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A Note from the Editor

FOR THE PAST ten years or so, I’ve been in that phase of life in which my parents are aging, having health issues, and passing away. As a result, I’m interacting significantly more with the healthcare system than at any other time in my life, and I’ve found it to be terrifying. I won’t get into the gory details, but I’ve spent more than four months of this year navigating the morass that is healthcare—from doctors’ offices to hospitals, from emergency rooms to skilled nursing. And the insurance… oh, the insurance!

In 2009, when my stepmother needed a cancer treatment that would put her in the hospital for a week, I learned that leaving someone in a hospital by themselves is a very dicey proposition. As a result, when first my mom, and then my dad, ended up hospitalized for long periods late last year and early this year, I was compelled to (once again) play the role of healthcare advocate—a tiring, thankless, necessary job.

In the end, I might not have known how to treat them, but I was the only person who had the 360-degree picture of every complaint, response, diagnosis, medication, and treatment. Nurses and doctors came and went. Specialists saw only the specialty. I got to see and hear it all. I kept copious notes. I questioned every treatment and medication. I wanted to see test results. I did a ton of Googling of terms, conditions, medications, side effects, and treatments—and then I asked even more questions. In short, I was a complete pain in the you-know-what.

When my father left skilled nursing, he needed assisted living and couldn’t afford it on his own. Thankfully, Maine has an insurance program for that—if you can navigate the application, the insurance jargon (what the heck is “cost of care,” again?), and the five-year forensic accounting scrutiny. The rules, regulations, and coverage were yet another new education for me. There was so much that my parents—and I, as their advocate—needed to know that we had to figure out on our own. The experience of illness and hospitalization is traumatizing enough, and I found the “information experience” within that trauma to be nearly non-existent.

This whole situation has left me feeling that it is definitely time for the experience designers, the writers, the editors, the visual communicators—all of us—to descend on the medical industry and start applying our techniques and knowledge to this space. It is such a critical industry! Thus, I am thrilled to introduce this issue of Intercom! Guest editor Dr. Kirk St.Amant provides us with a breadth of experiences in medical and health communication. If you’ve ever thought about diving into medical writing, this issue is a gold mine!

Kirk brings a wealth of insight to the magazine in this topic area. He is a Professor and the Eunice C. Williamson Endowed Chair of Technical Communication at Louisiana Tech University (United States) and an Adjunct Professor of International Health and Medical Communication with the University of Limerick (Ireland).

Kirk has also worked on projects in industry—for companies such as Medtronic, VERITAS Software, the Braun Corporation, Unisys, and for nonprofit organizations.

Kirk is also an STC Fellow, the Vice-Chair of the Association for Computing Machinery (ACM) Special Interest Group on Design of Communication (SIGDOC), and serves as the Interim Editor of Communication Design Quarterly—the ACM SIGDOC’s peer-reviewed research publication.
Thank you to Kirk, for editing this informative issue, and to Sarah Brenckman Leida, Bryan Tutt, Deborah Hemstreet, Candice Welhausen, Russell Kirkscey, and Elizabeth Angeli for sharing their insights in their feature articles.

In this issue, you’ll also find some great columns:
- Scott Abel interviews Alexis Haselberger for “Meet the Change Agents” and skillfully extracts lots of great insight and actionable advice for time management and productivity.
- Michelle Corbin defines gobble-dygoook and jargon in “Editing Matters” and exhorts us to think consciously about our audience and their terminology needs.
- Alan Porter moves his “Convergence Conversation” into the realm of health and medical communication.
- Kirk St.Amant’s “Health and Medical Communication” guest edited by Porschia Parker, features an interview with three members of the STC Health and Medicine SIG, discussing medical communication careers.

And don’t forget the regular Society Pages! In addition to the regular Society news and in the spirit of this issue’s theme, Heidi Lawrence takes us on a deep-dive tour of the Health and Medicine SIG.

Healthcare is such an important conversation, and I believe that technical communicators can have a huge positive impact! So I encourage you to have a conversation about it. Whether at a conference like the STC Summit, on the STC website in response to this article, or on social media—anywhere and everywhere—conversations like these are the way that we continue to develop and grow and make a difference in the world! Until next time, to your health!

— Andrea L. Ames
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**Creating for Contexts of Care**

**BY KIRK ST.AMANT | Guest Editor**

**TODAY HEALTH AND WELLNESS**

accounts for some 4.2 trillion dollars of the global economy. At the same time, technological advances continually change how we engage in health-related and medical activities. This situation represents a perfect opportunity for technical communicators, but how do we become part of these developments?

Perhaps the best place to start is understanding contexts of care—the settings in which health and medical communication occur. These settings vary from person to person and involve different tasks and technologies. Usability, however, is central to success in all these situations. The audience needs to use materials to achieve an objective in a situation. The better technical communicators understand these contexts, the more effectively they can participate in them.

**Understanding the Context of Care**

These contexts consist of three interconnected areas: medical, health, and care. While sometimes used interchangeably, these terms do not mean the same things. “Medical” refers to the information one collects, specifically information on a particular biochemical process. This focus, which involves information like blood pressure, is “medical” in nature. This situation means usable materials need to reflect the collection and use of medical information. Approaches to this could involve creating interfaces that display related medical information (for example, readings for diastolic and systolic pressure on an automated blood pressure cuff), or they could be instructions referencing how medical information connects to a process (such as how to use systolic blood pressure numbers when taking someone’s blood pressure). Usability involves knowing what medical information is essential to a user’s objectives, and providing it appropriately for the related setting.

“Health” refers to the metrics used to interpret medical information. A blood pressure reading is meaningless. It needs to be compared to a standard to determine if that reading indicates a healthy blood pressure. In terms of usability, materials need to include features that allow users to evaluate the health of an individual (including themselves) based on the medical information they’ve collected. This could be a table explaining how to assess the blood pressure readings one has collected. It could also be a Web interface that offers interpretations when one enters medical data into it (like “Blood pressure levels are above normal”). The key is providing users with a mechanism for understanding a medical situation.

“Care” encompasses the processes individuals perform to address or maintain a particular condition. The objective of care is to return an individual’s medical situation and readings to levels considered “healthy” and maintain an individual’s medical levels within the range for “healthy.”

Care is the process that determines what usability is based on the tasks individuals perform in a situation.
Where care is administered affects what can be done and how. These factors affect what constitutes a usable design in a setting. By understanding these dynamics, individuals can create materials that meet users’ needs and expectations for medical, health, and care in a context of care.

**Usability in Contexts of Care**

Effective health and medical communication involves creating for contexts of care. It could include interfaces for electronic health records systems, health monitoring apps for mobile devices, or the manuals accompanying medical devices. In all cases, the audience needs to use that item to perform care-related activities in a setting. Knowing how dynamics of medical, health, and care converge in such situations can help technical communicators develop materials that are usable in those environments.

Understanding contexts of care involves knowing who will perform a care-related activity in a setting and what they need to do. Specifically, technical communicators must determine the user’s knowledge of the medical, health, and care factors associated with a context. They must also identify the details of the environment in which persons will provide care. They can use this knowledge to create materials that meet the user’s understanding of and needs involving a care-related process.

The factors to consider in contexts of care are numerous. They can include the design of content for informational sources, like websites, that individuals use to learn about care. They can also encompass the materials one needs to create—from mobile apps, to online data visualizations, to printed instruction manuals. The key is understanding user expectations and the context where individuals will use items. Technical communicators can apply this information to create the materials needed and the designs essential to usability in a context of care.

**In This Special Issue**

This issue examines how technical communicators can participate in different contexts of care. The settings in which care is administered will only become more complex over time. Approaches that help technical communicators understand these environments can contribute to professional success. The context of care approach offers a framework for addressing usability approaches for such situations. The topics examined in this issue provide insights into contexts of care. You can use this information to consider how you might contribute to effective communication practices in different contexts of care.

- The issue begins with Sarah Brenckman Leida’s discussion of her move from educational to medical communication. She also presents strategies and resources for understanding different health and medical communication areas.
- Next, Bryan Tutt explains how to apply content creation skills to develop materials for health and medical professionals. Specifically, he provides pointers for developing content for professional newsletters targeted at physicians.
- Deborah Hemstreet’s article describes how technical communication skills add value to the processes of publishing research articles. She reveals how standard technical communication skills can contribute to the successful dissemination of cutting-edge medical research.
- Candice Welhausen continues this discussion of value by describing how data visualizations can help convey health and medical information. By overviewing medical visuals used at different times, she reviews strategies for conveying health-related data in visual form.
- Russell Kirkscey’s review of health apps reveals opportunities for contributing to health and medical communication via new technologies. He also highlights situations in which technical communicators can contribute value to the design and use of medical technologies.
- In the final feature in this issue, Elizabeth Angeli also examines opportunities by noting how emergency care situations represent areas where technical communicators can make contributions. Her description of these contexts includes approaches for interacting with different healthcare professionals.

These entries provide perspectives on the care-related environments for which technical communicators design materials. Consider how you will build on these perspectives to develop your own understanding of contexts of care.

—Kirk St. Amant
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Tips for Transitioning
I STARTED MY CAREER as a secondary English teacher. I have since leveraged my technical writing skillset into a role that includes writing, project management, and training as a Project Manager for Research and Development at Smiths Medical, a global medical device manufacturer known for infusion, vital care, and vascular access products. People often wonder how I transitioned into technical writing for a medical device company. I tell them two things:

- Most jobs have more transferrable skills than first come to mind.
- It’s very possible to get into medical communication without a clinical background.

This advice generally applies to both working in a specific technical writing job for a company, and doing freelance medical writing work for different clients.

Jumping into Medical Writing

If you’re looking to make the jump into the medical industry—or perhaps to go beyond writing Instructions for Use (IFUs) for your organization—here are a few pointers.

**Be able to articulate your transferrable skills.** The skillset I developed in my early years of teaching was akin to user experience design, instructional design, and technical writing. These skills are not unique to teaching, and they can be developed across many other industries and roles as well. Working with high volumes of students each year (anywhere from 110–325), I learned how to explain things simply and clearly to people with a range of personalities and backgrounds (a core skill in medical writing).

After five years of teaching, I could predict how my students would react to different materials. I also knew what background knowledge I could assume, and I understood what order of delivery would make the most sense to them. In similar ways, medical communicators organize information and deliver it logically for a variety of audiences. This similarity allows me to constantly draw on my experience as a teacher in my current role.

**Consider targeting your job search to smaller companies.** When I decided to switch careers, I applied to a small medical software company with around 200 employees. The job description mentioned authoring a wide range of materials for their patient billing software module, and I wrote a carefully-worded cover letter to show how my skillset could translate into a flexible addition to their technical writing team.

The interview process involved a 45-minute writing test where they showed me a screen of their software, asked me to figure out what it did, and then document it to the best of my ability. This interview component worked to my advantage. I didn’t have formal education in technical writing, but I could prove that I could learn quickly and explain things clearly. After all, doing so involves common technical communication activities like playing around with new software features to understand them; writing in a simple, active voice; and thinking about what new users would need to know and in what order they would want to learn it. The only difference here was that I had initially developed these skills outside of the technical communication field.

