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How to Use the 3 Ps of Powerful Content: Plain, Personal, Possible
Make Your Message Memorable: The Power of Story

Introducing the 2014–2015 AMWA Executive Committee
Captured and Uncaptured Moments

Page through this issue and you will see an abundance of coverage devoted to the 74th AMWA Annual Conference. You can read about Gary Schwitzer’s spirited address on the troubling distortions in so much of health care journalism—“a daily drumbeat of dreck,” he called it. You can find tips on getting started in regulatory writing or learn about the evolution of the international process to “harmonize” the structure of documents required in regulatory submissions. AMWA volunteers stepped forward to do what they could to bring the conference to life for people who weren’t able to attend or for people who were in Memphis but found themselves in one session while wishing they could simultaneously experience another.

The conference reporters did a great job (and met their deadlines!), and yet, I must confess to you that our coverage barely scratches the surface. It doesn’t capture the chance meetings in the exhibit halls, the exchange of information over coffee, or the classroom education in AMWA’s workshops. There were hundreds of people in attendance at the conference, leading to thousands of interactions. Countless facts, insights, and inspirations were shared.

Here is one moment I’ll remember. Rosemary Gibson, winner of this year’s Alvarez Award, had finished her talk in which she emphasized the importance of listening to real people who are affected by the health care system. Peggy Boe stepped to the microphone. “I don’t have a question, but I do have a comment for my fellow medical writers,” said Boe, a regulatory writer with a background as an operating room nurse. “Start thinking of yourselves, when you are writing patient safety information, as patient advocates. Look carefully at the data for the little things that can turn into big things over time.”

We are not all regulatory writers, and we may not touch safety data the way such writers would, but Boe’s words resonated. In ways direct and indirect, our work can influence the health and care of actual people. Boe mentioned a time when she had asked a gathering of medical writers (not at an AMWA conference) whether they see themselves as patient advocates, and just one person raised her hand. If she asks you, what would your response be?

Our coverage of the conference in the Journal may be good, but it cannot compete with the lived experience. If you have a chance to go to next year’s conference in San Antonio, Texas, be sure to seize it. Also drop in at chapter events, or better yet, plan one. If you can’t break away from your desk, take advantage of AMWA’s webinar series or the many social media channels that can connect you to your colleagues.

The AMWA Journal is good. The AMWA people are better.

The Year Behind
As 2014 comes to a close, I would like to thank the volunteers who made it possible to pull together the issues of the journal. Behind these pages are authors, peer reviewers, section editors, article editors, proofreaders, Editorial Board members, Publications Committee members (especially Deb Whippen, administrator of publications), the AMWA Executive Committee and Board of Directors, AMWA staff, and the Journal’s graphic designer. From the bylines and the masthead, it may be clear to you who many of these people are whose ideas and efforts shape this publication. I want to specifically name and thank a few people who aren’t on the masthead page but who have contributed as peer reviewers, proofreaders, or article editors: Jessica Ancker, Danny Benau, Stephanie Brillhart, Carolyn Brown, Kathryn Nelson Emily, Hannah Fitterman, Melissa Fitterman, Tom Gegeny, Rita Gelman, Stephanie Harvard, Bart Harvey, Jim Hudson, Sue Hudson, Amy Karon, Tom Lang, Marianne Mallia, Donna Mathis, Nadine Odo, Kelly Schrank, Emily Sproul, Amy Stephenson, and Regina White. A special thanks also to Kelleen Flaherty of the University of the Sciences for encouraging her Biomedical Writing Program students to submit manuscripts to the Journal. The Journal wouldn’t be possible without everyone’s help.
The Growing Need for Shared Decision-Making Tools and How Medical Writers are Equipped to Meet It

By Kara Sorrell, MA / Medical Writer, Medpace Inc, Cincinnati, OH

S

Ituated at the nexus of patient-centered care and lower health care costs is an underused communication process called shared decision making (SDM) that helps patients navigate complex health choices to make informed decisions about their own care. Designed for the clinical encounter, SDM encourages doctors to personalize population-level evidence for individual patients whose socio-cultural contexts and personal preferences may be as varied as their literacy levels and risk tolerance. Across a range of disciplines and decision points—from statin choice to hip replacement surgery to taking antibiotics for bronchitis—decision aids (DAs), also known as patient decision aids (PTDAs) or decision tools (which can include brochures, videos, websites, cards, leaflets, etc) have been developed to facilitate this two-way communication between practitioner and patient.

Although SDM has been endorsed by medical doctors since 1959, the process has not yet reached a critical mass. However, that may be changing soon. As stakeholders in US (and global) health care delivery organizations strive for improved health outcomes and lower costs, the current “transition from volume-based to value-based care creates a business case for SDM” as well as an ethical one. And, the growing need for high-quality decision tools across the breadth of health care settings presents an excellent opportunity for medical writers.

THE FINANCIAL AND ETHICAL NEED FOR SDM

In 1982, “A US Presidential Commission on medical decision-making ethics recommended shared decision making as the ‘appropriate ideal for patient-professional relationships that a sound doctrine of informed consent should support.’” Since then, albeit slowly, SDM has been gaining international recognition “as a hallmark of good clinical practice, an ethical imperative, and as a way of enhancing patient engagement and activation.” Fifteen years ago, for-profit and non-profit hospitals, research centers, and private businesses began developing decision aids. Today, these tools (Figure 1, for example) come in a variety of formats across print and digital media:

Some are explicitly designed to facilitate shared decision making (e.g., decision aids). Others provide some of the information needed for some components of the shared decision-making process (e.g., risk calculators, evidence summaries), or provide ways of initiating and structuring conversations about health decisions (e.g., communication frameworks, question prompt lists).

Clinical trials of decision aids “have demonstrated effectiveness for increasing knowledge and risk-perception accuracy, improving patient-clinician communication; and reducing decisional conflict, feeling uninformed, passivity in decision making, and indecision about the choices made.”

Although not panaceas, SDM tools that are regularly employed at decision points throughout the health care delivery system could be valuable because of their demonstrated ability to improve patients’ knowledge about treatment options and hospitals’ bottom lines.

Policy makers perceive SDM as desirable because of its potential to a) reduce overuse of options not clearly associated with benefits for all (e.g., prostate cancer screening); b) enhance the use of options clearly associated with benefits for the vast majority (e.g., cardiovascular risk factor management); c) reduce unwarranted healthcare practice variations; d) foster the sustainability of the healthcare system; and e) promote the right of patients to be involved in decisions concerning their health.

Of course, a decision aid won’t prevent an emergency department (and inpatient) visit for a perforated appendix or other acute care conditions. But how many preventable visits (and costs) could be avoided if decision aids were used at each decision point for conditions like diabetes, or cardio-
vascular disease, along the course of a patient’s lifetime? Although the answer to this question remains unknown, it is one that is receiving increased scrutiny. Of particular concern are the “high and increasing health care costs [that] are arguably the single biggest threat to the long-term fiscal solvency of federal and state governments in the United States.” A 2013 study found that acute care spending on Medicare patients from 2009 to 2010 was “highly concentrated [with] 10% of the Medicare population [accounting] for more than half of the costs to the program.”

Current innovations and incentives aimed at stabilizing escalating costs emphasize patient-centered care, better health outcomes, lower costs, and the power of consumer choice. Some health care delivery organizations have devised internal processes to achieve these goals. Other organizations have begun to do so because of the Patient Protection and Affordable Care Act (ACA) and its associated federal mandates and pay-for-performance incentives, as well as the public reporting of survey data about patients’ perceptions of care.

Thus, when it comes to making health care decisions, there is a lot at stake for hospitals and patients. For hospitals that participate in ACA programs, “their organizational success depends on patient perceptions of and satisfaction with health care encounters.” And, there are millions of dollars at stake. In 2013, the Centers for Medicare and Medicaid Services (CMS) allotted $964 million in value-based reimbursement payments for acute inpatient care for eligible hospitals, with payments set to increase over time. An important consideration for both patients and hospitals is that as the number of possible clinical options increases, so too does the complexity of the decision-making process.

Patients and clinicians typically overestimate the benefits of interventions and underestimate their harms. Shared decision making can provide the opportunity for resolving this mismatch between clinician and patient expectations and the demonstrated benefits and harms of screening, tests and interventions . . . [and] may reduce the inappropriate use of tests and treatments, such as those that are not beneficial for the majority or are associated with substantial risks or harms. As such, it can play a role in reducing the problem of overdiagnosis and overtreatment.

**FEATURES OF A DECISION AID**

At a minimum, according to the International Patient Decision Aid Standards Collaboration (IPDAS), decision aids need to “(1) Explicitly state the decision that needs to be considered (2) Provide evidence-based information about a health condition, the options, associated benefits, harms, probabilities, and scientific uncertainties, and (3) Help patients recognize that their personal values are an important part of the process, which can be used to help guide their decision.”

In 2005, the IPDAS Collaboration crafted a checklist to assess the integrity of the content, development process, and effectiveness of print and digital tools developed around the world. The panel, which included more than 100 researchers, practitioners, patients, and policy makers from 14 countries, recommended that tools provide not only the funding source and date created, but also a balanced presentation of probabilities, information, and options. The checklist for evaluating the quality of decision aids includes:

- The use of plain language written at an 8th grade reading level or lower
- The use of visual graphics
- Multiple methods to view probabilities (words, numbers, diagrams)
- Equal presentation of positive and negative features (fonts, order, display of statistics)
- Discussion of chance, uncertain probabilities, probabilities as they relate to age, and context of other events
- Equal use of positive and negative frames (eg, showing both survival and death rates)
- Suggestions of ways for patients to share what matters most with others
- Presentation of evidence from studies of patients similar to those of target audience

The international panel also developed criteria for web-based tools, such as providing step-by-step guidance on how to move through a site and the ability to print the tool as a single document.

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**Figure 1.** Shared decision-making tools frequently use visual displays of quantitative information to help people interpret the benefits and risks of a course of action. This example is for people in a high-risk group considering whether to take a statin. 

Reprinted with permission from the Mayo Clinic Foundation of Education and Research.

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**1 What is my risk of having a heart attack in the next 10 years?**

**NO STATIN**

50 people DO NOT have a heart attack (green)

50 people DO have a heart attack (red)

**YES STATIN**

50 people still DO NOT have a heart attack (green)

12 people AVOIDED a heart attack (yellow)

38 people still DO have a heart attack (red)

8 people experienced NO BENEFIT from taking statins

---

**2 What are the downsides of taking statins (cholesterol pill)?**

- Statins need to be taken every day for a long time (maybe forever)
- Statins cost money. (to you or your drug plan)
- Common side effects: nausea, diarrhea, constipation (most patients can tolerate)
- Muscle aching/stiffness: 5 in 100 patients (some need to stop statins because of this)
- Liver blood test goes up (no pain; no permanent liver damage): 2 in 100 patients (some need to stop statins because of this)
- Muscle and kidney damage: 1 in 20,000 patients (requires patients to stop statins)

---

**3 What do you want to do now?**

- Take (or continue to take) statins
- Not take (or stop taking) statins
- Prefer to decide at some other time
In spite of the numerous IPDAS guidelines for tool developers, decision aids are not equally reliable. The uncertain quality of decision aids, including their appropriateness (or lack thereof) for low literacy populations, is one of a few barriers preventing the widespread uptake of these tools.12 (pp9)

McCaffery et al. note:

There has been “no systematic examination of the effects of health literacy on outcomes relevant to [decision aid] development or of interventions that might mitigate potential adverse effects of low health literacy in the decision-making context . . . despite the observations that in many developed countries only half the population has more than basic reading skills.”13 (pp10)

**WHAT MEDICAL WRITERS BRING**

If professional medical writers are currently playing a role in the development of decision tools, evidence in the medical literature to support this claim is scant, with only one study from a relatively new open access journal specifically citing literature to support this claim is scant, with only one study from a relatively new open access journal specifically citing the role of a medical writer in the development process.13

Another reference refers to a “multidisciplinary team of designers, investigators, clinicians, patient representatives, and other stakeholders.”14

Notably, however, the IPDAS criteria for the development of effective decision tools requires the technical, linguistic, and rhetorical skills that underpin the curricula of professional writing and editing programs across the United States. To meet these criteria, decision aid developers face the same classically rhetorical questions—pertaining to invention (eg, arguing cause and effect), arrangement (eg, creating a logical message), style (eg, using language appropriate for the subject matter and audience), and delivery (ie, choosing the appropriate mode of communication, such as digital or print)—that I studied as a master’s student in the Professional Writing and Editing program at the University of Cincinnati. Our curricula delved into:

- **Audience-focused documents**—in print and digital formats for low literacy and low health literacy populations, which we user-tested for effectiveness.
- **Desktop publishing**—using the Adobe Creative Suite and document design best practices to create information graphics, visual graphics, brochures, posters, e-pub files, interactive charts, and more.
- **Rhetorical strategy**—to identify the presence or absence of persuasive appeals in texts and images, which may not be understood by all audiences because of the cultural and linguistic contexts in which they are situated.
- **Theoretical analysis**—because a critical examination of culture and power dynamics allows writers to identify the ways in which oppression can manifest itself in documents through seemingly benign social norms.
- **Semiotics**—in order to understand how signs, symbols, and language make meaning when addressing various audiences.

When considering the interdisciplinary skills that professional medical writers bring to the development of high-quality decision tools, I recall another nugget from my graduate program—media theorist Marshall McLuhan’s aphorism, “the medium is the message”—and note its relevance in the context of current health care reform. In short, according to McLuhan, the “message” of a new technology (such as a decision tool), is “not the content or use of the innovation, but the change in inter-personal dynamics that the innovation brings with it.”15

In the case of SDM, the “medium” of a decision tool, regardless of whether it’s print, digital, or a set of memorized prompts, is able to facilitate the incorporation of both empirical evidence and patients’ values and preferences into the decision-making process. Potentially, its transformative power is more than the sum of its parts in that “each [tool] enables us [clinicians and patients] to do more than our bodies could do on their own.”15

It’s a medium for shared communication whose effects (physical, mental, and financial) extend beyond the clinical encounter to patients and their families, clinicians and their practices, hospitals and their communities. As national and international health care providers adopt SDM processes to improve patient care, professional medical writers are equipped to develop high-quality decision tools that span medical disciplines and decision points, and deliver important health messages to diverse populations.

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

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**References**


continued on page 192
Sometimes medical communicators must explain lesser-known disorders, such as nonconvulsive electrographic seizures (NCES) and nonconvulsive status epilepticus (NCSE). Medical communicators who appreciate the clinical significance of NCES and NCSE will be well positioned to participate in the recent surge of interest in these disorders. NCES and NCSE have been undetected and underreported owing to their ambiguous symptomatology, their complex diagnoses, and the technologic limitations of local hospitals. However, increased use of continuous electroencephalographic monitoring of critically ill patients, particularly those with altered levels of consciousness, has shown that both NCES and NCSE are more prevalent than previously thought. Their frequency and pathophysiology vary considerably according to the underlying cause. The pathophysiology generally involves an imbalance of excitatory and inhibitory neurotransmitters, including glutamate and γ-aminobutyric acid, that leads to neuronal excitotoxicity and damage and, ultimately, seizures. Patients with NCES and NCSE may lack cognitive effects but typically present with some degree of altered mental status. The subtlety of their clinical presentation coupled with the complexity of interpreting their electrographic signatures complicates their diagnoses. Paradoxically, both NCES and NCSE can be missed with some newer technologies. Management of the disorders consists of nonpharmacologic and pharmacologic interventions. Most patients receive a benzodiazepine as first-line pharmacologic treatment, but other antiepileptic drugs are used if patients have no response to treatment. Although much has been learned about NCES and NCSE, many important questions regarding their overall clinical significance and management remain unanswered.

INTRODUCTION

Recurrent seizures have been recorded as a medical condition for thousands of years. Historically, seizures were known as “falling sickness” and were considered readily recognizable because of their distinctive clinical presentation, which often includes violent, involuntary muscle movements called convulsions. By comparison, the study, diagnosis, and treatment of nonconvulsive seizures is in its infancy. Currently, there are 2 major classes of nonconvulsive seizures: nonconvulsive electrographic seizures (NCES) and nonconvulsive status epilepticus (NCSE), which are primarily distinguishable by their durations.

NCES are characterized by spikes or rhythmic discharges of electrographic activity with clear evolutions in frequency, location, or morphology lasting for at least 10 seconds but not longer than 5 minutes. The spectrum of clinical features of NCES ranges from asymptomatic to coma, which explains why they are frequently undetected and underdiagnosed. Patients sometimes have mental status changes and subtle myoclonic limb, facial, or ocular movements (or a combination of these features).

NCSE is similarly marked by electrographic activity without overt convulsive symptomatology. While the definition of what constitutes NCSE has evolved over the past decade, NCSE is now considered to be nonconvulsive seizures lasting longer than 5 minutes or 2 or more seizures without a return of consciousness between seizures.

