Environmental Epidemiology, Occupational Health, and Toxicology Branch, Colorado Department of Public Health and Environment (CDPHE), Denver, CO
Laura Borgelt, PharmD, BCPS
Associate Dean and Professor, Departments of Clinical Pharmacy and Family Medicine, University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences, Aurora, CO
Andrew Monte, MD
Associate Professor of Emergency Medicine and Medical Toxicology, University of Colorado School of Medicine, Aurora, CO

By Suzanne M. Pratt, DVM, DACVP, ELS

Colorado voters in 2012 approved a state constitutional amendment that paved the way for the legal sale and use of marijuana for adults aged 21 years and older. As other states consider similar measures, AMWA’s conference in Denver provided an opportunity to hear from local experts about implications—both minor and major—of the lifting of marijuana restrictions.

On the minor side: Panel moderator Elise Eller noted that although legalization hasn’t affected her personally, she has noticed new kinds of content in her local newspaper—articles about trends such as “pot coffee” and advertisements featuring marijuana products.

On the open session panel were 3 speakers who serve on the Retail Marijuana Public Health Advisory Committee of the Colorado Department of Public Health and Environment (CDPHE), a working group focused on understanding the science and developing the messaging to the public and health care providers.

The Public Health Perspective

Inside the health department, the legalization of marijuana was a huge paradigm shift. “Overnight, we went from a place where we treated marijuana the same as all other illicit drugs...to having to deal with marijuana in the public health realm in terms of education, prevention, and monitoring,” said Mike Van Dyke, PhD, chief of the Environmental Epidemiology, Occupational Health, and Toxicology Branch of CDPHE.

A scientific advisory panel of professionals with “expertise in cannabinoid physiology” was assembled for the Retail Marijuana Public Health Advisory Committee, with the following aims:

- Systematically review the scientific literature
- Review public surveillance data
- Recommend public health-related policies
- Recommend public health surveillance activities
- Identify research gaps important to public health

Van Dyke said the goal of the group is “to translate science into public health.” He noted that it is challenging to translate consensus statements into plain language. Van Dyke’s rhetorical question, “Have you ever been in a room with MDs and PhDs and tried to talk in plain language?” caused a ripple of laughter.

The CDPHE is monitoring use patterns based on population surveys and looking at trends post-legalization. Results of the Healthy Kids Colorado Survey for the period 2005 to 2015 showed that marijuana use by adolescents of high school age has remained relatively flat in Colorado and is similar to the national average. Compared to the prevalence of alcohol and tobacco use, marijuana use is in the middle. Although there are limitations to the data, Van Dyke considers them to provide reliable indications of trends.

Since recreational legalization, there have been increases in marijuana-related visits to hospital emergency departments. All panelists attributed at least a portion of this to increased availability. One area of concern is the increase in accidental exposure of young children. This is being addressed with public health education campaigns about proper storage at home and changes in regulations for packaging.

Pregnancy and Breastfeeding

Laura Borgelt, PharmD, associate dean of the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences and a professor of clinical pharmacy and family medicine, said that her newfound focus on marijuana had not been her intended professional path. “In fact, prior to marijuana coming onto the scene in Colorado, my areas of expertise and passion have been women’s health and patient safety. I learned very quickly, however, that marijuana and these passions blend perfectly.”

Borgelt’s clinical role in family medicine is to “help the providers be better prescribers.” Her team has had to deal with unexpected attitudes of patients about marijuana use during pregnancy and breastfeeding. A study of pregnant women after legalization found 8% to 14% of pregnant women tested positive for marijuana. Currently in review are results from a study showing an increase in marijuana use by pregnant women since legalization. This follows the general trend of increased use with increased availability. Other research underway is
examining the impact of marijuana use among breastfeeding women and their infants.

Borgelt noted that there are public health concerns related to both recreational and medical use of marijuana. Moderate evidence demonstrates that maternal use of marijuana during pregnancy is associated with negative effects on cognitive function and attention that may not appear until adolescence, she said. Counseling pregnant and breastfeeding populations about cannabis requires key messaging to ensure potential risks are communicated appropriately. Borgelt said that evaluation of drug interactions and certain health conditions is needed to determine appropriate use of cannabis.

Borgelt noted that resources are available to support health care professionals and patients to better understand benefits and risks for using cannabis.

Counseling pregnant and breastfeeding populations about cannabis requires key messaging to ensure potential risks are communicated appropriately.

Emergency Department Experiences
Andrew Monte, MD, a toxicologist and emergency physician, also came to the marijuana topic “purely by happenstance” after treating patients in the emergency department who needed care because of synthetic cannabinoid abuse. Monte started interacting with the public health department, wrote an article about Colorado’s experiences with legalized marijuana for JAMA’s Viewpoint section, and the rest is history.

The first thing Monte highlighted is that “things are much different than when you were in college,” and he proceeded to show images of a wide variety of cannabis products available today. There are many edible products that have, historically, been packaged to look like other candy products, “so of course kids are going to get into them.” New labeling regulations now use a uniform symbol to identify all THC-containing products.

Increased availability of any drug causes increased visits to emergency departments and hospitalizations, Monte said. With marijuana, there have been a number of negative unintended consequences. “The risks of use must be consistently communicated, especially for edible products,” Monte said. Emergency departments are seeing disproportionate risk associated with edible ingestion compared with other forms of use.

One syndrome associated with marijuana use is cannabino- loid hyperemesis. “Paradoxically, THC seems to be a potent antiemetic at lower doses, but with chronic use and higher concentrations of THC, there is an associated cyclic vomiting syndrome,” Monte said. The syndrome cannot always be managed by conventional therapies.

For writers looking for article ideas, Monte said there are plenty of marijuana-related topics to choose from, including:

- Pesticide use
- Financial implications for patients using for medical indications
- Effectiveness for specific conditions
- Safety for specific conditions
- Use as an over-the-counter therapeutic
- Effect of public health educational interventions

The panelists suggested that medical writers can play a major role in getting messages out to people and emphasized that writers should avoid overinterpreting data and should err on the side of safety. This is a politically polarizing topic, and staying close to facts when writing on the topic is important. Monte also recommended involving collaborators with a stake in the repercussions—people in the cannabis industry—as he had some very productive interactions with them.

There is more information becoming available every day. Writers can get information on marijuana by talking to the healthcare providers on the front lines and public health officials and by searching the literature. The CDPHE online resources are a great place to learn about the topic.

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RESOURCES

The “Good to Know” initiative of the Colorado state government provides information geared to the public.
https://goodtoknowcolorado.com/

Information from the CDPHE Retail Marijuana Public Health Advisory Committee
www.colorado.gov/pacific/cdphe/retail-marijuana-public-health-advisory-committee

MEDICAL WRITING IN REAL TIME: THE EVOLUTION OF AN OUTBREAK

Speakers:
Heather Marshall, PhD
Senior Medical Writer, DynaMed Plus, Ipswich, MA
Pei Chun Yeh, PhD
Senior Medical Writer, DynaMed Plus, Ipswich, MA

By Whoy Shang, MA, RN
Solid data form the foundation for all medical writing. Without reliable data, writers face a difficult challenge writing anything of use for their audience. Medical writers Heather Marshall and Pei Chun Yeh experienced this situation while covering the ongoing Zika outbreak.

The Process
Marshall and Yeh work with a team of clinical editors and specialists to develop clinically relevant content at DynaMed Plus, a subscription service that provides medical information to clinicians for use at the point-of-care. They focus on infectious diseases. “Pei and I synthesize best available evidence-based information from medical literature, and we present it in as clear, concise, and transparent a format as we possibly can,” Marshall explained.

She defined best available evidence as “the most rigorous methodological study for any given scenario.” Evidence that meets a defined set of methodologic criteria may be given a level 1 rating.1 Not every topic that they are writing about, however, possesses level 1 evidence. Initially, reporting on Zika was hampered by limited, low-quality data. Before 2007, fewer than 100 studies were available on Zika.2 When the latest outbreak began in 2015, Marshall and Yeh struggled to report with certainty or even high probability what was happening in the clinical setting, especially as Zika's devastating consequences were seen.

At DynaMed Plus, writers develop detailed information for a topic in 3 stages that often overlap: They identify and monitor available data; they write and publish on the topic; and they monitor emerging information and update the topic as needed. Normally, staff members systematically survey more than 500 medical journals. During an outbreak, they monitor additional resources such as ProMED (the Internet-based Program for Monitoring Emerging Diseases), the World Health Organization Disease Outbreak News, and the Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report. They also perform keyword searches in databases such as PubMed.

Tracking Zika
DynaMed's work on Zika began in May 2015, when a confirmed outbreak of Zika in Brazil was reported by ProMED. The search for outbreak data focused on 3 characteristics: increased number of cases, new geographical area affected, and/or increase in severity or comorbidities,” Marshall said. While they gathered and evaluated data, the clinical situation was deteriorating.

- **July 2015.** Forty-two cases of Guillain-Barré syndrome were reported in Brazil. At the time, no one knew whether or not they were related to Zika.
- **October 2015.** Zika infections were seen in Cabo Verde, West Africa, and Colombia, South America.
- **November 2015.** An increased incidence of microcephaly was reported in Brazil, and Zika outbreaks were reported in 6 additional countries in South America.

Yeh noted that, as they were working in 2015, no study had yet shown a causal link between Zika infection in pregnant women and microcephaly in their offspring. The increasing number of studies being published made sifting through them and assessing their reliability challenging. In addition, all studies failed to meet the criteria of level 1 evidence. Some had limitations (small cohort) or faulty methods (no standardized diagnostic approach to identify microcephaly), or they failed to identify Zika as the infectious agent. Despite limited data, the team determined there was sufficient accumulated evidence pointing towards an association between Zika infection and microcephaly. The DynaMed team decided to publish the topic in January 2016, with the limitations of the reported studies noted.

Evidence
In February 2016, the *New England Journal of Medicine* published a case report of an autopsy on a 32-week aborted fetus with microcephaly.3 Severe brain deficits and the Zika virus found in the fetal brain provided the first empiric evidence for the direct link between Zika infection and microcephaly. Subsequent studies published in *JAMA*, *Lancet*, and *BMJ* further reinforced the link. By April 2016, the CDC published a statement that Zika infection does cause microcephaly and other birth defects.

As new studies were published, the team critically appraised and incorporated them into the topic. Since publication, they have made more than 150 updates. In October 2016, DynaMed Plus published a separate topic devoted to Zika virus infection and its effects in pregnancy and congenital Zika syndrome.

Although the link between Zika and microcephaly has been resolved, other questions remain. Is Zika virus infection associated with Guillain-Barré syndrome? Are there additional modes of transmission besides mosquito, blood, and sexual contact? No one knows yet the full extent and long-term out-
comes of Zika virus infection. New questions continue to arise, followed by new studies. Marshall and Yeh still have a lot to do.

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References

SUBMIT IS NOT A PANIC BUTTON... REMOVING FEAR FROM THE SUBMISSION PROCESS

By Ryan Fell, PharmD
“The first time I had to hit the submit button I was nervous; I’ve jumped out of an airplane skydiving and I would prefer to do that over submitting again for the first time,” Charlotte Kenreigh opened. She and colleague Linda Wagner went on to provide practical tips for removing fear when submitting abstracts and manuscripts to journals and congresses.

“Dummy” Submissions Are Your Best Friend
Creating an account on the submission site is a useful way to gain access to the information you will need. Both Kenreigh and Wagner suggested doing this early in the process to form a plan of attack.

“Some congresses don’t even give you instructions unless you are actually in the submission site,” Wagner said.

Once the account is created, follow along with the steps that are involved in submitting. If you need to, use a dummy manuscript or abstract to review the entire submission site and gather important information, such as what types of questions are asked, who can actually submit the abstract or manuscript, and any limitations on word count or the number of authors. (Stop short of pressing the final “submit” button.) Look for questions you may not have the answer to or unusual questions. “I was once asked for the lead author’s birthdate,” Kenreigh said.

Create a Template
Use the information gathered from your dummy submission to create a template. You can share the template among colleagues or use it for multiple or future submissions. Use a header at the top of the template to highlight essential information, such as what congress it is being submitted to and the deadline for abstract submission.

Using a template can also be a good way to help authors stay within guidelines and provide guidance. For example, you could highlight the maximum word count allowed and the number of words in the abstract so authors will know that any changes must be within the limit. “I have a couple of clients who like to do the initial draft of the abstract. I will give them my template and that helps keep them on track,” Kenreigh said.

Phone a Friend
When there are issues that must be clarified, it is usually permissible to reach out to the appropriate representative at the journal or congress. “We have one congress we submit to that states in the instructions that you can only have 5 authors.
If we have 10, we write to them and they always say yes,” Wagner said.

Using your professional network is another good way to gather more information or clarify issues. Contact peers who have submitted to that journal or congress in the past. They will often have useful information that can help you resolve a dilemma.

Share your work with others and have them review it. This can help when stuck on a difficult problem, such as when trying to come in under the word count or making sure data are presented correctly. “The roadblock in front of you may not actually be a roadblock,” Kenreigh said.

Take a Deep Breath
You will likely always feel trepidation before you submit your abstract or manuscript. However, with preparation and a plan, you may be able to decrease your presubmission fear. When you are ready to submit, have a coworker take a final look, correct any remaining issues, and then take a deep breath and submit. Be sure to notify authors that the item was submitted and save the notification that the submission was successful.

After submitting, it is still possible that technical corrections may need to be made, and your submission may be rejected. Don’t fret. Mistakes will happen.

“If you make a mistake it’s not the end of the world. Fix it and move on,” Kenreigh said.

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SIX STEPS TO WRITING HEALTH CONTENT THAT MOVES PEOPLE

Speakers:
Debbie Dakins
Content Manager, Healthwise, Boise, ID
Colleen Cronin
Medical Writer, Healthwise, Boise, ID

By Laura Long, MA
You’ve heard the phrase “Put words into action”? Well that, my friends, is what I’m going to attempt to do here. In this recap of the 2016 AMWA conference presentation “Six Steps to Writing Content That Moves People,” I will try to apply what I learned from Debbie Dakins and Colleen Cronin’s tips to help writers create informational materials for the general public that can inspire and motivate people to make changes to improve their health and wellbeing.