After I was hired, I learned that my new employer often looked past gaps in formal education or tool knowledge to hire employees who fit with their culture and were eager to learn. Because our team was small, I worked very closely with software designers and understood the software product both broadly and deeply. To keep up in this environment, I drew on skills key to teaching and technical writing—adaptability, attention to detail, and the ability to understand different user perspectives. In a short time, I had experience authoring every type of technical document that the organization needed. Because my first role was in a small, fast-paced company with a lean technical writing team, this initial role provided an excellent foundation for a medical writing career.

**Look for roles that fit your writer personality, and go after the work you want.** In the health and medical industry, there is a wide range of roles filled by technical writers. While it’s important to build experience with a variety of documentation types, many technical writers develop a specialty in their writing—instructions for use, software documentation, or standard operating procedures. At companies such as Medtronic, technical writers might work in a specific product area to create documentation for a particular type or line of products—
for example, pacemakers or leads that connect pacemakers to the heart. Others might specialize in a specific type of documentation—for example, Smiths Medical has technical writers who focus on software documentation, while others specialize in standard operating procedures.

I have always held jack-of-all-trades technical writing roles involving some project management, instructional design, training, and even marketing. For example, when I write procedures and work instructions, I draw on my technical communication skills in organization and instructional writing. When I develop overview presentations on product data management for the marketing team or training for the systems engineers, I draw on my skillsets in user experience and working with diverse audiences.

Next Steps
So you’re thinking of making the move to medical writing. What are some things you can do now to start this process? Consider strategies such as:

- **Watch free webinars on health and medical topics.** Medtech Europe, British Standards Institution (BSI), and even the U.S. Food and Drug Administration (FDA) have webinars that are great resources for becoming familiar with industry trends and regulations. More information on each organization can be found online (see Resources).

- **Get involved with medical and health professional organizations.** A number of organizations focus on health and medical communication and provide resources and events that help with career development. They include:
  - American Medical Writers Association (AMWA)
  - Association for Advancement of Medical Instrumentation (AAMI)
  - Drug Information Association (DIA)

Reading some of their articles or joining a Facebook group for the organization will give you a better idea of the areas within medical and health that appeal to you.

STC’s newly formed Health and Medicine Special Interest Group (SIG) can also provide information on a range of topics in this area. See the Resources for the SIG’s website and Facebook page for more information.

Browse the websites of companies that are established leaders such as Philips, Medtronic, Siemens, and Abbott Laboratories. Their websites cite and publish articles about key trends that could come up in an interview. You might also review additional resources (see Resources for links), such as:

- New Medical Writer Toolkit available on the AMWA website.
- Information about Medical Writing through the Technical Communication Body of Knowledge (TCBOK).
- Courses and webinars through STC’s website, such as the Fundamentals of Healthcare Writing.

The key is to consider how your technical communication skills can be adapted to certain medical contexts, then hone those skills for such settings. It’s easier than you might realize, but it does take practice to begin thinking this way.

Final Thoughts
I was drawn to the medical and healthcare industries because they resonated with my values and experiences as a teacher. By expanding my knowledge base, I adapted the technical communication skills refined through teaching. The skills to make the transition into medical writing, however, can be built in any industry. One of the greatest benefits to making this transition is working with people who all want to be a part of creating products and services that improve health or save lives.

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RESOURCES
American Medical Writers Association (AMWA): https://www.amwa.org/
Association for Advancement of Medical Instrumentation (AAMI): https://www.aami.org/
British Standards Institution (BSI): https://www.bsigroup.com/
Courses and webinars through STC’s website, such as the Fundamentals of Healthcare Writing: https://www.stc.org/course/fundamentals-healthcare-writing/
Drug Information Association (DIA): https://www.diaglobal.org/
FDA: https://www.fda.gov/MedicalDevices/default.htm
STC Health and Medicine Special Interest Group (SIG):
- Website: https://www.stc.org/wiki/health-and-medicine-sig-healthmed/
- Facebook page: STC HealthMed
Information about Medical Writing through the Technical Communication Body of Knowledge: https://www.tcbok.org/wiki/careers/career-paths/medical-writing-and-editing/
Medtech Europe: https://www.medtecheurope.org/
New Medical Writer Toolkit available on the AMWA website: https://www.amwa.org/page/toolkit_Details
Developing E-newsletters for a Physician Audience

By Bryan Tutt
ONLINE NEWSLETTERS (E-NEWSLETTERS) are a popular medium that hospitals, professional organizations, and pharmaceutical or biotech companies use to reach specific audiences. Often written to inform, educate, or market to physicians, such newsletters usually require knowledge of medical terminology—something best provided by technical communicators who specialize in health and medical writing. Creating content for such newsletters can be a good way to transition from other areas of technical communication into medical writing. By following a few key steps, technical communicators can easily and effectively make this move.

Understanding Your Audience
If there’s one thing to know about physicians, it’s that they’re busy. Consequently, few physicians take the time to read a medical journal cover to cover, if they read journals at all. In a 2017 survey, 40 percent of doctors said that they regularly read Medscape, which reports medical news from sources such as journal articles, news releases, and government agencies (Revelant 2017). Only 28 percent reported regularly reading Journal of the American Medical Association, and even fewer reported reading The Lancet or other journals. When busy physicians take the time to read a news article, they choose content that may be useful in their practice.

If there’s one thing to know about physicians, it’s that they’re busy. Consequently, few physicians take the time to read a medical journal cover to cover, if they read journals at all.

Whether you’re creating a physician-targeted newsletter or writing content for an existing one, it is essential to understand the unique characteristics and needs of your physician audience. Physicians’ reading habits and information needs should determine your decisions about content and style. Physicians want information that is relevant to their practice, but most have little time to find and read such information. You can meet their needs by providing relevant content in a form that is accessible, informative, and easily digestible. Doing so can involve presenting information or ideas in list format rather than paragraphs or using tables, charts, and other visuals to display information.

Choosing an Accessible Format
Understanding physicians’ time constraints can help you choose the format for your e-newsletter. Most physicians prefer to read on their smartphone or tablet, so a digital format is preferable to print, and multiple user-friendly email newsletter platforms are available.

Although you can use inexpensive (or free) easy-to-use templates to create newsletters, e-marketing professionals such as Chris Singleton (2019) prefer a more versatile option in the form of an HTML platform for e-newsletters that link to a landing page. Content on the landing page should be searchable so that your readers can find the articles that are most relevant to their practice. Articles should be also easy to share. These two requirements are more easily met by an HTML e-newsletter format than a PDF. To learn more about the templates one might use for different delivery formats, consult the Email Tool Tester (see Resources).

Providing Relevant Content
If you’re starting an e-newsletter for physicians, you probably have a particular subset of them in mind as your target audience—clients of your company, for example, or members of a professional organization. The better you know your readers, the better you’ll be able to provide content that meets their needs.

After each issue, you can use your e-newsletter software’s performance reports to determine which types of articles your readers prefer. In reviewing these reports, look for the open rate and click-through rate. The open rate tells you what percentage of subscribers opened the email. Over time, this can tell you whether your audience is becoming more or less engaged with your content.

The click-through rate shows you the percentage of readers who clicked on a link to read an article. Most e-newsletter software shows you the number of clicks for each article, and you can use these data to judge which types of articles your readers are most interested in. Some software packages offer more detailed information, such as open and click-through rates stratified by readers’ demographics or device type (Campaign Monitor 2019).

Using a Concise but Informative Style
Although you’ve selected content that is likely to appeal to your physician readers, few of them will read every article of your e-newsletter. This is why your article titles are important. For example, physicians who consider themselves up to date on pancreatic cancer might ignore an article with a vague title like “Diagnosing Pancreatic Cancer,” whereas an article titled “New Test Detects Pancreatic Cancer Before Symptoms Appear” would promise new and useful information. Your style should allow for longish headlines that clearly describe an article’s content or a short heading with a more detailed deck (aka, summary).

Because your readers are busy, your articles should be structured like conventional newspaper articles. This means you should place the most important information at the beginning. If you’re citing source material, such as a research article in a medical journal, provide a link to that material.
Balancing Detail and Style
Although your writing style should be concise, don’t skimp on important details. A mass-market publication might describe a new treatment agent as “an immunotherapy drug for the treatment of patients with lung cancer.” A physician-focused article, however, should specify “a programmed death ligand 1 (PD-L1) inhibitor for the treatment of patients with stage IV non-small cell lung cancer whose tumors express PD-L1.”

The nature of physician-targeted material requires it to be written at a higher reading level than mass-market publications. That said, you don’t want the material to be dense or boring. This is where your skills as a technical communicator are useful. Paying attention to transitions between sentences and paragraphs can help ensure readability. Additionally, keeping paragraphs as short as possible can help readers digest the information.

These style choices, along with relevant and accessible content, can help make your e-newsletter useful to your physician readers. By focusing on these areas, you can expand the ability you have to work in different health and medical contexts on local, regional, and even global levels.

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The Added Value of Technical Communication to Medical Research Publications

By DEBORAH HEMSTREET | STC Senior Member

WHEN I FIRST began working at Rambam Health Care Campus in 2011, I was inundated with the question, “What’s it like to no longer work in technical communication?”

On the surface, many people think working for a hospital does not involve technical communication. However, the definition of technical communication relates to far more than the world of high tech. In fact, since medicine is overflowing with specialties and sub-specialties with very specific terminology, the principles of technical communication are critically needed for medical and healthcare texts and media. This is particularly the case in today’s “publish or perish” world, where the number of medical and research publications is increasing with each passing year.

Technical Communication and Manuscripts for Publication

Technical communicators (TCs) have several core skills that are exactly what doctors and researchers need to produce high-quality research publications. Understanding the importance of these skills can open doors when representing our profession to medical/scientific publishers, hospitals, academic institutions, or individual doctors and researchers. It can also expand the fields to which we can add value and the contributions we can make to organizations.

Perhaps one of the most daunting tasks is helping to prepare a health or medical research manuscript for publication. As TCs, we have learned that the devil is in the details. This is often key in how the manuscript is written—clarity of message is essential. It is also central in the handling of references and ensuring the manuscript meets all the requirements of the journal to which it will be submitted.

The Horrors of Journal Instructions and More

Every publication has its own set of instructions, and these often involve a variety of minutiae including font and page size, margins, pagination, figuring out if headers or footers are allowed, determining the language standard (UK vs. U.S. English, etc.), and the exact format to be used for references. It is here that TCs can begin to apply their skills. Who else would have the patience and ability to take the author’s references, formatted in the Vancouver style, and meticulously change them to the legal citation style?

The knowledge TCs bring to this process is but one example of the value brought to a wide range of medical professionals. The surgeon authoring an article may know how to save a patient—but they often don’t know how to format a reference or document. The TC who helps the surgeon publish their research reveals how
technical communication can facilitate sharing cutting-edge (pun intended) ideas.

**Referencing**

There is more to the insertion of academic references than their formatting. Today, many authors rely on programs such as EndNote, Zotero, and Mendeley to locate citations and insert the reference into their paper. However, many authors forget that if there is an error in the source data, the output will also be wrong. Technical communicators can help ensure manuscript accuracy by using their attention to detail to verify each reference and ensure no citation errors are present. I have rarely worked on a manuscript that used EndNote or Medeley that was error-free.