Both NCES and NCSE have been associated with significant morbidity (including brain damage, injuries, severe disability, and vegetative state) and mortality among critically ill patients. Additionally, because NCES and NCSE frequently occur in some of the most clinically vulnerable patient populations and because the diagnoses of NCES and NCSE are inherently difficult, their true clinical significance may be markedly understated.

The aim of this review is to provide medical communicators with an overview of the epidemiology, etiology, clinical presentation, diagnosis, and treatment of NCES and NCSE. Medical communicators derive 3 primary benefits from studying NCES and NCSE: an appreciation of nascent...
disorders, an understanding of their biologic and pharmacologic similarities with other disorders, and an opportunity to capitalize on the burgeoning commercial interests in these disorders. First, medical communicators are often tasked with explaining the lesser-known disorders. This is particularly true of disorders perceived to have clinically significant consequences, such as nonconvulsive seizures. Additionally, NCES and NCSE share common pathophysiology, pharmacologic treatments, and treatment strategies with other neurologic and psychiatric disorders. The familiar pathophysiology and treatment can serve as a refresher for some medical communicators and a brief introduction for others. Third, there has been a recent surge in academic and pharmaceutical research to understand the underlying mechanisms, detection, and treatment of these disorders. In aggregate, there is a demand for reliable written information about NCES and NCSE, which thereby creates opportunities for medical communicators who possess a fundamental understanding of these complex neurologic disorders.

### EPIDEMIOLOGY

The prevalence of NCES and NCSE varies by patient population (Table 1). Perhaps no population is more susceptible to NCES and NCSE than critically ill patients, particularly those in a neurologic intensive care unit, who account for up to 34% of NCES cases and 18% of NCSE cases. Young age substantially increases the risk of NCES and NCSE for critically ill patients; for children admitted to a pediatric intensive care unit because of altered mental status, the prevalence of NCES and NCSE is among the highest of any patient population. Brain tumors also predispose patients to NCES and NCSE. Critically ill patients with traumatic brain injury, ischemic stroke, intracerebral hemorrhage, subarachnoid hemorrhage, central nervous system infection, altered consciousness, or toxic metabolic encephalopathy are at additional risk for NCES. Patients who have a history of generalized convulsive status epilepticus or who are comatose are also at increased risk. Reported prevalence varies not only by disease state but also by differences in study methodology. For example, differences in the duration of electroencephalogram (EEG) recordings or in the enrollment criteria, such as whether patients with prior convulsive activity are included, can affect measures of prevalence.

In recent years, NCES and NCSE have gone from being undetected or infrequently diagnosed to being managed at least 5 times per year by 86% of surveyed neurologists. The number of diagnoses has increased mainly as a result of improved detection technology and changes in the definition of NCSE. Previously, NCSE was defined as a seizure lasting longer than 30 minutes; now it is defined as a seizure lasting longer than 5 minutes or 2 or more seizures without a return of consciousness between seizures. The less-stringent criteria resulted in more electrographic seizures meeting the diagnostic criteria for NCSE.

### ETIOLOGY

The pathophysiology of NCES and NCSE is complex yet familiar. The pathophysiology is complex because it involves several excitatory, inhibitory, and metabolic pathways and can vary by the epileptogenic etiology. For instance, whereas convulsive and nonconvulsive seizures themselves contribute to further epileptogenesis by directly precipitating neuronal damage, brain tumors do so through several mechanisms, including bleeding-mediated release of iron, edema, necrosis, increases in peritumoral pH, increases in N-methyl-D-aspartate levels, and imbalances in excitatory and inhibitory neurotransmitters.

Nonetheless, some of these pathophysiologic mechanisms are not unique to nonconvulsive seizures. In fact, they are prominent in other neurologic and psychiatric disorders. The same imbalances in neurotransmitting substances present in NCES and NCSE, for instance, have been implicated in Alzheimer disease, schizophrenia, anxiety, and depression.

Most seizures are caused by abnormal electrical discharges in the brain. Elevations in extracellular excitatory amino acids

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**Table 1: Incidence of Nonconvulsive Electrographic Seizures (NCES) and Nonconvulsive Status Epilepticus (NCSE) by Patient Population or Diagnosis**

<table>
<thead>
<tr>
<th>Patient Population or Diagnosis</th>
<th>Incidence of NCES, %</th>
<th>Incidence of NCSE, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients in NICU</td>
<td>26.7–34</td>
<td>10–18</td>
</tr>
<tr>
<td>Patients in PICU with AMS</td>
<td>16.3–30</td>
<td>23</td>
</tr>
<tr>
<td>Brain tumors in adults</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>Traumatic brain injury</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Ischemic stroke</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Intracerebral hemorrhage</td>
<td>18–28</td>
<td>9</td>
</tr>
<tr>
<td>Subarachnoid hemorrhage</td>
<td>8–18</td>
<td>8</td>
</tr>
<tr>
<td>CNS infection</td>
<td>26</td>
<td>17</td>
</tr>
<tr>
<td>Altered consciousness or subclinical seizures</td>
<td>18–37</td>
<td>10</td>
</tr>
<tr>
<td>Toxic–metabolic encephalopathy</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Generalized convulsive SE</td>
<td>48</td>
<td>ND</td>
</tr>
<tr>
<td>Coma</td>
<td>ND</td>
<td>8–31</td>
</tr>
</tbody>
</table>

AMS, altered mental status; CNS, central nervous system; ND, not determined; NICU, neurologic intensive care unit; PICU, pediatric intensive care unit; SE, status epilepticus.

Superscript numbers indicate sources of data, which are listed in the References section.
can initiate seizure activity by triggering waves of neuronal depolarization that exceed the seizure threshold and lead to prolonged neuronal damage. Glutamate is the most abundant excitatory amino acid in the central nervous system and has a key role in this process (Figure 1). Under normal physiologic conditions, glutamate is stored in presynaptic vesicles in neurons, and its extracellular levels are tightly regulated at multiple stages. Changes in these levels are epileptogenic. Most notably, glutamate levels can increase as a result of a dysregulation of ion exchange systems, leading to neuronal membrane depolarization. Vesicles of glutamate within these neurons are subsequently released into the synapse in excess, yielding heightened extracellular glutamate levels. Excessive synaptic glutamate triggers N-methyl-D-aspartate receptor–mediated release of excessive calcium within postsynaptic cells, a process that has been implicated in programmed cell death. Alkalization of extracellular pH has also been associated with membrane depolarization, so conditions that alter pH could also be epileptogenic. Dysregulation of these excitatory pathways is believed to be a component of the underlying pathophysiology of NCES and NCSE.

The brain has mechanisms to prevent seizures caused by the damage associated with neuronal excitotoxicity. For instance, the presence of extracellular glutamate also triggers nearby interneurons to release inhibitory neurotransmitters, such as γ-aminobutyric acid, which suppresses the excitability of the discharging neuron releasing glutamate. Synaptic glutamate simultaneously activates nearby sodium-potassium–adenosine triphosphatase transporters to actively reuptake glutamate from the synapse and thereby suppress glutamate-mediated excitotoxicity. The buffering of extracellular potassium by glial cells also suppresses neuronal excitability. Failure of these inhibitory mechanisms or injury to inhibitory interneurons or glial cells may also precipitate NCES and NCSE.

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**Clinical Presentation**

NCES and NCSE are associated with protean and subtle clinical features. Although some patients with NCES and NCSE lack any cognitive effects, a more typical presentation involves some degree of altered mental status, including confusion, catatonia, and depressed mental acuity. About 8% to 31% of patients with NCSE are also comatose. In addition, personality changes (agitation and aggression) have been noted. Other manifestations of NCES and NCSE include involuntary ocular movements, such as blinking, staring, nystagmus (ie, spontaneous slow horizontal or vertical eye movements), sustained eye deviation or misalignment, and hippus (ie, irregular ocular spasms with exaggerated pupillary dilation and contraction). Moreover, some patients have subtle facial twitching, occasional limb muscular twitches, and automatisms (ie, a set of brief, unconscious behaviors).

**Diagnosis**

The diagnoses of NCES and NCSE can be challenging. Clinicians must assess patients’ medical history, concomitant

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**Figure 1. Glutamatergic Synapse and Reuptake.**

Abnormal fluctuations in sodium (Na⁺) or potassium (K⁺) levels lead to excessive depolarization of the presynaptic neurons. An overabundance of glutamate is released into the synapse and then binds its receptors, such as the N-methyl-D-aspartate receptor, on postsynaptic neurons. Excessive stimulation by glutamate triggers the release of excess calcium within postsynaptic cells and has been implicated in programmed cell death (excitotoxicity). Glutamate undergoes active reuptake by the Na⁺/K⁺–adenosine triphosphatase (ATPase) pump, which can attenuate glutamate–mediated excitotoxicity. Dysregulation of the glutamate excitatory pathway is a major mechanism for nonconvulsive electrographic seizures and nonconvulsive status epileptics. ADP indicates adenosine diphosphate; ATP, adenosine triphosphate; NAD+, oxidized form of nicotinamide adenine dinucleotide; NADH, reduced form of nicotinamide adenine dinucleotide.

(Adapted from Vlassenko, Rundle, Raichle, and Mintun [34]. Used with permission. Copyright 2006. National Academy of Sciences, USA.)
medications, seizure-related family history, facial movements, ocular movements, extremity movements, and level of consciousness. Additionally, the electroencephalographer, who is often a specialist in clinical neurophysiology with several years of experience, reviews individual EEG discharges and the electrographic pattern for distinctive features of NCES and NCSE [19,36-39].

NCES and NCSE are frequently missed with routine noncontinuous EEGs and even with some newer diagnostic tools for seizure detection. However, continuous EEGs (cEEGs), which record electrographic activity over a prolonged period, have proved effective in the detection of NCES and NCSE. cEEGs are analogous to the continuous monitoring of heart electrical activity with telemetry electrocardiograms. Like nonconvulsive seizures, arrhythmias often occur sporadically, and patients can be unaware of their presence. Accordingly, arrhythmias can be missed with routine electrocardiograms. Just as telemetry electrocardiogram monitoring provided a more accurate reflection of the true prevalence and clinical significance of cardiac arrhythmias, cEEG monitoring is changing the perception of the frequency and gravity of nonconvulsive seizures.

Given the rising incidence and perceived clinical significance of NCES and NCSE, cEEGs are increasingly being used in neurologic intensive care units. For instance, Pandian and colleagues [8] compared the incidence of seizures, including both NCES and convulsive seizures, with both routine EEG (recorded over 30 minutes) and cEEG (median duration 2.9 days). They found that more than half of all seizure cases would have been missed with routine EEG. Since convulsive seizures are clinically easier to diagnose than NCES, the use of a combined NCES and convulsive seizure rate in this study likely underpredicted the rate of missed NCES diagnoses. Moreover, Jirsch and colleagues [1] similarly found seizure activity in only 15% of critically ill patients at the beginning of EEGs but in nearly half of patients by 1 hour, again supporting the value of prolonged EEG monitoring.

The fact that NCES and NCSE can occur without overt clinical manifestations also complicates diagnosis. To better detect subtle motor activity, clinicians are increasingly using video cEEG monitoring, which provides a time-locked visual recording of patient movements and the corresponding continuous record of electrographic activity. [19] Additionally, clinicians are training bedside caregivers to enter comments on the recorded curve to document changes in medication, details related to the electrodes and recordings, and suspicions of seizures. [19] Together, cEEGs and video cEEGs have had pivotal roles in the increased number of diagnoses and the corresponding increased prevalence of NCES and NCSE.

## Treatment

Treatment of NCES and NCSE consists of both nonpharmacologic and pharmacologic interventions. Nonpharmacologic treatment of NCES and NCSE includes intubation if patients have a high likelihood of respiratory failure because of comorbidities or pharmacologic treatment. Intravenous access is also key because many of the pharmacologic treatments are administered intravenously. Additionally, monitoring with cEEGs provides insights into the diagnosis, treatment responsiveness, and the possible need to adjust therapy.

Since NCES and NCSE are heterogeneous disorders, laboratory assessments are obtained to identify and treat the underlying causes. For patients with histories of epilepsy, antiepileptic drug levels should be measured. Subtherapeutic levels should be corrected quickly, and increasing the maintenance doses may be considered, especially if patients were adherent to pharmacotherapy. [35,42] Similarly, other critical steps include withholding any medications, correcting metabolic disturbances, and treating infections that could be triggering NCES or NCSE. [35,42] Moreover, the cause of NCES or NCSE certainly affects the treatment options in some cases.

Occasionally, NCES and NCSE resolve spontaneously without pharmacologic intervention, but pharmacologic treatment is necessary in most cases. [35,42] First-line pharmacologic therapy for most NCES and NCSE events is benzodiazepines. [1,35,40,42] Among the benzodiazepines used as first-line treatment, lorazepam is frequently administered; diazepam is used less commonly because its effects are shorter than those of lorazepam while its elimination pathway is more complex. [40] Second-line antiepileptic drugs for NCES and NCSE include phenytoin, fosphenytoin, valproate, and levetiracetam. [1,35,43] Because many NCES and NCSE events are inadequately treated, new pharmacologic treatments are currently under investigation. Additionally, existing treatments for both epileptic and nonepileptic disorders are also being explored for treating NCES and NCSE. [30,12,14]

Adverse events are major considerations in the treatment of NCES and NCSE. Death from NCES and NCSE treatment often results from respiratory depression, hypotension, pneumonia (related to respiratory depression), and hemodynamic instability. Respiratory suppression and respiratory failure can occur as a result of overtreatment with barbiturates and benzodiazepines. [18] Hypotension is likewise a toxicity of barbiturates and benzodiazepines. [1,42] As seen in the treatment of some malignancies and infectious diseases, the treatment side effect profile is a key determinant for treatment selection. Accordingly, patients with NCES and NCSE are often treated with combination therapy or are switched immediately to another agent after a brief treatment course with benzodiazepines in an effort to minimize toxicities and capitalize
on potential synergies between treatments. For instance, in addition to being second-line treatments, phenytoin and fosphenytoin are also sometimes used in combination with benzodiazepines as part of first-line therapy. Furthermore, while typically considered to be as effective as benzodiazepines, barbiturates such as phenobarbital are generally reserved as third-line agents because they have less-manageable toxicity profiles.44

CONCLUSION
NCES and NCSE are potentially important clinical concerns. A large proportion of critically ill patients have seizures that are solely nonconvulsive. These events can go largely unnoticed and underreported because the diagnoses of NCES and NCSE are complicated by ambiguous symptomatology, technologic limitations of treatment facilities, and the need for diagnostic consultation with specialists, such as electroencephalographers. In contrast, the diagnosis of convulsive seizures and status epilepticus can be relatively straightforward because of distinctive clinical manifestations.

Robust research on the clinical outcomes of NCES and NCSE is needed. NCES and NCSE are thought to cause considerable physiologic and metabolic stress that can precipitate, or further exacerbate, neurologic injury after acute insults.2,21 However, synergistic damage can result from concurrent medications and from underlying and concomitant systemic disorders, including infections, traumatic brain injury, and hypotension.42 Consequently, only limited evidence of permanent dysfunction is solely attributable to NCES and NCSE.1 Not only are the criteria used to define NCES and NCSE not universally accepted by practitioners, but NCES and NCSE often occur with underlying causes that are inherently neurotoxic or fatal. Nonetheless, case series and laboratory data suggest that prolonged or continual ictal discharges, which are electrical discharges occurring during NCES or NCSE, are associated with a significant increase in morbidity or mortality (or both).5,45,46 In animal studies, prevention of NCES and NCSE with antiepileptic drugs has resulted in a significant reduction in mortality.47 Therefore, even in the absence of other pathology, morbidity and mortality are serious potential concerns for patients with NCES and NCSE and should be investigated in adequately powered clinical studies. A better understanding of the outcomes of NCES and NCSE would aid in developing evidence-based recommendations. For instance, the objective benefit of acute treatment of NCES and NCSE has not been quantified, and it is unclear which patients should be treated at all. The diagnosis (including biomarkers), treatment, and outcomes of NCES and NCSE are the focus of ongoing and planned research efforts with the goal of advancing an understanding of how to manage these disorders.

Given the dynamic nature of such research, the multifactorial etiologies, and the nuanced diagnosis and treatment of nonconvulsive seizures, medical communicators who can accurately characterize NCES and NCSE are particularly needed. The improved detection methodologies for these disorders, their increased prevalence, and the new treatments in development suggest that the demand will increase. More broadly, neurologic disorders rank as the fourth and sixth most deadly disorders in the United States.48 The 2013 direct and indirect costs of epilepsy were estimated as $17.6 billion in the United States alone, and approximately 10% of Americans will experience seizures in their lifetimes.49 Medical communicators who appreciate the clinical significance of NCES and NCSE will be well positioned to participate in the recent surge of interest in these and similar neurologic and psychiatric disorders.