Step 1: Be Conversational.
Dakins and Cronin recommended using a warm, friendly tone. They also cautioned against clinical and technical language. In other words, write as if you’re talking to a casual acquaintance. In addition, they advised writers to stick with the second person. I hope I’ve established a conversational, jargon-free tone. However, I hope you will give me a pass when I slip in a few first-person perspectives as I attempt to apply their recommendations to this write-up.

Step 2: Keep the Message Simple, Focused.
The big takeaway here is...to limit your takeaways. The presenters encouraged their audience to have clear objectives, to focus on no more than 3 key points, and to reiterate those points in the wrap-up. Again, I beg forgiveness because this is a review of 6 key ideas, so I’m going to stretch the takeaway recommendation a bit. But I promise to keep things simple.

Step 3: Promote Confidence and Choice.
Make health goals attainable and realistic. Dakins and Cronin emphasized the importance of avoiding shaming and finger-wagging. They added that when you’re writing to change health behaviors, you should try to put the reader in the driver’s seat. For example, I’m hoping that when you shift into writing gear, you will cruise away from this review remembering to test drive these 6 steps and see whether they help you engage your audience.

Step 4: Give Them a Reason to Act.
Nothing motivates us to make a change better than a clear idea of why it benefits us to do so. As the informational material the presenters shared points out, when your readers quickly see “what’s in it for me” (WIIFM), they are more likely to respond. And, they noted, don’t forget to stoke that ember of motivation with a call to action.

So, the WIIFM for those of you who are glancing over this story? Better ways to write content that gets results. The call to action? Give some of these ideas a try when you finish this recap.

Step 5: Include the Unexpected.
To help illustrate the idea behind Step 5, Dakins and Cronin shared a smoking cessation video produced by Healthwise. While many smoking cessation materials focus on the risks and dangers of smoking, the Healthwise video shared the progressive health benefits a person experiences when they quit smoking.
smoking. The refreshing, positive spin inspired 66% of those who viewed the video to report that they were now considering quitting. “If I’d been holding a mic when I heard that result,” said Dakins, “I’d have done the drop.” Peace out.

**Step 6: Invite Reflection.**
Actually, it’s not quite “peace out” yet. The final tip the presenters shared circled back to keeping things conversational, simple, and real. They advised the audience to acknowledge how difficult change can be and to pose their questions in a thoughtful, nonthreatening way that motivates the reader to mull things over and share questions with their health care professionals. Cronin noted that it helps her ensure sensitivity, as well as accuracy, when she receives input from behavioral psychologists and other specialists and colleagues before she finalizes materials.

Speaking of input, the presenters invited AMWA members to reflect on these 6 steps to help create health content that can inspire and contact them with any related questions or suggestions. You can reach Debbie at ddakins@healthwise.org and Colleen at ccronin@healthwise.org

Laura Long is the communications manager for Midwest Cancer Alliance – The Outreach Division of The University of Kansas Cancer Center.  
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**TARGETING LAY AUDIENCES**

**Speaker:**  
Lori L. Alexander, MTPW, ELS, MWC  
President, Editorial Rx Inc, North Fort Myers, FL

**By Dara Chadwick**

You might not think that classical rhetoric can play a significant role in developing health communications, but its principles can help writers build messages for any audience, said Lori Alexander. These principles, which include audience analysis, rhetorical appeals, and organization, will help medical writers create messages that resonate.

**Know Your Audience**

Communications for lay audiences include public health messages, patient education materials, decision aids, lay summaries or journal articles or clinical trial results, patient instructions, package inserts, news and magazine articles, and more. Regardless of the type of communication, the first step for medical writers is always the same: Know your audience.

The importance of this was recognized by Aristotle, Alexander said, adding that writers should begin crafting any communication by first considering whether there are audience-related factors that may be relevant, such as age, sex, health condition, literacy (reading, health), beliefs, attitudes, and cultural contexts.

**Reaching a Diverse Audience**

Writers can take several approaches to communicating with a diverse audience. One approach is to develop a “common denominator” message that will have relevance to most people. A second is to develop one fundamental message and then vary it to enhance its relevance for specific audiences. Alternatively, writers can develop distinctly different messages for different audiences—an approach that, while not necessarily practical, can be quite effective, Alexander said.

Writers can use tailoring or targeting (also called segmenting) to craft health messages. Tailoring—creating a specific message for each individual based on his or her unique circumstances—is often expensive and time consuming. Targeting involves taking a population, finding a similar subset based on certain factors such as age, sex, education, geographic area, psychographic characteristics, or a combination of all of these factors, and then targeting your message to meet the needs of the defined subset.

Once the writer has targeted the audience, it’s time to answer some questions:

- What is the best way to reach this audience?
- What benefits would appeal to them?
- What images should be conveyed?
- What challenges or barriers must be overcome?
- What actions can this audience take?

Whether you tailor or target your message, it’s important to know that “when an audience identifies with a message, it’s more apt to be influenced by it,” Alexander said. As an example, she used a target audience segmented by sex. Messages that focus on wellness, fear, and longevity don’t tend to work for men, she said, but information framed in terms of social roles such as “providers, protectors, and players” tends to resonate.

**Developing Messages That Work**

Alexander mentioned the role of rhetorical appeals in developing health messages that click with target audiences: Logos (logical), Pathos (emotional), and Ethos (ethical). “Classical rhetoricians agreed…you really need to integrate all three,” she said. “You can’t rely on just one of them.”
The logical appeal is prominent in communications such as decision aids and package inserts. Typically, this appeal includes concrete information about a disease or condition, along with data. Balanced information helps patients make informed choices and improves their knowledge about options.

The emotional appeal tends to work well when an audience is not yet interested in the topic. This appeal typically includes personal stories, materials written in conversational style, and compelling visuals, for example, photographs as a warning on cigarette packaging.

The ethical appeal, which refers to credibility, focuses on how the author presents himself or herself as an authority, such as the Centers for Disease Control and Prevention.

Organizing for Understanding
Classical rhetoric also offers guidance for organizing health messages. Writers are advised to capture the audience with delight through the use of anecdotes or stories with emotional appeal designed to draw the reader in, establish credibility, provide background, state the issue or argument, and conclude with emotional appeal once again. When it comes to presenting the “other side” of the argument, it’s important here as well to know your audience. “If you think the audience will agree with you, present your own argument first. If you think the audience won’t agree with you, present their side first,” Alexander said.

Writers can best integrate classical rhetoric in developing health messages by crafting balanced arguments, presenting numbers clearly, strengthening appeals with visuals, and organizing content to persuade.

Dara Chadwick is a Rhode Island-based writer, strategist, and creator of content that helps people live healthier lives.

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**RESOURCES**

Making Health Communication Programs Work: A Planner’s Guide
U.S. Department of Health & Human Services, National Institutes of Health, National Cancer Institute

Gateway to Health Communication and Social Marketing Practice
Centers for Disease Control and Prevention
www.cdc.gov/healthcommunication/index.html

The Gender Guide for Health Communication Programs
Center for Communication Programs, Johns Hopkins Bloomberg School of Public Health
www.who.int/management/genderguide.pdf

Talking Health to Men
Helen Osborne, On Call Magazine

**HOW TO ANSWER THE “SO WHAT?” QUESTION**

**Speaker:**
William Van Nostran
*Medical Communications Specialist, Rebecca D. Considine Research Institute, Akron Children’s Hospital, Akron, OH*

By Lori De Milto, MJ
What do target audiences need from the document you are preparing? Answering that question is the key to ensuring that readers get the information they need from research protocols, consent forms, website study descriptions, and journal articles, according to William Van Nostran, medical communications specialist at the Rebecca D. Considine Research Institute at Akron Children’s Hospital.

These 4 common medical writing genres are often based on the same information, but they differ in how they should be written to convey that information. Adapting content so that it is relevant and understandable is challenging when the target audiences for a particular document may include regulators, specialists, general practitioners, hospital staff, patients, and the general public (Table 1).

Medical writers should go beyond addressing the obvious questions. “Think deeper about what our multiple audiences need and the perspective they bring as readers,” Van Nostran said. Consider, for example, a research protocol. Its primary function is to serve as instructions on how to conduct the clinical trial for the entire study team. A secondary audience, however, includes the institutional review board, which includes both clinicians and community members. Many of the community members are not clinicians. The board members read and discuss the document from an ethical perspective, evaluating risks and potential benefits. For the community members, obscure jargon or technical language makes the document more difficult to understand.

In contrast to research protocols, the main audience for informed consent forms consists of research participants; if the participants are children, the audience would be parents. Writing in a conversational style can help clearly convey the information and reassure study participants (or parents) that the research is being conducted ethically.

**Bad Habits and the Appropriate Voice and Medium**
Medical writers need to think about what they do and why they...
do it, because training, experience, knowledge, and preconceptions often lead to bad habits that hamper communication. Using the appropriate voice for each medical writing genre starts with understanding the differences in knowledge, attitudes, and needs between the writer and the reader.

When writing for patients, family members, and the general public, a key consideration is health care literacy, defined by the Institute of Medicine as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services to make appropriate health decisions.” Health literacy varies based on factors such as age, education, sex/gender, ethnicity, and health concerns.

Information written in plain language is clear, readable, and useful to readers. “Plain language does not offend well-educated people. If something is well written, it’s well written,” Van Nostran said.

Studies show that informed consent forms written in simplified plain language decrease anxiety and increase satisfaction with the consent process. Medical jargon and research terminology lead to confusion, misunderstanding, anxiety, and misconceptions about the purpose of a trial and treatment. Medical writers should either explain medical and scientific terms or substitute commonly understood terms.

Taking a creative writing class can build skills that can enhance medical writing, Van Nostran suggested. In fact, he challenges the idea that literary devices, such as metaphors, do not belong in medical writing. Metaphors can help medical writers describe and explain science and persuade people about the scientific argument.

How to Answer the “So What?” Question
Medical writers need to ask the right questions and understand the key values for each target audience in order to answer the “so what?” question, concluded Van Nostran. Regardless of the genre, medical writers should think about these things before they start writing, and develop content appropriate for the audience’s knowledge, attitudes, and needs.

Table 1. Common Medical Writing Genres

<table>
<thead>
<tr>
<th>Document Type</th>
<th>Purpose</th>
<th>Readers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research protocol</td>
<td>To explain:</td>
<td>Institutional review boards</td>
</tr>
<tr>
<td></td>
<td>• Study purpose</td>
<td>Investigators</td>
</tr>
<tr>
<td></td>
<td>• Need</td>
<td>Clinical study team</td>
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<tr>
<td></td>
<td>• Therapeutic treatment</td>
<td>Medical writers</td>
</tr>
<tr>
<td></td>
<td>• Risk/benefit ratio</td>
<td></td>
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<tr>
<td></td>
<td>• Inclusion criteria</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Data analysis plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Plan for informed consent</td>
<td></td>
</tr>
<tr>
<td>Informed consent form</td>
<td>To explain:</td>
<td>Patients qualifying for study enrollment</td>
</tr>
<tr>
<td></td>
<td>• Study purpose</td>
<td>(family, friends, primary care physician)</td>
</tr>
<tr>
<td></td>
<td>• Participation requirements</td>
<td>Study team members</td>
</tr>
<tr>
<td></td>
<td>• Risks/benefits</td>
<td>Clinical coordinators</td>
</tr>
<tr>
<td>Website study description</td>
<td>Inform potential clinical study participants</td>
<td>Individuals with the illness or condition</td>
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<tr>
<td></td>
<td></td>
<td>seeking/considering clinical study opportunity (patients/parents of child)</td>
</tr>
<tr>
<td>Journal article</td>
<td>• Share knowledge within a specific medical domain</td>
<td>Practitioners</td>
</tr>
<tr>
<td></td>
<td>• Influence practice</td>
<td>Specialists</td>
</tr>
<tr>
<td></td>
<td>• Interdisciplinary knowledge dissemination</td>
<td>Students</td>
</tr>
<tr>
<td></td>
<td>• Participate in the research community</td>
<td>Researchers</td>
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<td></td>
<td></td>
<td>Patients</td>
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<tr>
<td></td>
<td></td>
<td>Medical/Scientific journalists (news media)</td>
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RESOURCES


THE MEDICAL WRITER'S ROLE IN HELPING PATIENTS MAKE HEALTH CARE DECISIONS

Speaker:
Kathi Whitman, MA
Senior Medical Writer/Project Manager, Intermountain Healthcare, Sandy, UT

By Ciranna Bird, MS

Imagine your loved one has been newly diagnosed with a chronic disease such as end-stage renal disease, breast cancer, or obstructive sleep apnea. Owing to the stressful diagnosis, your loved one may have trouble taking in new information and choosing among numerous treatment options within a limited time. Can your medical writing skills help this difficult process?

The answer is yes, according to Kathi Whitman, a senior medical writer and project manager. Medical writers can create effective decision aids and advocate the shared decision making process in the health care environment.

Shared Decision Making and Decision Aids
By definition, shared decision making (SDM) is a conversation between 2 experts: the care provider as the expert on medicine and the patient as the expert on his or her values, fears, and lifestyle realities.

During this conversation, the patient and provider use the best external evidence, the provider's clinical experience, and the patient's knowledge of the social influences, financial situation, and supports that are available at home to identify the most suitable treatment options.

A decision aid facilitates the conversation between these 2 experts. Effective decision aids elicit and clarify patient values, fears, and questions. They are written with health literacy principles in mind. They present the risks and benefits of treatment options clearly and equally for each option, including the option of no treatment. To view examples of decision aids, visit the Ottawa Health Decision Center website at https://decisionaid.ohri.ca/AZlist.html.

