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SURGICAL TECHNOLOGIST

OFFICIAL JOURNAL OF THE ASSOCIATION OF SURGICAL TECHNOLOGISTS, INC.



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Emergency Department Visits and the Public Health

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JOURNAL DEADLINES The deadline for editorial copy is 8 weeks prior to the cover date (eg, the deadline for the November issue is August 1).

POSTMASTER Send address corrections to The Surgical Technologist, 6 West Dry Creek Circle, Suite 200, Littleton, CO 80120-8031.



CE EXAMINATION:

Dealing with Post-Medical Treatment: Emergency Department Visits and the Public Health

DON MARTIN, CST

Throughout the past 20 to 25 years, there has been an increase in the number of ED visits resulting from adverse effects of patient care. The adverse effect of medical treatment was the third leading cause of ED visits in 2006. This article will look at how the continued increase in the number of ED visits after receiving medical treatment has resulted in higher healthcare costs and is contrary to the theme of improving public health.

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Excitement Surrounds Conference, Leads Us into the Future

HOLLY FALCON, CST, FAST

PRESIDENT'S MESSAGE

The 48th Surgical Technology Conference just concluded, and WOW... was there excitement in the air! As soon as I checked into the hotel, I was greeted by many friends whom I see year after year at conference. Seeing these familiar faces made my day. Looking around and seeing other groups of surgical technologists shrieking as they see familiar faces and embracing friends as they give hugs made me smile. As one group met another, new introductions were made and our network continued to grow. It made me happy knowing others were just as excited for the learning and networking opportunities the week would bring as I was.

It was an extremely busy week filled with excellent educational sessions. Outside the educational speakers, we had a week full of supporting state assemblies, laughter with our keynote speaker, honoring members with awards and recognition, answering questions for members, having the opportunity to select our new national board, socializing and networking.

One preconference event that the national board participates in is one of my favorites. The AST Board, along with the boards of Association of Surgical Assistants (ASA) and the National Board of Surgical Technology and Surgical Assisting (NBSTSA),

participated in our annual community outreach. This event allows us to give something back to the conference host city. It is also an opportunity for team building among the AST board members and members of our partner organizations. This year, we chose the Boys and Girls Club of Southeast Louisiana. Each organization, along with the Accreditation Review Council on Education in Surgical Tech-

I am honored to leave New Orleans as the president of AST. As conference ends, the work of the newly elected board is already beginning.

nology and Surgical Assisting (ARC/STSA), provided a monetary donation and delivered boxes of supplies to the center to help with the planned activities for this summer. Our hearts were full being able to provide donations to contribute to this worthy organization while sharing our passion for who we are and what we do. We always have a

great time working together with our partner organizations to increase public awareness for our profession while giving back to the community. Stay tuned to the August Journal to see a closer view of the wonderful time we had sharing our passion for who we are and what we do with the kids at the Boys & Girls Club.

I am honored to leave New Orleans as the president of AST. As conference ends, the work of the newly elected board is already beginning. We spoke with many of you during the week and were given wonderful suggestions and great ideas which will set the groundwork for some future projects. My goals for the upcoming year include continuing to increase AST membership through member retention between certification cycles and working with program directors to increase communication and capture the excitement of our future leaders ... the students. I also would like to maintain positive and productive relationships with our partner organizations to continue the growth of our profession. I look forward to implementing some of your ideas for increasing public awareness for surgical technology.

Our future endeavors are awaiting. I am excited to see where they will lead.