It is also important to check how the references are used in the manuscript. For example, is an author referring to a quotation? If so, has the text been appropriately marked (quotation marks, etc.), and did the author provide a source for the exact quote, including the page on which it appeared (where relevant)?

These small factors can be central to the success of a research manuscript in terms of its publication and how the content is perceived by readers. In using their skills to address such factors, TCs can play a key—and highly appreciated—role in the sharing of important medical research across different fields.

**Overcoming Self-Plagiarism**

Another area where TC skills are invaluable relates to the issue of self-plagiarism. Self-plagiarism occurs when researchers copy text, a figure, or a table of a prior paper that they wrote into a new paper for publication. Some authors erroneously believe that they own the copyright for the previously published content; others plan to revise into new, non-plagiarized content but forget to do so. Whatever the rationale, if the author does not rewrite the content, or get permission for its reuse and properly cite it, he or she could be charged with plagiarism—a serious offense in research circles.

Here, again, TCs can provide a valuable service by explaining the problem to the author and helping them overcome it. This is where writing and research skills are critical for choosing and implementing the best approach to the problem. One approach is for the TC to help the author summarize the original text in ways that are original and convey essential information without involving plagiarism.

In other cases, when the content is deemed critical for the new publication, a little research can reveal how to get permission to reproduce the content and to correctly cite it. In some cases, a fee paid to the copyright owner may be involved. A more challenging alternative is to know when it is possible to minimally refer to the essence of the copied text, and then refer the reader to the original publication. Clearly, this can become a learning opportunity for the author, helping them to avoid the problem in the future, and further proving the added value that you, the TC, brought to their publication.

**Making the Manuscript Readable**

Technical communicators usually have an eye for picking up the small nuances of issues such as capitalization and proper punctuation. But they also have a focus on simplicity. While the trend in the past was for research manuscripts to be written in as complex and convoluted a manner as possible, there is a new trend to focus on the readability of a manuscript.

Just because a sentence is “good” does not mean that it cannot be “better.” Eliminating excess verbiage is an essential skill, increasingly expected when publishing medical research. I have often challenged authors of manuscripts with this question, “Which is more important to you, keeping your text as is (no work), or making sure that reviewers enjoy reading your paper, and once published, readers easily understand it?” I’ve never had an author say “yes” to the first option.

Even if the manuscript is on a medical/scientific topic with which you are unfamiliar, if you finish reading the entire thing and still only have a vague idea of what the author is trying to say, dig in with all of your skills, starting with researching the topic on the Internet, and find out how other publications (in PubMed) have presented the topic. You can also ask the author questions to help clarify information for you.

The goal of this process is to make the author’s message organized, clear, unambiguous, and easy to access. In helping authors make their data and research more accessible, the added value of TCs translates into a strong return on investment. This is a critical selling point when offering technical communication skills to a hospital, institute, publisher, or individual author.

**The Reward**

Helping doctors and scientists develop their research manuscripts is no small task. It requires the utmost of all your TC skills, from research to fact checking to hardcore writing to document design. However, there is nothing more rewarding than when an author brings you his or her published paper and shows you that it was accepted in a world class publication like *The Lancet*.

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Quick Tips for Visualizing Medical and Health-Related Data

By CANDICE A. WELHAUSEN

VISUAL REPRESENTATIONS OF quantitative information are commonly used to show relationships among health-related data and to achieve particular communication objectives. In the late seventeenth century, for instance, Captain John Graunt constructed the first life expectancy tables from mortality data collected by London officials (see Figure 1). His hope was “some other uses might be made” from the information. His was one of the first steps toward using visuals to convey health and medical information to different audiences.

Historical Examples
In the mid-nineteenth century, two important events happened in relation to visualizing medical information. First, Florence Nightingale, the founder of modern nursing, created rose diagrams to convey public health information.

The Table of the Parish of Cranbrook.

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Figure 1. Example table from Captain John Graunt’s “Natural and Political Observations Made upon the Bills of Mortality,” 1662.
Later, the early epidemiologist John Snow created a map to examine the location of cholera cases during an epidemic. The idea behind both creations was that such images could advance new theories about the spread of disease. More specifically, Nightingale sought to visually demonstrate that unsanitary hospital conditions had caused more soldier deaths during the Crimean War than war-related injuries (see Figure 2).

Snow, on the other hand, used his map to argue that cholera was a water-borne disease (contrary to common belief at the time). He did so, in part, by using a visual to document the clustering of deaths during one of London’s worst cholera outbreaks (see Figure 3).

From our twenty-first century perspective, these historical examples may seem rudimentary. Indeed, early creators of data visualizations did not have the benefit of sophisticated data analysis packages like SAS, a statistics program commonly used to create visuals in health-related fields today. The basic purpose of visualizing health data, however, remains unchanged. It still involves condensing quantitative medical information into abstract visual representations that can then be used to explore possible trends and patterns. The construction of these historically significant graphics thus illustrates several key design considerations that are still applicable today.

**Determine the Visual Relationships You Want to Emphasize**

...And what your readers/viewers care about for the particular situation at hand. The creators of early data visualizations mentioned above constructed their data into a particular visual metaphor or form—table, diagram, and map, respectively. They did this to emphasize select relationships among health-related variables they wanted to display. More specifically, Graunt’s tables enabled readers/viewers to compare individual quantities within a large collection of quantitative information. Nightingale’s diagrams invited viewers to make select comparisons. And Snow’s map showed spatial relationships among particular variables—more specifically, he used visuals to establish proximity between the location of cholera deaths during the outbreak and the Broad Street pump, the water source he believed was the source of the disease.

Today’s technical communicators can learn from such examples. The creation of each of these graphics demonstrates the importance of determining the relationship(s) you want to create among variables—for example, temporal, comparative, spatial—and the specific visual genre that will convey these relationships—line graph, bar chart, map—to viewers.

**Design the Visual and the Written Elements of Your Graphic Together**

The genre you choose for the data you are working with will signal the type of visual relationship being conveyed, but viewers do not construct meaning from genre alone. Rather, the accompanying text (title, labels, captions) is equally important. More specifically, the visual information in your graphic (lines, shapes, shading) conveys the relationship among the data shown (for example, line graphs show trends over time) while the textual content describes those variables.

Looking at Graunt’s work today, we likely recognize his grid layout as a table, and Snow’s bird’s-eye perspective is still routinely used in contemporary maps. Indeed, visual communication researcher Charles Kostelnick has argued that viewers understand these commonly used forms today, because we have become accustomed to their design conventions. Nightingale’s diagrams, on the other hand, may be harder for us to immediately interpret, because the visual form she used is not as conventional now.

If we consider just the forms of the images themselves without the accompanying explanatory text, something becomes obvious. The labels in Graunt’s columns, the short paragraphs in Nightingale’s diagram, and the caption under Snow’s map are essential to discerning the full meaning of each graphic. Based on these examples, technical communicators should consider the following:
The visual relationships they want to convey and the
genre usually used to show that relationship; and
The language they will use in the graphic (title, labels,
captions) to describe the visual relationships the
graphic shows.

Both are central to effective communication via data visual-
izations when sharing health and medical information.

Create a Clean Design Style

Over the last few decades, The New York Times (NYT)
has established a reputation for creating appealing data
visualizations. These visuals often use particular design
choices—thin sans serif typefaces, minimal labeling,
strategic use of color. This approach creates a clean and
streamlined appearance. While Graunt, Nightingale, and
Snow had very limited typeface choices, Nightingale and
Snow used some of these same strategies. More specifi-
cally, both used minimal labeling in their graphics, while
Nightingale also used color to show each variable (for
example, shades of pink, brown, and blue).

Today's technical communicators can also create a clean
design style by choosing sans serif typefaces, selectively
labeling data points, and calling attention to select
variables through color choices. To illustrate, the fictional
line graph in Figure 4 mimics the design choices of many
data visualizations created by the NYT. More specifically,
the x and y axes use the thin, sans serif typeface Cordia
New. Visual clutter is minimized through selective labelling
of the y axis (increments of 30). Red is used to call
attention to 2017, while shades of grey are used to downplay
the data points for 2016 and 2018.

Color choice is a particularly powerful design decision,
especially in data visualizations of medical and health-
related information. This is because color signals how
alarmed viewers should be by the information presented.
More specifically, warm colors, like red, tend to be perceived
as anxiety-invoking and urgent. Conversely, viewers tend to
perceive cool colors, like blue, as reassuring and calming.
Greyscale and shades of brown tend to be less noticeable and
thus likely to be perceived as more neutral by individuals.

As mentioned, Figure 4 does not show real data.
However, it is important to point out that the red line in
this graphic might not be appropriate in some situations,
such as communicating quantitative information about
outbreaks of certain infectious and communicable diseases
(such as Ebola). More specifically, red may overly alarm
viewers. As a result, technical communicators might want to
avoid using red in situations where the reader might already
be highly fearful and anxious.

At the same time, red can also be used to draw attention
to the seriousness of a particular health-related situation.
For example, many of the graphics in the NYT's coverage
of deaths from the opioid epidemic (see Resources) often
uses the visual strategy depicted in Figure 4. Technical
communicators should determine the particular emotional
response they want to invoke using color, and select
their design palate accordingly. Specifically, consider if
the objective is to increase viewers' perception of alarm
or to convey reassurance. Making this choice can allow
technical communicators to convey sensitive and essential
information about health risks in ways that minimize fear
responses and panic.

Final Thoughts

Information designer Albert Cairo has argued data visual-
izations should allow viewers to explore data. This means
design choices should be complex to a certain extent.
Indeed, all the graphics discussed here require viewers to
take a closer look in order to fully consider the information
being shown. Ultimately, data visualizations should enable
readers to understand and make decisions about data.

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RESOURCES
SMARTPHONE APPS FOR mobile health (mHealth) have multiplied in the past few years, with over 325,000 available in 2017 (Research2Guidance 2017). mHealth seeks to untether technology from traditional desktop computers and enable people to wear or carry wireless devices and record data for themselves or their healthcare providers. The rapid rise of these technologies increases the chances that technical communicators might work on a project involving mHealth apps.

Technical communicators can contribute to such processes in an array of areas, including the development of related user guides and training materials. These contributions relate to the idea of patient experience design (PXD) by enhancing the usability of new and emerging health and medical technologies (Melonçon 2017). To make such contributions, technical communicators must understand the uses, benefits, and limitations of mHealth technologies.

**Defining mHealth Apps**

Most of us know mHealth technologies from activity trackers, such as the Fitbit, which is designed to provide feedback and motivation to improve general wellness. But advocates of mHealth have also argued smartphone apps can maintain and improve patient health, safety, and quality of life while...
providing meaningful real-time data to both patients and their healthcare providers (Isaković et al. 2016). The Google Play Store and the Apple App Store have categories dedicated to medical, health, and fitness tools; these range widely in performance, content, and use. Additionally, digital publishers also create mHealth apps for proprietary distribution to health and medical organizations.