Creating an Effective Decision Aid
Whitman suggests using a repeatable process, such as the 4-step process used at Intermountain Healthcare, where she works:

1. Ask Patients: Obtain patient input on the information they would have wanted when making a decision on a specific health condition. You can use patient advisory councils, focus groups, surveys, or 1-on-1 questions to elicit their feedback.

2. Ask Care Providers: Talk to doctors, nurses, home health workers, physical therapists, social workers, and other care providers. Identify the hard conversations these providers have with their patients, and when and where care and treatment choices are discussed.

   The speaker relayed that one provider's hard conversation involved telling her patients that their kidneys were failing. Her patients might have to wait at least a month before they could see the nephrologist she referred them to. The provider said, “The last thing I want is my patient to deal with the stress of this diagnosis without solid information before they see the nephrologist!” Learning when the conversation occurred helped the speaker create a fact sheet for patients newly diagnosed with end stage renal disease (ESRD).

3. Create: Next comes drafting the decision aid. Arrange the information you gathered from patients and providers in a meaningful way, Whitman recommends. Align the content development with decision making situations (assessment, diagnosis, or treatment). When possible, replace text with visuals, worksheets, and self-quizzes. Be sensitive to inadvertent bias, Whitman warns, and ensure the colors, graphics, and description length of each option is equal. And finally, distill! Ask yourself the question, “What is it that you need to know right now to make a decision?”

4. Evaluate: Get feedback and input on the drafts by using focus groups and surveys of patients and care providers. Also, Whitman suggests, use a checklist to ensure the decision aid helps clarify and express patients’ values and provides the information in a balanced manner. To obtain such a checklist, visit the International Patient Decision Aid Standards Collaboration website at www.ipdas.ohri.ca/IPDAS_checklist.pdf.

Advocate the SDM Process
Whitman encouraged attendees to inform providers how SDM leads to better health outcomes including improved quality of care, increased patient satisfaction, and improved patient adherence to treatment recommendations. SDM reduces medical errors, Whitman says, and effective decision aids can save clinicians time by answering patients’ questions up front.

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QC REVIEW OF SAFETY NARRATIVES: MORE THAN JUST CHECKING THE DATA

Speaker:
Kent Steinriede, MS  
Senior Medical Writer, inVentiv Health Clinical, Bala Cynwyd, PA

By Nicola Gillespie, DVM
“Find out what the story is,” Kent Steinriede stressed throughout his session about the quality control (QC) review of safety narratives. Steinriede highlighted the elements of the safety narrative, source documents and tools used in QC review, and tips for best QC work.

What Are Safety Narratives?
A required part of the clinical study report (CSR) provided to drug or device regulators, safety narratives describe deaths, serious adverse events, and adverse events of special clinical interest (usually defined in advance by the sponsor or regulator). Steinriede defined safety narratives as stories that describe what happened. As the QC review person, he said, “you are protecting the story and making sure that the data that support the story are correct.”

The required elements of the safety narrative are outlined by the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) E3 guideline on the Structure and Content of CSRs, (Section 12.3.2).

Elements of the Safety Narrative
- Patient identification number, age, and sex
- Medical history
- Study drug, dose, and length of time administered
- Relevant concomitant and previous medication and dosage
- Description and intensity of adverse event
- Treatment and events leading up to the adverse event and timing relevant to study drug administration
- Relevant laboratory measurements
- Investigator and sponsor opinion on cause of adverse event
- Disease being treated and duration of illness

Documents Provided for QC Review
The QC review involves checking a variety of source documents, templates, and guides.
- Narrative template—provides a consistent structure for the narrative.
- Sample narrative—created by the medical writer and study team.
- Listings—the tables containing all individual patient data gathered.
- Patient profiles—predefined collection of patient-specific data.
- Council for International Organizations of Medical Sciences (CIOMS) or MedWatch forms—describe the adverse event.
- Correspondence from investigators—may add information to the story.
- CSR in progress—remember that the safety narrative is part of the CSR and the documents need to be consistent.
- Study protocol—read it! The protocol details what the patients were supposed to have experienced.
- Safety narrative plan—describes what sort of narratives will be created.
- Client style guide—if not provided, ask the client if they have one.
- QC checklist—list of what needs to be checked. Steinriede recommended developing your own QC checklist.

Safety narratives usually arrive for review in batches of 5 or 10. Steinriede recommended reading through all of them at once and figuring out what happened, how each patient was
treated, and how each story ended. “This is not creative writing, but we are telling a story,” Steinriede said. The QC review person ensures that the story makes sense and always keeps the reader in mind; as Steinriede said, “good writing is a treat for everyone.”

Steinriede recommended looking for and creating consistency in the safety narratives before checking the data. Look at the style and presentation. Pay attention to the organization of the narrative (chronologic or thematic), paragraph length, and spacing after periods. Notice inconsistency in use of American or British English, International System of Units or conventional units, number of decimal places for reported values, inclusion of reference ranges and sources of ranges, style of dates (calendar dates or study days), and use of generic or trade names.

Use 2 computer monitors to compare the safety narrative and source documents, and highlight electronically or on paper the information you have already checked. Steinriede said he finds it easier to search documents in PDF format rather than Word format.

When working with the listings, the QC reviewer should ask if the database has been locked; if not, a final QC may be needed. The listings (quantitative information from the statisticians) and CIOMS (qualitative information from the investigators) forms should match. Use the listings as the primary source for patient identification, MedDRA (Medical Dictionary for Regulatory Activities) terms, start and stop dates of medications, and relatedness to study drug.

Tips for QC Work
Performing QC is repetitive, but it requires focus. Steinriede concluded the session with the following tips for performing QC:

• Work when you are most alert.
• Find a quiet workspace.
• Eliminate distractions.
• Find your groove and go with it.
• Communicate with team members.
• Stop and take a break when you start to lose your attention or make a mistake.

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Set Financial Goals
The first step to maximizing your freelancing income is establishing your financial goal for the year. Once you’ve determined how much you want to make, then you can determine your rate. If math isn’t your thing, then use this free online calculator: www.doubleyourfreelancing.com/rate.

Maximize Efficiency
There is an ongoing debate among medical writers on whether to charge hourly or per project. Gordon, Dalton, and Kober all charge their clients based on the project and recommend the same to other freelances. While there are pros and cons to both pricing methods, the more efficient you become in completing projects, the more money you will earn in a shorter amount of time with a project-based fee. Here are some tips Gordon shared to boost efficiency:

• Specialize in a few areas.
• Know what projects you can complete quickly.
• Don’t feel as if you need to take on every project.
• Set parameters with clients regarding revisions.

**Increase Productivity**

There are many hindrances to efficiency. Dalton recommends setting time limits on certain stages of a project; for example: research, outline, writing, and editing. To keep on target, set daily or weekly personal milestones and minimize distractions. Monitor your daily habits and the time it takes to complete projects with time trackers such as Fanurio, RescueTime, or OfficeTime. Tame distractions and increase productivity by using computer software such as SelfControl or Freedom, which block applications, websites, and emails. Calendar applications such as ScheduleOnce allow you to schedule meetings online with clients. Simply send a link of your updated calendar to current or prospective clients and they can see your availability and match it with theirs, instead of wasting unnecessary time proposing meeting times.

**Build Long-Term Relationships**

In addition to increasing work efficacy and productivity, it is important to build relationships with clients. As Kober said, “you want to become the go-to freelance for your most important client.” And which clients are your most important? Well, every client is important, so develop relationships and build good will. Soft skills do matter. You don’t have to nickel and dime your clients in order to make more money; sometimes you have to give a little of yourself to gain a long-term client (and, of course, a steady stream of work and income from that client).

**Know Your Worth**

Convincing your clients you are worth every penny you charge may seem difficult, but first you have to convince yourself. Develop a reputation as an expert in the field of your interest(s). It could be a document type or a therapeutic area. When a client pushes back on your fee, don’t be afraid to negotiate your worth and remind them of your value. Kober suggested that writers think like lawyers when it comes to setting fees. Your lawyer charges you $XYZ and you are expected to pay $XYZ. Sure, there are other lawyers out there that will charge less, but they won’t be as good. The same goes for medical writers. Mentally set the minimum rate you will accept and be willing to walk away if that minimum isn’t met. Instead, invest time in marketing to clients that will see your value. Yet, as Gordon mentioned, it is okay to take on “heart” projects—those projects that might not pay what you want but still provide benefit in some way, such as exposure to a new therapeutic area or the opportunity to work with a client you enjoy.

**Key Points**

Below are the key takeaway points:
• Determine your financial goal.
• Charge a project-based fee.
• Know what projects you can complete quickly.
• Set parameters with clients regarding revisions.
• Use apps and software programs to increase productivity.
• Build relationships with clients.
• Convince your clients (and yourself) of your value. Making $200 (or more) an hour is more than possible; it’s achievable. What will you do to maximize your freelancing income?

*Margaret Ward is a regulatory medical writer based out of Boston, Massachusetts.*

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**CLOSING THE DEAL: GETTING THAT FREELANCE PROJECT**

**Speaker:**
**Alisa Bonsignore**
*Writer & Strategist, Clarifying Complex Ideas, Pleasanton, CA*

**By Lisa Accettola**

As a freelance, how do you successfully close the deal? You know you have the skills as a writer, but negotiations can be daunting. Once you find a prospective client that is interested in your work, what do you need to generate a proposal? Alisa Bonsignore, a writer and public speaker who works for clients all over the world, provided answers to these questions using a series of steps that will enable you to develop solid, working relationships with clients and get what you need.

**Set the Stage**

Set the stage to attract prospective clients. What are they looking for? They want talented, skilled professionals. You know you have the ability, but what is your public image?

For in-person meetings, it is important to dress professionally, because it shows you are serious and prepared for business. Your online persona is even more important, as many of us have never met our clients in person. “You are your own...
public relations department,” Bonsignore said. Your website and social media profiles give prospective clients an idea of who you are and what you can do. Clients want assurances that you have the necessary skills and experience before they pick up the phone. “You want them to relate to your content and be able to communicate that with others,” Bonsignore said.

She added that one of the important things about LinkedIn profiles are recommendations from people who know you—not the “click to endorse” items, but thoughtful reviews of your work and talent. Recommendations are more beneficial than endorsements because they provide details about you, your skills, and the type of work you do.

Another thing to consider is your email address. Is it professional? Bonsignore advised against using a Gmail address that alludes to your wild weekends. All marketing materials must have correct spelling and grammar. She recalled seeing a business card that used the title of editor.

Find the Prospects
Although some people recommend cold calling to try to find new clients, Bonsignore has found it to be ineffective. However, should you choose to make cold calls, research your target clients before contacting them so that you can do “educated cold calls.” Find out who they work with, what is in their business pipeline, and if they have adequate funding. You may also learn about working with prospect companies by checking websites such as Glassdoor, which offers a wealth of information provided by employees about the work environment of various companies.

Another approach is the “warm call.” Bonsignore researches clients on social media sites such as LinkedIn. Profiles and posts may reveal information about vacations, hobbies, and family that you may be able to use to build connections. As individuals become more comfortable with you, they are more likely to reveal what their true pain points are. Referrals are the best way to gain viable prospects, and those referrals come from the relationships that you have built over the years, she said.

Do the Research
Once you have the attention of a potential client, gather as much detailed information as you can about an upcoming project so that you can create an effective proposal. In conversations, “know when to stop talking and start listening.” Giving the client room to do most of the talking will enable you to hear what their needs and challenges are. It will prepare you as you approach the project. Refrain from talking too much, and avoid trying to sound like the smartest person in the room. Otherwise, you risk losing credibility and missing the opportunity to gather valuable information.

Proposal Pitch
Your research helps prepare you to deliver a good proposal that clearly addresses the client’s needs and yours. The project outline should include a start date, timeline, deadline, budget, scope of services and how to address changes in scope, your business hours, what constitutes additional rush fees beyond standard business hours, and how many revisions are included in your flat rate. Answer every possible question in your proposal. “It is not just about money—it is also about your time and your sanity,” Bonsignore said. Negotiate the terms and timelines that you need. State your payment terms, whether you accept cash, check, or credit card, and when you expect to be paid. Negotiating can seem scary, but you learn as you go.

Bonsignore recommends including a proposal expiration date of approximately 2 weeks. This gives you a legitimate reason to follow up when they fall silent, which is common in large companies in which the proposal sign-off comes from someone far removed from your project contact. You now have a built-in opportunity to comfortably follow up and say, “I just wanted to check in and make sure you don’t need anything more from me to get things approved.” It makes you seem thoughtful and prepared, rather than pushy.

Close the Deal
By the time you get to the close, you have already eliminated all objections. Your potential new client knows that you are professional and capable, that you have been vetted by others, and that you are ready to work within budget. If the deal had been destined to fall apart, it would have happened earlier in the process. Because you have already worked through the details, the signature is simply a formality, not a hurdle.

Bonsignore offered some bonus advice to a question that she is frequently asked: “How do you know when to fire a client?” She explained that if your frustration has moved you to the point where you find yourself saying out loud, “I have to fire this client,” then it’s time. “You’re simply looking for validation,” she said.

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COMPLEX CASE STUDIES FOR FREELANCE WRITERS

Speakers:
Scott Kober, MBA  
President, MedCaseWriter Inc, Philadelphia, PA
Debra Gordon, MS  
President, GordonSquared, Highland Park, IL
Michelle Dalton, ELS  
Founder, Dalton & Associates, Reading, PA
Tracy Bunting-Early, PhD, CHCP, CMPP  
Publications Lead, Evidence Generation, US Medical Affairs, AstraZeneca, Wilmington, DE

By Monica Nicosia, PhD
“How often do clients make you pull your hair out?” That question provided the theme for this lively session during which 4 seasoned writers walked the audience through case studies ripped from their experiences as freelances. The speakers used a click-to-vote audience response system to ask how people would handle different aspects of each case. The panelists and audience constructively commented on the audience responses throughout the session. Amid much discussion and laughter, everybody shared nuggets of freelance wisdom.