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

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GLOSSARY
comorbidities – Concurrent disease states, which may include the underlying cause of seizures.
epileptogenesis – The triggering of seizures.
epileptogenic etiology – The underlying diagnosis resulting in seizures.
generalized – A seizure with widespread discharges affecting both brain hemispheres.
seizure threshold – The balance between excitatory and inhibitory forces in the brain, which affects how susceptible a person is to seizures.


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“daily drumbeat of dreck” is the mainstay of much health care journalism, says Gary Schwitzer, publisher of HealthNewsReview.org and winner of AMWA’s 2014 McGovern Medal Award. Instead of helping readers and viewers understand the evidence behind treatments, tests, products, and procedures, many health news stories emphasize or exaggerate potential benefits, minimize or ignore potential harms, and ignore cost. “Many health care journalists write as if all the evidence is in, especially for newer, costlier interventions. Almost always, it is not,” says Schwitzer, who is also an adjunct associate professor at the University of Minnesota School of Public Health. Schwitzer acknowledges that there are unprecedented peaks of excellence in health care journalism. “It’s just that the valleys in between those peaks—the daily drumbeat of dreck—are becoming wider and deeper and may overwhelm the good achieved at the peaks,” he says.

Before establishing HealthNewsReview.org in 2006, Schwitzer spent more than 30 years in health care journalism, including leading CNN’s medical news unit and serving as founding editor-in-chief of MayoClinic.com. HealthNewsReview.org is the only health care news watchdog service of its kind in the United States. Reviewers from journalism, medicine, health services research, and public health use 10 criteria to review news stories that make therapeutic claims about treatments, tests, products, and procedures (Box 1).

Health News Stories Get An Unsatisfactory Report Card

Of 1,889 health news stories reviewed over 7 years (April 2006 through May 2013), the reviewers rated most unsatisfactory for half of the criteria:
- Costs: 69% unsatisfactory
- Benefits: 66% unsatisfactory
- Harms: 65% unsatisfactory
- Quality of the evidence: 61% unsatisfactory
- Comparison of the new approach with alternatives: 57% unsatisfactory.

By Lori De Milto, MJ

The stories appeared in newspapers (43%), wire or news services (30%), online, which includes stories by broadcast and magazine companies (15%), and network television (12%). Conveying a certainty that doesn’t exist was the most common flaw (Box 2).

Positive Spin and Lack of Knowledge Harm the Public

In 2013, NBC News reported a cure for baldness that was based on a mouse experiment with 5 successful results. The same year, The New York Times, Time magazine, and Esquire all alluded to a cure for cancer, according to Paul Raeburn, a media critic for the Knight Science Journalism Tracker at MIT. In 2012,
CNN proclaimed that a cure for cancer was within reach, based not on new findings but on a new program established at a medical center.

News releases and stories that misrepresent randomized controlled trials contribute to the “daily drumbeat of dreck” fed to consumers and patients. In a study published in *PLOS Medicine* in 2012, Yavchitz et al. found positive “spin” (reporting that emphasized the beneficial effect as reported in the abstract conclusion) in about half of press releases and news stories. Schwitzer notes the importance of not believing the stated bottom line without confirming it in the data. Many journalists, however, don’t have the necessary knowledge to do this. They don’t understand, for example, terms such as composite endpoints, surrogate markers, subgroup analyses, and inadequate comparators, Schwitzer says.

“We have entrusted the reporting of health stories to the public to many people who are ill-prepared to know bad science,” says Schwitzer. This harms people by misleading them and giving them false hope. Despite the fact that only about 8% of drugs in Phase 1 trials will be approved for marketing, for example, health news stories often describe Phase 1 results as “breakthroughs.” Schwitzer has seen breakthroughs proclaimed about Phase I study results on network TV reports by ABC, CBS, CNN, and NBC. The cover of *Prevention* magazine proclaimed a “cancer vaccine breakthrough,” while the story consisted of 16 words about a drug that was just moving into the testing phase.

**Box 2. How Health Care Stories Convey a Certainty That Doesn’t Exist**

- Exaggerating effect size
- Using causal language to describe observational studies
- Failing to explain limitations of surrogate markers/endpoints
- Single-source stories with no independent perspective
- Failing to independently analyze the quality of the evidence

**Journalists Should Help the Public Understand Health Care**

Too much of the wrong kind of health news matters because the public debate about health care is ugly and uninformed by evidence-based medicine. When the US Preventive Services Task Force followed the evidence and recommended not performing prostate-specific antigen-based screening in asymptomatic men, the chief executive officer of Zero, a nonprofit organization working to end prostate cancer, accused the task force of condemning “tens of thousands of men to die this year and every year going forward...” The vice president of the National Breast Cancer Coalition, a breast cancer survivor, was reviled when she told an FDA advisory committee that the data don’t show that Avastin extends the lives of breast cancer patients, but do show it increases the risk of harm. One person at the meeting called her “an embarrassment to all cancer survivors.”

Schwitzer says journalists should be helping people understand that:

- In health care, newer isn’t always better...more isn’t always better...less can be more.
- Bad things happen when normal states of health are redefined as illnesses requiring treatment.
- Every health care decision involves tradeoffs of something to be gained but also something to be lost.

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Alvarez Award Lecture

Becoming a Medical Writer: the Journey and the Destination

Speaker: Rosemary Gibson, MSc / Senior Advisor to The Hastings Center and Section Editor for the Less is More series in JAMA Internal Medicine

By Debamita Chatterjee

This year’s Walter C. Alvarez Award was conferred upon Rosemary Gibson, MSc, a distinguished health care policy writer and a national champion of patient safety. Gibson has dedicated her career to giving voice to patients; her books have empowered society in matters of pressing health care issues.

Fourteen years ago, Gibson stumbled upon the Institute of Medicine’s book To Err Is Human. She viewed the report as “a stunning piece of work” because in it leaders of medicine acknowledged that too often there were preventable errors in the US medical system, leading to as many as 98,000 deaths annually. Combined with the financial burden, medical error is a significant public problem, and yet it had been not much discussed. Gibson’s internationally acclaimed book Wall of Silence* tells many stories of people affected by medical errors.

“I used to write policy work at 30,000 feet when I was at a think tank,” Gibson said in her Alvarez address at the 2014 AMWA Annual Conference. “Here I was down at 3 feet, where the rubber hits the road. And I’ll tell you, this was the most transformative work I’ve done in my career—the simple act of listening and talking with the patients about whom this whole enterprise is ultimately about.”

One such story was that of a woman who lost her 2-year-old son to medical negligence. Doctors performed an apparently successful surgery to remove his tonsils, but within a week, after multiple episodes of vomiting up blood, he died; the woman was left with many questions about what had gone wrong. Gibson spoke of more such horrific events—botched surgeries, removal of healthy tissue rather than cancerous tissue, and false diagnoses.

Medical mistakes are commonplace, but our society has been trained to think of these as rare, unfortunate incidents. Wall of Silence shatters this myth and reveal how the health care system has covered up these medical errors.

As a self-described “doctor of the system,” she turned again to the general public for ideas for her next project. This time, she heard stories about the questionable quality of informed consent: Are we informed about costs as well as benefits every time we go under the knife? She said every patient has a right to ask: Is the medical care at all necessary? And is there a cheaper alternative?

The Treatment Trap

Her third book, The Battle Over Health Care, discusses the Patient Protection and Affordable Care Act. The book critically examines how key industry players shaped the final legislation. In her talk, Gibson said there are parallels between the financial meltdown of 2008 and the problems in the health care system. Borrowing terms from the financial crisis—price bubbles, too big to fail, and privatized gains and socialized loses—Gibson said “we have those in health care.”

Gibson said a dean of nursing once told her: “Health insurance used to be about giving patients access to providers. Now, it’s about giving providers access to patients.” Or as the wife of a patient once commented, “they harm you and then they bill you for it.”

Gibson’s books helped influence the creation of the Choosing Wisely series, initiated by the ABIM (American Board of Internal Medicine) Foundation to encourage conversations between patients and providers to make sure the care being delivered is appropriate. The Choosing Wisely materials consist of lists created by specialty societies of “5 things physicians and patients should question.” Consumer Reports has translated many of these lists for the public. She encourages AMWA and other organizations to actively talk about these issues to public.

Gibson’s latest book, Medicare Meltdown: How Wall Street and Washington Are Ruining Medicare and How to Fix It, talks about how Medicare—an entitlement for older and disabled patients—is being gradually “entitled” to hospitals and health care-related corporates affecting nations economy in the process.

Gibson concluded, “Health care is hard and health care problems are even harder to change but we have to name them, acknowledge them, and pave the way for ongoing conversations.”

Debamita Chatterjee recently completed a doctoral program in biology with a focus on aging, metabolism, and molecular genetics. She is based in Rochester, New York.

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* Gibson’s books were written with coauthor Janardan Prasad Singh.
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Breaking In: How to Get Your Start in Regulatory Medical Writing

Speakers

Dandan Zhu  
Principal Recruiter, Real Staffing Group, New York, NY

Barbara Snyder, MA  
Senior Director, Medical and Scientific Communication, Onconova Therapeutics Inc, Newton, PA

Jude Richard, MA, ELS  
Senior Medical Writer, Medical Writing, INC Research®, Austin, TX

By Daniel Yarrow, PharmD

The aim of this session was to provide guidance and insight for getting started in regulatory medical writing. Viewpoints and advice were provided by a recruiter, a pharmaceutical company employee, and a contract research organization (CRO) employee.

Advice from a Recruiter

Dandan Zhu is a recruiter and knows what attributes companies are looking for in a regulatory medical writer. She noted that, although a background in science helps, the keys to getting your first project or job are enthusiasm, sincerity, positivity, and networking. She also stated that you can get started by contacting recruiters and sending your curriculum vitae directly to potential clients/employers. However, for senior-level or experienced writers with industry experience, submitting yourself to a recruiter is often ineffective, leverage your networks with recruiter help. Some of the key competencies to develop (or highlight) include:

- Attention to detail
- Preparation
- Professionalism
- Ambition
- Initiative
- Quality of product
- Consistency
- Teamwork
- Cooperation
- Independent achiever
- Deadline/time driven
- Communication expertise
- Results oriented
- Flexibility
- Diplomatic
- Leadership
- Client/customer service
- Client satisfaction
- Focus on client needs
- Client relations
- Client-focused
- Client oriented
- Client relationship management

Dandan advised that one major decision for writers while job searching is choosing whether they want a permanent or contract position. Some benefits and requirements overlap between the two categories (Figure 1).

Dandan noted that, once someone has broken into regulatory writing, there are 4 ways to progress:

1. Stay within the company and climb the "corporate ladder."
2. Move to a different company (eg, switch between a pharmaceutical company and a CRO).
3. Switch between permanent and contract.
4. Change direction of career internally

Pharmaceutical Company Perspective

Barbara Snyder has been working in regulatory writing for more than 33 years. She stated that regulatory writing is a highly collaborative environment with teams composed of individuals with diverse backgrounds and experiences. Working in this environment requires that writers often function as project managers to manage timelines and negotiate with collaborators. She offered her top 10 tips for making career progress:

10. When appropriate, volunteer for tasks outside your job description.
9. Don’t be a burden to your manager (no internal politics, be positive).
8. Be a mentor or seek one out (formally or informally).
7. Ask for feedback and accept it graciously.
6. Keep your skills sharp (AMWA workshops, online education, company-sponsored training).
5. Support others’ ideas and give credit where credit is due.
4. Own up to your mistakes (use them as valuable lessons).
3. Meet deadlines.
2. Develop a thick skin; criticism of what you write isn’t criticism of you.
1. Always be respectful (eg, of other people’s perspectives and time).

Contract Research Organization Perspective

Jude Richard has 8 years of experience in regulatory writing for CROs and a total of 24 years of experience in medical writing and editing. He explained that, although CROs and pharmaceutical companies tend to look for writers with similar skill sets, there are a few key differences. Working for a CRO may require a writer to “switch rapidly and smoothly between standard operating procedures for different clients.” He also stated that, because a CRO’s primary selling points often include...
scalable perfection and “turnkey” operation, clients often expect a CRO’s regulatory writers to be able to write, review, or edit the final documents with little or no direct client oversight. This translates to regulatory writers needing strong attention to detail and editorial skills. Also highly valued is the ability to seamlessly integrate and function within different (client) teams.

**Question and Answer Section**

CROs may let individuals telecommute, whereas pharmaceutical companies tend to require working on site. However, many companies will want you to train and/or work on site before permitting you to work remotely.

Breaking into the field can be difficult. The speakers tended to agree that for someone new to regulatory writing, the best or easiest way to get started is to take an entry-level position and advance upward as he or she gains competency and experience.

For someone starting with a strong science background but little applicable writing experience, the speakers recommended starting out editing regulatory documents and, again, taking an entry-level position. Another recommendation was to provide a passionate, detailed cover letter explaining one’s interest and enthusiasm for the field.

When getting started, being hired usually comes down to a hiring manager taking a chance on a new regulatory medical writer who shows promise.

*Daniel Yarrow is a freelance medical writer (IntraSciConsulting.com) in Lenexa, Kansas.*

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**FROM R&D TO CLINICAL TRIALS: MEDICAL WRITING STRATEGIES FOR GLOBAL TEAMS**

**Speakers**

**Angela Johnson, MSE, PMP**
Senior Professional Brand Clinical Writers, GE Healthcare, Waukesha, WI; Graduate Student, Department of English, Texas Technical University, Lubbock, TX

**Catherine Cadogan, BS**
Senior Professional Brand Clinical Writers, GE Healthcare, Waukesha, WI

**XiaoYan (Yolanda) Wang, PhD**
Senior Professional Brand Clinical Writers, GE Healthcare, Beijing, China

**By Julie Ravo, MA**

How can we define global research and development (R&D)? In this presentation, this was best answered by the three presenters—medical writing colleagues for GE Healthcare in the US and China—as “where discovery and science meet and coexist.”

The Frascati Manual, published by the Organization for Economic Cooperation and Development, classifies R&D into 3 types:

- **Basic (pure and oriented):** Discovery of scientific knowledge about technologies, processes, and services
- **Application (strategic and specific):** Development of new technologies for commercialization
- **Experimental development:** Acquisition of knowledge for testing and commercialization

Of the 3 types, basic research has grown in developing regions. In 2014, China experienced 12.5% growth to $6.6 billion; in the US and the UK, basic research accounts for 10% to 20% of all R&D activities. In addition, the US, China and Japan—the top three R&D countries—represent just over 50% of the estimated $1.28 trillion in global R&D.

Medical writers play a role in R&D by facilitating the communication of new ideas derived from R&D initiatives. Medical writers can serve as an interface between scientists, physicians, regulatory representatives, businesses and more. They also may be involved in many phases of biomedical and medical research, including the development of grant applications, bench testing documents, regulatory submissions, manuals, protocols, journal manuscripts, and training materials.

**Is Your Team Culturally Competent?**

Cultural competence is an individual and organizational process that affects how people interact with those of different cultures and socio-economic backgrounds. Johnson stressed that this is particularly important when working on global teams with culturally and linguistically diverse members. Hence, succeeding in the global market requires an understanding of how different cultures think and approach a specific business situation, which were discussed in general terms in the presentation.

According to Johnson, individuals can enhance their cultural awareness, knowledge, and skills by considering the following factors:

**Diplomacy and directness:** In those cultures where directness is put before diplomacy, the truth in any situation must be made clear. In business, this may be regarded as rude in diplomatic cultures, where it may be rare to directly speak the truth if it could be perceived to negatively affect others.

**Literal and coded language:** Some cultures speak in literal terms to avoid evasiveness or inefficiency, while others may use “coded” language to protect others’ feelings. Accordingly,
each approach may present a challenge for the other during business interactions.

**Reserve and emotion:** Some cultures view it as a necessity to be reserved in business. Showing emotion may be interpreted as engagement or interest, which may lead to unintentional outcomes.

**Self-promotion and self-deprecation:** In some cultures, many people find it difficult to speak positively about themselves (to self-promote), but instead prefer to understate their abilities (to self-deprecate).

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**Benefits and Challenges of Global Collaboration**

Global collaboration can be rewarding but challenging. Establishing virtual teams offers the potential for frequent and flexible meeting schedules, which are cost-effective and support innovation. Conversely, different languages, time zones, and cultures of team members may make it difficult to ascertain the purpose, roles, and focus of a project and may lead to misdirection of goals.

**Real World Situations for the Medical Writer**

There are opportunities for medical writers to not only communicate new ideas but participate in other aspects of the R&D process as well. Cadogan presented potential “real world” scenarios in which a medical writer might play a role in communicating issues to team members. These included documentation of missing information that was crucial to the accuracy of the data and a response plan for the discrepancies for the project manager and interaction with the principal investigator to develop protocol amendments after a serious adverse event that may have been caused by incorrect product calibration.