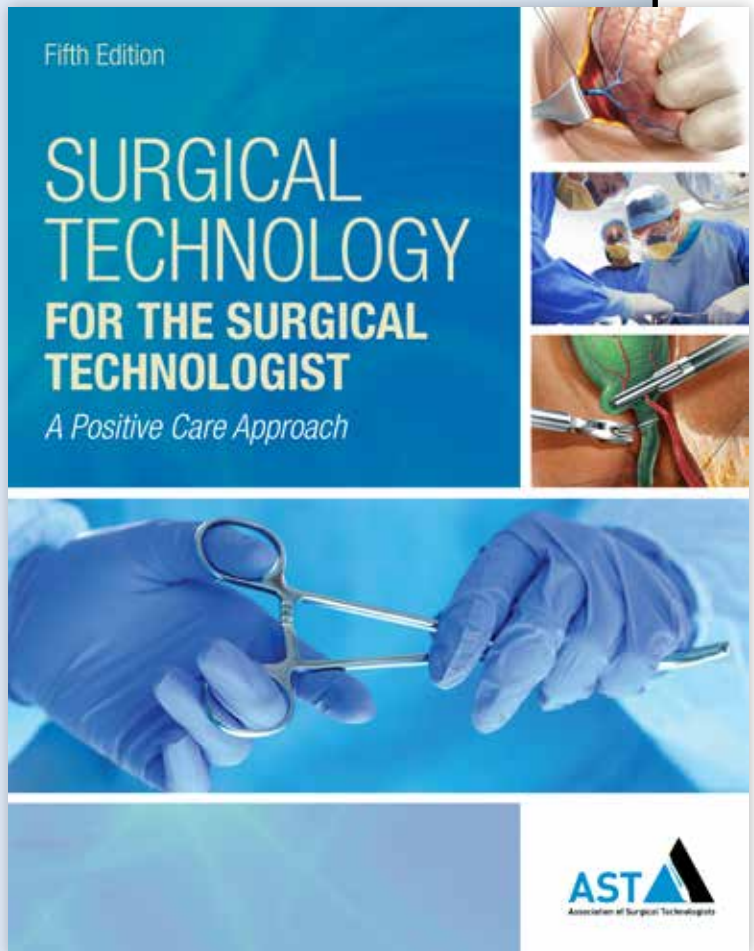


New AST 5th Edition of Surgical Technology for the Surgical Technologist Now Available!

This just published textbook, written by CSTs, continues to focus on the knowledge, critical thinking and cognitive skills required by the surgical technologist.

Some of the latest changes in this new edition include:

- Two new comprehensively illustrated procedures have been added: Open Nephrectomy and Lumbar Laminectomy
- All case studies have been revised and many are new
- New information includes OR furniture, safety guidelines, for ionizing radiation, electrical, fire and laser hazards and sharps safety
- Minimally invasive surgery is now discussed under Biomedical Science and Minimally Invasive Surgery
- Emergency Situations and All-Hazards Preparation information has been substantially revised
- Surgical Pharmacology and Anesthesia topics have been streamlined
- General Surgery features an expanded laparoscopic instrumentation discussion



To order copies of the latest AST-authored textbook, please visit
<http://answerspluspro.cengage.com/b2bstore/index.html>

AST News and Current Events

AT A GLANCE

NEWS OF NOTE

NEW BOARD OF DIRECTORS ELECTED

Each year at AST's national conference, new board members are elected to fill the positions that are up for election. This year, the following positions were elected: president, vice president, treasurer and three board of director positions.

2017-2018 AST Board of Directors

From left, front row: Director Sue Jeffery, CST, CSFA, FAST; Director Michelle Gay, CST, FAST; President Holly Falcon, CST, FAST; Treasurer Peggy Varnado, CST, CSFA, FAST; Director Nicole Claussen, CST, FAST; Director Rachel Ray, CST, CSFA, FAST. From left, back row: Director Dustin Cain, CST; Director Jessica Elliott, CST, RN, FAST; Vice President Kevin Craycraft, CST, FAST; Director Sandra Farley, CST, FAST; Secretary Heather Burggraf, CST.



CE AUTHOR RECOGNITION

This recognition is for those whose dedication to the profession, the organization and the advancement of learning for their peers has empowered them to become contributing authors to the Journal and enhance the continuing education for all in this industry.

It is always a challenge to identify relevant material to publish in *The Surgical Technologist*, but we have been honored by how many of you continue to submit CE articles that present interesting topics and well-researched topics. This recognition honors the authors who have written for the editions of June to May each year.