- mHealth apps can be generally considered as tools for:
  - Independent use by people without a requirement for patient-provider interaction
  - Healthcare provider use only; and
  - Integration of information shared between patients and healthcare providers.

Let’s look at these differences a bit more.

**Independent Patient Use**

Apps in this category may support people who want to improve their health and fitness without the guidance of healthcare providers. A search on Google Play returns thousands of options in this category, including ones that encourage people to drink water, exercise, count their calories, and monitor their blood pressure. Another genre for independent use may help people living with a disease. Jointly Osteoarthritis, for instance, provides methods to track medications, minimize pain, and receive video tutorials for physical therapy.

**Healthcare Provider Use**

This category of apps comprises tools to support the work of healthcare experts. Examples include protocol information for paramedics, a reference guide for prescriptions, and an instrument for finding patient veins by using a smartphone’s flash. These apps may also provide medical staff with recommendations for treatment based on submission of symptoms and screening results. For example, researchers have recently developed and evaluated a clinical support tool to use with pregnant women who have pre-eclampsia. Functions in the app include the ability to measure oxygen saturation, access patient records, and input testing data (Dunsmuir et al. 2014).

**Integrated Information for Patients and Providers**

A third category of apps focuses on incorporating direct communication between patients and healthcare providers. The associated benefits include remote diagnosis and monitoring of patients. These apps may also decrease unnecessary testing and treatment, which can save consultation time and insurance payments.

- Both patients and healthcare providers are interested in the possibilities for using such integrated apps. For example, prostate cancer patients would be willing to use an app to monitor their symptom management and receive real-time communication with their healthcare providers (Nyman et al. 2017). Apps in this category might also increase physicians’ abilities to communicate with and treat asthma patients (Van Boven et al. 2015). While the development of integrated apps is increasing, their use may weaken face-to-face communication and harm patient-provider relationships (Mutingi et al. 2014).

**Essential Notes for Technical Communicators**

Apps that are available for anyone to download commonly include a disclaimer noting these technologies are for informational use only. These disclaimers also often state that individuals should consult their healthcare providers to determine the apps’ appropriate uses.

No certification exists for these apps to qualify for distribution on the open market. As a result, healthcare experts may not necessarily provide input during their development (Higgins 2016).

Researchers investigating mHealth app quality them have reported mixed results. For example, a study evaluated an interactive app designed to give information to parents considering vaccinations for their children and found a significant gain in knowledge (Fadda et al. 2017). However, another study analyzed 218 pregnancy-related apps available in the Apple App Store. It found that 41 percent did not address modern birth control methods, while only 10 percent were directed at younger people (Mangone et al. 2016).

**Data Security**

One of the challenges of using mHealth apps is the possible misuse of intelligent software. Developers should ensure that they handle user data appropriately (Shugalo 2018). Apps created for the open marketplace should have clear and appropriate end-user license agreements. This action will allow people to opt into or out of personal data collection, especially if developers intend to sell user information to third parties for advertising purposes. Developers should also make appropriate arrangements to guarantee security of information stored on cloud-based servers.

Additionally, developers who work in the healthcare industry must also abide by the regulations outlined in the Health Insurance Portability and Accountability Act of 1996 (HIPAA). This legislation calls for the de-identification of data by removing specific fields from each patient’s record. To address such requirements, hospital systems and insurance organizations have begun to transfer patient information to electronic health records. This move has increased the complexity of safeguarding personal information.

- In terms of data security, key items for technical communicators to keep in mind include:
  - Understanding that apps may unintentionally release personal information;
  - Developing appropriate measures to guarantee the security of data;
  - Working within state and federal privacy regulations; and
  - Learning about electronic health records.
Doing so can lead to the development of materials that are both usable and meet regulatory requirements.

**mHealth Apps and the Marketplace**

Research2Guidance is a company that supports digital healthcare innovation, and it produces annual reports on the status of mHealth apps. Such materials can help developers better understand the process necessary to bring their products to market successfully and efficiently. According to Research2Guidance’s latest report, small publishers and independent developers use email, social media campaigns, and online advertising to draw customers. However, nearly half of all mHealth app developers now collaborate directly with healthcare providers, health insurance companies, or healthcare organizations (Research2Guidance 2018).

Monetizing strategies for mHealth apps on the open market vary greatly. Prices on Google Play range from free (Surgical Procedures Free App for Self-Learning) to $279.99 (Atlas of Minimally Invasive Surgical Operations). Yet many free apps contain advertisements that support their developers. Other mHealth apps deliver a free version with fewer features and then prompt users to subscribe to a more elaborate version for a set fee or a yearly subscription.

Several app publishers have also begun to produce tools tailored to the specific content and educational needs of clients including hospitals, clinics, pharmacies, and health insurance providers. For example, Healthwise offers multimodal health education apps based on their growing video, text, and image library. Welvie focuses on decision support for surgery that gives options and risk analyses. Healthdialog has partnered with Rite Aid to develop a patient portal that allows people to upload data from fitness and health monitoring apps. They can then use these technologies to send providers information that includes the user’s exercise regimens, heart rate, blood sugar levels, and blood pressure.

In relation to technical communication, developers need to consider a few central issues, including the best ways to:
- Use customer discovery interviews to find the appropriate set of users;
- Monetize the work;
- Advertise the product; and
- Contract with an established app publisher.

Addressing such factors can be key to contributing value to app development and use.

**Conclusion**

The mHealth app market continues to grow as people become more comfortable with using their smartphones to monitor their health and medical issues and to communicate with their healthcare providers. Technical communicators bring many competencies that mHealth app development teams require. This overview of these products can help as a starting point for a broader understanding of this relatively new field.

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Understanding Technical Communication Practices in Prehospital Healthcare Contexts

By ELIZABETH L. ANGELI
WE GENERALLY ASSOCIATE “healthcare communication” with hospitals or clinics, but healthcare communication extends beyond these settings out into the field. It encompasses dispatch centers where people who need urgent medical attention are connected to prehospital care providers like emergency medical services (EMS) professionals.

Unlike hospitals or clinics, EMS professionals do not know where they will practice medicine. It might be on the side of the road, in a patient’s bedroom, or in a restaurant. This unpredictable environment can strain communication, which is pivotal in facilitating patient care beyond the prehospital setting. In this environment, effective instruction and training are essential.

While technical communicators can make meaningful contributions to these processes, this area remains underdeveloped in technical communication. To participate, technical communicators need to understand the dynamics and needs of the contexts in which EMS professionals work. This article examines these dynamics.

Emergency Response: Not Your Typical Healthcare Specialty

Most healthcare specialties are defined by bodily system (“neurology”), organ (“cardiology”), disease (“oncology”), or demographic (“gerontology”). Emergency healthcare, in contrast, is defined by a time and place: an emergency. Emergencies happen to patients in all demographics and across all bodily systems, organs, and diseases. Given the unpredictable nature of emergency situations, documentation needs to support an array of possibilities while allowing providers to take specific action tailored to a patient’s emergency situation.

Given the unpredictable nature of emergency situations, documentation needs to support an array of possibilities....

To care for a patient, emergency healthcare professionals collaborate as a fine-tuned machine, and it starts with a 911 call to a dispatch center. Based on the nature of the emergency, EMS professionals travel to the patient’s location. EMS professionals then gather and transfer on-scene information to other agencies and stakeholders. For example, EMS professionals transfer patient information to emergency department (ED) healthcare providers so these providers can continue patient care.

Guided by sensory and situational awareness, training, and what some would call “intuition,” EMS professionals work with others to effectively care for and transport patients. The number of people on an emergency scene varies from two to eight or more. Events can move quickly and allow little time to take notes or refer to decision making aids.

During a response, the chain of information can change for reasons beyond an EMS professional’s control. For example, when en route to a scene, dispatch might tell the EMS professional, “Caller reports that the patient has no pulse and isn’t breathing.” When the EMS professional arrives on the scene, the patient might be sitting upright, never having lost her pulse or breath. It is in this context where technical communicators can make important differences in healthcare.

Written Communication in Emergency Response

Although much of the communication is verbal, written documentation is used throughout a response. EMS professionals refer to written protocols to support decision making in the field. At the end of every 911 response, EMS professionals also complete an electronic patient care report (ePCR), documenting the events that transpired. This documentation requires EMS professionals to input, synthesize, and narrate numerous data gathered from a response. This information encompasses a patient’s name, birthdate, social security number, relevant health and insurance information, and medications. It also includes the patient’s vital signs, medical interventions provided and related results, and other pertinent details. This information helps different audiences, like insurance billing agencies, to act. Addressing this situation effectively requires writing practices and materials that allow for the quick collection and effective transmission of medical information.

Documents used in the field need to support rapid, but not rushed, decision making and action. These materials need to be created specifically for emergency situations, not taken from other areas of healthcare. In the past, EMS documentation models, like SOAP and CHART, were borrowed from fields like hospital care. Although these workplaces share similar characteristics, like patient care and charting, they are different. Technical communicators can contribute to these processes by observing EMS professionals in the field and then using that information to design materials specifically for these professionals.

Get Out in the Field and Cultivate Partnerships

Hearing, watching, and reading stories on the news is different from witnessing emergencies firsthand alongside responders. Likewise, emergency medicine cannot be fully understood from only the ED or the field. It is best understood from all perspectives. These include the ED, the field, dispatch, billing and insurance agencies, and even medicolegal settings, like courts. These factors are key to getting necessary information to address the needs of EMS audiences when creating materials for them.

To do so, technical communicators need to build trust with EMS agencies and be open to partnering with them to develop long-term communication solutions. To create such relationships, technical communicators can contact a local EMS or fire agency to ride along (when a non-EMS
provider joins an EMS agency on the ambulance on an emergency situation.

When riding along, technical communicators should listen to the providers’ stories and suggestions, be respectful, and ensure that they do not interfere with patient care. They should also:

- Ask the crew where to sit on the ambulance. If they are allowed to sit back with the patient, ask where to specifically sit to avoid interfering with patient care.
- Bring snacks to share with the crew, being mindful of potential food allergies, like nuts.
- Mentally and emotionally prepare to witness potentially traumatic scenes and to experience compassion, as well as physical, mental, and emotional fatigue. Also consider having a plan in place, such as speaking with a counselor afterward.
- Avoid asking providers about the worst thing they’ve experienced. That can trigger post-traumatic stress symptoms.

When collecting EMS data in the field, technical communicators also need to be mindful of HIPAA guidelines to avoid creating problematic legal situations (to learn about HIPPA guidelines in emergency response, see Resources).

**Design for Instability**

When a situation changes, written documents, like protocols and ePCRs, are constants because they provide a predictable structure that providers use during high-stakes situations. Ideally documents should support—not add to—EMS professionals’ cognitive workload. To achieve that goal, documents should:

- Help EMS professionals manage multiple, developing pieces of information from patients, dispatch, bystanders, and other emergency responders;
- Support EMS professionals as they gather data from multiple sources, like a ten second preliminary visual scan of a scene and verbal information shared over the radio with dispatch; and
- Account for unpredictability, such as a change in patient status that requires EMS professionals to assess and alter a course of action within seconds.