*Julie Ravo is a medical writer in New Jersey.*

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Bart Harvey, PhD, (right) presents the Harold Swanberg Distinguished Service Award to J. Patrick P. G. Barron, professor emeritus, Tokyo Medical University, and adjunct professor, Seoul National University Bundang Hospital.

His award address was titled “Memories, Observations, and Predictions: the Past, Present, and Future of Medical Writing in Japan and Asia.”
EVOLUTION AND EXPANSION OF ICH

Speaker
Justina A. Molzon, MS Pharm, JD
Associate Director, International Program, Office of Strategic Programs, Center for Drug Evaluation and Research

By Michelle Eby, PharmD, CCRP

According to Justina A. Molzon, the Common Technical Document (CTD), well known to many medical writers, made a major contribution to the history and expansion of the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

ICH began in 1990 as an effort by regulators and their associated trade organizations in the European Union, Japan, and the United States to harmonize technical requirements for the registration of pharmaceuticals for human use. The intent is to reduce duplicate testing and research, saving time, money, and resources. Although initially concerned with brand name prescription drugs, ICH efforts expanded in 1996 to include generic and over-the-counter drugs.

The first ICH Steering Committee divided the topics for harmonization into safety, efficacy, and quality, which are the criteria and the basis for approving new medicinal products. This led to the formation of the first 3 expert working groups (EWGs) within ICH tasked with writing guidelines. The Safety, Efficacy, and Quality EWGs focus on preclinical studies, clinical trials, and manufacturing, respectively. During ICH’s first decade, significant progress was made in these areas, leading to the creation of guidelines in each working group.

In ICH’s second decade, initiatives such as the Medical Dictionary for Regulatory Activities and the CTD brought together experts from different domains. These led to the formation of multidisciplinary EWGs.

International Conference on Harmonization Process

All new guidelines undergo the ICH process, which consists of 5 steps (Figure 1). The first step, building scientific consensus, involves writing a concept paper and a business plan. The second step, agreeing on draft text, varies depending on the complexity of the topic, but includes a comment period. After completion of step 3, consulting regional regulatory agencies, the guideline moves to step 4, adopting harmonized guidelines. The guideline then moves to the final step, implementing guidelines in ICH regions.

Development of the Common Technical Document

Development of the CTD began in 1996 when ICH industry representatives proposed assembling the information generated by the harmonized guidelines. Their goal was to decrease the amount of time and staff needed to assemble and disassemble documents for submission to ICH regions.

As part of the implementation of the CTD, Molzon turned to the medical writing group in the Drug Information Association (DIA). She said “knowledge of the CTD would promote the status of medical writers and identify them as the ‘go to’ people in their company for this new submission format.” Molzon has worked extensively with medical writers on how to use and understand the CTD.*

The electronic CTD (eCTD), developed in 2008, facilitated the direct transfer of regulatory information from the pharmaceutical industry to regulatory agencies. The eCTD became mandatory for Japan and Europe and highly recommended for submissions to the FDA.

In addition to time-savings and increased efficiency, the CTD and the eCTD became catalysts for making the ICH process more inclusive. Pharmaceutical companies and regulatory agencies in other countries quickly realized the value of the CTD in reducing “complex multiple submissions vis-à-vis a single technical dossier,” Molzon said. Thus, the creation of the CTD resulted in expanded participation and increased transparency. Molzon lauded the fact that the international community openly embraced the collateral transparency of the CTD process itself, encouraging smaller, less-wealthy nations to come onboard as active participants in the ICH.

Global Participation

Since its inception, ICH has fostered collaboration and consensus building, and its public outreach meetings are held every 2 or 3 years (Figure 2). The first ICH public conference was held in Brussels in 1991. The fifth ICH conference (ICH 5), held in San Diego in 2000, focused on assembling quality.

*For her efforts, Justina Molzon was awarded an honorary AMWA fellowship at this year’s conference.
efficacy, and safety information and incorporating it into the CTD.

In November 2003, the following Regional Harmonization Initiatives were invited to ICH 6 to discuss their participation in key ICH functions:
- Association of Southeast Asia Nations
- Asia-Pacific Economic Cooperation
- Gulf Cooperation Council (the Arab States of the Gulf)
- Pan American Network for Drug Regulatory Harmonization
- Southern African Development Community

In November 2005, these countries observed ICH working group meetings. In June 2008, the ICH Steering Committee expanded to include Australia, Brazil, China, Chinese Taipei, India, Korea, Russia, and Singapore as individual regulatory authorities. In April 2011, the ICH Scientific Committee opened EWGs to Regional Harmonization Initiatives, drug regulatory authorities, and departments of health as expert members (not only as observers) who possessed appropriate knowledge and demonstrated support for the use of ICH guidelines. The East African Community, consisting of Burundi, Kenya, Rwanda, Tanzania, and Uganda, became a key ICH player in June 2011. According to Molzon, they had “a collective effort to review regulatory submissions including a common IT structure.”

Increased Transparency
Increased transparency has contributed to a broader acceptance of the CTD and ICH. In November 2005, ICH decided
to publish the summary of scientific committee actions and decisions on their website. In June 2006, concept papers and business plans for new topics were posted on the website as well. This provided for earlier notice of topics under discussion.

Medical writers are encouraged to contribute to the ICH harmonization process. Comments can be submitted using the “Help to Shape the ICH Guidelines” link on the ICH website. They will be considered by the relevant ICH EWG. As part of ICH’s strategy on global capacity-building, materials from training events—including several regulatory writing topics—are available for medical writers on the ICH website.

The continued success of ICH, now in its third decade, will depend upon broader use of ICH guidelines and standards. ICH must evolve to meet changing global conditions. Expanded participation in ICH is expected to benefit industry, regulators, and patients by promoting faster access to innovative medicines.

Michelle Eby, PharmD, CCRP, is a consumer safety officer for the Food and Drug Administration in Silver Spring, Maryland.
client’s lexicon. The writer is now cautious about sending any work to the editorial team and, specifically, to that editor.

So, what went wrong here? The answer is clear: The communication channel between the writer and the editor was leaky, if not completely broken. The writer failed to adequately explain to the editor the exact level of editing that was required for the manuscript, and the editor failed to query the writer for further explanation before editing the manuscript.

As this case scenario demonstrates, a writer may not understand the multiple levels of editing that are available or may mistakenly request an inappropriate level of editing. For example, “developmental editing,” also sometimes referred to as “comprehensive editing,” approaches editing at a high level and addresses the overall content and general structure of the document, including logical flow, sentence and paragraph transitions, unnecessary or inaccurate statements, wordiness and jargon. “Copyediting” involves a mid-level approach to editing and addresses grammar, word usage, active versus passive voice, cross-referencing, and consistency across sections of text, between text and figures/tables, and in overall style and tone. “Proofreading” involves a low-level approach to editing and addresses typographical errors, repeated word usage, spelling errors, punctuation, and minor formatting issues. In the case scenario, the writer requested “copyediting” but likely desired “proofreading.”

Because a writer may not understand the meaning of different types of editing, an editor must be sure to communicate to the writer exactly what level of editing will be performed, including the specific tasks that will be undertaken. Both the writer and the editor need to agree on the level of editing that is required, as well as the actual method used to edit (e.g., track changes in Microsoft Word, text edit in Adobe Acrobat). Both also need to communicate with one another throughout the process. Finally, the writer should always provide constructive feedback to the editor before removing that person from any future editorial work, as this is only fair.

Across all of the case scenarios that were discussed by Cannata and colleagues, several themes emerged, which clearly defined the rules of engagement between a writer and an editor. As with all relationships, both the writer and the editor have certain responsibilities that must be upheld to ensure a long-term successful relationship. The writer’s responsibilities include: clearly explaining the level of editing that is desired for a document; providing all necessary back-up documentation and (ideally) a kick-off call before the editor begins work on a large project; offering a style guideline and lexicon, if applicable; establishing the absolute deadline; querying the editor with any questions that arise; and providing constructive feedback upon completion of a job. The editor’s responsibilities include: ensuring that the writer understands the level and method of editing that is to be performed; highlighting all editorial changes; restricting all edits to the level of editing that was agreed upon; sending all major queries immediately and minor queries either in batches or when sending the document back to the writer (to avoid overburdening the writer with emails); and alerting the writer to any anticipated changes in turnaround time.

The take-home message is that the formula for a rewarding and effective relationship between a writer and an editor is actually quite simple: communication + respect = success.

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Resources

Brian Bass, AMWA’s 2013–2014 president, with Naomi Ruff, PhD, ELS. Bass selected Ruff for this year’s President’s Award, which is given in recognition of distinctive contributions to the association at the chapter or national level. She has served at the chapter level in numerous positions since 2002. For the Northern California Chapter, she was a board delegate, member of the Nominating Committee, and president for 2 terms. Since moving to the North Central Chapter, she has served as a member of the chapter’s Publications Committee and as secretary. At the national level, she has been a speaker and workshop leader and a member of several committees focusing on chapters, Web technology, annual meeting poster presentations, the Freelance Directory, elections, and the science curriculum.
PEER-REVIEWED JOURNALS: HOW TO MAXIMIZE THE ACCEPTANCE POTENTIAL OF YOUR MANUSCRIPT

Speaker
William S. Pietrzak, PhD
Senior Technical Writer, Biomet Inc, Warsaw, IN

By Debamita Chatterjee, PhD

The data have been collected, and now the would-be authors want to publish their findings in a peer-reviewed journal. In William S. Pietrzak’s session, he provided suggestions for maximizing the chances of having a manuscript accepted for publication.

According to Pietrzak, peer-reviewed journal articles are indicators of the highest level of scientific evidence and collectively embody “what makes science go forward.” Publishing in peer-reviewed journals helps scientists achieve credibility for themselves as well as the science they engage in; hence, the publishing process can be rigorous and challenging. Success at peer-reviewed publishing is an acquired skill and one that needs careful planning and practice, he said.

Pietrzak discussed the following tips for getting a manuscript published:

1. Understand the reviewer’s mindset.
Reviewers are selected from a pool of experts in their field of study and are asked to review manuscripts by journal editors. Most of them choose to review because it is an obligation as a scientist to give feedback and criticism to their peers. Reviewers are not paid for the job. Reviewers are not “out to get you,” Pietrzak said. Authors should make the job of reviewers easier by making sure submissions are readable.

2. The study should be important.
Pietrzak says that you need a “hook” to grab the attention of your reviewers. In this case, your hook should be that your study fills a gap in the existing literature or contributes significantly towards addressing an existing problem.

3. Fold your study into the fabric of the published literature.
According to Pietrzak, there is always a body of published work that serves as the starting point for your study and placing your study in the context of the literature adds enormously to its richness, depth, and value.

4. Avoid commercialism.
Acknowledge any negative findings, and objectively discuss findings without regard to a personal or company-based agenda. If the manuscript discusses a particular product, pros and cons should be included.

5. Become your audience.
It is imperative that you read your manuscript from the standpoint of the reader (in this case, the reviewer) and stop assuming that the reader knows as much as you do. If possible, get the critique of a colleague before submitting your manuscript.

6. The devil is in the details.
Follow the instructions and guidelines for authors in the respective journal carefully, stick to the format of the journal, and “be reasonable” about grammar and sentence construction, Pietrzak said. Reviewers are not supposed to serve as grammar police, but poor grammar and sentence construction can impede comprehension and frustrate the reviewer.

7. Choose the right journal.
This is a crucial step, as it requires careful evaluation and judgment on your part. No single journal may be “the right” journal, but you must choose the most appropriate one for your study. Closely examine author instructions to ensure your study fits the journal’s scope and criteria. Pietrzak suggested that the chosen journal should be indexed on PubMed but advised that you not worry too much about a journal’s Impact Factor (a measurement of how frequently a journal’s articles are cited during a specific timeframe).

8. Prepare to submit.
Most journals have online submission systems that are generally easy to navigate. Follow the steps laid out by the individual journal.

9. Close the deal.
The selected journal’s editor-in-chief (or other designated editor) decides whether to publish based, in part, on comments from reviewers. Authors will receive one of the following responses:
- Accept (rare on the initial submission)
- Revise (address the reviewers’ concerns and suggestions in a logical manner)
- Reject (do not take the rejection personally)

Pietrzak concluded by saying that peer-reviewed publishing is becoming more challenging every day. Rejection is becoming more common, and chances of acceptance in the first attempt are diminishing. “The stakes are high but rewards are many,” he said.

In keeping with his advice in the rest of the presentation, he cited 3 common reasons for rejection that authors can control: failing to explain the significance of the study; insufficient integration of the study results with the existing literature; and poor grammar and sentence construction.

Debamita Chatterjee recently completed a doctoral program in biology with a focus on aging, metabolism, and molecular genetics. She is based in Rochester, New York.

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HOW TO TAME YOUR TIMELINE DRAGONS: PROJECT MANAGEMENT AND NEGOTIATION FOR MEDICAL WRITERS

Speaker
Suzanne R. Canada, PhD
Owner and Lead Medical Writer, Tanager Medical Writing LLC, Union City, CA

By Nick Russell

In her open session, experienced medical writer Suzanne Canada provided fellow freelancers with a variety of ideas for negotiating the scope of projects and communicating with clients if demands grow beyond agreed-upon terms.

Negotiation Skills
Negotiating with clients sets boundaries and offers the possibility of fair treatment for both parties involved with the project. Unfair situations may lead to negativity and poor workmanship, which are not optimal for the freelance or the client. According to Canada, the simplest way to engage in negotiation is by learning how to say “no” to the client. If the scope of the project grows past the point of reason or if unfair terms are being suggested, a skilled freelance may be able to improve his or her position through compromise. Two important principles must be followed to ensure favorable results.

Principle #1: You Don’t Get What You Deserve, You Get What You Negotiated
Canada suggests engaging a client who has made unfavorable demands by asking to review timelines or offering the client the option of discussing avenues for negotiation. She notes 3 points that are negotiable: time, resources, and scope.

If negotiations are opened before a project starts, a thorough discussion of the timeline can help mitigate future issues and clearly define expectations. During the project, communication with the client is the key to ensuring that the scope of the project does not change unexpectedly. Communication also provides the freelance with the ability to be more agile in handling change. After the project is completed, next steps should be discussed in case the client has more work to be completed outside the original scope or the project still needs finishing touches.

In all negotiations, it is important to remember that the person with authority on the client side should be contacted directly. Should a timeline shift beyond the originally negotiated scope, it is important to find out who is in charge of driving the timeline. The person who holds this information may be able to indicate whether the timeline change was arbitrary, market driven, or caused by a shift in project priorities or other factors. Should the timeline change unexpectedly and require immediate action, for example, a sudden request to supply the client with materials before an impromptu meeting, the clients’ needs must be determined in order to meet their expectations. Asking for less work, timeline changes, or more resources to help complete the task are possible negotiating points.

In some cases, clients may not be willing to negotiate. Whether they have no time to talk or are unwilling to open dialogue, it is crucial to be prepared to engage the client and ensure that the manager in charge is contacted.

Principle #2: The Longer You Engage the Other Party, the More Likely They Are to Make Concessions
Canada suggests that the best way to get results when engaging a client is by meeting face to face. During such engagements, several key points should be followed:

- Be patient.
- Ask questions.
- Listen.
- Do not agree to anything that isn’t fair or puts you at a disadvantage.

Offering your own suggestions on reaching a compromise can often induce the client to make concessions that are more feasible within the given time frame for completion. It is important not to feel rushed or pressured to agree to something that is unfair. If the discussion does not have a clear outcome, Canada recommends not making an agreement until you have all of the information needed to make a decision that is in your best interests. She also offers commonly experienced scenarios in which project timelines are changed, with corresponding suggestions for ways to approach such situations.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Course of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impending meeting</td>
<td>Reduce project scope</td>
</tr>
<tr>
<td>Late delivery of project materials</td>
<td>Ask client for more work to fill the time</td>
</tr>
<tr>
<td>Emergency event</td>
<td>Find help</td>
</tr>
</tbody>
</table>

Project timelines can be troublesome, even to an experienced freelance writer. A positive attitude can help set a friendly and relaxing tone during an otherwise uncomfortable discussion. With the correct tools for negotiating, a compromise can be made that is beneficial to both the freelance and client. Recognizing when to negotiate, thinking about acceptable alternatives, preparing an offer, and exercising patience are the keys to taming your timeline dragons.

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INTROVERTS VS EXTROVERTS: DOES IT REALLY MATTER IN THE MEDICAL WRITING WORLD?

By Katherine Venmar

Pollock, an ambivert who leans toward extroversion, and Clingan, a self-proclaimed introvert, began the talk by recommending the HumanMetrics personality test, a free assessment of introvert/extrovert status. Understanding your personality and how introverts and extroverts function can improve relationships and workplace performance, whether you’re looking to move up or are already in a leadership role, the speakers said.