- June 2016 - Endoscopic Lumbar Laminotomy, Amanda Dowell, CST
- July 2016 - Health Production and Patient Engagement, Erika Fowler, CST, MPH; Ann Cole, MHA, RT (R)
- August 2016 - The Surgical Repair of Transverse Patella Fractures, Angela Miller, CST
- September 2016 - Epidermolysis Bullosa, Katherine Hayes, CST
- October 2016 - Robotic Sigmoid Colectomy with NOSE, Jesse M Cheney, CST, CSFA
- November 2016 - The Diabetic Surgical Patient, Zsa Zsa Chinn, CST
- December 2016 - The Surgical Legacy of World War II, Part 1: Pearl Harbor, Preparation and Portability, Dolores Goyette, CST, DC
- January 2017 - Radiofrequency Ablation as a Treatment for Chronic Venous Insufficiency, Julie Beard, CST
- February 2017 - Congenital Aural Atresia, Suzanne Cunniff, CST, CSFA-CVS
- March 2017 - Navigating Through Conflict in the Operating Room, Jorge A Zamudio, CST, MS
- April 2017 - Using Open Partial Nephrectomy as an Effective Nephron-sparing Surgical Treatment in Renal Cell Carcinoma, Susan Begnal, CST, BSN, RN
- May 2017 - Surgical Smoke: Hazards and Prevention, David Blevins, CST, CSFA

GIVE BACK

INTERESTED IN MEDICAL MISSIONS?



Ever considered being a part of a medical mission trip? Maybe you feel like you should give back to the less fortunate or maybe you just like reaching out to those in need, but are unsure how to jumpstart your plans to participate in a medical mission trip. There's a resource to help you get started on your mission.

Operation Giving Back is a program of the American College of Surgeons and was created for the volunteer surgeon. OGB recognizes the team nature of surgical care delivery and the critical contributions of all surgical professionals. OGB attempts to include information relevant to all members of the surgical team.

Their resources page for the surgical team offers lists of how to get active in serving on medical missions. To view this list, visit our website, www.ast.org, and click on About Us – Medical Missions.

MEMBERSHIP

FAQS

For more FAQs, visit our website at www.ast.org – Members – FAQs.

Does AST accept college courses for CE credit?

Yes, each college hour is worth 5 credits. Members need to earn the college credit within their membership and certification cycle. Members can find the accepted college courses on our website.

Can you get credits from any BLS, CPR or ACLS?

Yes, just make a copy of the card and inform us of how many hours to complete. Each hour is worth 1 credit.

If I am certified and my name changes, how do I change it?

For a name change if you are already certified, contact the National Board of Surgical Technologist and Surgical Assisting at 1-800-707-0057 or www.nbtsa.org.

How do I submit credits?

- Mail: 6 W Dry Creek Circle, Ste 200 Littleton, CO 80120
- Fax: 303-694-9169
- Email: memserv@ast.org

EARN CES

AST CE Online Resource Center

AST offers a variety of options to stay connected with your profession and up to date on procedures.

AST Member CE Credit Package Deals

- Package 1: 21 CE Credit Package for \$35 (2007)
- Package 2: 18 CE Credit Package for \$30 (2008)
- Package 3: 10 CE Credit Package for \$15 (2009 - Neurosurgical Specialty)
- Package 4: 10 CE Credit Package for \$15 (2009 - Orthopedic Specialty)
- Package 5: 12 CE Credit Package for \$19 (2010 - General)
- Package 6: 12 CE Credit Package for \$19 (2010 - General)
- Package 7: 17 CE Credit Package for \$29 (2011 - General)
- Package 8: 8 CE Credit Package for \$13 (2012 - General)
- Package 9: 17 CE Credit Package for \$29 (2013 - General)
- Package 10: 22 CE Credit Package for \$37 (2013 - General)
- Package 11: 22 CE Credit Package for \$37 (2013 - General)
- Package 12: 13 CE Credit Package for \$21 (2013 - General)
- Package 13: 17.5 CE Credit Package for \$29 (2013 - General)
- Package 14: Members may access this package by logging into their ast.org account.
- Package 15: 16.5 CE Credit Package for \$27 (2015 - General)
- Package 16: 20 CE Credit Package for \$33 (Guidelines – Only accessible online)
- Package 17: 11.5 CE Credit Package for \$17 (Guidelines – Only accessible online)
- Package 18: 16 CE Credit Package for \$26 (Guidelines – Only accessible online)
- Package 19: 9.5 CE Credit Package for \$13 (Videos – Only accessible online)
- Package 20: 5.5 CE Credit Package for \$10 (Preceptor course – Only accessible online)
- Package 21: 10 CE Credit Package for \$15 (Open domain articles – only accessible online)