Case Study 1: One Piece of the Pie or the Whole Enchilada
To explore issues related to subcontracting, Scott Kober presented a case about a client who offered 4 projects to be done within a tight timeline. Kober engaged the panelists and audience to consider the pros and cons of options ranging from taking on part or all of the work and subcontracting some portions.

“My rule of thumb for subcontracting work is that the job has to be at least $5,000 and I can take at least 35% of the project fee to make it worth my time,” Kober said. He explained that subcontracting is not just a simple handoff of work to a colleague. As the primary contractor, you are responsible for quality control, communicating with the client, and doing any necessary editing and revisions. He advised to only subcontract to people you know and can count on to do a good job.

After Kober decided to subcontract 2 of the projects, the client cancelled the other 2 projects that Kober had planned to handle. The panelists and audience discussed kill fees and whether to pull back the subcontracted projects. The general consensus was that taking a project away from a subcontractor wasn’t a good idea. As Kober said, “I approached them in good faith and I want to stay true to my word.”

Case Study 2: Juggling Clients and Workload
Tracy Bunting-Early, who recently took a full-time position after freelancing for many years, discussed a case that highlighted the perils of balancing multiple projects along with a client request to contract a certain number of hours per week.

As a freelance, Bunting-Early mostly worked on publications and continuing medical education. Her general rule of thumb was to “book up to one-third of time with a client at any one time and have at least 3 active clients at a time.” Since freelances face many different types of situations, she advised that each person should figure out the client/project ratio that works best.

Gordon added that she and some of her colleagues set a minimum fee, such as $2,000, because they find that smaller assignments are not worth the mental time it takes to switch from one project to another.

Michelle Dalton said, “I try to give any one client no more than 10 hours a week because I always have other projects on my desk.”

Case Study 3: Project Failure … After 10 Years of Freelancing?
To illustrate that despite a decade of freelancing it is still possible to make mistakes, Bunting-Early described her experience with a new client who asked her to work on a short review article based on a detailed outline. Despite the low fee, she took on the project because she wasn’t busy and thought it might lead to additional work at her standard rate.

Problems arose: two different agencies were involved and one wanted to accelerate the agreed-upon timeline. Bunting-Early persevered with the project despite the red flags. After she delivered the article, she received an email that said, “They are not happy with the work.” Instead of declaring herself a failure, she asked for more details about the problem because she had confidence in the quality of her work. It turned out that she had done a great job, but she had been provided with the wrong outline. She did get paid for the job.

“In the end, it’s the dysfunction that is in our business,” Bunting-Early said. “You shouldn’t let it challenge you too much and hit you in the gut if you know that your work is spot-on.”

Kober added, “Sometimes you do get some critical comments back. You have to be professional about it. They are the ones paying the bill. You have to be respectful of their comments, if they are legitimate.”

Case Study 4: Scope Creep
Dalton shared an experience with a needs assessment for an upcoming symposium. The initial assignment was to update the needs assessment for the previous year’s program. The
timeline and fee seemed reasonable. Dalton’s goals were to gain experience in the therapeutic area and hopefully land the more lucrative assignment for the enduring material supplement. As she dug into the project, she realized that the agenda for the new program did not overlap with the agenda for the previous program. This meant that instead of writing an update, Dalton had to start from scratch.

“When I first started out [in my career], I would have just stuck it out because maybe the phone might not ring next time,” Dalton said. This time she went back to the client. She pointed out the change in project scope and successfully requested additional time and a new contract. However, she did not get the enduring materials assignment.

Bunting-Early offered a comment that summed up a key lesson from this case: “I never bank on work when they say, ‘If we get the grant we will give you this,’ because it never comes through,” she said. “I focus on this project and if I do a good job it’s going to work and hopefully I’ll get another.”

Case Study 5: The Saga of the Slides
“I just started the 17th year of freelancing and I chose this one to show you that no matter how much experience you have, you can still screw up,” Gordon said to introduce her case study. The project—a slide deck with speaker notes—had 2 key client contacts with different personalities.

After the initial phone call, many emails flew back and forth with mixed messages regarding the outline step, the timeline, and annotation styles. One of the clients expressed disappointment in the slide deck, while the other client’s comments were minor. Things went downhill, and Gordon withdrew from the project. Later she rekindled the relationship with one of the clients.

Gordon learned many key lessons (Box 1), including:
• The whole misunderstanding came down to communication problems. If there are more than 2 emails going back and forth, pick up the phone.
• It is the freelance writer’s responsibility to take control and manage the clients.

Take-Home Messages
Other useful advice from the panelists and members of the audience included:
• Remember that emails can be read different ways.
• Never read emotions in emails.
• Don’t take things too personally.
• Stipulate in your contract terms for payment for work done if either party decides to terminate a project.
• Pay attention to where your contacts are going when they change positions. Congratulate them on their new jobs as a subtle reminder that you can still be a resource to them.

Gordon stressed that although problems can occur, freelances need to value themselves. “Don’t take abuse. There is a lot of work around.” However, as Kober said, “When you are the one who is at fault, it is your responsibility to make it right.”

Monica Nicosia, PhD, is a freelance medical writer at Nicosia Medical Writer LLC in Bryn Mawr, Pennsylvania.

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Box 1. Gordon’s Key Messages
• Even an experienced freelance can mess up the client-management side of the job.
• You can never ask too many questions.
• Get all the necessary background materials and project specifications and put everything in writing.
• Ensure all involved are copied on all key emails.
• Get people on the phone before emails get too heated or complicated.
• Show other people an email before getting upset.
• Read through emails and comments carefully before getting upset.
• Never be afraid to apologize and start over.
• Forgive yourself.
WRITING AND EDITING IN THE INTERNATIONAL MEDICAL RESEARCH ARENA

Speaker:
William R. Brown, MD
Professor of Medicine Emeritus, University of Colorado School of Medicine, and Director, International Medical Editing Service, LLC, Denver, CO

By Joel Green, PhD

Editing the work of authors from non-English-speaking countries has its challenges, but it can also be rewarding, says Dr Bill Brown. After more than 40 years as a physician, researcher, and professor at the University of Colorado, Brown retired 4 years ago at age 79, only to start a new career as a medical editor. He likes working but wanted to have the greater flexibility afforded by a freelance editing career. “I can play tennis when the sun shines and work when it rains,” he said. In this session, Brown discussed the challenges, practicalities, business considerations, and rewards of medical editing in the international arena.

Challenges
Editing for English as a second language (ESL) authors is demanding, labor-intensive, and time-consuming work, Brown noted. Interpreting what such authors are trying to say can be a complex task. However, English language and usage are often not the most challenging issues. “It can be a far more difficult task to take a paper that needs work and reconstruct it in a logical, orderly, and systematic way according to the conventions of English-language medical journals,” Brown said.

The Educational Role of the Editor
Brown writes extensive notes for authors, framing them in a diplomatic way, such as: “Here are my suggestions. You may reject them, but this is what I think will help your paper get accepted.” The authors have generally been grateful for the guidance he provided. For example, Brown once received a note from an author, stating: “Thank you again, I will consider the advice you gave me... You are a passionate person. I really thank you for helping me when I am helpless.” Brown concluded that with ESL authors “we have a major educational role, not just a critical role.”

How Much to Edit or Rewrite?
On a regular basis, editors for ESL authors receive papers that are in need of major revisions. “So at this point, you as an editor have to decide what to do,” Brown said. “You can either just accept it and correct the punctuation and spelling, or try and help the author fill it out. I have decided it’s better to try and help the author.” He provided an example of an abstract that had densely detailed methods and results, but no introduction, no rationale, and no conclusion, which would leave the reader confused and wondering what it all means. After Brown added these essential components, while eliminating nonessential methods and results, the abstract was much more understandable. During his editing career, Brown has increased the amount of rewriting he does with ESL authors’ work when it’s clearly needed and has found that authors appreciate the improved quality of their papers.

Business Considerations
How much do you charge for this type of editing? “I think you should charge as much as you can, because it won’t be big bucks at the most,” Brown said. His standard rate is 10 cents per word of text. He prefers to charge per word rather than an hourly rate because he thinks that authors like the concreteness of the cost-per-word method. In billing, it’s important to submit professional-looking invoices with your logo on them. It’s also important to have a business email address, business mailing address, and business bank account. In Brown’s experience, Asian clients are particularly interested in seeing evidence that they are dealing with a professional service.

Working for Editing Companies—The Good and the Bad
There are some advantages to working for editing companies. It can be a way to get started in the profession and try it out; the editing company finds clients for you; the company does the collection of fees and bookkeeping; and companies usually pay reliably and without haggling. However, editing companies may not pay editors well and may require revisions without remuneration.

Rewards of Working in the International Arena
“It’s interesting to work in the international milieu and expand your boundaries,” Brown said. “You gain an appreciation of the quality of research being done around the world. Also, as an independent editor, you can develop cordial relationships with authors from other countries and experience the gratification of educating young and inexperienced researchers,” Brown said.

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RESOURCES
The complete slide presentation in PDF format is available at: www.amwa.org/sessionhandouts
Instructional material for authors is available on the presenter’s website: http://imesmeded.com/
BEST PRACTICES IN WRITING TEST ITEMS

Speaker:
Lori L. Alexander, MTPW, ELS, MWC
President, Editorial Rx Inc., North Fort Myers, FL

By Kristina Jong, MD
Continuing medical education credits are often awarded based on answers to test questions, so it is essential that the questions be designed well.

Research shows, however, that “almost half of all test items have flaws,” said veteran continuing medical education writer and editor Lori Alexander. This problem is driving the need to develop better test items and is creating job opportunities for medical writers and editors. In this open session, she explained how to write test items using guidelines and best practices from the National Board of Medical Examiners and the American Board of Internal Medicine.

Alexander began by describing a general approach to writing test items:
• Identify your audience and what they need to know.
• Focus on meaningful content rather than trivial facts.
• Emphasize the common clinical presentations of frequently seen diseases rather than rare disorders.

She noted that multiple-choice questions are typically the preferred test format and explained that research shows a high score on a test composed of multiple-choice questions correlates with superior clinical performance.

Before she launched into a detailed discussion of the 4 learning objectives for the session, she outlined the anatomy of a test item:
• Stem: the problem to be solved, often a clinical scenario
• Lead-in question: the prompt to elicit the correct response
• Answer options: the correct answer and a variable number of distractors
• Rationale: the explanation of why an answer is correct or not
• References: the evidence from the literature that supports the rationales

Develop Clear and Focused Educational Objectives.
The educational objective is the fundamental basis of a test item, Alexander said. It should focus on a single concept and address at least 1 of the following: a recent advance in medical knowledge, a best practice, or a clinical management principle.

The educational objective should start with a measurable verb that describes the behavior desired from the test-taker; for example, “Identify the mammographic findings of suspicious masses.”

Writers should also pay attention to the cognitive level of the educational objective. According to Alexander, “More than 90% of test items are written at a low cognitive level” and require the test-taker to simply recall facts. Clinical decisions, however, require the ability to apply knowledge, which can only be tested with higher cognitive level objectives.

Write Stems and Lead-in Questions that Follow Guidelines for Best Practices.
The stem, which is usually a clinical scenario, should be based on the educational objective. Writers should select a common clinical presentation and present it clearly and succinctly.

One of the most common problems with stems is a lack of focus, which can occur because the stem either is wordy or teaches a concept instead of generating a question. Both flaws frustrate the test-taker who must sift through unnecessary information.

The lead-in question should be phrased as a direct question; fill-in-the-blank and incomplete sentence formats are not recommended. Other guidelines for composing lead-in questions include:
• Define the problem clearly.
• Connect to the clinical scenario.
• Follow the “cover-the-options rule.”
• Address a single specific task (diagnosis, testing, management).

The cover-the-options rule refers to a guideline from the National Board of Examiners that recommends a lead-in question provide enough information to be answered without viewing the options.

Create Answer Options That Are Free of Flaws and Clues.
Answer options are “the component of test items with the most flaws,” Alexander said. Accordingly, there are guidelines for writing good answer options:
• Be simple and clear.
• Order logically.
• Craft plausible distractors.
• Create a single best answer.
• Vary the position of the correct answer.
• Make options mutually exclusive.
• Make options grammatically parallel.

Writers should also create answer options that are within the same category of response. For example, if one option is a drug, then the other options should also be drugs.

Answer clues should also be avoided. Writers may unwittingly identify distractors with grammatical errors such as
subject-verb disagreement or differing verb tenses. They may also clue test-takers to the correct answer by repeating a word or phrase from the lead-in question (the “clanging clue”), or by making the correct answer longer and more detailed.

Construct Rationales That Explain All Answer Options.
Rationales help test-takers understand the material better. They are an essential component of self-assessment modules but not always included with other educational activities. Clients may prescribe that rationales be a certain length—check with them before investing a lot of time researching and writing. Some simple tips for writing rationales included:
• Explain all answer options.
• Concentrate on what the lead-in question asked.
• List in the same order as the answer options.
• Include at least 3 published references to support data.

In the question-and-answer period following the presentation, several attendees remarked that their clients follow none of the best practices presented. With a knowing nod, Alexander wrapped up the session noting that clients often use existing test items as models for new ones, thus there is an urgent need to get good test items in circulation.

Kristina Jong is a physician, medical device consultant, and aspiring medical writer.
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RESOURCES
Medical Writing & Communication Conference Session Handouts. www.amwa.org/sessionhandouts

STEPS TO CREATE A MEDICAL WRITING HANDBOOK
Speaker:
Rebecca Wong, PhD
Manager, Medical Writing Services, North America; PAREXEL International, Port Coquitlam, BC
By Julianna Erickson, PhD
Whether in a large global medical writing department or a small department that outsources to medical writing vendors, one document should be the center of the writing universe, said Rebecca Wong, PhD. That document: the medical writing handbook. For a department of any size, this central collection of useful resources increases efficiency and consistency of style and eases onboarding new employees and contractors, Wong said.

As an experienced manager in clinical/regulatory medical writing, Wong has developed a deep appreciation of the handbook. In this open session, she described the rationale for generating and maintaining a handbook and summarized its essential and optional contents.