Both introverts and extroverts can be good medical writers, which may be reassuring because personality status is not something that can be changed, said Pollock and Clingan. People of both personality types can be well organized, detail oriented, good listeners, team players, and analytical, all of which are needed to succeed at medical writing, Clingan added.

Common Myths About Introverts and Extroverts

Introverts are typically (and often incorrectly) viewed as shy, self-centered, aloof, poor team players and leaders, bad public speakers, arrogant, rude, unfriendly, or lacking anything to say, said Pollock and Clingan.

Among these mythical traits, shyness is perhaps the most common attribute falsely ascribed to introverts, the speakers warned. In fact, shyness is not introversion but a desire to avoid people or a tendency to be self-conscious in front of them, Clingan said. Steve Martin, for example, is a vibrant comedian and actor who happens be an introvert, he said.

Both introverts and extroverts can be shy, so it is important to distinguish shyness from the true traits of either personality type, he emphasized.

Likewise, not all extroverts are poor listeners, unable to process information internally, shallow, loud, talkative, energetic, always team-oriented or the life of the party, or more social, outgoing, or confident than introverts, Pollock and Clingan noted.

True Characteristics of Introverts and Extroverts

Introverts and extroverts primarily differ in how they “recharge their batteries,” Clingan explained. Extroverts receive energy from groups, while introverts need down time to recharge, he added.

Introverts usually take time to think deeply and process information and are often insightful, sensitive, and intuitive, said the speakers. Introverts also may eschew small talk or lack assertiveness in verbal communication. But, when they do talk, they may freely share personal information—sometimes too much too soon.

In contrast, extroverts tend to seek novelty and excitement, and often are gregarious, assertive, cheerful (depending on circumstances), and talkative, said the speakers. Extroverts also tend to enjoy being the center of attention and are action-oriented—that is, they know which steps to take and take them, they said.

Working Successfully Within the Limitations of Personality Type

Both introverts and extroverts should be willing to work a bit outside of their comfort zones and learn from one another, said Clingan and Pollock. Extroverts may be more likely to be promoted as leaders because they tend to speak up and be heard but must take care not to interrupt their colleagues, they said.

Conversely, introverts may become frustrated if they think that they are being talked over and should be encouraged to “be their own cheerleaders,” the speakers said. Introverts should consider asking to be included in meeting agendas to create a space for themselves to speak, added Clingan.

Managing Teams of Introverts and Extroverts

Teams with both introverts and extroverts have two distinct and valuable perspectives that can be tapped, said Pollock. She suggested sending meeting agendas to the team before the meeting to give introverts time to think deeply about how they will contribute. If introverts feel prepared, they are more likely to speak up during meetings, she said.

When the meeting convenes, invite extroverts to speak first and encourage the introverts to share their ideas after they’ve had more time to process the information, Pollock said. Introverts nearly always have something to say, but they may need to be asked or given the opportunity to email their input after they’ve had sufficient time to process the information, she added. Pollock stressed that listening to both introverts and extroverts enhances the team greatly, and pointed out that some clients may prefer to communicate with one personality type over the other.

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SURVIVING YOUR DESK JOB: TIPS FOR BRINGING MOVEMENT AND RELAXATION INTO YOUR DAY

Speakers
Mary Kemper
Medical Editor, Mayfield Clinic, Cincinnati, OH; TriYoga instructor
Ann Winter-Vann
Senior Medical Writer and Consultant, Whitsell Innovations, Inc, Chapel Hill, NC

By Kelly Schrank, MA, ELS

This open session began with Ann Winter-Vann discussing why and how to bring movement into the work day and continued with Mary Kemper introducing attendees to yoga practice and leading them through breathing exercises and stretches meant to bring relaxation to their day.

Winter-Vann, a senior medical writer and consultant, moved quickly through news stories and journal articles (Box 1) on the health detriments of too much sitting and a sedentary lifestyle. While the studies showed that too much sitting was hazardous to our health, they did not, unfortunately, offer an answer to the question of why. Even for those who are active outside of their work hours, the effects of being sedentary for so many hours of the day can still be detrimental. One way to combat this may be through understanding NEAT, nonexercise activity thermogenesis, a topic she discussed in more detail. According to James Levine, author of Move a Little, Lose a Lot: New N.E.A.T. Science Reveals How to Be Thinner, Happier, and Smarter (Crown Archetype; 2009), NEAT may hold the key to helping us live less sedentary lives. Through simple activities like parking further away, running up and down the stairs to get things done, or standing during a call instead of sitting, we can burn an additional 1,500 to 2,000 calories a day. While many of us strive to be efficient, when trying to increase NEAT, Winter-Vann said, “Efficiency is not your friend.”

Anytime you can add a bit more walking, standing, or stair climbing, you are burning a few more calories and potentially extending your life (Box 2). For example, when deciding where to work in your home, you might choose a location farther from the kitchen or bathroom, or you might place the printer in another room so that you have to get up to retrieve print jobs. Whether you work from home or in a corporate office environment, you can put books you reference often on a higher shelf, so that you have to stand up to reach them, or you can put the trash can farther away, so you have to get up to throw things away.

Some tools Winter-Vann suggests to introduce movement into your day:
- Phone with headset, so you can stand or walk during conference calls
- Timer that you can set so alarms will tell you to stand up and stretch
- Standing desks, treadmill desks, or recumbent bicycle desks

To illustrate the different desk setups, Winter-Vann offered pictures of her own office, where she has a makeshift treadmill desk and a store-bought standing desk.

Kemper, a medical editor and yoga instructor, began her part of the session by asking everyone to remove their shoes and stand. While she dimmed the lights, Kemper walked the attendees through pranayama, or yogic breathing, differentiating between a person’s natural breath and complete breath, in which a person fills the low, mid, and upper lung on the inhale, then draws in the navel to fully release the breath on the exhale.

This was the first of 9 movements she demonstrated and performed with the attendees in the session: 1) yogic breathing/pranayama; 2) natural alignment; 3) healthy spine; 4) relax your shoulders; 5) wrist stretches; 6) neck stretches; 7) relax the eyes; 8) yogic path; and 9) mindfulness meditation.

Box 1. Journal Articles Referenced in Session


Box 2. Toys for Increasing Movement in Your Day

- Apps (FitBit, Jawbone, Healthier, Time Out)
- Free weights
- Resistance bands
- Ankle weights
- Balance ball
- Wobble board
- BOSU balance trainer
- Punching bag
Yoga teaches natural alignment as an antidote to slouching. “There is no slouching position in yoga,” Kemper said. Natural alignment is done in conjunction with complete breath: On inhale, you engage the core muscles to reset the natural curve of your spine; on exhale, you relax.

Many of the yoga movements suggested were stretches. For a healthy spine, Kemper provided 3 stretches: spinal rolls (standing or seated), side stretch, and spinal twist. Two shoulder stretches included the stress buster (draw shoulders up of your spine; on exhale, you relax. Inhale, you engage the core muscles to reset the natural curve of your spine; on exhale, you relax. Kemper prompted everyone to relax their eyes by looking up and down, then right and left, and then on a diagonal. Her handout also suggests that you cup your hands over the eyes to allow them to relax. Kemper’s handout listed the following items as part of “the yogic path”: healthy diet, rest, meditation, exercise, and a positive attitude. Lastly, Kemper discussed mindfulness meditation, explaining how yoga can help practitioners control the thought waves of their mind. The session ended with the following affirmation: I am relaxed in the present, letting go of past stresses and future worries.

Kelly Schrank works from her home near Syracuse, New York, as a medical editor for Med Communications Inc.

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HOW TO DESIGN, DEVELOP, AND EXECUTE A SUCCESSFUL WEBINAR: EXPLORING THE AVAILABLE TECHNOLOGIES

Speaker
Ruwaida Vakil, MS
Owner, ProMed Write LLC, Somerset, NJ

By Loretta Bohn

Ruwaida Vakil, MS, the principal of ProMed Write, has developed, designed, and conducted webinars for her clients. Webinars are cost-effective for reaching a large, geographically dispersed audience, and they can be convenient (offered live or on demand) and enduring (if they are archived). Most importantly, if done well, they engage the audience. In the open session, Ruwaida shared some specific strategies from her experience and offered a hands-on demonstration of registration and participation.

Consider these elements in designing and hosting a webinar.

1. **Deciding on the webinar format.** Consider what format might work best for the event—single speaker, interview, panel discussion, interactivity with audience, or some combination of these? Will you charge a fee?
   - Free events have high registration rates, but just 30% to 50% are likely to attend.
   - Paid events have lower registration but 75% to 98% attendance.
   - Consider why an audience would pay for your content. Lots of free material is available.
   - Attendees have higher expectations for paid events.

2. **Choosing the webinar platform.** Do you prefer a suite of conference tools or a webcasting platform? Options include do-it-yourself (DIY) paid, DIY free, and all-inclusive services. Major webinar service providers include Google Hangout, WebEx, and GoToWebinar. Understand what the particular platform offers: number of events, number of viewers and interaction types.
   - Are customization and branding available?
   - Can you do a dry run or get training?
   - Does the software support registration or do you have to set up a separate Web page?
   - Can it send mass emails?
   - How big can your audience be?
   - What support services are available?
   - Can you get real-time engagement metrics?
   - Is audio provided via telephone, online, or both?
   - How is content distributed?
   - Does the platform support recording, mobile compatibility, and software download? (The ability to record a webinar for on-demand access will increase potential viewership.)
   - Is it usable on both Mac and PC systems?

3. **Selecting speakers.** Make sure all speakers are engaging and well prepared.
   - Audio is the key component.
   - Presenters should be subject matter experts.
   - Webinar skills differ from those for oral presentation—don’t allow pauses longer than 3 seconds.
   - Know how to use the specific platform.
   - Presenter must be available for rehearsals.
   - Log on half an hour before the event.
   - Do at least one dry run.
   - Consider prerecording to avoid distractions.
Other practical considerations:
• Use telephone and computer headsets to maximize audio quality.
• For the Internet connection, hardwire the computers rather than relying on wi-fi.
• For an archived session, to capture all the audio, wait 5 seconds after pressing Record before the presenter begins.

4. Promoting the event. Get the word out about your webinar.
• Email to a list is most effective.
• Use newsletters, blogs websites, videos.
• Write focused, relevant, value-driven messages.
• Customize emails with the recipient’s name.
• Include key details, such as a link to the registration page and the time and date.
• The registration page should include a description, learning objectives, a biography and picture of speaker, and a registration box (at least name and email).

5. Engaging the audience. Average viewership for a 1-hour event is 53 minutes. Who is your audience and how can you engage them? Engaging increases viewing times, ensures higher retention, and establishes a personal connection with your audience.

• The registration page can help you engage your audience from the beginning.
• Consider including a pretest.
• Don’t advertise more than a month before.
• Lots of people sign up the week or day of the event.
• Send reminder emails (at least 24 hours and 1 hour before the event).
• During the webinar, interact! Use polls and question-and-answer opportunities. Adjust your approach if engagement statistics suggest a dropoff in attention.

6. Following up after the webinar.
• Be memorable by sending follow-up emails, offering surveys, evaluations, or posttests.
• Post a blog entry or discuss it on social media.
• Send thank-you emails to all who attended.
• Check metrics.
• If you recorded the session, edit the file, and then post the recording on a website.

Loretta Bohn is a senior editor/writer for RTI International in Research Triangle Park, North Carolina.

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HANDS ON: UNLEASHING THE FULL POTENTIAL OF MICROSOFT WORD

Speaker
Natalie R. Herr, PhD
Medical Writer, Whitsell Innovations, Chapel Hill, NC

By Loretta Bohn

Word is a powerful program for users who know how to make the most of it. In a 1-hour hands-on session using Microsoft Word 2010 (for Windows), Natalie R. Herr covered some of the most common settings and tasks. She assumed a basic level of proficiency. Many participants brought their laptops so they could experiment with the settings she was demonstrating. Although her instructions specifically apply to Word 2010, similar options are available in other recent versions of the program.

The first thing Herr recommended was checking general Word settings that will apply to all documents. The Options link on the File tab is the key to the behind-the-scenes view. Here are some of its secrets.
• General: You can decide how to style your user name and initials for comments and changes.
• Display: Determine which formatting marks show on screen when Show/Hide (on the Home tab) is on, and set general printing instructions.
• Proofing: These items are typically left at default settings, but skim for your preferences. For example, if you are annoyed by the red squiggly lines that indicate spelling errors, you can either uncheck “Check spelling as you type” (for all documents) or check “Hide spelling errors in this document only” (under Exceptions in the next panel down). This is also the place to ask Word to recheck spelling, grammar, or both (for instance, if a draft has been significantly revised) by including all the previously ignored items.
• Save: Adjust settings for default autorecover and how long to keep a draft.
• Advanced: Choose the pasting default under Cut, Copy, and Paste (you can eliminate the little “CTRL” drop-down box that accompanies pasted text!). It also includes field shading preferences for cross-references, tables of contents, etc. If you set field shading to “always,” you can tell at a glance where these items are on a page—and if an intended field hasn’t been properly styled.
• Advanced—Display group: Set the width of the style area pane in draft or outline view—that is, you can see what style is applied to a given section of your document. It is not the same as the Styles window, but it may help you see why a given passage doesn’t appear as you were expecting it to.
**SOCIAL MEDIA: IT’S NOT JUST AN OPTION ANYMORE**

**Speakers**

Larry Lynam, MA  
Principal, Writer and Facilitator, The Lynam Group, Coral Springs, FL

Felicia Hudson, BA  
Freelance Writer, Hudson Creative Copy, Chicago, IL

**By Lori De Milto, MJ**

Although many people are still stumbling to find their way through the world of social media, it’s an untapped resource that’s “here to stay,” said Larry Lynam, MA, principal, writer and facilitator at The Lynam Group. Now that 93% of marketers are using social networks for business, being on them is an obligation rather than an option. Nearly 5,000 US health organizations have social media accounts (Box 1).

**The “Big 6” Social Networks**

The most used social networks by individuals, businesses and marketers today, dubbed “the Big 6” by Lynam and Felicia

**Box 1. Social Media Accounts of US Health**

<table>
<thead>
<tr>
<th>Social Media</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>26%</td>
</tr>
<tr>
<td>Twitter</td>
<td>20%</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>13%</td>
</tr>
<tr>
<td>FourSquare</td>
<td>23%</td>
</tr>
<tr>
<td>YouTube</td>
<td>14%</td>
</tr>
<tr>
<td>Blogs</td>
<td>4%</td>
</tr>
</tbody>
</table>

Hudson, a freelance writer and owner of Hudson Creative Copy, are: Twitter, LinkedIn, Facebook, Google+, YouTube, and Instagram.

Twitter, LinkedIn, and Facebook are the best-known social networks, but Twitter, Facebook, and Google+ are the most widely used social networks for business and marketing.

“You need to adapt your voice and tone to the social media platform. By being timely and sharing relevant information, you begin to establish yourself as an authority,” Hudson said. On the basis of their experience and the opinions of noted social media practitioners, Lynam, Hudson, and Martin developed a list of best practices for the major social networks, including using images to increase engagement and response (Box 2).

**Twitter**

On Twitter, people are searching for new ideas and opportunities, more information, and better services, products, and solutions. With more than 645 million users in 2014, “if Twitter were a country, it would be the 12th largest country in the world.”

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*Brande Martin, MA, content manager/strategist for the College of American Pathologists, Northfield, IL, worked with Lynam and Hudson to develop the open session but was unable to attend the conference to present it.*
Google+ enables users to promote brands, gain new clients and customers, gain readers and visitors; enhance search engine optimization (SEO), and share ideas, work, art, music, and more.

Google+ and related Google services, offer many features (Box 3) that can be used to create effective marketing campaigns. Videos are especially effective on Google+.

LinkedIn is growing at the rate of 1 new member every 2 seconds, and increasingly going mobile. More users are in the United States (93 million of the 300 million total users) than in any other country (India, in second place, has 24 million users). LinkedIn has 2.1 million groups, which “are a great place to meet colleagues,” Lynam said. Users spend an average of 17 minutes a month on LinkedIn, and 41% of visits are made using mobile devices.

Maximize LinkedIn by spending time on your profile, but be truthful (Box 2). Ask for recommendations. “Never ask anybody for a recommendation unless they can speak to what you do and you’re comfortable with what they’ll say,” Lynam said. He suggests politely telling the person which skills you hope they’ll write about. Always thank people who give you recommendations.

Facebook is about connecting for information, ideas, and news, “said Hudson. It is often one of the first social media platforms businesses use. As of June 2013, Facebook had 1.19 billion active users, 80% of whom are outside the United States and Canada, noted Hudson. According to Brande Martin, MA, content manager/strategist at the College of American Pathologists, health care organizations that do social media well, especially storytelling, include Cleveland Clinic and Mayo Clinic. They start by defining their Facebook strategy, then determine the appropriate voice and tone and develop and implement the Facebook plan.