To help EMS professionals, technical communicators can create documents that prime recall when providers complete an ePCR. For example, a document might include visuals of items professionals observed on scene, like an oxygen tank or expired medications. These visuals can help remind providers to include those items in their ePCR narrative. This information tells ePCR readers important information about the patient, like that they might need in-home support to manage their medical care.

Technical communicators can assist with more than just documentation. They can help agencies think through design interfaces of ePCR programs, especially making design choices that prompt effective recall and support the writing process.

**Design for Durability**

Documents in this context must be easy to use and durable. Emergency response providers work in the field with multiple uncontrollable elements, including wind, rain, snow, fire, dark nights, sunny days, low lighting, and cramped spaces. They carry medical equipment, and they typically need both hands to work with a patient.

To design for this context, account for:

- Providers not being able to use hands to hold materials
- Limited space
- Harsh environmental conditions
- Mental and emotional stressors (burnout, post-traumatic stress, adrenaline) that contribute to a high cognitive workload

Technical communicators can help by creating pocket-sized or hands-free, voice-activated material that can be consulted at distances. For example, although EMS professionals might not be able to grab a smartphone to open a protocol app or to look at a paper document, they can say, “Hey, Google/Siri/Alexa, what’s the new protocol for albuterol?” while providing patient care. These kinds of document alternatives respond to environmental constraints and don’t remove the provider from care.

**Conclusion**

Clear communication helps emergency responders manage multiple moving pieces. It allows providers to treat and transport patients as effectively as possible. Successful documents in emergency contexts account for fast-paced, unpredictable, often space-constrained environments. Ideally, they are designed for and respond to the specific needs of an agency. By addressing such factors, technical communicators can make valuable contributions to greater healthcare practices and patient care.

ELIZABETH L. ANGELI, PhD, (elizabeth.angeli@marquette.edu) is an Assistant Professor in Marquette University’s English Department, where she studies technical communication in prehospital care. Liz’s book, Rhetorical Work in Emergency Medical Services: Communicating in the Unpredictable Workplace, details the underlying persuasive, cognitive, and collaborative processes that guide EMS communication and decision making. She is also the Principal of the Report Doctor, LLC, a consulting firm that provides documentation and education solutions for first responder agencies. Visit her website at http://lizangeli.com.

**RESOURCES**

About STC HealthMed: Building a Community of Communicators

BY HEIDI Y. LAWRENCE

WE WILL ALL BE communicators of health and medicine at some point in our lives. A simple visit to the doctor, a discussion about healthcare legislation with family and friends, or even a trip to Whole Foods might ask us to consider the wide range of ways we define health, how to weigh conflicting evidence, or how to make decisions in the face of medical or scientific uncertainty.

Those whose jobs require them to communicate, analyze, and teach complex information about health and medicine are challenged daily to address multifaceted, complex problems that arise with communication. Balancing regulations, scientific information, and an array of audience literacy and expertise levels are just some ways in which communicating in this context is a confounding and complicated task. The STC HealthMed community is designed as a gathering place for facilitating connections and problem solving among communicators interested in this distinct set of concerns.

A SIG Focused on Health and Medical Communication

The STC HealthMed Special Interest Group (SIG) was started last year with a goal of providing a community for support, guidance, professionalization, and connection for communicators and researchers in these distinctive environments. These communicators have tasks in common with technical communicators in other environments. They advocate for audiences, work with technical experts to translate complicated information to lay readers, and struggle to communicate proprietary information about company products in ways that are compliant and clear but also do not reveal trade secrets. What often makes these challenges unique, however, are the stakes of their communications tasks—if patients do not understand instructions, they might take medications improperly; if equipment is not used correctly, diagnoses might be missed; or if lay audiences do not accurately understand a study result or finding, improper conclusions might be reached about the implication of a study. These particular situations of health and medical communication can affect us all and how we understand medicine, science, and our health.

Other members of the STC HealthMed community include those who research and teach medical and health communication. In adjacent academic fields, such as the rhetoric of health and medicine (RHM) and the medical and health humanities, researchers work to forge academic connections to analyze and examine how medical and health communication works. These researchers form multidisciplinary teams with medical and scientific experts to better understand patient health literacy, prepare new generations of technical communicators for the unique challenges of medical and health communication, and work in legal and policy environments to examine and change communications.

REGISTER FOR UPCOMING ONLINE CERTIFICATE COURSE

Introductory Markup and Scripting with HTML and CSS

3 October – 7 November

Thursdays | 2:00 PM–3:30 PM EDT

INSTRUCTOR:
Dr. Craig Baehr

OVERVIEW:
This six session course will introduce participants to introductory markup and scripting with HTML and CSS. The course will also introduce students to readings, resources, and tools available to help develop basic coding skills through practice.

Each session will feature a different topic (HTML Syntax, Working with Text Editors, Tables and Semantic Markup, Form Building, Integrating HTML and CSS, CSS Syntax, Working with Positional CSS) and will also challenge students with weekly practice assignments to help them develop their coding skills. Students also will be encouraged to present their work in progress and receive constructive feedback from the instructor and their peers.

The goal of this course is to provide students with an understanding of the wide range of skills, methods, and techniques used basic content markup and scripting for the Web. The course is also designed to prepare students for more advanced or specialized study in other topics related to markup and scripting in Web development.

COST:
Members: $595
Nonmembers: $995
Student Members: $295

www.stc.org
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Community Achievement Award
The Community Achievement Award (CAA) recognizes a SIG, professional, or student chapter’s outstanding accomplishments in achieving the Society’s goals through a wide range of programs and activities. All communities are encouraged to apply. The CAA process determines the prestigious Community of the Year award.

Due date for 2019 nominations: 27 January 2020
Get the application and guidelines here: https://www.stc.org/community-achievement-awards/

Community Pacesetter Award
STC’s Community Pacesetter Award recognizes innovative and successful community initiatives. Unlike STC’s other Community Achievement awards, which recognize communities for consistent strength in many varied activities, the Pacesetter Award recognizes the successful implementation of a single beneficial innovation that may be implemented by other STC communities.

Due date for applications: 24 February 2020
Get the Web form application and guidelines here: https://www.stc.org/community-pacesetter-awards/
If you have any questions about the application process, please email to caa@stc.org.

Questions and Goals
Consequently, STC HealthMed is a community of communicators—writers, editors, researchers, developers—who seek out each other for best practices on communicating about health and medicine across a wide range of industries. Already, our SIG has built some online spaces, including our social media accounts and website, for connecting and collaborating.

At the 2019 STC Technical Communication Summit & Expo in Denver, CO, a group of us gathered to discuss questions and issues most pressing in our daily jobs. Some of the questions that emerged included:

- How can technical communicators write about algorithms that they can’t talk about for proprietary reasons?
- How can technical communicators work with automated technologies, like chat bots and automated text, to better reach patients?
- How can technical communicators account for populations and communities who might be unfriendly or resistant readers of our work?
- How can academics and practitioners form productive connections to study and produce more adaptive text?

There are no easy answers to the above questions. STC HealthMed therefore functions as a place to work through and find community in these questions with other professionals.

Join Us
Over the months and years to come, STC HealthMed SIG members will aim to connect to address problems, help identify common lessons learned and best practices, and professionalize in ways that are most useful to our members. This special issue of Intercom offers one channel for beginning these conversations that we can continue online and offline through webinars, social media discussions, and collaborations. More questions, topics, and issues are certainly waiting to be explored. The aim of the group is to function as a place for connection over our common concerns, allowing our shared goal for improving communication to guide the solutions we envision for effective, responsive communication in health and medical environments.

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Time Management Mastery Improves Workplace Productivity and Personal Satisfaction: An Interview with Alexis Haselberger

BY SCOTT ABEL | STC Associate Fellow

LIKE MOST KNOWLEDGE workers today, technical communication professionals often complain that they don’t have enough time to do the work they need to. This is especially true when they are challenged to learn new tools and technologies—or adopt new ways of working—that are, ironically, designed to make them more efficient and effective communicators.

After being convinced that there’s a better way to do their work, it’s not unusual for a frustrated and time-crunched technical writer to ask, “When (in my copious amount of free time) am I supposed to find the hours I need to adopt this new approach? I can’t seem to complete the work I already have on my plate!”

In this month’s installment of “Meet the Change Agents,” I interview professional time management and productivity strategist, Alexis Haselberger, about the top reasons we aren’t as effective as we could be.

Scott Abel: Alexis, thanks for taking the time to speak with me about time management and productivity.

You’re called on by Silicon Valley firms to help their workers become more productive—to find the time they claim isn’t available but actually is. I appreciate your willingness to share your lessons learned with our audience, and I really enjoyed your presentation at Technical Documentation RoundUp 2019 (see Resources). For our readers who may be unfamiliar, can you tell us a little bit about yourself—who you are, what you do, and why you do it?

Alexis Haselberger: Thanks so much for having me; I’m happy to share a bit about me. As you mentioned, I’m a productivity, time-management, and efficiency expert—although I like the word “strategist,” I might start using that! In terms of background, I spent the first 15+ years of my career managing operations and HR at several early stage startups, where there was always way more work to do than people to do it. I saw people working very hard, too hard, but not necessarily accomplishing more. I saw a lot of burnout. I was always really productive, but I wasn’t working crazy hours or burning out, because balance was super important to me. I think it’s totally possible to achieve your professional goals AND to have a personal life you enjoy.

As a result of working in these high-pressure environments and this fundamental belief of mine, I began to develop and implement productivity systems in the companies I worked for, and in my life, to ensure that goals were met, balls were not dropped, and, most importantly, everyone stayed...
We want to.

If we sometimes feel like we are not present... it’s often because our brains are working overtime trying to hang onto all that stuff we know we have to do.

more of what they want, less of what they don’t, and reduce stress at the same time.

SA: You’ve written a lot about productivity—and our inability to see the three over-arching reasons that we struggle with time management. The first reason you cite is “attempting to rely on memory.”

For someone who struggles with memory and has endured brain surgery and subsequent chemotherapy treatments (both of which can dramatically impact memory), I understand why I should not rely on my memory for a wide variety of things.

But my personal brain challenges aside, why is it that relying on memory causes us to struggle with time management?

AH: In short, attempting to use our memories to keep track of what we need to do isn’t very useful, and it actually increases stress. We want to use our brains for thinking about, and focusing on, the task at hand, not for remembering that you need to pick up milk, or call back your mom, or write that report.

If we sometimes feel like we are not present (at work, at home, on the phone), it’s often because our brains are working overtime trying to hang onto all that stuff we know we have to do. And when our minds are trying to hold onto all that stuff, it’s tough to focus on the present.

Imagine this:

Your partner, or roommate, texts you in the middle of the day and asks you to pick up milk on the way home. You say, “Ok,” and store that in your memory. An hour later, you’re writing an email, when a thought pops into your head, “Remember the milk.” Now you’ve just missed the last sentence your boss just spoke.

In any case, you get where I’m going here. Our memories are not a great place to keep track of the stuff we have to do. When we get all of this stuff out of our heads and into a system, we can use our brains in the moment, on the thing we are trying to do, instead of getting stuck in the future or the past.

SA: It makes perfect sense that we leverage our brain power to think about and focus on solving problems, not on remembering the nitty gritty details of our family, work, and personal lives.