Contents of the Handbook and Why It Is Needed
Wong defined the handbook as a single source of day-to-day information for all members of a medical writing department. Ideally, it should be an indexed document providing 1-click access to information about department policies and processes as well as frequently used tools, templates, and checklists. Length and contents will vary for different groups, as the handbook is customized to suit an individual department’s activities. The handbook is a “living” document that should describe both new and established processes, so it is best kept in a shared location to permit frequent access and editing.

The handbook promotes consistency in common practices and increases efficiency by answering many standard questions and helping group members quickly find current tools, templates, standard operating procedures (SOPs), and other information.

Steps Toward Creating a Handbook
The handbook should present information on core topics that are common to the medical writing function and may also include custom topics pertaining to specific departmental needs. Core topics include an overview of the organizational
structure as well as contact information (and possibly photographs) for key contacts. The handbook should then summarize the department’s functions, including types of projects and connections with other departments. A description of resources for training (for example, SOPs and soft skills) can follow.

Wong further recommended that the core contents include a description of the relevant document management, IT, and library/literature systems. Processes specific to the medical writing function (including the development and review of medical writing deliverables, recommended timelines, and sample review notification email text) may also be included. For the description of various corporate processes not related to medical writing, Wong recommended referring users to the organization’s official information as much as possible to ensure consistency.

The handbook may also contain a section for writing tools, templates, regulatory guidances, subject matter experts, sample documents, checklists, and the medical writing style guide. Finally, a section with a list of miscellaneous useful hyperlinks may be provided for quick reference.

Other topics that may be considered for inclusion are performance and career development, region-specific information, and invoicing/financial information for contractors.

Level of Detail and Presentation
In some instances, Wong said, it may be best to give general information so that frequent updates of specific nonessential information are not needed. Remember to be complete: for example, give a brief description of each hyperlink so that the document can stand alone in directing the reader to information. Avoid redundancy within the handbook, as well as unnecessary redundancy with information in the linked documents. Finally, consider using special formatting such as boldface and highlighting to enhance comprehension.

Review and Maintenance
To optimize its accuracy and value, multiple parties should review the handbook. First, the content owner (the contributor of the content) ensures that the information is correct, including updates to SOPs and templates. Medical writing management (from each region, if applicable) then reviews the handbook to provide a broader perspective and fill any gaps. Finally, the end user (employee or contractor) provides feedback and can check that the internal hyperlinks are correct and functional.

Wong recommended extending a standing invitation for contributions and feedback. Additionally, she noted the importance of reminding people to use the handbook, both when it is initially released and whenever new information is added.

There are pros and cons to sole and group ownership of the handbook. A sole owner has greater control, which may translate to greater consistency and continuity. However, ownership of a large document may be too labor-intensive for one person, slowing down the frequency of updates. Group ownership allows a shared workload but requires more time for collaboration. A compromise is rotating ownership, which may be especially useful to provide diverse perspectives within multi-region departments.

Alternative Formats, and Beyond!
Wong concluded by illustrating an alternative format for a handbook. Instead of in a paginated electronic document, the same information can be presented in an open-face, webpage format (Figure 1) for even easier comprehension and access.

The medical writing handbook is expected to evolve over time. Though its length usually expands, it may start as a short and simple document, depending on the department’s needs. In either case, Wong said, the initial time invested in generating the handbook pays dividends as the whole department becomes more efficient through its use.

Julianna Erickson is a medical writer for Medtronic and resides in Portland, Oregon.

Author contact: julianna.p.erickson@medtronic.com

Figure 1. Sample Webpage Format for a Medical Writing Handbook
GET YOUR HANDS ON RESEARCH!

in the
MBL Logan Science Journalism Program
Immerse yourself in biomedical or environmental science in Woods Hole, Mass.

May 30 – June 8, 2017
Application Deadline: March 1, 2017
Fellowships cover room, board, travel, and all course fees

mbl.edu/sjp Marine Biological Laboratory

“This kind of research experience should be a requisite part of the career of any science journalist.”

Earn the only credential designed specifically for you, the medical communication professional.

Apply Yourself. Apply Now.
Next Exam: April 21, 2017
Application Deadline: March 10, 2017
www.amwa.org/mwc
Three members were named “fellows of AMWA” in recognition of their contribution to the organization: Barbara T. Zimmerman, PhD; Cynthia L. Kryder, MS, CCC–Sp; and Hilary Graham, MA. They are shown with Brian Bass, MWC chair, Fellowship Awards Committee. See Online Exclusive for further details.
THANK YOU

AMWA thanks the following organizations for their generous support of the 2016 AMWA Medical Writing & Communication Conference.

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- Trilogy Writing & Consulting
- University of the Sciences
- Veristat
- Writing Assistance, Inc

**PHOTOS**

Photos by Alec Tremaine Photography

Exhibitor hall.
FROM THE PRESIDENT

The Magic of AMWA

By Lori L. Alexander, MTPW, ELS, MWC / 2016–2017 AMWA President

Our next annual conference not only is in my home state—a rare treat for an AMWA president—but it’s also on the grounds of one of my favorite places on earth—Disney World! You know, the most magical place on Earth. The best part about Disney—aside from the attractions, of course—is that it reminds me of AMWA.

You see, I think of AMWA as the Magic Kingdom. AMWA is the place where my professional dreams have come true. It hasn’t been all magic—I’ve played a central role in making those dreams come true, but I’ve also had the help of many AMWA members, AMWA leaders, and headquarters staff.

AMWA headquarters is an amazing place that offers a wide variety of outstanding resources to help you be a successful medical writer. And AMWA staff members are always available to help you with your questions—they’re smart, courteous, and fun! We depend on them to run our programs efficiently, and they come through for us day in and day out. Among the greatest resources that staff helps develop is our annual Medical Writing and Communication Conference.

Every year, the AMWA conference is an adventure to me. I pack up and travel to a different location, where I meet people from all over the country who do the same thing I do, as well as colleagues who do something a little different. I enjoy networking with all of them. I also love all the new things I learn at the conference. When I get back to my office, I am re-energized about my work.

AMWA is about far more than its annual conference, though. AMWA has been on the frontier of medical communication since the 1940s, when the association was founded and quickly began to offer unparalleled educational activities. Last year, AMWA launched its online learning program, and although we weren’t pioneers in this regard, we’re now at least on the same frontier plain. The thing about frontiers is that once you get there, you want to keep moving, and AMWA is doing that by continuously working to improve all our educational offerings—in-person, self-study, and online. Last year, AMWA pushed the medical writing frontier further by creating the Medical Writing Certification exam, and we now have several certified medical writers among us. A credential in medical writing gives us all a way to validate that we have the knowledge, skills, and attributes necessary to be competent medical writers. Certification is not only validating us, it’s validating our profession.

We have many, many AMWA leaders to thank for always moving our association forward: from chapter leaders and officers to national committee members to the Executive Committee and board. I am honored to be joining the presidents who have come before me. It’s a distinguished group, and all have left their mark on our association. We value our past presidents and appreciate their commitment to AMWA.

Leading this organization is an honor, but it can also get a little scary. One past president continues to brave a particularly scary area as she carries on efforts to increase transparency of authorship through proper acknowledgment of medical writers in peer-reviewed research publications. As we learned from our most recent edition of Medical Communication News, an article published in BMJ shows that we are still haunted by this issue of ghostwriting. AMWA acted swiftly. Together with the European Medical Writers Association, we supported detailed responses from the International Society for Medical Publication Professionals and the Global Alliance of Publication Professionals refuting the claims made in the article (https://thepublicationplan.com/2016/09/16/defining-ghostwriting-smpp-and-gapp-respond-to-controversial-bmj-article/). Coming together like this so quickly makes you realize the dedication of the medical writing community and also just how small our world is.
Most of the time, AMWA has swum along happily and safely, but over the past few years, we have acknowledged changing currents, and we have made decisions to venture into new and exciting areas. We're riding the wild current now, taking on many new initiatives to enhance resources for our members and, more important, to invest in AMWA's future.

As Steve mentioned at Thursday's opening session, I helped lead several strategic planning activities last year. We involved board members, other chapter leaders, and, through interviews, random members and nonmember stakeholders to help define what AMWA should be doing and could be doing better. Our strategic planning facilitators told us to not let reality hold us back—we needed to think of a fantasy world for AMWA. They encouraged us to soar and to think outside the box. Reining in our individual visions into a collective focus for tomorrow was a bit of a challenge, but we learned that if you just keep at it, you finally figure out what you’re aiming at and before you know it, you’re hitting your targets. Thanks to the structured process we used, and the number of people we involved, we now know the best direction for AMWA and we know no bounds.

Moving into the future is thrilling, yet a little frightening. You can't always be sure where the path will take you, and so you just have to rely on your instincts and your colleagues to know that you'll be OK on that course you can't even see yet.

There's so much more to come from AMWA. After working for decades with governance documents that we now realize are outdated, we are committed to ensuring that our documents are brought into the 21st century and allow us to operate as efficiently and effectively as possible.

We are also continuing to invest in technology, both to offer members leading-edge experiences and to enable AMWA staff to support members more efficiently. We're updating AMWA's membership database and enhancing our learning management system to allow you to track the education you've received from AMWA. And we're redesigning the AMWA website to be more inviting and interactive.

Overall, AMWA is committed to delivering more relevant and accessible resources. And we're making data-driven decisions to better meet our members' needs. For example, we've used member surveys to identify what our members need and want for education, and working groups have done research to determine the educational needs of mid- and late-career medical communicators and to define gaps in education for regulatory writers. We've heard that you want education but that you're busy, and so we'll soon be offering a new slate of educational resources that better fit your busy schedules.

And as always, our members are our priority, and so we are developing ways to better engage our members at all levels: member to staff, member to chapter, and member to member. As always, we'll use data to guide us in decision making—this time using data from the recent member experience survey. We're also looking for ways to bring new medical writers and editors under the AMWA umbrella.

Four new members join the returning members of the Executive Committee, and we're excited to have them onboard. We all have lofty goals, but that's a good thing, and we hope that you will all benefit from the new programs, resources, and initiatives that grow from our strategic discussions. We ask for your patience during this time...good things are worth the wait. And, as a very wise woman once said, even miracles take a little time.

Thank you so much for indulging me.
In her final address this time last year, outgoing president Karen Klein talked about AMWA’s many accomplishments during 2014 to 2015—the introduction of our online education program, the very first MWC (Medical Writer Certified) exam, and the new salary survey, among other things—and she concluded that “it’s been a big year!”

Well, we have gone and had another one. As we begin this first session of the annual conference, let me tell you about some of the things we’ve accomplished in the last 12 months:

We implemented our new learning management system, or LMS, along with a slew of new online learning programs. At this time, we have 9 interactive online learning modules—not counting the one that explains what interactive learning is about.

We launched our new e-newsletter, Medical Communication News. This twice-monthly, curated-content newsletter contains article summaries and links chosen specifically to be of interest to medical communicators.

We implemented our new online community, Engage. This platform enables AMWA members to communicate with their colleagues rapidly and easily, as it is usable entirely through email. Users have asked and answered questions about everything from grammar to job hunting to how to set up a home office.

We completed the 2015 Salary Survey and began sharing the results with our members, both through the AMWA Journal and on the AMWA website. And more results are forthcoming.

For the AMWA Journal, we recruited a new managing editor—or rather, an editorial group, called J&J Editorial. This group will designate one editor to work with AMWA Journal staff and volunteers but will have other editors and persons with related expertise to assist when needed.

We made the decision to divide the tasks of running the AMWA Journal between 2 separate positions: a managing editor, who will conduct the day-to-day operations of assembling and publishing the Journal, and an editor-in-chief, who will determine the overall direction of the journal and help to select content that will have the greatest value for AMWA Journal readers.

AMWA also accomplished a great deal on the strategic level this year. The Strategic Planning Initiative, headed up by Lori Alexander, AMWA’s incoming president, surveyed members about what they valued most about AMWA and what they hope to gain from their membership in AMWA in the future. The results helped us to create a new list of strategic plan objectives: to build our online education program, to enhance our marketing and communications, and to update our governance structure and documents. You’ll be hearing more about all of these efforts in the coming months.

Last but far from least, this is the first AMWA annual conference to be called by the conference’s new name, the Medical Writing and Communication Conference. This name, along with the conference’s new logo, were the creations of Brian Bass and his Communications Committee.

So once again, it’s been a big year.
Meet AMWA's 2016–2017 Executive Committee

President: Lori L. Alexander, MTPW, ELS, MWC, has served on the EC for the past 4 years, including 2 terms as the annual conference administrator. As secretary, Lori led the work on 2 important AMWA initiatives: the 2015 Salary Survey and the Strategic Planning Initiative. In the 10 years preceding her time on the EC, Lori was the editor of the AMWA Journal. A member of AMWA since 1998, she is a past president of the Florida Chapter, has served on numerous AMWA committees, has worked with the Certification Commission, and has led workshops and open sessions at the annual conference. She was recognized with the AMWA President's Award in 2009, was made a fellow of AMWA in 2010, and received a special award for her service to the AMWA Journal in 2012. She graduated from the University of New Hampshire with a degree in English (concentration in journalism) and earned a master's degree in technical and professional writing at Northeastern University in Boston. She established Editorial Rx Inc, an independent medical writing and publishing company, in 2008. In addition to her own freelance work, she is a faculty member for the new medical writing certificate program at the University of California San Diego Extension.

Immediate Past President: Stephen N. Palmer, PhD, ELS, is manager of the Section of Scientific Publications and a senior scientific medical writer at the Texas Heart Institute in Houston. He earned a PhD in social and health psychology at the State University of New York at Stony Brook. He holds a BA from Wesleyan University. Steve joined AMWA in 2002 and became a fellow in 2011. His previous AMWA service includes the following: administrator of awards, administrator of the annual conference, administrator of chapters and membership; annual conference roundtable and klatch leader; open session leader and speaker; member of many committees, including Medical Book Awards and Constitution and Bylaws; and, for the Southwest Chapter, program chair, president, immediate past president, and board delegate.