Launched in 2011, Google+ is the second largest social network after Facebook. It is growing 33% per year and users include 70% of brands, according to Hudson. “Some people say this will be one of the most popular platforms in the next few years,” she said. Using Google+ can improve search rankings.

Google+ enables users to promote brands, gain new clients and customers, gain readers and visitors; enhance search engine optimization (SEO), and share ideas, work, art, music, and more.

Google+ and related Google services, offer many features (Box 3) that can be used to create effective marketing campaigns. Videos are especially effective on Google+.

Twitter:  
- Make tweets resonate  
- Keep tweets short and sweet  
- Use photos, images and videos  
- Keep it real (current and relevant)  
- Tweet often (three to five times per day)  
- Follow your interests  
- Reply

LinkedIn:  
- Spend time on your profile:  
  - Fill it out completely  
  - Use keywords so others can find you  
- Make connections  
- Be active:  
  - Send comments  
  - Introduce people who will benefit by knowing each other  
- Ask for recommendations

Google+:  
- Create a Google+ community to engage and build relationships  
- Test different types of content (long and short copy, video, and images, etc.) to monitor audience response  
- Use strong headlines to increase SEO

Facebook:  
- Use calls to action  
- Use photos, images and video  
- Share stories and information

YouTube:  
- Use YouTube as one tool in the social media arsenal  
- Create content that is engaging and tells a story—not an ad  
- Be the face of the business or brand—people connect with people  
- Focus on creating high-quality, valuable content  
- Drive people to the organization’s website from YouTube

Instagram:  
- Use creative visuals along with effective captions  
- Create a theme and be consistent  
- Engage with followers  
- Connect with influencers who are advocates of the brand  
- Use a #hashtag to gain followers  
- Show the organization’s culture
YouTube and Instagram
Each day, 12 years of video footage is uploaded to YouTube and more than 60 million photos are uploaded to Instagram. YouTube enables users to promote their brand, advertise goods and services, educate, entertain, and learn. Instagram enables users to tell their brand’s story through visuals and connect with engaged users.

Using Social Media Effectively
The objective of using social media is to build engagement. Doing this starts with developing a social media strategy, and then developing a plan to implement the strategy. Lynam and Hudson advise starting small, tweaking the strategy, and continuing to grow. Regardless of the social media platform, consistency online and offline is key, Lynam said.

Freelance writer Lori De Milto is the owner of Lori De Milto Writer for Rent LLC, in Sicklerville, New Jersey.

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Resources

Box 3. Key Features of Google+

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google+ Hangouts</td>
<td>Group video chat with up to 10 users</td>
</tr>
<tr>
<td>Google+ Hangouts on Air</td>
<td>Live stream to a global audience</td>
</tr>
<tr>
<td>Google+ Ripples</td>
<td>Find influencers and brand evangelists (devoted fans who help spread the word about a product or service)</td>
</tr>
<tr>
<td>Google+ Communities</td>
<td>Share interests</td>
</tr>
<tr>
<td>Google+ Post Ads</td>
<td>Amplify content</td>
</tr>
<tr>
<td>Google+ Helpouts</td>
<td>Give or receive assistance over live video</td>
</tr>
<tr>
<td>Google+ Circles</td>
<td>Manage the updates received and shared</td>
</tr>
</tbody>
</table>

The Eric W. Martin Award (Professional Audience) was presented to Art Gertel (with Cindy Hamilton, Adam Jacobs, Gene Snyder, and Karen L. Woolley) for a 2013 article in the AMWA Journal: “The Global Alliance of Publication Professionals: Update on a Small Group with a Big Mission” (Volume 28, Issue 1).

The Eric W. Martin Award (Public or Health Care Consumer Audience) was presented to Randi Redmond Oster for her article “A Beautiful Choice: Living, and Dying, with Dignity,” available through her website at www.randiremondoster.com.

Allyson McLoed, a PhD candidate in biomedical sciences at Vanderbilt University, received the Annual Conference Student Scholarship. AMWA offers the scholarship in partnership with the University of the Sciences.

Presentation of the Golden Apple Award to Thomas Gegeny, MA, ELS (left) by Scott Kober, MBA, CCMEP, chair of the 2014 Golden Apple Award Committee.
HOW TO USE THE 3 P's OF POWERFUL CONTENT: PLAIN, PERSONAL, POSSIBLE

Speakers
Katy Magee, MA
Senior Content Manager for Content Strategy and Shared Decision Making at Healthwise, Incorporated, Boise, ID
Carrie Henley
Senior Content Manager of Behavioral and Responsive Content at Healthwise, Boise, ID

By Debamita Chatterjee, PhD

The goal of this session was to help medical writers develop powerful content that serves to inform and educate patients (and other users) accurately about existing health care practices, goals, and knowledge. This helps patients distill the plethora of information that is available and form an educated opinion of relevant health choices and become more engaged in their health pursuits.

Speakers Katy Magee and Carrie Henley both work for Healthwise, a health information company that provides decision support tools, behavior change assistance, and personal care planning for health plans, hospitals, and consumer health portals. Magee discussed some of the difficulties of health education and health literacy: Health is personal and therefore subjective. The language of medicine can seem foreign and be difficult to comprehend.

Magee and Henley went on to describe how these hurdles could be bypassed skillfully by adopting the 3 p’s of “plain, personal, possible” when creating health education materials or otherwise working as a health educator.

Plain

Health literacy has been defined in the Healthy People 2010 report as “the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.”

Keeping your content plain can help people overcome limitations in their health literacy. Magee listed the following tips that can help writers use plain language.
• Compose short, direct sentences.
• Use the second person (“you” as if directly addressing the patient), and use the active voice.
• Use familiar words and concepts instead of difficult words and jargon.
• Teach whenever needed.
• Focus on one idea at a time.
• Reduce background information and present content succinctly.
• Make content easy to read quickly for people who are skimming or scanning the text.

Personal

As diseases and health care becomes more globalized, the need arises to educate patients from diverse backgrounds. People have different needs, goals, learning styles, levels of support and perspectives on health. To overcome these differences, Henley suggested using the second p, personal, to connect with your readers. Like Magee, she suggested writers consider using the second person “you” to directly address readers and to use the active voice. She suggested that writers be clear about who their audience is and to compose text accordingly. She further suggested that writers should connect choices to what is likely to matter to individual patients.

Possible

Adopting new health goals and maintaining them is challenging to individuals; they may struggle for years. Gently remind people that it is possible to make small changes along the path to becoming a healthy person. How can you make change seem realistic and possible? Henley suggested the following:
• Seek to build confidence in readers, thus making them more powerful in charting their own health care.
• Focus on what people can do and not on unsuccessful examples.
• Provide multiple paths or choices, thus allowing people to choose based on their goals, habits, and personalities.

For creating powerful content, Henley underscored the importance of good research, judicious use of web-based materials and printed literature, and conversations with people. She concluded with a reminder to practice the 3 p’s while planning, writing, designing, publishing, and revising educational content.

Debamita Chatterjee recently completed a doctoral program in biology with a focus on aging, metabolism, and molecular genetics. She is based in Rochester, New York.

Author contact: debamitachatterjee@gmail.com
MAKE YOUR MESSAGE MEMORABLE: THE POWER OF STORY

Speaker
Geoff Kane, MD, MPH
Chief of Addiction Services at the Brattleboro Retreat in Brattleboro, VT

By Katherine Venmar

Dr Geoff Kane specializes in addiction services and often includes stories when writing about neurobiology, addiction, and recovery. Stories engage readers in medical writing, making it more likely they will read to the end of the piece, remember it, and even change their behavior based on their emotional response, said Kane. Stories can take many forms in medical writing—including case histories; histories of diseases, technology, people, or institutions; anecdotes; analogies; parables; extended figures of speech; or personal accounts by writers themselves.

Why Stories Work
Stories engage much more of the brain than what we use to memorize a list of facts, Kane said. When stories stir our feelings, we are more likely to connect with the writer and the writer’s message, he added. Stories appeal to the highly emotional regulatory core of the self and therefore can induce biological changes in the brain that drive how people act, he said. Thus, story influences people’s actions by altering their neurobiology.

As an example, Kane played a video that showed a simple but powerful animated story about a father who is playing with his young son, Ben, who is dying from brain cancer. In studies conducted in the laboratory of Paul Zak, from Claremont Graduate University’s Center for Neuroeconomics, participants who viewed the video were more likely to have a strong empathic response, have an elevated release of oxytocin, and be more willing to donate money to charity or an unseen stranger in comparison with people who watched a less-engaging video of the father and child walking at a zoo. This research highlighted the fact that storytelling is about the listener as well as the teller, and—perhaps most important—story is about the emotional connection between the teller and the listener.

Elements of Story that Hook Readers
Kane noted the current popularity of storytelling as oral performance art, referencing the work of storyteller Syd Lieberman, and “The Moth” events. Kane pointed out that many of the same elements that make storytelling effective, such as word choice, imagery, narrative details, and timing, also work well in written documents. Other story elements that are especially likely to engage readers include characters, relationships, details, suspense or anticipation, descriptions of gestures, surprise, and humor. One of the easiest ways to connect with people is to make them laugh.

Story in Regulatory and Technical Writing
Stories can be used in technical writing to help convey complex ideas. In his own work, Kane said he has used analogy to explain a basic principle of psychopharmacology. He wrote that the relationship between neurotransmitters and their receptor sites are like the relationship between keys and their locks — highly specific, but not exclusive. As an example, a friend of his once found that his father’s 1950s Oldsmobile key was able to open the lock on a camp door. Similarly, the neurotransmitter/receptor relationship is highly specific, but if the structure of the neurotransmitter is close enough it can activate a different receptor.

Incorporating story into regulatory writing can be difficult, Kane acknowledged. But approaching any type of writing with caring and warmth makes it more likely that you will touch your reader, he said. When your heart is in what you’re doing and you hold the reader in mind, regulatory writing is likely to become clearer and easier to understand, he added.

Maximize Story Potential from Interviews
Writers should interview the most appropriate person for the theme they are writing about and then elicit authentic information that will capture readers’ attention, Kane said. Prepare questions in advance, he suggested, but be ready to abandon them if something more interesting comes up.

Interviewing shares much in common with clinical work, Kane said. For example, the interviewer should express empathy, be eager to listen, avoid judging or arguing with the interviewee, be aware of and check out assumptions about what is true, and use reflective listening skills.

Reflective listening elicits insight, honest self-disclosure, and emotions from the interviewee that can add power to the written story, Kane noted. Reflective listening means listening attentively and then responding with a statement that captures the content of what the other person just said. If possible, the response statement should also reflect the intensity of the source’s feelings about the matter, Kane said. Your statement invites the person to elaborate, which is precisely what you want, he said.

Throughout his talk, Kane reminded listeners that affect (or feeling) is central to sense of self, relationships, learning, behavior—and effective story telling.

Katherine Venmar is a PhD candidate in cancer biology at Vanderbilt University, in Nashville, Tennessee.

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Five Days at Memorial chronicles, in detail, the events taking place at Memorial Medical Center in New Orleans in the wake of Hurricane Katrina. Author Sheri Fink, a physician turned medical journalist, masterfully reconstructs the chaotic and painful moments during the 5 days at Memorial, a large private hospital sheltering almost 2,000 people, including patients, medical staff and family and community members, when Katrina struck. As the storm subsided, the flood water rose. The conditions in the hospital quickly deteriorated when the backup generators failed, cutting off power to critical medical equipment and turning the hospital into a dark place where heat and foul smell dominated the air. Unprepared for such unimaginable adversities and faced with delayed and erratic rescue efforts, exhausted health care givers struggled to continue care for the patients and organize for their evacuation. In the midst of chaos and a sense of despair, decisions were made to leave some of the sickest patients to the last for rescue. When the chance of survival grew dim for these patients toward the end of evacuation, over 20 of them were injected with drugs that led to their hastened deaths. Ten days later, a total of 45 bodies were recovered from the grounds of Memorial, about one-fifth of the total patient census before the storm, and the largest death toll among all medical facilities in the flooded region.

Was there a crime committed at Memorial, and who should take responsibility for such tragedy? In the second half of the book, the author unfolds the yearlong criminal investigation into the alleged intentional killing by health care professionals. This investigation led to the highly controversial arrests of 1 doctor and 2 nurses who participated in the injection. In the end, a grand jury refused to indict any of them.

Fink spent more than 6 years researching for the book. The complexity of the story, involving over a hundred named characters, is revealed through painstaking journalistic investigation. With intimate and rich details, Fink captures nuanced emotions and motives of the characters, while maintaining a strong sense of neutrality and respect for each of them. Fink writes in a seemingly simple language, yet the narrative is so intelligent and powerful that it instantly draws in the readers and guides them through the complexity of the story.

The book takes the readers into a critical discussion about medical facilities’ preparedness for disasters and ethical dilemmas of health care rationing under extreme circumstances. It tries to understand the reasons behind the poor decisions made at Memorial. The ethical line between relieving pain and suffering and intentional ending of patients’ lives becomes blurred when the decision makers are ill prepared for such scenarios and, when the system fails to support them, are pushed to break their own moral convictions. As Fink puts, the hospital was “a microcosm of these larger failures, with compromised physical infrastructure, compromised operating system, and compromised individuals.”

What lessons can we learn from the tragedy at Memorial? The book provides an insightful analysis of how we can do better. In the epilogue, Fink examined plans and protocols put in place since Hurricane Katrina to prepare medical facilities across the country for disasters. However, as she observes, in the aftermath of a crisis, life and death “most often depends on the preparedness, performance, and decision making of the individuals on the scene.” Eventually, it comes down to each of us to “prepare and resolve how we would want to make the decisions.”

A compelling piece of medical journalism, Five Days at Memorial is an enduring book on medical ethics in time of crisis.

-- Qing Zhou

The members of the Medical Book Awards, Public Category, Committee were David Caldwell, PhD; Heather Gorby, PhD; Jasenka Žegarac, PhD, and Qing Zhou, PhD (chair).
The circumstances of warfare make surgical treatment extremely difficult. Measures of expediency are often crucial in the treatment of combat casualties. Military surgeons must quickly access combat injuries, stabilize the wounded and have them evacuated to a medical treatment facility, where they can receive long-term medical care. The faster the military surgeon reacts, the greater the probability of survival.

Emergency War Surgery expertly presents state-of-the-art principles of trauma surgery and guidance on the medical management of combat injuries. These combat injuries include: radiological, blast wounds, burns, multiple penetrating injuries, and biological warfare (BW) agents. The priceless information in this latest edition is a collective effort by military scholars to document the advancements, made in the practice of military medicine, over the last decade of war. As the war on terrorism continues, it is vital that we continue to provide high-quality medical care for the courageous men and women in the military.

The invaluable material in this book enables readers to pause for a moment and recognize the dedication and sacrifice of those who protect our nation by their military services.

This publication is intended to be useful for a variety of audiences including: deploying surgeons, hospital corpsman, physician assistants and advanced combat medics. Although the book provides medical insight and guidance, we need to consider managing the long-term medical care and rehabilitation of wounded military personnel. The plight of the injured soldier can be a long and daunting journey. Great numbers of wounded soldiers are returning with absent limbs, burns, loss of hearing and eyesight, and a multitude of other injuries.

These soldiers not only have to heal from their physical injuries, they must heal from their emotional and psychological injuries.

The introductory chapters of this manual describe the pathophysiology of war wounds, the 4 roles of medical care in the Armed Services and mass causality and triage management. Subsequent chapters present major traumatic injuries encountered on the battlefield by anatomical region with detailed figures. Each subsection contains in-depth teaching points and guidance for initial surgical care and stabilization of the injured. Locations for suggested clinical practice guidelines are also included. The concluding chapter, which explains the protocol for emergency whole blood collection, is followed by a description of 6 principles of medical ethics. These principles are also relevant to physicians in the protection and treatment of prisoners and detainees.

The invaluable material in this book enables readers to pause for a moment and recognize the dedication and sacrifice of those who protect our nation by their military services.

– Tara Ann Cartwright

The members of the book awards committee for the Health Care Professionals, Physician Category, were: Tara Cartwright, PhD; Deborah Kostianovsky, MD (chair); and Arushi Sinha, PhD.
Reaching Teens: Strength-Based Communication Strategies to Build Resilience and Support Healthy Adolescent Development

Kenneth R. Ginsburg, MD, MS Ed, Sara B. Kinsman, MD, PhD, editors
American Academy of Pediatrics, 2014; 600 pp

The teen years often are framed as a rollercoaster ride for parents and professionals alike, a time of fierce independence and rejection of adult guidance. In fact, though, as Reaching Teens deftly informs, adolescents are hungry for guidance that helps them to come into their own—without peril, shame, or guilt—to achieve their best.