In your productivity workshops, you point out that not having a system is the second reason that we struggle with time management. As a content strategist who spends a considerable amount of time arguing that my clients must have a formal, repeatable, systematic way of doing things, the requirement for a system to manage the tasks associated with creating, managing, and delivering content makes sense to me.

Why is it that you believe that the lack of a system prevents us from managing our time efficiently? What are some of the symptoms that help you pinpoint this as the cause of time management difficulties?

AH: All that stuff that we’re not going to rely on our memory for has to go somewhere if we want to get it done. So, having a system is imperative.

By system, I just mean a method for capturing, organizing, prioritizing, and documenting your tasks. But here’s the catch: a list is not a system (yet). Most people use lists that get out of control quickly. Everything in a list carries the same visual weight. In my opinion, the key to a successful system is the concept of a “next action date.” You want to ensure that not only do you know the next action you need to take on each task or project, but that you also know WHEN you are going to take that next step. This allows you to realistically compare your tasks to the time you have on your calendar. When we don’t have a full picture of what we have to do, and we don’t have a clear idea of the time we have available, we start to get overwhelmed and attack our tasks in a haphazard way, with a lot of context switching. Using a system that tracks everything allows us to prioritize appropriately so that we know what we can accomplish and where we might need to seek out help. Creating a system that works for you, and filtering all of your input through it, is one of the best ways you can take back control of your time and ensure that you’re on top of it all. You’ll spend less time thinking about what you have to do, and more time actually doing it.

The symptoms that I see when people are not using a system are overwhelming anxiety, forgetting/dropping balls, a vague sense of dread, and way too much context switching. I also see people valuing immediacy over priority. It’s a form of shiny object syndrome. If you don’t have everything you need to do prioritized all in one place, it’s tough to figure out if that new “urgent” email is actually more important than what you are working on right now. So, people find themselves jumping from one “urgent” thing to another and losing sight of what’s essential. We could spend our whole day reacting in this way, and never get anything important done. A system helps ensure that we know what the important stuff is and make time to get it done.

sane. And I started helping others achieve the same goals. In short, I help people figure out how to do
SA: I’m a list maker. I make so many lists that sometimes I lose track of them. But when I manage to keep track of and use them, I find a sense of comfort and calm. Lists—especially when they pile up—can add to my anxiety, however, making it harder for me to focus on the work at hand. This is particularly true when overdue tasks make themselves known to me.

I’ve learned from my involvement in an entrepreneurial leadership program called Strategic Coach that many everyday distractions—things that make themselves known to us (notifications on our smartphones and computers, noise from people sitting nearby, announcements over the public address system)—are detrimental to focus. You’ve written that distractions are a huge issue—and the third reason that we are not as productive as we could be at work.

Can you talk a bit about what we know, scientifically speaking, about distractions and their impact on our ability to focus?

AH: Recent studies show that when we are distracted or interrupted, it takes, on average, 23 minutes to refocus on what we are doing. Other studies show that we are distracted every 11 minutes in a modern office. When you do the math, it’s easy to see why so many people feel like they’ve been busy all day long yet didn’t cross anything off their lists. It’s a losing battle. Of course, we can’t eliminate all distractions, because we live in the real world. But if we want to get stuff done, to increase our capacity for focus, then we really need to take control of our environment and adjust the default settings. Turn off those notifications and answer email and other messages on your own schedule. Use noise-canceling headphones when you’re in deep work mode. Set yourself up for success, because the world is here to sabotage us by default (at least in terms of focus).

SA: Keeping lists seems to create a sense of comfort, but discomfort and anxiety can creep in the minute we realize that we didn’t accomplish everything we set out to.

In your effort to help us to get more done without increasing the stress level, what lessons have you learned about list-making and prioritization of tasks? And what advice can you provide to those of us looking to improve our ability to estimate the amount of work we can accomplish in a day?

AH: Being realistic about what we can accomplish is the first step. And to do that, we need to accept the fact that our to-do list will never be done. Never. It will always grow. We will die someday with a big list of all the stuff we never finished. And that is A-OK. That’s just reality. This also means that whether you work until 6:00 PM tonight, or until 11:00 PM, you’ll still have a full day of work to do tomorrow. It’s essential to make time for ourselves, to know when to stop and to actually enjoy the life that we are working for.

What this also means is that prioritization is hugely important. We want to make sure that the stuff we don’t get to was less important than the things we do get to.

You’re also right that it can be a bit demoralizing to keep moving stuff from one list to another, one day to the next. To avoid this, you need to be more realistic about what you can accomplish. And to do this, you need to look at your calendar and your task system at the same time and only assign stuff to yourself on a particular day where you actually have time to do it. For instance, if you’re in back to back meetings tomorrow, then don’t expect to get anything else done. At best, you’ll be able to check your email between meetings. Don’t set yourself up for failure by thinking that somehow, you’ll magically make some significant headway on that big project you are working on. You won’t, and you’ll be much less stressed if you just accept that reality and plan to work on the project on a day that you actually have a few hours between meetings.

SA: Task prioritization can be challenging, especially when you are overwhelmed with work and feel as if you never have enough time. I try to practice a “do, delegate, or delete” approach to work, meaning that when a task makes itself known, I ask myself is the task essential for me to do, or is it something I should delegate to another person, or should I just delete it and forget about it. Can you talk a bit about our false sense of priority and its impact on productivity? What guidance can you provide to technical communicators attempting to prioritize tasks?

AH: You’re right; prioritization is hard. I tend to use the important/urgent matrix or the impact/difficulty matrix. These frameworks help you to decide the relative timeframes (priorities) for your tasks. For instance, if you have two tasks of equal importance, ask yourself, “Which is more urgent?” Do that one first. Or if you have two big projects of similar impact, ask yourself, “Which of these is less difficult (in terms of time, effort, and complexity)?” Do that one first. For those items that are urgent but not super important, delegate them. I like your “do, delegate, delete” method, Scott, because you are accepting that there are some things that we just shouldn’t do. If it’s not essential, impactful, or urgent, will it ever be prioritized above the other stuff? Nope. So just take it off the list.

We feel pressure to say yes…. It comes from a good place, but we’re not always thinking about our time and priorities, and that’s often how we get stretched too thin.
SA: One of the biggest lessons I have learned in my career is the importance of being able to say no. In your experience, why do you think so many people have a problem saying no? Do you have any advice for technical communication pros who have difficulty doing so?

AH: I totally agree. I think that in general, we find it difficult to say no, because we don’t want to feel like we are letting people down. Most of us say yes without thinking about it a lot of the time. We feel pressure to say yes, to be liked, to be helpful, because it seems like a good thing to do or something that we should do. It comes from a good place, but we’re not always thinking about our time and priorities, and that’s often how we get stretched too thin.

The ability to say no to the things that don’t serve us, so that we have the available time and energy to say yes to the things that do, is critical. A caveat is that at work we often have less leeway to decide what we want to do and what we don’t.

For technical communication pros, having a fully prioritized task system helps us to say no. If we have that system, we can show our boss or colleagues our real-time priorities and ask them what they think we’d need to push back to make room for a new project. Having the data allows us to have “no” conversations in a way that feels more collaborative and less like we are not team players.

In terms of ensuring that we don’t say yes without thinking of the consequences, here are a few steps I recommend:

- First, take a breath and... don’t immediately say yes. Say you’ll need to look at your schedule and get back to them. Then sleep on it.
- Then ask yourself, “Is this a heck, yes’ situation?” If not, say no.
- And if it is a “heck, yes’ situation, think to yourself “if this were tomorrow, would it still be a “heck, yes?” If not, say no.
- Finally, look at your priorities and your schedule. If it’s a “heck, yes,” and you would do it in a heartbeat tomorrow, do you have time for this? If you don’t have time, is it important enough that you’d replace something else that you are doing? If not, it’s still a no.

The Muse has an excellent resource (see References) for how to communicate a “no.”

Saying no is hard. Extrinsic yourself from obligations is hard. But the reward is knowing that you’re spending your most valuable resource—your time—on the activities that support your goals. Once you start doing it, you’ll be at the beginning of a virtuous cycle.

SA: Science is often most valuable when it helps us debunk myths. The big myth I’d like you to address today is one that many of our readers likely believe is the truth. Can you address our belief in multitasking and help our readers understand how things like context switching can tire our brains and damage our ability to be as productive as we might otherwise be?

AH: Yes! Let’s say it together: “Multitasking is a myth!” Our brains can’t do it. Multitasking is just super-quick context switching, and context switching depletes our energy and our willpower. When we attempt to multitask, we make more mistakes, and worst of all, it’s not actually faster. (We all know you’re not paying attention to that conference call; we can hear you typing!)

Single-tasking is the antithesis to this. Just do one thing at a time. Once you start doing this, your accuracy will improve, you’ll get things done faster, and your stress will reduce.

SA: I like your “Don’t let the day happen to you” adage. I think it’s a goal we should all have plastered on our computer screens and that we should program our talking devices to remind us about daily. Can you shine a light on the challenges associated with being dragged into other people’s priorities and help us avoid the concerns of others dictating how we’ll spend our time?

AH: Most of us start the day with email (in other words, other people’s priorities), and it just goes downhill from there. We react all day long instead of using our time intentionally, in service of our own priorities. I think everyone has had one (or more) of those days where you sit down at your computer, start responding to email, and somehow, it’s suddenly 3:00 PM, and that big project is still looming. This is another instance of allowing the immediate to overshadow our priorities. Because we live in a world where there is just so much—email, Slack, texts—we could be stuck there all the time. We need to take our heads out of the sand and actively protect the time to work on our own priorities. Practically speaking, this means carving out as much time in the morning as you can to work on your own priorities before you check email or other messages. As soon as you check those messages, your brain will be unable to put them aside. You might be working on your priorities (in the best case scenario), but in the back of your brain, the priorities of others are weighing on your mind, stealing your focus, and ensuring that you’re not as focused as you could be on the task at hand.

Even if you are using a task system and diligently prioritizing, if you start the day with email, and check email all day long, then you are likely going to be pulled in many directions that seem urgent but probably aren’t.

SA: Deadlines are part of everyday life. They’re important and needed, but not always as much of an emergency as some would have us believe. Can you talk to us about the need to understand the difference between real and perceived crises and why failing to categorize tasks can lead to unnecessary distress?

AH: Ah, deadlines. Sometimes they are real, and sometimes they are
Let’s talk about this word “emergency.”

Unless you are a doctor, a first responder, or maybe a tech ops person responsible for keeping a website up, it’s unlikely that you have any true emergencies in your job. Ever.

While I understand this inclination, and I have been guilty of this behavior myself, you argue that setting aside some of your first hours for deep focus work is often a better strategy. Can you elaborate on why we might want to do our most important work before we check email?

**AH:** I think most people check email first thing by default, not because they’ve actually thought through whether that’s the best thing to do for their day. Earlier in this conversation, we talked about not letting the day happen to you, and when you start with email, that’s what happens. Even if you just check email, but don’t process it, it sits there at the back of your mind, pulling at your focus. If you can start the day with just an hour devoted to the most crucial thing you have to do that day, the likelihood that you’ll actually do it skyrockets. Email is distracting, addictive, and also necessary, but what I find is that if you respond to someone at 10:00 AM, instead of 9:00 AM, it rarely makes a difference to them, but it makes a huge difference in what you can accomplish in terms of your own goals that day.