President-Elect: Katharyn (Kathy) Spiegel, PhD, an AMWA member since 2006, has been a member of the Constitution and Bylaws Committee since 2012. Her previous EC positions include chapter relations administrator and chapters/membership administrator. She has served as a member of the Education Committee, as chair of the Regulatory Education Subcommittee, and as a member of the Advanced Education Workgroup, and she recently helped prepare online education courses on regulatory writing. She has held numerous positions for the Michigan Chapter, including chapter president. Her annual conference activities include roundtable leader; special interest session coordinator, open session moderator, and open session panelist; and workshop leader. In 2015, Kathy was made a fellow of AMWA. Kathy received her BS in chemistry from Duke University and her PhD in pharmacology from Cornell University Medical College. She is a regulatory writing senior manager at Amgen, working remotely from Sharon Township, Michigan.

Secretary: Cynthia (Cyndy) Kryder, MS, CCC-Sp, an AMWA member since 1993, has served as the member resources administrator since 2013. In that position, she served as chair of the Engage Advisory Group. She has been editor of the Social Media section of the AMWA Journal since 2010 and has written more than a dozen articles for the Journal. Cyndy has been a member of numerous AMWA committees, including the Constitution and Bylaws Committee, the Annual Conference Committee, and the Awards Committee. She chaired the Nonphysicians Book Awards Subcommittee of the Medical Book Awards Committee in 2012 and 2013. At the chapter level, she has served in numerous positions, including president, for the Delaware Valley Chapter. At the annual conference, she has presented open sessions and roundtables. She recently assisted with the development of an AMWA online activity about careers in medical communication. Cyndy writes promotional, educational, and scientific pieces for professional and lay audiences in various therapeutic areas and for a wide range of media. She also writes about health care economics, the changing health care landscape, and value-based purchasing and reimbursement. She lives in Phoenixville, Pennsylvania.

Treasurer: Julie L. Phelan, MD, MBA, an AMWA member since 2009, has been a member of the Budget and Finance Committee and the AMWA Communications Committee. She also served on the 2015 Salary Survey Task Force and Salary Survey Writing Group, and on the Social Media Committee. On the chapter level, she is president of the Greater Chicago Area Chapter (2014–2016), having previously served as president-elect (2013). She has also served as the membership chair for the chapter (2012–2014) and as chapter delegate (2013–2016). Julie is president of Biomedisys Inc in Chicago, Illinois, where she consults on medical communications and strategy. As for her educational background, after earning an MD from
the Chicago Medical School, Julie received her MBA from the University of Chicago Booth School of Business, concentrating in finance, entrepreneurship, and marketing management. She holds a bachelor’s degree in biologic sciences (French minor) from Northwestern University.

Administrator of the Annual Conference: Kelly Schrank, MA, ELS, is new to the EC, but served on the annual conference committee in 2014 and was co-chair of the Spectrum conference (hosted by the Rochester Chapter of the Society of Technical Communication [STC]) for the past 2 years. She’s been the new member liaison and communication coordinator for the Empire-NY Chapter and has served in numerous positions in many STC chapters. Kelly has been a roundtable leader and panelist at the AMWA annual conference and has contributed articles to the AMWA Journal. Kelly lives in a small town in Central New York, where she works remotely for Med Communications Inc as communications manager and senior medical editor. Her master’s degree is in technical communication, and she currently teaches Advanced Technical Communication locally as an adjunct.

Member At-Large: Theresa Singleton, PhD, has been an active New England Chapter member since 2010, including serving as president. On the national level, Theresa has served on the Eric W. Martin Awards Committee (2013–2015) and as peer reviewer for the AMWA Journal Science Series (2011–2014). Theresa received her bachelor’s degree in nutritional science from Cornell University and her PhD in microbiology and immunology from Boston University School of Medicine. Theresa is currently owner and principal scientific writer at Singleton Science, LLC, where she specializes in writing and editing biomedical research manuscripts for biotech, pharma, and academic clients.

Administrator of Chapter Relations: Hilary Graham, MA, who is entering her third year in this role, has been an active AMWA member and volunteer since 2009, serving at both the local and national levels. Hilary holds a BS in biochemistry from the University of California, Davis, and a master’s degree in cell and molecular biology from the University of Texas, Austin. She is working toward a PhD in technical communications from Texas Tech University. She began her career at the UT MD Anderson Cancer Center in Houston, Texas, where she helped basic science researchers write grants and manuscripts. Most recently, she’s been leading scientific content marketing efforts at Luminex Corporation, a biotechnology company that provides multiplex assay solutions to the life science research and molecular diagnostic communities.

Administrator of Education: Hope J. Lafferty, AM, ELS, joined AMWA in 2003, has led AMWA workshops, roundtables, and
hands-on intensives since 2009, served 2 terms as the annual conference workshop coordinator, and participated on the 2016 annual conference committee. Her membership in AMWA spans 4 chapters, and she currently writes the “Praxis” column in Postscripts, the monthly e-journal of the Pacific Southwest chapter. Hope received her certificate in medical writing and editing from the University of Chicago, where she also received her master’s degree in group work. She is president-elect of the Board of Editors in the Life Sciences. The bulk of her work centers in academic and research communication, and after years of exclusively editing and writing, Hope has stepped out from behind the desk to teach communications skills (scientific and other types of writing, public speaking, and engaged listening). She consults with medical and public health researchers on multiproject grant applications and book proposals. She blogs, meditates, and podcasts out of Marfa, Texas.

Administrator of Member Resources: Theresa King-Hunter has been a member of AMWA since 1990 and has served in multiple positions in AMWA’s Southwest (director at large) and North Central (president) chapters. She was the Program Committee chair for the North Central Chapter, is a past member of AMWA’s Publications Committee, and is a current member of AMWA’s Budget and Finance Committee. Theresa has been a medical writer since 1988, focusing her work in the areas of toxicology, carcinogenesis, neuromodulation, and cardiac rhythm management. She is a senior technical writer with St. Jude Medical, where she authors manuals related to cardiac resynchronization therapy, implantable cardioverter defibrillators, and pacemakers, in support of submissions to the US Food and Drug Administration and international notified bodies. Theresa has a bachelor’s degree in medical technology.

Administrator of Publications: Ann Winter-Vann, PhD, is in her third year on the EC, having served as administrator of awards and as administrator of publications last year. Ann is a medical writer and consultant at Whitsell Innovations in Chapel Hill, North Carolina. She has a bachelor’s degree in biology from Duke University. After earning a PhD in molecular cancer biology from Duke, Ann was a postdoctoral researcher in the Department of Pharmacology at the University of North Carolina at Chapel Hill. An AMWA member since 2007, Ann has served in numerous positions in the Carolinas Chapter, including president. Ann was involved in organizing the Carolinas Chapter’s annual conference for several years, and she has presented roundtables at that conference and open sessions at AMWA annual conferences.

**CALENDAR OF MEETINGS**

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<th>Event</th>
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<tr>
<td>Alliance for Continuing Education in the Health Professions</td>
<td>January 26—29, 2017</td>
<td>San Francisco, CA</td>
<td><a href="http://www.acehp.org">www.acehp.org</a></td>
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<td>DIA Regulatory Submissions, Information, and Document Management Forum 2017</td>
<td>February 6–8, 2017</td>
<td>North Bethesda, MD</td>
<td><a href="http://www.diaglobal.org">www.diaglobal.org</a></td>
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<tr>
<td>American Association for the Advancement of Science</td>
<td>February 16–20, 2017</td>
<td>Boston, MA</td>
<td><a href="http://meetings.aaas.org">http://meetings.aaas.org</a></td>
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<td>International Society for Medical Publication Professionals (ISMP)</td>
<td>May 1–3, 2017</td>
<td>National Harbor, MD</td>
<td><a href="http://www.ismpp.org">www.ismpp.org</a></td>
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<td>European Medical Writers Association Annual Conference</td>
<td>May 2–6, 2017</td>
<td>Birmingham, UK</td>
<td><a href="http://www.emwa.org">www.emwa.org</a></td>
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<td>Council of Science Editors</td>
<td>May 20–23, 2017</td>
<td>San Diego, CA</td>
<td><a href="http://www.councilscienceeditors.org/">www.councilscienceeditors.org/</a></td>
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<td>AMWA CHAPTER CONFERENCES</td>
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<td>Mid–Atlantic Chapter Conference</td>
<td>March 10, 2017</td>
<td>Chevy Chase, MD</td>
<td><a href="http://www.amwa-midatlantic.org/">www.amwa-midatlantic.org/</a></td>
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<td>Delaware Valley Freelance Conference</td>
<td>March 18, 2017</td>
<td>King of Prussia, PA</td>
<td><a href="http://www.amwa-dvc.org/">www.amwa-dvc.org/</a></td>
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<td>Southwest Chapter Conference</td>
<td>April 22, 2017</td>
<td>Austin, TX</td>
<td><a href="http://www.amwasouthwest.org/">www.amwasouthwest.org/</a></td>
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<tr>
<td>Pacific Southwest Conference</td>
<td>April 22, 2017</td>
<td>Costa Mesa, CA</td>
<td><a href="http://www.amwa-pacsw.org/">www.amwa-pacsw.org/</a></td>
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<tr>
<td>Indiana Chapter Conference</td>
<td>April 22, 2017</td>
<td>Indianapolis, Indiana</td>
<td><a href="http://www.hoosieramwa.org/">www.hoosieramwa.org/</a></td>
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Have you ever lain awake in the wee hours of the morning thinking about what you should have done, would have done, or could have done? If so, then you understand the power of modal auxiliary verbs. In English, we use the verbs to be and to have as auxiliary (helper) verbs to express the timing of actions or states of being. We also use the verb to be plus a past participle to express the passive voice. However, we use modal auxiliary verbs (can, could, do, may, might, must, shall, should, will, would) to express feelings, such as beliefs, doubts, guesses, and regrets, as well as to ask questions and make requests. There are also some semimodal verbs (dare, need, ought to, used to) and other verbs with modal meanings (have [got] to, be going to, and be able to).

The modal auxiliary verbs are common words that native English speakers have been using since early childhood. As a result, native English speakers seldom give these words much thought. However, if you want to write well or even to think clearly, you need to pay careful attention to these simple yet powerful words.

Grammatical modality allows a speaker or writer to attach expressions of belief, attitude, and obligation to statements. In English class, you may have learned about the 5 basic moods of English verbs (Table 1).

The 5 basic moods of English verbs are a good starting point for the study of modality. However, writers and editors should have a deeper understanding of modality in English. Note that we do not use word endings to mark the mood of a verb in English. Sometimes, we use word order or modal auxiliaries to express grammatical mood. To express grammatical mood clearly, we sometimes have to use adverbs such as perhaps or expletive constructions: “It is unlikely that…”.

Realis Moods—Indicative Mood and Emphatic Modality
Linguists divide grammatical moods into 2 categories: realis and irrealis. Realis moods are used for expressing statements of fact and reality. In English, we have only one realis mood: the indicative. However, we can also use the modal auxiliary do to express emphatic modality, which is also part of the indicative mood:


However, do can be used as an auxiliary in questions (interrogative mood):
- Do you love me?

Also, we use the auxiliary do to negate things in the indicative mood:
- She does not smoke cigarettes.

Note also that to do can be an ordinary verb, not just an auxiliary:
- After supper, we did the dishes.

Irrealis Modalities
The other 4 basic moods (imperative, interrogative, conditional, and subjunctive) express irrealis modalities, which convey something other than reality. There are several irrealis modalities (Table 2).

Although we can certainly express these various irrealis modalities in English, we do not clearly mark our verbs to indicate them. Also, the way in which people express these

<table>
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<th>Table 1. Basic Moods of English Verbs</th>
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<tr>
<td>Mood</td>
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<td>Indicative</td>
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<td>Interrogative</td>
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<tr>
<td>Imperative</td>
</tr>
<tr>
<td>Conditional</td>
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<tr>
<td>Subjunctive</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Table 2. Irrealis Modalities</th>
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<tbody>
<tr>
<td>Modality</td>
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<tr>
<td>------------------------------</td>
</tr>
<tr>
<td>Epistemic</td>
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<tr>
<td>Deontic</td>
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<tr>
<td>Commissive</td>
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<tr>
<td>Directive</td>
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<tr>
<td>Volitive</td>
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</table>
modalities can be confusing, especially if they are using what sounds like an epistemic or volitive modality in order to soften a command. For example, you might say to a waiter, “Could I have...?” when you really mean, “Please bring me....” If your boss says that he or she would like you to do something, you should probably interpret that statement as a polite command, rather than as a wish.

### Expressing Grammatical Modality

To express grammatical modality accurately, you must first think carefully about what you want to say. Then, you must choose the right words, such as the right modal auxiliary and perhaps some adverbs, to express yourself clearly. Notice that each modal auxiliary can be used for several different purposes, as you can see from Table 3.