In addition, three free online CE credits are offered annually. Over a four-year period, members can earn 12 free credits. For the three credits offered this year, turn to page 301.

The beauty of accessing and paying for credits online, is that the credits automatically post to your record. No waiting for confirmation, you can instantly see how many credits you have earned and how many you need to stay current in your certification!

To access our online credit packages or our free CE articles for credits, visit our CE Credit Online Resource Center by logging on to www.ast.org and clicking on the “Professionals” tab, then “Earn CE Now.”

AST MONTHLY JOURNAL – THE SURGICAL TECHNOLOGIST

The articles in this publication provide valuable knowledge about latest topics related to the industry. Accompanying the article every month is a CE exam. Take the exam and send your answers into AST. This can be done on hard copy via mail, or online at www.ast.org. These credits may be applied toward your recertification. There are no expiration dates on the CE articles/tests and you may go back to the beginning from 1980 to present to read the articles and take the tests.

LOCAL STATE ASSEMBLY

Your state assembly offers continuing education seminars and may provide guidance in pursuing legislation in your state. Announcements of state assembly meetings and workshops in your state are published in the “Upcoming Programs” section of your monthly issue of *The Surgical Technologist*, and on your state’s website. Visit www.ast.org – State Assemblies – Upcoming Programs for the list as well.

Your state assembly also will contact you about upcoming workshops in your area. Keep checking your Journal for new meeting dates and announcements. It’s a great way to get involved on the state level and gain valuable CE credits in the process.

COLLEGE CREDITS

College courses must be relevant to the surgical practice of surgical technology and surgical assisting and completed at an institution that is accredited by an organization recognized by the US Department of Education. Surgical assistant college courses submitted for CE credit(s) must be completed at a CAAHEP-accredited surgical assistant program. If you have questions about whether or not the program you attended or are planning to attend is CAA-

HEP accredited, you can contact the Accreditation Review Council on Education in Surgical Technology (ARC/STSA).

You can visit their website at www.arcst.org.

WRITING FOR HEALTH-RELATED PUBLICATIONS

When authoring a CE article to be published for a magazine or journal, the article must be a health-related publication. Additionally, the publisher must have a peer-review process in place in order to determine if the article meets the publishing standards of the magazine or journal. In fact, you can earn CE credit by writing for AST’s journal, *The Surgical Technologist*! If you have any questions regarding what is involved in writing for the Journal or how to begin the process, write to us and include what topic you would like to cover. Send outlines or letters of interest to publications@ast.org. Always wanted to write, but don’t know how to get started? We’ll help you through the entire process. Express your interest today!

COMING UP NEXT

NEW ORLEANS ROUNDUP

You won’t want to miss the August 2017 edition of *The Surgical Technologist* as we feature our yearly conference roundup including a photo spread detailing the highlights of AST’s 48th Surgical Technology Conference in New Orleans.

Editorial content will also include a wrap up of awards presented at conference and how the AST Board of Directors and other attendees gave back to the community.



National

Surgical Technologists Week

September 17-23, 2017

Planning something big for NSTW this year?