**SA:** What is the one-touch rule, and how might we use that to help us accomplish more with less stress?

**AH:** The one-touch rule is a way of approaching email (really any messages, no matter what form). The idea is that for all incoming items, you commit to only touching them once. If you don’t have time to respond to messages, don’t even read them until you do have time. You’ll only be distracted and thinking about it, but unable to take action.

**SA:** Some people prefer to check email first thing in the morning.

**AH:** The best strategy I can offer is the “brain dump.” The brain dump is a central component of a working task management system, and it’s a bit more extreme than Marie Kondo, as I’m just suggesting you get it all out of your head regardless of whether it “sparks joy”.

When you start to feel a bit overwhelmed, dump out into your system all the stuff you have to...
our readers a bit about the type of educational programs you provide and how they can take advantage of them.

**AH:** Of course. My approach is a bit different than what you’ll read about in all those productivity books, and I don’t think there’s a single app that is the silver bullet. Everyone is different, and that means that different strategies are going to work better for some than others. Instead of trying to change who people are (because that doesn’t work), I work with people to implement strategies that work with who they are already instead of trying to fit them in a box. For instance, you’ll never see me telling a night owl that the key to productivity is waking up at 5:00 AM and getting a jump on the day before their kids wake up.

I offer the following types of programs:

- **Coaching (individual or group):** Participants will experience transformation in their life and work regarding their ability to accomplish what they want, and experience less stress by learning and integrating strategies, techniques, tools, and solutions that fit into their specific lives. After the program, participants will have built a completely customized system for accomplishing their tasks, projects, and larger goals, while reducing stress, and they will have learned the underlying skills necessary to tweak their systems when circumstances inevitably change.

- **Workshops:** I lead virtual and in-person workshops, for groups of any size. During this interactive workshop, participants will learn the essentials of effective time management, including easy-to-implement strategies, techniques, and tools that they will be able to integrate into their workflows immediately.

- **Speaking:** If you’d like me to speak at your event, I’m more than happy to share tips that anyone can implement immediately to become more productive and reduce stress at the same time.

- **Online course:** If you’d like to learn at your own pace, you can check out my online course (see Resources).

**SA:** Are there any online resources, books, or tools you recommend for people hoping to earn more about time management and personal productivity?

**AH:** *Getting Things Done* by David Allen is a seminal work in the field—an excellent read and lots of great content. Tools-wise, I often recommend TickTick, a free, simple task manager with lots of great features.

**SA:** I’m afraid we’re out of time. Thank you on behalf of our readers for taking the time to share what you’ve learned about personal and workplace productivity and time management.

**AH:** Thanks so much, Scott. I really enjoyed speaking with you today.

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**RESOURCES**

Take her online course: [https://www.udemy.com/do-more-stress-less/?couponCode=TECHDOCS](https://www.udemy.com/do-more-stress-less/?couponCode=TECHDOCS)

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**REFERENCES**


I LOVE THE word gobbledygook. It’s such a fun word to use. Merriam-Webster defines gobbledygook as “wordy and generally unintelligible jargon.” As technical communicators, you might be more familiar with that term “jargon.” Merriam-Webster defines jargon as “the technical terminology or characteristic idiom of a special activity or group.” Did you notice how I switched from using “word” to “term?” That’s because, like the word “jargon,” “term” refers to words in a specialized field and “terminology” is that field’s specialized vocabulary.

Technical communicators work in a variety of specialized fields, such as the computer industry, scientific industries, or healthcare industries, just to name a few. These fields are filled with technical terminology. Often, there are specialized dictionaries that contain these technical terms for their field.

Are all of these technical terms considered to be jargon then? If we look at just the Merriam-Webster definition, then maybe so. I think, however, that the technical communication field has given jargon a different definition: jargon is the set of technical terms that are used inappropriately. (Dan Jones devoted an entire chapter to jargon and technical terms in his book, Technical Writing Style. See Resources.) What defines inappropriate use? Plain and simple: your audience (your reader). But more on that in a bit.

Most style guides for the computer industry, including the Microsoft Style Guide (see Resources), recommend that technical writers avoid jargon, especially for less technical audiences. The Microsoft Style Guide brings in the idea of “familiarity” to the decision of when to use jargon—or really the technical terminology for the computer industry. The Nielsen Norman Group wrote an article on plain language, and in it they talked about using technical terms that are familiar to your users, even the experts (see Resources).

So as technical writers and technical editors, how do we avoid jargon in our communication?

- Know your users
- Define your terms
- Customize your grammar checkers (build a custom technical dictionary)

Know Your Users

Just as I wrote last year (see Resources), everything depends on your users. Every technical communication project should start out with a solid and thorough user and task analysis. You need to know your users and understand their environment and understand tasks. You also need to understand their skill level, as defined by Dreyfus (see Resources): Novice, advanced beginner, competent performers, or experts. When we write a piece of content for advanced beginners, we will have to watch our use of jargon and technical terminology more closely than when we write a piece of content for experts.

Also consider Jakob Nielsen’s perspective that we should use jargon “to communicate more precisely and professionally” with our specialized audiences and our expert readers (see Resources).

Define Your Terms

If you use your technical terminology...
appropriately, and avoid jargon, you will likely need to define your terms in context. You might use a term that is unfamiliar to your audience and then immediately define it so that they can learn it, and it can become a part of their technical or specialized vocabulary. As you work on the content, you’ll likely need to consult specialized dictionaries or word usage lists to help define terms for your users.

**Customize Your Grammar Checkers**

Today, most grammar checkers (or spelling checkers) have a custom dictionary feature. You can build or import a list of technical terms that are allowed for your project. Any term that does not appear in the custom dictionary would then likely be flagged as jargon for you to either eliminate or define. You can read more about how technical communicators should use grammar checkers in my previous column titled, “(Grammar) Check please!” (see Resources.)

If you do not have or use a grammar checker, then you should at least build a custom dictionary or specialized glossary to use as you write or edit your content.

**Jargon Is in the Eye of the Beholder**

In the end, one reader’s gobbledygook is another reader’s technical terminology. It is very easy to let jargon slip into our technical writing, especially when we’ve worked in the same industry or on the same project for a long time. We need to build our specialized dictionaries, and if possible build them into our grammar checkers, to help keep us alert to the inappropriate use of jargon.

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**RESOURCES**


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Be Patient and Understand the Customer Journey

BY ALAN J. PORTER | STC Senior Member

WE’VE ALL BEEN there. Sitting in the doctor’s waiting room balancing a clipboard on our knees trying to recall which of the listed ailments we’ve suffered from at some point in our lives. You’ve already given them all this information; why can’t they just get it from the previous doctor you visited?

In some countries, there are definite moves to collect patient data in centralized locations that can be easily accessed. In others, like the United States, various legal restrictions keep such information confined to isolated paper records. While the idea of microchips that could hold all your patient data was approved back in 2004, the chips developed to date in the United States don’t contain anything beyond a PIN number that can then be scanned and entered into other systems to retrieve data. Other countries, like France and Germany, have chips with patient records that are attached to healthcare cards, similar to the insurance cards that people carry in the United States.

So what’s all this got to do with the convergence of content? While it may seem on the surface that the healthcare industry is lagging in the use of intelligent content and reuse, I believe that once you get past the frustrations of filling in yet another form, this is one of the industries that is leading the way in the application of content convergence.

It may not be visible at the point of customer (patient) interaction yet, but there is a lot of thinking and progress happening around the concept of cross-functional content development in the supporting and associated areas of the healthcare industry.

Over the past twelve months, I’ve personally been involved in projects in a large pharmaceutical manufacturing company to take a standardized approach to the use of structured modular content within the scientific communication, medical, and marketing groups of the company.

What can we learn from such initiatives? I believe that a lot of this thinking is being driven by a holistic view of the patient and where they are on their healthcare journey. There is an understanding that to be most effective, we need to understand the history and context of any ailment and how to treat it.

That’s an approach that can be applied to any industry. The idea of the customer journey is not new, but the phrase tends to be used in marketing departments to describe how a customer moves around the website—which pages do they visit and in what order, what do they click on, etc.

I believe that your customer journey, like a patient journey, should take a broader holistic view of everything a customer does, not just at the moment that the customer engages with you.

Understanding “a day in the life” of your customer allows you to develop great empathy for what tasks they are trying to achieve or what questions they need answered. With this knowledge, we can identify what content can help them, or even where there are gaps in the content they need. By pulling together these insights, we can focus on developing content that can move across functional groups and deliver what the customer needs.

As pre-sales content and post-sales content begin to overlap, Alan Porter provides the latest insights about our role in that evolution in Convergence Conversations. Learn through this column to build bridges and form synergies with your counterparts in marketing. Contact Alan at ajp@4jsgroup.com to ask a question or propose a topic for him to cover in this column.
Making the Move to Medical Writing: Perspectives from the Health and Medicine Special Interest Group (SIG)

BY PORSCIA PARKER | Guest Columnist

IN EARLY 2019, STC Health and Medicine Special Interest Group (SIG) members Alisa Bonsignore, Kelly Schrank, and Kirk St.Amant participated in an interview for the online publication BioSpaces. The objective was to provide insights on making the move to medical writing.

Questions were crafted by career coach and consultant Porschia Parker, and an abridged version of that interview was published in the article “Medical Writing: A Flexible Career Choice.”

The following is an expanded version of certain responses, and the interviewees welcome questions or comments on their responses via Twitter (@STCHealthMed) or in our Facebook group (STC HealthMed).

What is a medical (technical) writer?
Kelly Schrank: Very simply, a medical (technical) writer is a technical writer in a medical field.

Kirk St.Amant: Technical writers take scientific or technical information, find the best way to convey it to a particular audience, and then design materials that share that information effectively with that audience. It’s about understanding what audiences want or need to do in a given situation, and providing information in ways that allows them to achieve this objective. Technical writers do everything from creating instructional manuals to developing websites to designing interfaces and apps.
Medical writers create informational or instructional materials for use in health or medical contexts; their materials allow different audiences to
- Understand health and medical situations or practices;
- Perform certain health- or medical-related activities; and
- Use a particular health or medical product or device.

Typical activities include creating pamphlets on public health practices for a local clinic, writing manuals that accompany a pacemaker or defibrillator, or creating website content that explains a treatment to a patient. The key is knowing the audience, what information they need, and in what format they need the information to accomplish an objective related to a health or medical topic.

Alisa Bonsignore: When I first went independent, I realized that there was a lucrative niche in the gray area between technical/clinical writing and marketing. My core business involves writing about things that require a solid technical understanding and yet are written for a non-technical audience.

I often work across departments, interacting with technical or clinical specialists, lawyers, marketing professionals, clinical educators, regulatory specialists, and executive teams, but I also provide strategy and advisory services to help my clients understand and empathize with their users’ pain points.

What do you think are the differences between a medical (technical) writer and other technical writer positions?