**Table 3. English Modal Auxiliaries**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>can</em></td>
<td>You can use <em>can</em> to express ability, possibility, probability, or permission.</td>
</tr>
<tr>
<td><em>could</em></td>
<td><em>Could</em> sometimes serves as the past tense of <em>can</em>. <em>Could</em> is also used in the past conditional (eg, he said that he would go if he could). <em>Could</em> can also be used as an alternative to <em>can</em> to express less certainty (That could be true), or as a polite way of stating requests (I would be grateful if you could turn down the volume on your stereo).</td>
</tr>
<tr>
<td><em>do</em></td>
<td><em>Do</em> can be used as an auxiliary to express emphasis, or as part of a question or a negation. (<em>Do</em> is not always used as an auxiliary.)</td>
</tr>
<tr>
<td><em>may</em></td>
<td>Like <em>can</em>, <em>may</em> can be used to express possibility, probability, or permission. <em>May</em> can also be used to express volition, as in prayers, imprecautions, or benedictions (may peace be upon them!). <em>May</em> can be used to express purpose or expectation (I sow so that I may reap) or contingency (We’ll be prepared, come what may) or concession (He may be small but he is wiry) or choice (You may cook it on the stovetop or in the microwave). In laws and legal documents, <em>may</em> is used to express that something is permitted but not required.</td>
</tr>
<tr>
<td><em>might</em></td>
<td><em>Might</em> was originally the past tense of <em>may</em>. However, <em>might</em> can also be used to express less probability or possibility than <em>may</em> (It might be possible to get there on time), or a present condition that is contrary to fact (if you had done your homework, you might be able to pass the test). <em>Might</em> can also be used as a polite alternative to <em>may</em> (might I have this next dance?) or to <em>ought</em> or <em>should</em> (you might at least pay for the damages).</td>
</tr>
<tr>
<td><em>must</em></td>
<td><em>Must</em> can be used to say that some action is necessary or required. <em>Must</em> can also be used to issue a command, or to express that someone should do something. <em>Must</em> can also be used to express strong likelihood (That must be Janet calling).</td>
</tr>
<tr>
<td><em>shall</em></td>
<td><em>Shall</em> is sometimes used to express simple futurity (indicative mood). However, <em>shall</em> is often used to express a command or exhortation (thou shalt not kill). In law, it is used to express what is mandatory (Congress shall make no law …). <em>Shall</em> can also be used to express what is inevitable or likely in the future (We shall see). It can also be used to express determination (They shall not pass!).</td>
</tr>
<tr>
<td><em>should</em></td>
<td><em>Should</em> was originally the past tense of <em>shall</em> and is sometimes still used in that sense, such as to express futurity from a point of view in the past. <em>Should</em> is also used to express condition (if he should leave his father, his father would die). <em>Should</em> can also be used to express obligation, propriety, or expediency (you should brush your teeth after every meal). <em>Should</em> can also be used to express what is probable or expected, and to soften direct statements or requests.</td>
</tr>
<tr>
<td><em>will</em></td>
<td><em>Will</em> is used to express the future tense in the indicative mood. <em>Will</em> is also often used to express frequent or habitual actions or natural tendencies. <em>Will</em> can be used to express desire, choice, willingness, or consent. In negative constructions (I won’t!), it expresses refusal. <em>Will</em> can be used to express capacity or sufficiency (the tank will hold 40 liters). Although <em>will</em> can be used to express probability or inevitability, it can also be used to express determination, insistence, persistence, or willfulness or to make a command, exhortation, or injunction.</td>
</tr>
<tr>
<td><em>would</em></td>
<td><em>Would</em> came from the past tense of <em>will</em>. <em>Would</em> can be used to indicate what someone said or thought about what was going to happen or be done. <em>Would</em> can also be used to talk about an imaginary situation or something that did not happen. <em>Would have</em> is used to talk about something that did not happen or was not done.</td>
</tr>
</tbody>
</table>

Now that you have a clear understanding of grammatical modality, think about the difference between how doctors are practicing medicine (indicative mood) and how they ought to be practicing medicine (deontic modality!)

*Laurie Endicott Thomas is the author of Not Trivial: How Studying the Traditional Liberal Arts Can Set You Free* ([www.not-trivial.com](http://www.not-trivial.com)).

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### Resources


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**Resources**
What are some strategies that freelancers can use to break out of the feast-or-famine cycle of work?

Never stop marketing and always do great work for clients. Networking with colleagues, which is one marketing tool, and doing great work are the keys to referrals from colleagues and clients, respectively. Referrals are the simplest and easiest way to get new clients.

Up to 90% of the time, clients aren’t ready to hire you when you first contact them, so following up with prospects, especially those who’ve responded positively to you but not yet hired you, is another easy way to even out your workflow. The client needs to be thinking of you, and not another freelance, when he or she does need freelance help.

These strategies can help you move toward a perpetual feast of freelance work. But balancing your work so you have just the right amount is really difficult. If you never want to have a famine, be prepared to sometimes work more than you want to.

For several years I was on retainer with a client, who paid me enough each month so that there was never a famine time. I’ve never been able to find that again. Today, many pharma/biotechs/CROs want you to be a “temporary employee” rather than a consultant on retainer or a freelance on a project basis—which means they want 40 hours a week of your time for X months or a year. This is not self-employment; it is being a transient employee. I have tried to get a few to agree to a non-W2 contract of 20 hours a week but so far no luck. One other important step I took, when the money was flush, was to be sure I always had at least $50,000 in a money market account so the famine times would be covered.

However, it is important, I think, to remember that the feast/famine condition is not in our control; we can take steps to cope with it, but in truth we must accept that this business (like life) brings constant change.

—Cathryn D. Evans

In your experience as a freelance/consultant, what challenges and opportunities have you found vis à vis working with your clients’ teamwork model? Is it easier or more difficult working as a freelance compared with a full-time in-house employee?

I consistently work 30 to 35 hours per week for an advertising agency with pharmaceutical clients. I collaborate with several teams, mainly working directly with each team’s project manager or copywriter. I find it easier to work as a freelance because the hours are more flexible, there is no commute time, and my home is a quieter place to work than cubicles in a company’s office.

Early on, one disadvantage of working outside of the company was the “out of sight, out of mind” syndrome. Project managers would not allow enough time for medical editing and then ask for my work to be rushed. I have started to get this under control by:
To my mind, there is no question that teamwork is the way to go. It is much better to work with others, those who share the same project goals, so to speak. When you are a full-time in-house employee, you are there 100% of the time, with access to the other team members as much as you wish. They know you, they see your face, they know how you think, and you know how they think. There is a certain intimacy that furthers progress. As a freelance, working with the team is somewhat more difficult, because they are not likely to know you. You have to work harder to establish and nurture relationships. You are not always in touch with the internal politics, so it can be a bit harder to be a team member when you are not there in person and do not know the inner workings. Nonetheless, I have had particularly successful dealings when everyone is a consultant working remotely under a single project manager outside the company. This situation, I find, makes it exciting because everyone wants to achieve the goal; no one has a hidden agenda or a political agenda that interferes with accomplishing the task. Overall, I do think it is somewhat harder to work with the client’s team when you are not inside. In the end, the key is developing a good rapport with the client’s team. Much depends on the skill and experience of the project manager, but also on us as experts to stay on top of the need to communicate.

—Cathryn D. Evans

This question is timely! Until recently, the extent of my working within a client’s teamwork model involved simply uploading and downloading large files from FTP sites. Over the past 2 months, I have been involved in 2 projects requiring me to come up to speed very quickly on how to use software my clients are using to manage team projects.

The most challenging was a regulatory writing assignment. I was part of a writing, editing, and quality control team comprising about a dozen people. Our assignment was nearly impossible given its scope and timing. And then came the collaborative nightmare.

First, the team was required to use an email address created for us by our client. I was able to forward messages from this account to my usual email address but had to log into the client’s portal when I needed to send messages. What a time suck when you are frantically trying to get things done! Then we learned we would also have to obtain some input documents from the portal of our client’s client. For that, we needed yet another email address. It was crazy figuring out what address to use where and what information to get from which site.

At least both client portals used the same team collaboration software—Microsoft SharePoint. While it was pretty intuitive to use, the velocity at which we had to come up to speed on it felt like being in the front car of the fastest induction roller coaster ever. I’m not sure whether it was the speed or the fear that brought tears to my eyes. But once I figured it out it was another notch on my belt.

Perhaps the most insane part of the project, though, was the Excel spreadsheet the client used for tracking everyone’s progress. A necessary evil, and evil it was to the core. It spanned 18 columns and hundreds of rows across several tabs. It probably would have covered a football field, and like an ant in a football field, once in the middle of it, I had no idea of where I was. But failure was not an option. The only way to know whether a piece of the project had come back from either internal or client review was to check the Excel spreadsheet of death. Our client set up a system whereby every time anyone uploaded a document, everyone would receive an email about it, whether the document was relevant to us or not. There were hundreds of unique deliverables, and each deliverable was going through about a dozen reviews. We all had to stop what we were doing to check thousands of emails that would come in (horrifyingly, at a rate of 100 or more at a time) to identify which documents were ours, then follow the links in the emails to download the comments.

If all this sounds like a nightmare, it was. This assignment was insane, and our client knew it. This assignment wasn’t any easier for the in-house people than for the freelances. But the situation nevertheless provided great opportunities for me. By stepping up to the plate, I was able to be a hero to my client and learn something new, all while doing important and

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- Saying yes to rush jobs to earn credibility (which can cause weekend work)
- Going into the office about once every 6 months to put faces with names
- Calling team members to iron out issues that may appear testy in emails
- Being courteous, at all times, in emails
- Numbering questions in emails so that they are more easily noticed, and thus more likely to be answered
- Creating an order form for my work that prompts project managers to provide the necessary information, instead of my having to reach out for it
- Reaching out to a project manager a week in advance of significant or new projects to prompt an onboarding meeting
- Suggesting overall project changes to allow for more consideration of medical editing

It is a work in progress, but I think that project managers appreciate when a freelance works within their teamwork model.

—Cherie Dewar

To my mind, there is no question that teamwork is the way to go. It is much better to work with others, those who share the same project goals, so to speak. When you are a full-time in-house employee, you are there 100% of the time, with access to the other team members as much as you wish. They know you, they see your face, they know how you think, and you know how they think. There is a certain intimacy that furthers progress. As a freelance, working with the team is somewhat harder to work with the client’s team when you are not there in person and do not know the inner workings. Nonetheless, I have had particularly successful dealings when everyone is a consultant working remotely under a single project manager outside the company. This situation, I find, makes it exciting because everyone wants to achieve the goal; no one has a hidden agenda or a political agenda that interferes with accomplishing the task. Overall, I do think it is somewhat harder to work with the client’s team when you are not inside. In the end, the key is developing a good rapport with the client’s team. Much depends on the skill and experience of the project manager, but also on us as experts to stay on top of the need to communicate.

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If all this sounds like a nightmare, it was. This assignment was insane, and our client knew it. This assignment wasn’t any easier for the in-house people than for the freelances. But the situation nevertheless provided great opportunities for me. By stepping up to the plate, I was able to be a hero to my client and learn something new, all while doing important and
exciting work and being paid for it. That’s the advantage of being a freelance, and that’s a big win.

—Brian Bass

What are the advantages and disadvantages of being a freelance writer in business for yourself compared with being hired by agencies for temporary employment?

In some ways, these 2 choices are different sides of the same coin, when you consider there is a level of uncertainty associated with both. The decision often comes down to where you are in your career and personal life. The advantages of being a freelance writer in business for yourself seem obvious. You are your own boss, you have great flexibility in the hours you work, you set your own fees, you can choose your own projects, you can take vacations when you want, and more. On the downside, there are many disadvantages. One of the primary obstacles can be the lack of benefits, especially health insurance. Unless you have a substantial number of regular clients, there can also be a constant sense of uncertainty about when the next project might come along. Working by yourself can also be isolating, and, if you are working out of your home, it takes lots of self-discipline to avoid distractions. It’s important to weigh the pros and cons, but if you are an experienced writer, with established contacts in the field, have built a reputation for reliability and the quality of your work, and are acutely aware of the pitfalls, being in business for yourself can be rewarding, both personally and financially.

The disadvantages of being hired by agencies for temporary employment are easier to identify than the advantages. The most obvious is that you sacrifice much of the autonomy associated with having your own business. Besides, you still have the disadvantage of having to buy health insurance and the uncertainty related to any type of freelance work. On the plus side, however, accepting temporary agency work eliminates many of the headaches associated with running your own business and the associated risks about generating income. Taking temporary work with agencies can be an excellent way to gain potentially valuable experience while getting paid on a relatively regular basis. It can also help you create a portfolio of your work, which can be critical in building a successful career.

—Donna L. Miceli

After 20 years of working for a large medical research institution followed by a back-to-school break, I connected with an AMWA member and manager of a pharmaceutical company who invited me to apply as a contract employee. So I did.

During my long previous stint working full-time, I had worked my way up to having a private office. I reported only to the director and benefited from his teamwork management style. If I could prove that I needed equipment, I got it. I had a free hand to coordinate the output of department heads, administrative staff, the art department, and print vendors.

As a subsequent temporary worker, I had an open cubicle in the publication department and a difficult time coordinating input from the manager’s assignments, statistical department, regulatory, art department, etc, because they seemed to compete rather than cooperate. Since this company was a highly regarded subsidiary of an international group, instructions for completing projects were not always consistent. However, the company paid much higher salaries than research institutions! Furthermore, company employees rated management highly, which convinced me to buy stock, whose value rose consistently during my 2-year stay!

Obviously, a long-term position in which one grows with the institution has a comfort zone that’s hard to beat. But, when opportunity knocks, open the door with a smile.

—Phyllis Minick

The freelance writer is a self-employed consultant. You are an entrepreneur who is in business, and, as such, you make all decisions in a wide variety of areas:

• Developing and writing a business plan
• Hiring other consultants, advisors, and subcontractors as you see fit
• Dismissing people who are not performing up to par
• Determining your hours
• Performing work in the way that suits you
• Accepting only projects you wish to be involved with and turning down those that are not a mutual fit with your business strategy
• Managing tax strategies

Your client views you as a consultant—not as an employee. Thus, you have not only substantially greater responsibility but also much more independence and unilateral decision-making power than does the temporary or transient employee (“contract employee”). As a consultant, except in circumstances in which you have been put on a long-term retainer for a given period, you are working on a project basis. When a specific project is finished, you are finished with that particular client until another project is available. Having no obligations, you simply move on to another project with a different client. These are clear advantages, in my view, to being freelance.

The contract writer is an employee, so your employer dictates how you will spend your time. As a temporary employee, whether in the client’s office or at home, you are generally
on the books for 40 hours per week for as long as the staffing agency books you; it means the client can assign you any other tasks to keep you busy during any project downtime. In addition, the staffing agency is removed from the work: the agency staff handle administrative tasks such as time cards and billing and know little (if anything) about the health care industry and medical writing. So your “employer” is the staffing agency, not the company. You may report to a project manager, but you are paid by and accountable to the employment agency. Some agencies offer benefits. Some do not. You have less control over what you do and how you do it. Moreover, in some cases, the permanent full-time employees may resent the temporary employee if he or she happens to be making more money because of the nature of the work. These are clear disadvantages to being a temp.