We want you to show your events and your pride with others within the surgical community. Post your events and activities to our Facebook page and keep an eye out for the details for this year's photo contest. The rules and instructions will be posted in the Journal, online at www.ast.org and on our Facebook page.

The goal of National Surgical Technologists Week is to educate the public about what you do every day in the OR. The best way to do that is to step out from behind the mask and be an advocate for the profession that you live and breathe. By raising awareness in your community you promote your own profession.



From Beads to Mickey Mouse Ears

ROCHELLE DUPLICHIAN, CST

STATE ASSEMBLY



As president of the Louisiana State Assembly, who was the host state of the 48th National AST Conference in New Orleans, I can honestly say that I am still motivated and energized! It was an exciting conference and one that I will always remember.

For those of you who attended national conference, not only did you experience an emotional excitement, but also a deep sense of awareness of being part of a big happy family. From the exhilarating opening ceremony, informative educational sessions, the efficient business sessions and the ever-impressive Exhibit Hall to the buoyant music, authentic cuisine and the thrill of Bourbon Street's invigo-

Now, I know you already are asking "How can I go to this conference and get involved?" Here is your answer: be a delegate for your state assembly.

rating energy, it was truly fantastic to say the least. As you know, the AST conference comes around once a year and is the perfect opportunity to network with nearly 2,000 colleagues who are ready to participate in the camaraderie that we all look forward to every year. The talking, laughing and the enthusiasm that filled the air made it feel like a reunion of a big happy family.

For those of you who were unable to attend the conference, I encourage you to try to make it to the next conference, which will be held in Orlando from May 30-June 2, 2018. It will be magical! It is where Mickey and Minnie

Mouse come alive with open arms to bring your fantasies to life at the world famous Disney World. It will be a conference full of educational opportunities by day and fun-filled theme parks by night!

Now, I know you already are asking "How can I go to this conference and get involved?" Here is your answer: be a delegate for your state assembly. What is a delegate you ask? Well, a delegate is an individual chosen by the members of your state assembly to represent them at the AST conference. They are part of the voting body for the elections on the national level. Eligibility of each delegate is as follows:

He/she has to be current with their certification through the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

1. He/she has to be current with their AST membership.
2. He/she has to be registered for conference.

While at conference, delegates are expected to follow protocol as follows:

1. He/she will have to attend the opening ceremony.
2. He/she will have to attend the first and second business sessions of the House of Delegates.
3. He/she will have to attend the Candidates Forum.
4. He/she will have to participate in the voting process.
5. The delegate ribbon will need to be worn at all times.
6. Delegates need to dress appropriately in business casual.
7. He/she will report to his or her state assembly after the conference regarding what occurred during the meeting in the House of Delegates.

I encourage you to become a delegate and come to the AST Conference. Florida promises to be fun and exciting, inspiring and motivating. Everyone will leave with something, and you'll get the feeling of knowing you are a part of a big happy family that you have with AST!



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Log onto www.ast.org and click on the “Earn CE” menu to access the library of CEs. Click on the numbers and take the tests for free: #362 The Spread of the Superbug (1 CE credit); #351 Patient Safety Equals: Aseptic Technique, Surgical Conscience and Time Out (2 CE credits). Credits are awarded after passing the tests.