St. Amant: The differences include:
- Specialized focus in a particular area—health and medicine.
- Working in a regulated environment where you need to account for both a target audience and a regulatory agency that oversees your work.

Schrank: To me, the difference is the industry you are working in and its constraints; for example, technical writers who are writing procedures for medical devices or in pharmaceutical manufacturing environments.

Bonsignore: Medical writing is highly regulated, which provides unique constraints, not only on what can be said but where and how.

What are some of the top benefits of being a medical (technical) writer?

Schrank: Two things for me are the constant state of change in pharma as an industry and as an editor, the opportunity for a higher rate of pay.

Bonsignore: As an independent, I have the flexibility to work on the types of projects that I enjoy, while focusing on compelling disease states or innovative medical technologies. There’s plenty of opportunity for learning and research.

St. Amant: The benefits include:
- Being part of something big and important that can really help others, like developing a new technology.
- Always learning something new about science, medicine, and health, as well as healthcare and treatments.
- Being part of a network doing interesting and exciting things.
- A dynamic environment where you are continually learning and can feel like you are making a difference.

Have you noticed any new trends related to the medical writing profession?

Bonsignore: Generally, changes in the medical writing profession happen more slowly than on the tech side. Tech tends to be more about moving fast and breaking things, while medical moves at the slower pace of R&D and regulatory. I think there’s also been more of an awareness of new media and new ways to present information, although that has been a slow-moving change.

Schrank: I am hearing clients ask for infographics and infographic-like documents, so data visualization beyond slide decks and posters are a popular topic.

St. Amant: The use of social media to share information (for example, updates on a medical situation), test products (for example, trial interfaces for a product), and provide suggestions or advice (for example, prospective treatments for a situation). The fact that these technologies allow information to be shared so quickly and directly with so many people—as well as provide instant, direct access to so many individuals—creates both new opportunities and challenges that medical writers need to understand, work with, and address.

How competitive is it to become a medical writer?

St. Amant: It depends on the state of the industries in the health and medical areas. If those industries are expanding, the need for medical writers generally grows in response, and the options increase. The same forces tend to affect what prospective employers look for when hiring medical writers. If the financial situation is good, organizations might provide training to help writers enhance their skills in certain areas or supplement their knowledge of a topic. This approach allows a wider range of individuals with different backgrounds to be viable candidates for jobs. If such on-the-job training is not available, the expectation or need for job applicants to have

This column provides information on trends, practices, and resources for applying technical communication skills in health and medical settings. Contact the columnist, Kirk St. Amant, at kirk.stamant@gmail.com.
specialized training could increase, which affects job prospects and competitiveness.

**Schrank:** It really depends on what you want to do, your credentials, and your location. It’s always hard to get an entry-level writing position, but if you happen to have an advanced degree in a scientific field and are located near a pharmaceutical area (like Philadelphia and New Jersey) and you want to be a medical writer, you have a better chance than someone with a Bachelor’s degree in English living in Idaho. More remote opportunities are opening up, but it’s much harder to start your career as a remote worker; companies are more likely to train you if you are in-house.

**Bonsignore:** It depends on where we are in the economic cycle. Having done this for more than 20 years, I have seen plenty of ups and downs. But like any profession, once you have a solid network of clients and colleagues, it’s much easier to find work, even in the down times.

**What advice would you give to aspiring medical writers?**

**Bonsignore:** Make lots of connections, both with other medical writers and with other healthcare industry professionals.

Find the area that you find most compelling—medical device, pharma, hospital—and build your base there. Even when a client gives you the supporting information, do your own research. You’ll ask better questions and be able to deliver a better finished product.

**St. Amant:** Know the area: learn about the industries you wish to work in, and learn about the products or services they specialize in.

Know the resources: learn about the resources available to keep up with an industry or the products and services of an industry, and learn where to find effective and accurate information to supplement your knowledge of a topic.

**Schrank:** You’d better like researching, learning, presenting, writing, and editing if you want to get into this field. There will always be new software to learn, new terminology and topics, new platforms, news ways of communicating (such as video).

Start a blog or a YouTube channel or create a poster or infographic on something you are interested in—preferably something professional, but really anything that shows you can communicate and use technology to make your point.

**The SIG**

The STC Technical Communication in Health and Medicine Special Interest Group (HealthMed SIG) provides members with information on trends, practices, and resources for applying technical communication skills in health and medical settings. The SIG’s mission is to help members who have different levels of familiarity with health and medical topics learn how to apply their skills in different health and medical contexts.

**ALISA BONSIGNORE** (alisa@clarifyingcomplexideas.com) runs Clarifying Complex Ideas, a strategic communications consultancy in the San Francisco Bay Area. She helps companies communicate complicated topics, including medical devices and pharmaceuticals/genomics, network security, healthcare IT, and policy development and sustainability communications surrounding companies’ efforts to improve their supply chains and meet the U.N. Sustainable Development Goals (SDG). She is serving her second term on the Society for Technical Communication (STC) Board of Directors, and she is also a longtime member of the American Medical Writers Association (AMWA). You can contact her on Twitter at @clearwriter.

**KIRK ST. AMANT** (kirk.stamant@gmail.com) is the Eunice C. Williamson Chair in Technical Communication and a member of the Center for Biomedical Engineering and Rehabilitation Science (CBERS) at Louisiana Tech University. A former Co-Manager of the STC’s Health and Medicine Special Interest Group (HealthMed SIG), he is a Co-Director of the Louisiana Section of the American Medical Writers Association (AMWA). You can contact him on Twitter at @Kirk_StAmant.

**KELLY SCHRANK** (headbookworm@gmail.com) is a technical and medical editor and Head Bookworm at Bookworm Editing Services. As an experienced writer and editor of medical, technical, and marketing communication, she has created and improved documentation, websites, marketing materials, newsletters, slide decks, standard responses, dossiers, training materials, and product manuals, for a variety of industries, including the pharmaceutical industry. She is President of the Rochester Chapter of STC, CoManager of the Technical Editing Special Interest Group (TE SIG), and Marketing and Promotions Councilor for the Board of Editors in the Life Sciences (BELS). You can contact her on Twitter at @headbookworm.

**PORSCHIA PARKER** (pparker@fly-highcoaching.com) is a Certified Coach, Professional Resume Writer, and Founder of Fly High Coaching. She empowers ambitious professionals and motivated executives to add $10K on average to their salaries. You can contact her via her website: https://www.fly-highcoaching.com.

REFERENCES

FYI lists information about nonprofit ventures only. Please send information to intercom@stc.org.

1 10-12 Oct
The Council for Programs in Technical and Scientific Communication (CPTSC) will be holding its annual conference 10–12 October 2019 at West Chester University in West Chester, Pennsylvania.
CPTSC
https://cptsc.org/
conference@cptsc.org

2 19-23 Oct
The Association for Information Science and Technology (ASIS&T) will have its 82nd Annual Meeting 19–23 October 2019 at the Crown Conference Centre in Melbourne, Australia.
ASIS&T
https://www.asist.org/am19
meetings@asist.org
301-495-0900 x1500

3 20-22 Oct
The Public Relations Society of America (PRSA) will be holding its annual conference 20–22 October 2019 at the Marriott Marquis San Diego Marina Hotel in San Diego, CA.
PRSA
https://apps.prsa.org/
Conferences/
InternationalConference/

4 23-26 Oct
The American Translators Association (ATA) will hold its 60th annual conference 23–26 October 2019 at the Palm Springs Convention Center in Palm Springs, CA.
ATA
https://www.atanet.org/
conf/2019/

5 28 Oct-1 Nov
The Human Factors in Ergonomics Society (HFES) will be holding its annual conference 28 October-1 November 2019 at the Sheraton Grand Seattle in Seattle, WA.
HFES
http://www.hfes2019.org/
llawson@hfes.org

6 6-9 Nov
The American Medical Writers Association (AMWA) Medical Writing and Communication Conference will take place 6–9 November 2019 at the Sheraton San Diego Hotel and Marina in San Diego, CA.
AMWA
conference@amwa.org
240-238-0940
https://www.amwa.org/
page/Conference
Healthy Writing, Healthy Life

BY SHAWNEDA CROUT | STC Member

“WHATEVER YOU DO, Shawneda, make sure it involves writing.” My foster dad locked eyes with me. “Everyone can’t write, it’s a gift. Use it.”

Books, fiction and nonfiction, were my first love as a child. I’d researched enough of my favorite authors to know that writing books for a living didn’t provide enough to live on for most authors. According to my AP program’s personality test, I’d be well suited to being a judge or organizational psychologist. The test pointed out my logical and analytical capabilities as strengths to use to secure my professional future.

I couldn’t forget my foster father’s words over the years. My AP Literature teacher agreed with him. She submitted my information to the Princeton English Department in my junior year as a prospect for a scholarship program. Pointing out how much writing lawyers and psychologists do, my Dad inferred the personality test reinforced what he said.

Years later, on my wedding day, my Dad’s toast sounded very familiar. “Congratulations, Shawneda, I’m very proud of you. No matter where your life takes you, don’t forget to write. Use your gift.” Tears came to my eyes as I smiled at my Dad. His commitment to me living up to my full potential by finishing college and using my gift with words inspired me even after he passed away.

When I finished writing my first novel and first poetry book in 2005, he preordered the first copies of each. I proudly signed and shipped his copies the day the first box of books arrived on my porch. Learning to self-publish led to learning about marketing, business, and with the timing of my novels coinciding with the release of the Kindle, I made a livable wage from writing fiction for a few years.

When a nurse told me one day while volunteering at the local daycare my blood pressure was stroke level, I knew something had to change. Instead of blaming my sedentary writing lifestyle as the problem, I looked to writing as part of my solution. How could I continue to write and be healthier?

Blogging about healthy living led to becoming Aerobatics and Fitness Association of America (AFAA) certified as a group fitness instructor to have access to professional resources from proven health and fitness leaders. My love for technology grew alongside my love for writing. The same creativity used to create entire worlds, depict juicy drama, and bring readers to tears came to be very useful in creating marketing campaigns and ghostwriting for others when the self-publishing landscape changed again. Designing book covers, building websites, and book promotion campaigns gave me as much satisfaction as working on my stories and nonfiction books.

Blogging about healthy living has changed as much as self-publishing. Chronicling my journey toward living a healthy lifestyle as a professional writer evolved into wanting to help other writers find their best healthy writing life as well. Recognizing I preferred the foundational principles of communications and wanting to help people, I shifted from marketing to technical communication.

Imagine my surprise while attending my graduate courses to earn my masters in Technical Communication at Minnesota State University, Mankato when professors referenced fiction writing techniques that helped with technical writing. I also learned how to replace marketing with ethical persuasive writing. Being a novelist and a healthy writing blogger led to discovering the field of technical communication. I imagine being a technical communicator and author would make my Dad proud.

Everything I do incorporates my gift of writing. I love to connect with you on LinkedIn. To find out more about her go to www.shawneda.com.
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<td>STC Live Educational Webinar (free, sponsored, and community webinars excluded)</td>
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<td>STC Annual Summit</td>
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<td>Begin and complete a college-accredited course related to the Technical Communication field</td>
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<td>Published articles that relate to any aspect of Technical Communication (2/article)</td>
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