A few years ago I agreed to work 2 weeks each month in a client’s office for 18 months; hotel costs were covered as well as all other reasonable expenses. (I did not agree to become a W2 employee, however.) I was paid $100 per hour, and I was happy for the security of knowing I could bill $800 per day, 5 days per week. But what I encountered was the waste of time one often sees in an office (and which has been well documented by management consultants): Employees are often seriously unproductive relative to freelance consultants, since so much employee time is spent in meetings, handling internal email, dealing with corporate politics, and talking among peers. For me, as a long-time consultant, this was one of the single most challenging aspects of going into the office 2 weeks each month. In fact, it was so unpleasant that I only stayed (and charged for) 6 hours a day, not 8. Thus, my billing was not as high as expected, but at least I could spend the downtime in a productive manner back at my hotel.

The employees are present and being paid for 40 hours a week, no matter what, while the freelance is focused on productivity and charges only for hours that he or she deems productive. During downtime, the independent consultant can use the time for marketing, selling, and administrative tasks related to his or her own business. Still, for some people, being in the office with so many colleagues and participating in all the meetings may be true advantages. And of course, 2 other significant benefits to being a temporary employee on long-term contracts are:

- You do not have to market yourself, nor do you have to spend time on nonbillable business tasks.
- You have more security with long-term, full-time contracts, especially if you are registered with 2 or more temporary employment or staffing agencies.

I suspect the real difference has to do with personality types; some writers really cannot tolerate the ambiguities and risks associated with self-employment, nor do they have the psychological or personality profile to market themselves and handle other business management tasks. Such individuals are the most likely to prefer and benefit from temporary employment compared with being an actual freelance, self-employed consultant. In the end, one can make and keep more money as an independent freelance, but the stress involved may not be worth it to some people. Thus, we would have to conclude that neither position is superior or inferior—it is merely a matter of individual choice.

—Cathryn D. Evans

By definition, a freelance is in business for him- or herself. But how you work can make all the difference in the world. While I prefer to have hands-on and exclusive control for my success (and responsibility for my failures), I understand and respect why some freelances prefer to work through agencies for temporary employment.

In my opinion, the advantages of working through agencies are threefold: you don't have to market yourself, someone with contacts has a vested financial interest in your success, and you get a regular paycheck until the gig runs out.

A significant disadvantage, in my opinion, is that you're not freelancing and therefore miss out on the many wonderful advantages of being independent, such as:

- Determining your own hours
- Working from home
- Turning down work you don't like
- Firing clients who become a pain in the neck
- Charging for your value instead of your time
- Making more money than an employer would ever pay you
- Having a continual and overlapping flow of new work

Fortunately, the options rest with the freelance. If you have experience but prefer not being responsible for everything from buying paper clips to paying your taxes, or if you hate marketing and know you don't want to do it or think you won't do it well, working for an agency can be an excellent option. If you thrive on uncertainty and change and feel that the sky's the limit, going it alone may be right for you.

—Brian Bass
Vaccines are among the simplest, most successful, and most cost-effective means of public health promotion and infectious disease prevention. Vaccine-preventable diseases such as tuberculosis, polio, diphtheria, pertussis, and measles can lead to illness, blindness, disfigurement, long-term disability, and even death. According to a recent federal report, of all the children currently vaccinated, the incidence of vaccine-preventable deaths has reached an all-time low in the United States. Unfortunately, unfounded concerns promoted by anti-vaccination activists have led to a fall in vaccination coverage, causing the re-emergence of communicable diseases.

Laurie Endicott Thomas's primary goal in writing *No More Measles! The Truth About Vaccines and Your Health* was to inspire parents, physicians, health care providers, and scientists to work together to drive measles, mumps, rubella, and other diseases into extinction. Fear, misconceptions, and myths are the greatest obstacles in the fight to eradicate vaccine-preventable diseases. Unfortunately, vaccine-hesitant parents are more immobilized by fear of the vaccines than of the devastating effects of the diseases they prevent. Vaccination fears have even delayed the eradication of polio.

This highly informative book offers readers an engaging introduction to the rise of scientific and alternative medicine. It provides an excellent overview of the biology of infectious diseases as well as the history of the anti-vaccination movement. More importantly, it simply and clearly describes the theory of herd immunity and the success of disease-eradication campaigns. The book contains a wealth of information about the vaccine-preventable diseases and about the minimal risks and great benefits of vaccination.

The childhood vaccination schedule recommended by the Advisory Committee on Immunization Practices is designed to promote public health, not to sell vaccines to profit the pharmaceutical industry. Indeed, the vaccine industry struggles with slim profit margins considering the cost of development and production. On behalf of their children, many parents have chosen an alternate or delayed vaccine schedule, in the belief that they will decrease the potential for adverse reactions and/or prevent overburdening the immune system with multiple vaccines. However, there is no medical evidence to support any benefit in delaying childhood vaccinations. Instead, delaying the administration of the vaccines leaves children unprotected from diseases longer. This practice also increases the risk of fever-related seizures, requires more trips to the physician, and reduces the likelihood that children will complete the full schedule of vaccinations.

Some anti-vaccination activists have argued that the additives and contaminants in vaccines such as aluminum, formaldehyde, and thimerosal have not been subjected to toxicity studies. Thomas explains in detail how the Food and Drug Administration (FDA) works to ensure the safety and effectiveness of vaccines in the United States. The FDA regulates what additives may be used in vaccines and keeps track of all reports of adverse events associated with vaccines. Despite many anti-vaccination activist claims that the measles-mumps-rubella (MMR) vaccination caused their child's autism, there is simply no scientific evidence from top researchers and scientists to support such a connection.

Many chiropractors oppose vaccination despite the overwhelming scientific evidence regarding safety, efficacy, and effectiveness. Often they portray vaccination as a personal choice and emphasize risk rather than benefit. This misleads parents into believing that diseases are preventable by regular chiropractic visits. Vaccination, however, should not be viewed as personal choice but as self defense—and community defense. In order to effectively eliminate vaccine-preventable diseases, physicians and other health care professionals must combat fears, misconceptions, and myths about vaccines. It would be in the best interests of our children and society to educate parents (and policymakers) so that they understand that the supposed risks to children's health are unfounded and that children will greatly benefit from being vaccinated against various debilitating and deadly diseases.

—Tara Ann Cartwright, PhD

*Tara Ann is a medical writer and editor in Research Triangle Park, North Carolina.*
LETTER TO THE EDITOR

Valuing Medical Writing: Some Missed Misperceptions That Matter

Recently, Hilary Graham expressed concern about medical writing becoming feminized. Actually, since professional communicators replaced the male journal editors in the early 1970s, at least half of AMWA members, if not half the profession, have been women.

I agree that “understanding how we are perceived both as a profession and as individuals is critical to influencing the value assigned to our work.” I was concerned, however, by some common misperceptions that are more problematic than feminization.

One participant reported “she is a chameleon in her writing style” and works to “accurately employ [her clients’] writing voice.” However, “style” and “writing in the author’s voice” are not characteristics of medical-technical writing. She also “felt her transition to medical writing basically depended on a grammar refresher,” a topic mentioned by another participant, who commented that authors often have to be “gently reminded of rules of grammar”—statements that invoke freshman composition class, not medical writing.

One participant noted “that a credential, such as the Editor in Life Science (ELS), registers most effectively with physician-authors when [he describes himself] as ‘board-certified.’” Maybe. But certification will not provide credibility without superior skills. The BELS exam was compiled unsystematically by an organization created only to administer it, and the AMWA certification exam combines the 3 main specializations of medical writing, in the misguided belief that the pooled characteristics of all medical writers should characterize every medical writer (see “ecological fallacy”). Neither exam has been validated, nor have the subjects they test been publicly identified. Further, the exams test knowledge about writing and editing, not the skills themselves. Indeed, the AMWA exam is “not intended to predict how well an individual may perform as a medical writer.” (Really?) These exams are thus purely symbolic. However, if certified members cannot write and edit far better than untrained writers, certification could easily backfire.

At issue is our long-standing desire to be treated as professionals, despite the fact that people can enter the field without specialized preparation, can be unaware of its defining aspects, are often overly concerned with lower-level composition skills, and hope that 2 flawed certification exams will provide credibility. One participant commented—correctly—that “the greatest difficulty medical writers face is a lack of understanding of the profession.” When this lack of understanding permeates the profession itself, the difficulty is that much greater.

Whether or not medical writing has become feminized, if we are to be accepted as professionals, we must distinguish medical-technical writing from academic writing by developing the advanced, specialized knowledge and skills of expert communicators. To reach this goal, our workshops, conferences, and journal need to focus not just on preparing document types but on developing expert writing and editing skills, understanding and documenting biomedical research, applying evidence-based communication research findings, and, above all, educating clients, employers—and, apparently, ourselves—about the unique nature of medical writing.

—Tom Lang, MA

Tom Lang Communications and Training International

References

* A 1996 study reported that 65% of 800 high-ranking authors believed they could write better than medical communicators.
In my research project, I sought to document the lived experience of people who identify as medical writers. Within AMWA, this group includes individuals who prepare a wide variety of documents for distinct audiences. A small case study, of course, will not necessarily be representative of all viewpoints; nevertheless, I wanted to hear these voices, and I found them valuable in this beginning stage of research. Tom Lang may disagree with the lived experience documented in my article, but it does not invalidate the value in considering this information.

Regarding certification, Tom is a long-standing critic of various certification initiatives and how they have been implemented, and I understand that he continues to have concerns. Our profession is one of great diversity in type of work performed and attitudes about such work, which, in my opinion, should be celebrated, not chided. The purpose of the article was to raise awareness of potential inequities our profession faces as a whole and to prompt discussion—and, to this end, I believe the article was a success.

—Hilary Graham, MA

Graduate Student in Technical Communications & Rhetoric, Texas Tech University
Each year, AMWA presents up to 3 fellowships to members who have made significant contributions to the goals and activities of the association. Awardees of active fellowships must have been consistently active in AMWA during at least the previous 5 years and must be currently active.

In the spring, the Board of Directors accepted the recommendations of the 2016 Fellowship Committee to bestow the fellowship designation on Hilary Graham (Southwest Chapter), Cynthia Kryder (Delaware Valley Chapter), and Barbara Zimmerman (Rocky Mountain Chapter). The fellowships were officially awarded at the Medical Writing & Communication Conference in Denver.

**Hilary Graham**

Hilary began volunteering in AMWA in 2010, and in the span of just 6 years she has contributed significantly to the goals and activities of AMWA at both the chapter and national levels. Hilary has supported the Southwest Chapter in the areas of planning and publicizing chapter events and activities, managing the chapter’s Facebook page, and serving as chapter delegate. She has also led the chapter as president-elect, president, immediate past president, and director-at-large. Hilary has contributed numerous articles for the *AMWA Journal* and is a former section editor and member of the journal’s Editorial Board.

On AMWA’s Executive Committee, Hilary has served as awards administrator and most recently brought her vibrant energy and fearless and innovative thinking to benefit all AMWA members as administrator of chapter relations, a position she continues to hold.

**Cynthia (Cyndy) Kryder**

Cyndy began volunteering in AMWA in 2009, and since that time her significant contributions to the goals and activities of the organization have greatly benefited AMWA and AMWA members. She has represented the Delaware Valley Chapter as a chapter delegate; led the chapter as president-elect, president, and immediate past president; and moderated the chapter’s LinkedIn group. Cyndy has been an avid presenter of round-tables, panel sessions, and open sessions at annual conferences. She has also chaired and moderated open sessions and served on the Annual Conference and Constitution and Bylaws Committees. Cyndy is also a prolific contributor of articles to the *AMWA Journal* and has served as a section editor and member of the journal’s Editorial Board.

On AMWA’s Executive Committee, Cyndy has committed her insight, energy, and talent to enhancing the membership experience for all AMWA members. Cyndy now holds the elective office of AMWA secretary.

**Barbara Zimmerman**

Barbara began volunteering in AMWA in 2001. Barbara has contributed substantially to the organization at both the chapter and national levels. Whereas most volunteers begin at the chapter committee level and progress upward, Barbara’s path was inverted. She began as secretary of the Rocky Mountain Chapter—a position she held for 5 consecutive years before stepping up to serve as chapter
**2016 Golden Apple Award Winner**

**Jill Shuman, MS, ELS** (left), is the 2016 winner of AMWA’s Golden Apple Award. The award is given to workshop leaders who have demonstrated excellence in teaching in AMWA’s educational program. Shuman, who has taught dozens of workshops since 1995, has consistently received excellent evaluation scores. She is shown here with Kristina Wasson-Blader, AMWA’s 2015-2016 education administrator.

**2016 President’s Award Winner**

**Jude Richard, MA, ELS** (left), was chosen by Stephen Palmer, AMWA’s 2015-2016 president, to receive the 2016 President’s Award. The award is given by the AMWA president to a member of AMWA in recognition of distinctive contributions to the association at the chapter or national level.

In announcing the award, Palmer said, “Jude’s contributions to AMWA are notable, not only for the amount of work he has done for AMWA over the years, but for the sheer variety of that work.” Richard has served in several different offices for the Southwest Chapter, including president. He has written, edited, and peer-reviewed articles for the AMWA Journal. He has led workshops, open sessions, and roundtables at the annual conference. He has served as a judge for AMWA’s Book Awards. He has also served on the Education Committee and its Website Advisory Group, and chaired the Workshops Subcommittee.
This three-part learning activity, **Regulatory Writing Overview: Roles, Documents, and Process**, will help you jump-start your career in regulatory writing by providing a comprehensive understanding of the role of the regulatory writer, the major regulatory agencies overseeing drug approval, and the documents most frequently produced during the drug development process.

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