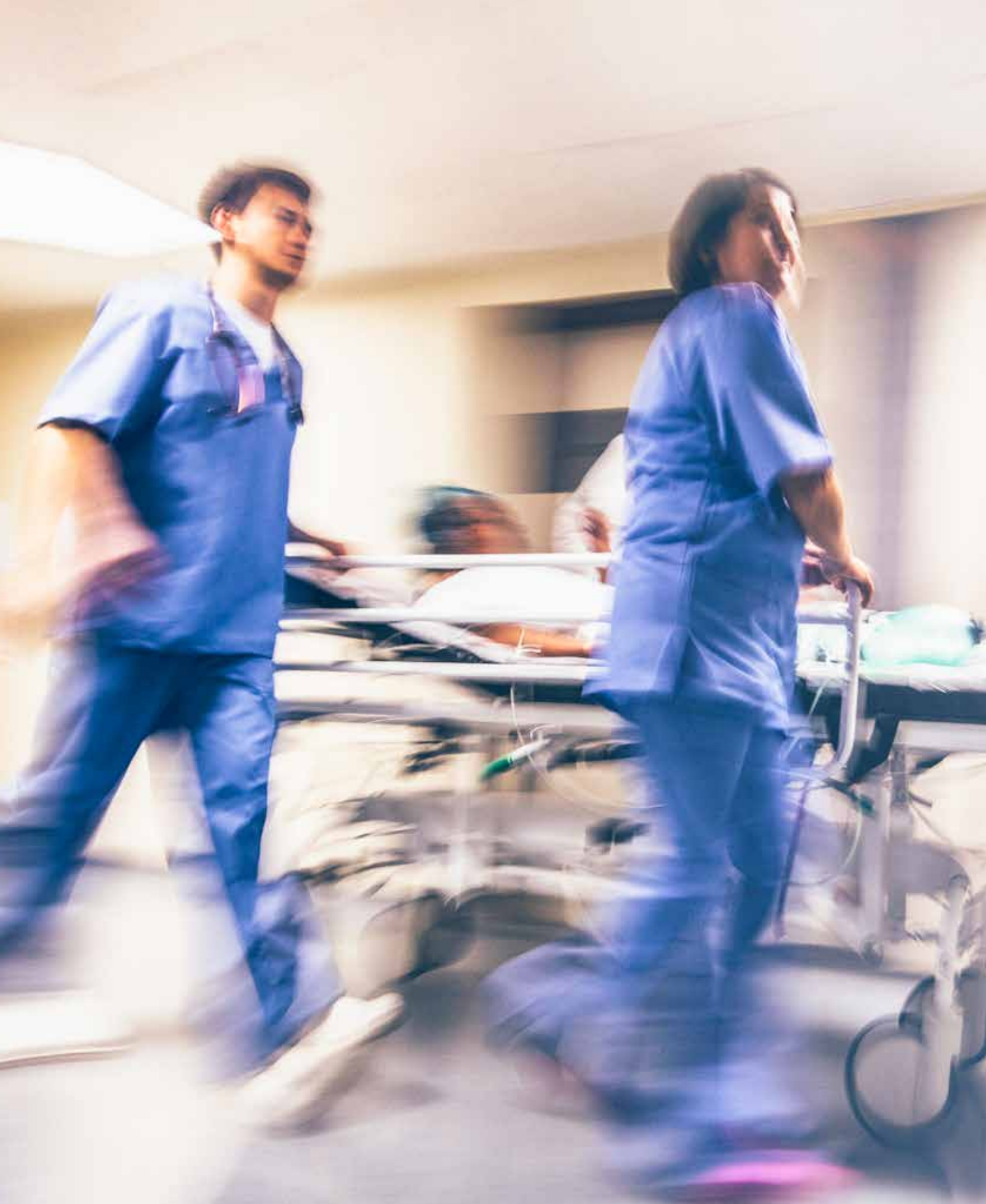
Whenever. Wherever. AST is making continuing education more accessible—more convenient—and even FREE. Now you can look, listen and learn from our quality education presentations that have been archived from national conferences and advanced specialty forums. Specialty topics range from orthopedics, OB/GYN, general and neurosurgery. You will actually see the medical professionals and slides as they were presenting their information. Each presentation is coded by specialty.

Topics include Intrauterine Repair for Spina Bifida, Pelvic and Acetabular Surgery, Infertility, Drug Abuse During Pregnancy, ACL Surgery, Issues in Patient Care, Advances in Spine Surgery, Epithelial Ovarian Cancer, and Preventing Preterm Delivery. Any or all are free to watch and study.

Whenever you're ready, take the examination—there is absolutely no charge. If you pass, you will be offered the opportunity to purchase the accompanying CE credit and register it with AST at a very affordable price.