In this evidence-based, practical resource filled with understanding and theory, the authors advocate believing in teens’ potential and building on their strengths. By doing so, adults can successfully help youth navigate the experience of trying on different personas and experimenting with behaviors to become happy, healthy, confident, and contributing adults. Even adolescents who don’t always seem to be listening hold onto the positive energy we adults share.

To show how expert-tested, strength-based communication approaches work with today’s youth, the book’s contributors who are leading adolescent-health professionals and youth program staff, as well as teens. First-hand accounts provide critical insight on a gamut of behavioral and emotional issues, including crisis and stress management, sexuality, grief, depression, peer pressure, substance abuse, sexual abuse, bullying, and youth violence.

Reaching parents also is front and center. The book addresses the important role professionals can play in reinforcing the benefits of engaged and balanced parenting, which include promoting positive behaviors and well-being in youth. The principles and approaches provided guide professionals in helping parents learn about successful monitoring and communication strategies.

This outstanding resource offers information and strategies in either 600-page print or electronic text, with more than 400 Cloud-based video clips that expand on the text with in-depth explanations. The multiple platforms provide accessible training for professionals with different learning styles to acquire skills, knowledge, and confidence. Handouts and quizzes also enable social workers, pediatric nurse practitioners, physician assistants and pediatricians to earn up to 65 continuing education credits.

The content is well organized and presented. Chapters are easy to navigate and begin with a description of why the content in that section matters. Understanding the “why” helps promote investment in “what to do” and committed action. Tips are provided throughout on how to listen so teens will talk, and how to talk so teens will hear. The tone is positive, authentic, and caring.

Occasional text-only pages could benefit from more visual features in text or design. The type size in side stories is a bit on the small size. But the book’s overall design and success in packing in a lot of highly engaging, practical information more than make up for any concern.

The strength of Reaching Teens lies in filling a largely unmet need: an action-oriented road map to help adults focus on talking to young people about their strengths and reinforcing those strengths, rather than on telling teens what they should not do or should not have done.

Individuals or organizations can integrate Reaching Teens into ongoing professional development or consult the book as needed to address specific challenges. Clinicians and staff can help build resilience and support healthy adolescent development progressively or by maneuvering between chapters to focus on unique issues at whatever pace is required. With Reaching Teens, the multitude of what-to-do strategies, personal scenarios, concrete examples, and group activities and discussions can empower professionals with the wisdom to determine what is best to implement for the youth they serve.

Reducing the risks in children’s lives and building healthy connections between children and parents, youth and adults, are no small challenges. The editors, along with the American Academy of Pediatrics, have provided a unique and important book to better help youth-serving professionals in turn help young people and parents address life’s challenges in healthier ways.

– Ruth Taswell

The members of the Medical Book Awards, Health Care Professionals (Nonphysician) Category, Committee were Evelyn Kelly, PhD; Eileen Girten, MS; Melissa Bogen, ELS; and Ruth Taswell, MA (chair).
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Many leaders of AMWA, on becoming president, have said they never thought they’d be addressing the members at the annual business meeting, describing their goals and vision for the organization. I’m yet another one of those people. But now that I’m here, I’m excited to have the opportunity to share my vision of AMWA.

Today I’d like to start by talking a bit about the past—which is also the future. I was a double history major in college—classical and American—and I love reading history in my spare time. So imagine my luck: AMWA’s 75th anniversary is in 2015. And as you know, we’re not waiting until then to talk about it. Doug Haneline, our once and just past president, has spearheaded a group of AMWA luminaries to explore ways to celebrate our milestone. Special events from now until our meeting in San Antonio will highlight AMWA’s evolution, how the field of medical communications has changed, and the AMWA members who made possible that evolution and change.

Two other topics on my mind are in the present—but they are also part of our future. The first topic is AMWA’s progress toward installing and implementing learning management technology. This platform will be our electronic central nervous system that enables AMWA’s education program to go—and grow—online. This system will connect to our now-installed association management system (or AMS) to provide a host of member benefits and services. That includes things like a better interface with your membership records, more webinar capability, and easier registration for this conference, to name just a few. Volunteers and staff are working together to identify and implement the best learning management software for AMWA. This work, and the future investment required in the system, are key steps in 2 imperative parts of our mission, allowing us to serve our members better now, and to be a meaningful part of their professional development, networking, and education tomorrow.

My second present-but-future topic is one you’ve already heard a lot about. We will hold the first-ever examination for medical writing certification at the 2015 Annual Conference in San Antonio. AMWA has taken the lead in creating an exam to document essential skills in medical writing. We have also created a Certification Commission that is the body responsible for test administration and recertification. For medical communicators worldwide—whether they are AMWA members or not—the exam will be one way (among others) to illustrate core competency in medical communication.

I consider being past chair of the commission at the top of my list of most meaningful professional opportunities in my career. I extend my deepest thanks to our sterling commission members and the current co-chairs, Tom Gegeny and Marianne Mallia, who are now working to make the exam a reality.

I want to finish my remarks by telling you about my summer vacation, which I spent with my husband, Scott, traveling through Scandinavia. The future of AMWA was not on my mind when I met an intelligent young woman in Bergen, Norway. I was (believe it or not) at that city’s Leprosy Museum, where the cause of leprosy was first discovered. Our tour guide was terrific—highly knowledgeable and articulate, she made the eerily quiet and grim building come to life. After the tour, we struck up a conversation, and I asked her what she had studied in college. She said she’d always been interested in medicine, but majored in communications. Now she’d graduated, but didn’t know how to combine her 2 interests.

I smiled, took a deep breath, and I was off to the races. Ten minutes later, the young woman had links to several relevant professional websites (ours first, naturally), my email address, and a bushel basket of ideas that she could turn into a portfolio of writing samples. In the spirit of full disclosure, she did eventually learn that I was the incoming

*This article is based on the address delivered at the AMWA Annual Conference Business Meeting, October 11, 2014, in Memphis, TN.
president of AMWA (my husband spilled the beans). But what I really wanted her to know was why I was a long-term, enthusiastic, and active AMWA member.

Now, the Leprosy Museum in Bergen, Norway, is about the last place you’d imagine as a great spot for networking. But later that morning, when I reflected on our conversation, as enjoyable as it was, I realized I was disappointed. This young woman was an ideal candidate to become a professional medical communicator. And yet, she was ignorant that the field even existed.

My friends and colleagues, we have work to do. The medical communications professionals of the future are in many different places. They are liberal arts majors in college, like I was. They are postdoctoral fellows in academic labs, weary of writing endless grant applications to support their work. They are health care practitioners who realize they love communicating about health, but not just in 5-minute patient encounters in a clinic. They are graduate students in technical writing programs, learning how to convey complex ideas clearly.

For all these people, here’s our Job Number 1: to make sure when they wonder, “How can I merge my interests in writing and medicine?” they find out there is a way. Then, when these individuals—with very different skill sets and goals—find AMWA, we want to be useful to them. As my friend Harry, a clinical psychologist, would say, we have to meet their needs. Online learning is one critically important component, but it’s not the only one. AMWA will continue to offer the highest-quality education for medical communicators, whether on-site at companies, at chapter conferences nationwide, or at our annual conference.

One of the most powerful lessons about my encounter in Bergen was that there is no substitute for a face-to-face conversation. Another lesson is that professional opportunities to grow and learn are everywhere, if you’re open to them and ready for them. I’m deeply grateful for the many, many opportunities AMWA has provided me, to grow and to learn. So now, let’s go back to the future, together.

The Certification Commission has been busy finalizing policies and procedures and developing written materials needed to offer the first certification examination for medical communicators at the 2015 Annual Conference in San Antonio, Texas. The commission is pleased to announce that the name of the credential awarded to those candidates who pass the examination will be Medical Writer Certified (MWC). A logo is being developed.

At their October 2014 meetings, the Executive Committee and Board of Directors reviewed the Applicant and Candidate Handbook. The next step is to have the handbook field tested by a small focus group of members who may be interested in taking the examination. Once the field test is complete, the handbook and application materials will be posted on the Certification Program website at www.amwa.org/certification. Also new to the website is the poster, “An Overview of AMWA’s Medical Writing Certification Program,” which Commission members presented in October at the annual conference in Memphis.

The commission’s goal is to launch the Certification Program in early 2015, with extensive information to be available about policies and procedures, candidate eligibility, and useful resources for preparing for the exam. Watch for more news and announcements in the AMWA Update and the AMWA Journal.
Save Time with Social Media Management Tools

By Cynthia L. Kryder, MS, CCC-Sp / Medical Communications Consultant, Phoenixville, PA

Social media platforms have become valuable tools for medical communicators who want to engage with colleagues and prospective clients or keep tabs on the latest news in a particular field. In addition, social media are important resources for drug and device manufacturers, hospitals, health care systems, medical publications, and public health agencies to communicate with consumers and health care professionals. Whether you manage social media accounts for yourself or are part of a corporate team developing and managing content for your employer, executing a coordinated social media strategy across multiple platforms and measuring the results can be time consuming. That's why social media superusers rely on social media management tools to do so efficiently. If you are overwhelmed by the time and energy involved in updating and monitoring social media channels regularly, these 5 options may enable you—or your employer—to maintain a social media presence more efficiently.

Hootsuite [www.hootsuite.com]. Hootsuite is probably the most popular social media management tool for individuals and businesses, with more than 10 million users including 744 of the Fortune 1,000 companies.1 It features a web-based dashboard that allows you to create and share content across multiple social media platforms, including Twitter, Facebook, LinkedIn, Google+, Foursquare, and others, without having to log into each separate account. Moreover, with the Hootsuite dashboard you can use filter and search tools to view other people’s content, which allows you to monitor conversations. You can also schedule messages in advance and measure results with its custom analytics system or through Google Analytics. Hootsuite offers a free plan for up to 3 social profiles, a Pro Plan for $9.99 per month, and additional plans for small businesses, teams, and agencies. Custom pricing is also available.

Buffer [www.bufferapp.com]. With 1.8 million customers, Buffer has found its niche within the social media community.2 Buffer is similar to Hootsuite in that you can schedule and share content across Facebook, Twitter, LinkedIn, and Google+, as well as App.net. Once you add your social media posts to a queue, you don't need to specify when you want them published (although you can designate very specific scheduling times and patterns). Buffer will publish content for you at optimal times, staggering items so that they are spaced out throughout the day. Buffer also points you toward content you might be interested in and provides analytics to measure engagement and reach of your content. Buffer has earned kudos for its customer service, scheduling flexibility, and ease of use; however, it falls short when compared with Hootsuite in its analytics and ability to monitor discussions. Buffer is a fairly new kid on the block and it is constantly improving its features and changing its pricing plans. You can choose from a free, 7-day trial, an Awesome Plan for $10 a month, and Buffer for Business plans that start at $50 a month.

IFTTT [IFTTT.com]. IFTTT is a free tool that allows you to share content across 136 social media networks and other channels automatically through what it calls recipes. Recipes are essentially directions that you create based on the simple formula, if this then that, where if is the trigger that sets in motion the action you desire. You define the parameters and IFTTT automates the function. Say, for example, you want to send out a tweet every time you post a photo to Instagram; your recipe would be, If I post a photo on Instagram, then send out a tweet about it. Or you want to receive an email whenever your company is mentioned on Digg (If Company X is mentioned on Digg, send me an email). You create the recipe and IFTTT does the rest. Since IFTTT is compatible with Hootsuite and Buffer, some social media users rely on all 3 tools to enhance their efficiency.
Gremln [www.gremln.com]. As with other tools, Gremln allows you to manage content across Twitter, Facebook, and LinkedIn. Gremln offers a robust analytics function, but what really sets it apart from other social media management tools is its focus on ensuring compliance in regulated industries, such as financial industries and health care. Gremln offers several tools to ensure compliance, such as keyword and phrase filtering to prevent certain content from being used in corporate posts. You can also capture and archive posts for the purposes of auditing and reporting. Another useful feature is the ability to organize teams and establish compliance filtering that prevents content from being posted before it’s been fully approved. Pricing information is not posted on the Gremln website.

BuzzBundle [http://www.link-assistant.com/buzzbundle/]. BuzzBundle is yet another tool trying to gain traction in the crowded field of social media management. It includes most of the bells and whistles found in Hootsuite, with one differentiating feature: the ability to create unlimited personas so that you can act and join discussions as different people (for example, your company’s customer service representative, CEO, or anyone else you need to represent as part of your job). BuzzBundle supports Twitter, LinkedIn, Facebook, Google+, and YouTube, as well as forums and blogs. Purchase the software for $199, or download a free version of the software that enables you to use some, but not all of the features for about 15 days.

This list includes just a sampling of some of the tools that are available. Type social media management tools into your favorite search engine and you’ll find even more (SocialOomph [www.socialoomph.com]; SocialMotus [www.socialmotus.com], TweetDeck [https://about.twitter.com/products/tweetdeck], and Crowdbooster [www.crowdbooster.com], to name a few). The key is to choose the one that works best for your needs. If you’re simply trying to share content across the big 3—LinkedIn, Facebook, and Twitter—and get some sense of your reach, then you probably don’t need anything more than the free Hootsuite service. More sophisticated users may find that a combination of tools works best for them.

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

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References

What People Are Saying

“What Hootsuite and Buffer were the ones I have used the most. I recently abandoned Hootsuite for TweetDeck. Main reason was I kept having functional issues with Hootsuite that really annoyed me. So now I use TweetDeck and Buffer. The main reason I liked Buffer is scheduling was just so darned easy...what keeps me at Buffer is their culture. Have you read their mission page? I just want to hug them and become one of them. I’ve never seen or heard evidence to make me think they do not live up to their reputation for transparency. They also have pretty good analytics with Buffer (even without their Awesome plan, which is pretty awesome in its generosity) so I still keep using them. It is good to have a backup or second tier tool ready to use in case your primary one is not available or already in maximum use, especially for scheduling as that can get hectic, especially during conference and meeting season if you are live tweeting or covering sessions.”

—Larry Lynam, MA
Principal, The Lynam Group

“I, too, use Hootsuite and Buffer. I find that Hootsuite is great for creating lists of people, brands, or industries you follow. You can make your time on social media more efficient by checking in periodically on your different lists. As writers and communicators, we typically have no shortage of thoughts or ideas to share. But it can happen. For those times, I rely on curation tools that help me find interesting information. Although its main purpose is as a scheduler, Buffer also conveniently suggests content for you.”

—Felicia Hudson
Principal, Hudson Creative Copy
Many years ago, I was offered a retainer to do some copywriting for an advertising agency. The timing was right for me, because my husband and I had just moved and I had decided to return to freelancing after having worked full time in hospital public relations. Accepting the offer seemed like a good opportunity to make some contacts, get some experience, and build a portfolio, while being guaranteed a steady income. In the beginning, the work was fairly steady, but as time went on, some weeks were too busy and others were too slow. I also began to realize that the hourly rate, which seemed reasonable when I signed the retainer agreement, was generally lower than I would have been making if I had billed on a project basis.

Like everything else, there are pros and cons to working on a retainer. Obviously, the primary advantage is the steady income. In addition, because the workload can change, often drastically, from week to week, or month to month, there is a potential for increasing your income by taking on additional clients to fill in the gaps. The problem is that it is difficult to predict when those gaps will occur. Because a retainer agreement generally requires you to be available whenever your client needs you, it can be risky to take on other projects with time-sensitive deadlines. Another negative aspect of working on a retainer is the danger of becoming too dependent on one client, who could leave at any time. For me, at least, that didn’t seem like a good strategy for maintaining a successful freelance business. I decided not to renew the retainer agreement but did continue to work for the client on a project basis.

—Donna L. Miceli

Several years ago I had one positive experience in billing for my services on a retainer basis instead of on a per-project or per-hour basis. In that instance, a very active long-term client within a major pharmaceutical company was retiring and he proposed to his upper management that my company be put on a monthly retainer to ensure that his colleagues continued to use my services for 6 months following his departure.

I billed the full retainer each month, which covered my normal daily rate for 40 hours of work during the upcoming month. Any fees within the month over and above that retainer rate were billed at my established rate. December was a short work month for the company (they closed between Christmas and New Year’s Eve). During that retainer month, the project fees were less than the retainer amount and I was still reimbursed for the full retainer fee.

It was a win-win situation for all of us over the 6-month span. Those who used my services relied on my experience within the department and my knowledge of all the activities planned for the transition period. I established several long-lasting relationships with people I had not worked with previously. They were more effective in their new roles by being able to rely on my services for the interim period.

—Elizabeth L. Smith
Do you charge your client a late fee if you are not paid for a project by the specified deadline? What is the typical late fee?

I have never charged a client a late fee and don’t expect to ever do this. Some organizations just need longer than the standard 30-day billing cycle to pay invoices. That’s okay, as long as I know that and the client pays me in a reasonable timeframe. For example, most of the hospitals I have worked with pay me at 60 days rather than 30 days. The payments always arrive without any further action on my part.