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Dealing with Post-Medical Treatment: Emergency Department Visits and the Public Health

DON MARTIN, CST

Few people would disagree that there is an emerging crisis in the American healthcare system. The problem is one of great complexity. Perhaps the best way to deal with the crisis in healthcare is to take a piece-by-piece approach. This article will focus on the issue of Emergency Department (ED) overcrowding and the role that post-medical care ED visits contribute to the strain on the ED response system.

The continued increase in the number of ED visits after receiving medical treatment has resulted in higher healthcare costs and is contrary to the theme of improving public health. The topic is relevant due to the fact that no matter how good we get at preventing health issues we will always need to treat some conditions, and on those occasions we should not be harming our patients. The reduction in the number of ED visits can be seen as a way to begin to recoup some of the wasted resources currently experienced in healthcare. Additionally, through the use of patient education, healthcare provider training and reinforcement of standards and guidelines, we can eliminate the majority of post-medical treatment ED visits and improve public health simultaneously.

LEARNING OBJECTIVES

- ▲ List the reasons for an uptick in ED visits after receiving medical care
- ▲ Read about how this rise in ED visits is changing the overall healthcare landscape
- ▲ Explain the Healthy People 2020 – Objective
- ▲ Recall the common strategies listed to help reduce retained items
- ▲ Discuss how surgical technologists can play a critical role in reducing ED visits therefore potentially changing the healthcare landscape

HISTORY

Throughout the past 20 to 25 years, there has been an increase in the number of ED visits resulting from adverse effects of patient care. The adverse effect of medical treatment was the third leading cause of ED visits in 2006 behind unintentional injury and intentional injury.

Nearly 58% of the visits related to adverse effects of medical treatment resulted from surgical or medical complications with the rest resulting from medication adverse effects.⁷ Roughly 1.9 million ED visits were directly attributable to the adverse effects of medical treatment. These adverse effects include complications of medical and surgical procedures (2.5 percent of all injury visits) and adverse

The implementation of patient and healthcare provider education is a key to reducing the number of post-medical care ED visits.

effects of medication (1.8 percent of all injury visits).⁷ A total of 4.3% of all ED visits resulted from complications or adverse effects of prior medical treatment. From 1992 to 2000, the rate of ED visits attributed to an adverse effect almost doubled, from 2.7 per 1,000 persons to 4.8 per 1,000 persons and approximately 13% of those visits resulted in a hospital admission². It also needs to be noted that while many post-medical care adverse effects result in a visit to the ED, many more result in visits to other ambulatory care providers. One study suggests that approximately 23.4% of all adverse effects resulting in visits to an ambulatory care setting as a result of prior medical care end up in the ED. An additional 29.9% of patients seeking help for adverse effects after receiving medical care end up in the office of a surgical specialist while others seek help in primary care practitioners' offices, urgent care facilities, hospital outpatient departments and medical specialty practices among others.

ECONOMIC IMPACT

It is an unfortunate reality that any discussion involving healthcare reform must include a discussion of the costs of healthcare. Cost control in healthcare is becoming important at every level; the ED is no exception. Costs include monetary considerations as well as wasted resources and loss of productivity. According to Baer et al, post-medical care patients visiting the ED required significantly longer length of stays (LOS) than patients visiting for other reasons: 6.58 hours versus 5.22 hours. This translates to ED billing for post-care patients that is markedly higher at \$1,415.67 versus \$391 for non-post-care patients. While these costs are significant on their own, it must also be noted that post-care patients visiting the ED were admitted at a rate of 47% versus 19% for all other causes of ED visits.¹ Taking the previous estimate of 1.9 million post-medical care ED visits annually the result is a staggering \$2.7 billion and 12.5 million ED hours. The average length of stay for post-care patients having been admitted was not available but those numbers would have a significant impact in both time and money.