If a new client is late on a payment, I’d politely follow up. If the client doesn’t have a longer billing cycle but is repeatedly late, and I have to continually follow up about payment, I would fire the client. I doubt that a client who doesn’t help make sure you’re paid would pay a late fee, and charging a late fee to an otherwise good client who has a longer billing cycle or simply forgot to process one invoice would damage the freelance-client relationship.

—Lori De Milto

I do not attempt to collect fees for late payments because clients do not pay them and to exact them through legal remedy would take more time, energy, and money than it would be worth. Also, after a while, you would run out of clients. I have what I believe is a much better compensation plan.

Please bear in mind that I rarely work directly with the end user. My clients are the medical communications companies, medical education companies, and medical advertising agencies who work with the end users.

First, I find out from each client what their payment cycle is, and I take that into consideration when deciding whether to work with them. Well-run companies tend to be in synch with the payment cycles of their clients, which in turn benefits the freelances. Conversely, some companies never even try to get in synch with their clients’ payment cycles. They are forever either feasting or starving—and they take their freelances along for the ride.

When a payment is late the first time, I nudge the client and seek to learn why. Perhaps there is an understandable extenuating circumstance. If a second payment is late, I may be less available for the third project until payment is received. I can then decide whether the client is worth further hassle. If the answer is yes, I add a grief factor in my project fee as compensation for serving as the client’s bank. Trust me, the grief factor I add is much more than an allowable interest charge, and I know it will be paid (albeit probably late) because it’s a part of the project fee to which the client agrees before I start work. My grief factor is never less than $100, and often it’s more. (And yes, this is another advantage of project versus hourly pricing!)

Sometimes, a perfectly good client will suddenly become a slow payer. They are trickier to deal with because it usually means they are going through an unanticipated cash flow problem. You have to be very careful not to bankroll them for too much money, because if they file for bankruptcy, you will be so close to the bottom of the collection barrel you aren’t likely to see much of your money. But if the client truly is healthy and just going through a difficult stage, working through it with them will make you more than a valued vendor. You’ll be the partner who came through for them when they needed it.

Of course, that doesn’t mean I won’t also charge them a grief factor on the next project. I can’t afford to be anyone’s bank.

—Brian Bass

For me, the best way to handle invoices that haven’t been paid is to email my contact at 31 or 46 days (for 30- or 45-day payments) to say I have not received payment of invoice #XYZ for $123.45 dated MM/DD/YY and ask if they would look into the status of the payment. I almost always get a reply that payment is in progress. My invoice may have been lost or stuck on someone’s desk, so the reminder is a handy, polite way to get the process moving.

For one regular client who balked when I raised my rates, I gave a 13.3% discount off my regular editing rate for payment within our agreed-upon time frame. That client pays 60 days after the invoice date. If the invoice is paid within 61–70 days I am OK with that. Once, when they paid 2 invoices at 72 days and I had emailed several times for an update on payment status, I added the 13.3% as a late fee for each late invoice onto the next invoice; since then, I have been paid the entire amount on time.

My usual late fee, however, is 5% of the invoice total. This late fee is noted in the small print at the bottom of every invoice, and I have never invoked it for any client.

—Melissa L. Bogen
Do you charge for travel time related to a project? What is the typical day charge?

When I travel for business, I expect to make just as much money as when I’m in my office working. I insist on being paid for travel time. Why? For two reasons:

Reason #1: If I had been at my desk working for one client instead of traveling for another client, I would be earning my expected income. Why would I ever give that up? To do so would punish me financially.

Reason #2: Clients who are on salary don’t get a smaller paycheck for the week because they are traveling, so why should I?

Clients aren’t necessarily evil—they just don’t think about income this way. So it’s beholden on us freelances to teach them. They typically appreciate the insight, which most freelances never think to share with them. As you can imagine, it’s pretty difficult to argue with the logic.

When it comes to deciding what to charge for travel, I’ve found the upper limit is about $1,000 per day. If there is a deliverable on the back end of the travel (eg, an executive summary of an advisory board meeting), I estimate that on top of the travel amount. Out-of-pocket travel expenses are always additional.

Whether I have work sitting on my desk waiting for me or not, I always charge for travel as if I do. I want clients to believe I am always better off at my desk working, so they only ask me to travel when it’s really necessary. This way, my clients always value my time, and my time is always valuable.

—Brian Bass

I charge a per-day rate that is equivalent to 1 day of work at my regular rate. The per-day rate applies to the time it takes to travel as well as for each of the days I am at the destination. I limit the travel charge to 8 hours per day even if the travel takes longer. I also bill for any expenses related to the travel, such as airfare, hotel, and meals. I do let my client know in advance that in addition to travel expenses, I will be charging a per-day rate for the time I am away. That way, there are no surprises for either of us at invoicing time.

—Ruwaida Vakil

I charge my regular hourly rate for up to 8 hours a day for travel within the continental United States, although the actual door-to-door time may be longer than that. If I’m traveling to attend a meeting and the meeting doesn’t last all day, I still charge 8 hours for that day. My justification is that my time away is time I am not working for other clients and therefore should be compensated for at least a full 8-hour day. If the travel time will be extraordinarily extensive (for example, a freelance colleague was recently assigned to do training of other writers in India), compensation for longer travel time should be negotiated.

Of course, I bill for expenses, too (on a separate expense report), and I make sure I have communicated with the client beforehand about specific travel arrangements. For example, some companies have a corporate rate at a hotel and may prefer that you stay there. In such cases, it is important to know ahead of time whether they are booking and/or paying for your stay (or whether they book and you pay). If they are paying, you should find out how and when that payment will be settled with the hotel. I try to apply common sense to billing for travel. If I have a 6-hour meeting and then have to work 3 additional hours in the hotel room on the same project that evening, I will bill 9 hours for that day. I don’t bill the client on such trips for any ancillary expenses not related to business (eg, if I stay over the weekend after the client visit for leisure purposes, I don’t bill for taxis, rental cars, or meals/lodging related to that).

—Sherri Bowen

Do you have a question for the Freelance Forum?

Send it to JournalEditor@amwa.org.
I am a print-person. First…last…and always. I admit it. I am also a computerphobe and a computer-idiot. Now that I’ve confessed—and exposed my prejudices—allow me to expound on some of the advantages of print over, well, you know what.

Here are a few of my reasons (and I’ve lumped all electronics into one group):

• You can carry a book around more easily than a mechanical contraption, for example, Kindle and its counterparts.
• You can lend that one book to many friends at no additional cost.
• You can read printed material much more comfortably while sitting in the bathroom. It’s a little difficult to do this with a computer.
• Print is much easier to hold while reading in bed. Try reading your computer in bed—uh-oh.
• You can read print in bed at night without being afraid of falling asleep and worrying about dropping the apparatus on the floor. That would be an expensive accident.
• If you read something worthwhile that you like, you don’t have to make a special effort (and maybe miss by hitting the wrong key—gone forever) to keep it permanently.
• A book is a lot easier to handle and to read in a taxi, bus, automobile, airplane, or any other travel situation.

Four additional and interesting reasons were raised recently by James Bruce Fine, author of “Why Print? Why Paper? Why Not?” in America’s Association Printer (a beautiful throw-away advertising/promotion magazine for a print house):

1. The value of visual impact. Subconsciously, things like color, design, weight of paper, and white space create an impact, enhancing or diminishing the effect of the written material. Does an electronic article or book have a visual impact? No, only verbal.
2. Print, according to Fine, “carries more weight than a fleeting electronic image on a monitor.” It makes a first and lasting impression. Very often the visual stimulus or its remembrance helps carry the message.
3. Printing creates a tactile relationship with your message. The print version tells the reader who and what you are—your brand if you will—whether you personally, your organization, or your enterprise.
4. You can forget about batteries and electric sources. Once printed, it remains permanent with no effort except to read it.

One of the most compelling arguments for print over electronics concerns Internet references. Several years ago, I warned about their use (Beware of Internet References. The DO. 2004;45[12]:25, and New Technology, New Problems. AMWA J. 2003;18[1]:28–29).*

In those articles, I pointed out several things:

• Material on the Internet can be modified, eliminated or reversed within seconds because of an error (and you will never know about it).
• Often, there is no permanent record of the item.
• Rarely is there an avenue to verify accuracy: Most of the time no author is named and no publication indicated.
• Anyone can enter anything without cause or supervision, whether the material is true or not.
• Content can be a “commercial” without your knowing it, or it can be a commercial that is surreptitiously and anonymously planted.

By now, I am sure some of my readers are chomping at the bit, wondering “Isn’t anything electronic worthwhile?” Of course. The discovery of the computer and the myriad wonderful advances in its use and function have given us wider information and sources of help. Cell phones are beyond belief, yet they keep improving. The computer is especially useful for finding medical citations, and the newer electronic devices have made more communication possible, usually even quicker. Currently, social media instruments have started to make a foothold, once more communication possible, usually even quicker. Currently, social media instruments have started to make a foothold, once again increasing communication. (However, I wonder whether it actually increases unneeded conversation.) I do understand also that texting, with its own brand of abbreviations, is breaking down the use of proper English and grammar—maybe the next invention will provide automatic translation of those shortenings into perfect-grammar English.

Each in its own place. I still strongly believe that for the publication of articles and books, print outdistances electronics by a mile—in overall presentation, visual impact, and the general conveyance of information for serious learning.

There, you have it: reasons why I prefer print—reasons based on a lifetime of exposure to print, from mimeograph to Multigraph to typeset to huge typesetting machines to offset printing to…today. You name it, I’ve done them all. So, I admit it, I remain a print person.

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AMWA’s 75th Annual Conference
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Introducing the 2014–2015 AMWA Executive Committee

President: Karen Klein, MA, ELS, GPC, an AMWA member since 1989 and Fellow since 2006, is the director of grant development and medical editing in the Biomedical Research Services and Administration unit, Wake Forest University Health Sciences, Winston-Salem, North Carolina. Karen spent the first part of her career at 3 different medical journals, and then transitioned to grant and manuscript editing in 1991. She was AMWA secretary in 2011–2012 and has previously served on the Executive Committee (EC) as administrator of special projects/communications, annual conference workshops, publications, and public relations. She chaired the Certification Commission from 2012 to 2013. Karen earned the Editor in Life Sciences designation from BELS in 1991 and the designation of Certified Grant Professional in 2008 (successfully recertified in 2011 and 2014). She is honored and excited to serve as president of AMWA.

President-Elect: Stephen (Steve) Palmer, PhD, ELS, is an author's editor in the Section of Scientific Publications at the Texas Heart Institute in Houston, Texas. After earning his doctorate in social and health psychology at SUNY Stony Brook in 1999, Steve moved to Houston to conduct pain research as a postdoctoral fellow at the MD Anderson Cancer Center. He joined AMWA in 2002 and became a full-time medical writer at the Texas Heart Institute in 2003. Steve has served the Southwest Chapter as president, chapter delegate, and coordinator of the chapter's biannual conference. Steve has served 2 terms as AMWA secretary; his previous EC positions were as administrator of chapters, chapters and membership, annual conference, and awards.

Immediate Past President: Brian Bass has specialized in medical communications for 29 years and has been a full-time freelance medical writer for 25 years. Brian's company, Bass Global Inc, provides medical writing and editing services to medical communications and education companies and medical advertising agencies. A member of AMWA since 1994 and an AMWA Fellow since 2001, Brian has served on the national level as president, president-elect, administrator of the 2012 Annual Conference in Sacramento, and administrator of special projects. He has been a workshop leader and open sessions presenter, and has chaired and been a member of numerous committees. Brian is a past president of the Delaware Valley Chapter and he served as the chair of the Princeton Conference for 16 years.

Secretary: Lori Alexander, MTPW, ELS, most recently served on the EC as annual conference administrator for 2 consecutive stints. For 10 years, Lori was the AMWA Journal editor. She is president of Editorial Rx, Inc, an independent medical writing and publishing company. Lori has more than 25 years of experience in medical communication, first as a medical editor at Lahey Clinic and at the Journal of Bone and Joint Surgery, and then as a writer and editor in the Publications Department at the American Society of Clinical Oncology (ASCO). A member of AMWA since 1998, she is a past president of the Florida Chapter and has served on numerous AMWA committees, including involvement with the Certification Commission. She was recognized with the AMWA President's Award in 2009, AMWA Fellowship in 2010, and 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.

Treasurer: Christine F. Wogan, MS, ELS, is repeating her 2013–2014 role as AMWA treasurer. Chris is a publications program manager at MD Anderson Cancer
Center, providing editorial services for clinicians, scientists, and trainees in radiation oncology, physics, and biology. Previously, she ran a freelance grant-preparation business in Massachusetts and worked at NASA’s Johnson Space Center as an experiment support scientist and later a senior scientific editor. She holds a BA in biology from Swarthmore College and an MS in human physiology from the University of Houston at Clear Lake. An AMWA member since 1989, Chris received the President’s Award in 2010 and was named a Fellow in 2012. She was AMWA’s administrator of awards in 2010–2011 and has served on the Budget and Finance Committee. For the Southwest Chapter, she has been director-at-large, treasurer, president, and immediate past president. Chris earned the Editor in the Life Sciences designation from BELS in 1991.

Administrative of Awards: Ann Winter-Vann, PhD, is new to the EC and has previously served in numerous positions for the Carolinas Chapter. Ann is a medical writer and consultant at Whitsell Innovations in Chapel Hill, North Carolina. Ann has a bachelor’s degree in biology from Duke University. After earning a PhD in molecular cancer biology from Duke University, 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 is a past president of the Carolinas Chapter and has served as a chapter delegate to the AMWA Board of Directors. Ann was involved in organizing

Administrator of the 2015 Annual Conference: Noelle Demas, MS, served as the Annual Conference Committee administrator-elect for 2014 and as an Annual Conference Committee member for 3 years. Noelle has been an AMWA member since 1998, serving the Pacific Southwest Chapter in various roles including president, chapter delegate, and conference committee member. She is a freelance medical writer who provides regulatory and technical writing services to pharmaceutical and medical device companies. She began her career as a technical writer for the medical devices and software industry in 1992 and transitioned to pharmaceutical writing in 1998. She holds an MS in technical communication from the University of Colorado at Denver, as well as a BA in biology and a certificate in technical writing from California State University, Fullerton.

the Carolinas Chapter annual conference for several years, and has presented roundtables at the Carolinas Chapter conference and open sessions at the AMWA Annual Conference.

Administrator of Chapter Relations: Hilary Graham, MA, is in her second year on the EC, having served as administrator of awards in 2013–2014. She is a medical writer at INC Research in Austin, Texas. Hilary has a bachelor’s degree in biochemistry from the University of California, Davis, and a master’s degree in cell and molecular biology from University of Texas at Austin. She is working toward a doctor of philosophy in technical communications and rhetoric at Texas Tech University. Hilary has been an AMWA member since 2009. Serving on the Southwest Chapter leadership since 2010, she was chapter president and chapter conference coordinator for 2013–2014. At the national level, Hilary has served in a number of roles, including editor for the *AMWA Journal’s Around the Career Block* section.

Administrator of Education: Kristina (Tina) Wasson-Blader, PhD, ELS, has served on the EC as the administrator of the online community and as the administrator of web and information technology. Tina is a technical writer at the University at Buffalo and owns Clearly Communicating Science, LLC. In both roles, she helps research scientists write grant proposals and manuscripts. After earning a PhD in biology from the University of Alabama at Birmingham in 1998, she accepted a postdoctoral fellowship in reproductive biology at Stanford University. Tina joined AMWA in 2002 and then transitioned to medical communications full-time. She is a past president of the Southwest Chapter. On the national level, Tina was on the Publications Committee and contributed to the *AMWA Journal* as an editor of the Professional Development section and editor of reports on annual conference open sessions.

Administrator of Member Resources: Cyndy Kryder, MS, CCC-Sp, earned her master’s degree in communication disorders and launched her first career as a speech-language pathologist. Cyndy transitioned to full-time freelance medical writing 23 years ago, thanks to her mentor, AMWA Fellow Donna Miceli. An AMWA member since 1993, Cyndy has served as editor of the Social Media section of the *AMWA Journal* for the past 5 years. She is past president of the Delaware Valley Chapter, has been an open sessions and roundtable presenter, and chaired the Nonphysician Book Awards Committee in 2012 and 2013. 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 assists companies in publication-planning efforts.

Administrator of Publications: Deborah Whippen has previously served on the EC as administrator of awards and repeats her 2013–2014 role as administrator of publications. Deb is vice president of Editorial Rx, Inc, a small medical writing and publishing company in Florida, where she manages publications projects and journals, develops electronic applications, oversees educational materials, and consults on continuing medical education projects. Deb specializes in working with organizations whose missions involve the improvement of health care through educational and technologic means. She joined AMWA in 1989 and has served on the Public Relations and Publications Committees, as president of the Florida Chapter, and as chapter delegate. She was named a Fellow of AMWA in 2014.