SOCIAL IMPACT

ED visits are among the most expensive of healthcare treatment options. The number of EDs has declined by 30% throughout the last two decades. In 1990, there were 2,446 rural hospitals with emergency departments. By 2009, there were only 1,779 hospitals in the same areas with emergency departments.⁷ With the decrease in the number of EDs available for treatment, post-treatment visits result in an increased pressure on the nation's EDs. Fewer ED visits, however, (as a result of a reduction in the number of adverse effects from medical care) would lead to improved access to healthcare due to the increase in available resources. Furthermore, a reduction in the number of adverse effects resulting from medical care would also result in an improvement in population health by preventing additional injury and illness.

DEMOGRAPHIC IMPACT

Post-medical care ED visits are disproportionately high among the elderly and minorities.² A 1999-2000 study by the Institute of Medicine (now called The National Academy of Medicine) estimated that between 44,000 and 98,000 people a year die as a result of medical errors. During the same period patients aged 65-74 made 60% more ED visits for an adverse effect than patients younger than the age of



65 (6.6 per 1,000 versus 4.2 per 1,000). The rate of ED visits for African Americans in 2000 was 617 per 1,000 and among whites the number was 370 per 1,000. The disparities become even greater for patients ages 65 and older. Among African-American patients of this age group, there was a 51% increase in the number of ED visits from 1993 to 2000. During the same period, elderly whites experienced an increase of 19%.² While there have been no studies performed on this matter, it is reasonable to assume that the numbers related to post-care ED visits are similar among the different groups.

STAKEHOLDERS

The stakeholders include the public, healthcare practitioners and providers and healthcare facilities. Healthcare practitioners and providers have an opportunity to improve their practice and reduce the number of healthcare-related errors which affect individuals and communities. Healthcare facilities have the opportunity to make healthcare more efficient and improve their use of resources thereby improving their

bottom line and increasing the resources available to care for others. The public would benefit from the decrease in post-medical treatment ED visits by seeing a decrease in the cost of healthcare as well as an increase in the public health.

SOLUTION IMPLEMENTATION

The implementation of patient and healthcare provider education is a key to reducing the number of post-medical care ED visits. Better public education regarding post-treatment care also would reduce the number of incidents leading to ED visits. Healthcare provider education would lead to a better teamwork and a deeper understanding of the implementation of the standards and guidelines, which each can lead to fewer post-care ED visits. Since 58% of all post-care adverse effect ED visits are medically or surgically related surgical technologists have a great opportunity to reduce the pressure that ED's across the country face. One study estimates that at least 63% of medical errors resulting in harm to the patient are preventable.³ The same article points out that the most common medical errors are the result of

surgery among others. Standards and guidelines for prevention of medical errors already exist within the various healthcare practices and surgery is no different. Better education of patients in post-treatment care techniques would result in fewer surgical site infections and less wound dehiscence. Fewer occurrences in these areas also would reduce the number of ED visits thereby freeing up resources in the form of time, money and space. Stronger education guidelines and enforcement of the practice standards of the various healthcare parties also would result in fewer patient injuries resulting from care.

SIMPLE CONCEPTS OF CARE

“4.) The first step is “don’t get worse.” Let’s create winners.

8.) An effective overall strategy begins with a clear vision from the leadership that is consistent with national objectives, followed by engagement of all of the internal partners in creating a culture aligned with the healthy and productive vision.”⁸

Success of any new healthcare initiative requires engagement by all of the stakeholders involved. Results cannot be achieved without leadership at all levels taking responsibility for setting the goals and outcomes. The leadership in question includes political leaders, community leaders, business leaders, and healthcare providers. They then must extend education and projected goals to the various stakeholders. Without a cooperative effort, the process will not achieve the goal of reduced patient injuries and the outcome of fewer post-medical care ED visits. Prevention of post-medical care injury creates winners in the form of successful healthcare providers and a healthier population where the participants in the system “don’t get worse.”

The Healthy People website lists 42 topic areas, or determinants of health, related to population health. Each area presents an overview, a series of objectives, supportive data and a number of evidence-based resources relevant to the topic of discussion. This article will focus on healthcare-associated infections (HAIs).

According to the Healthy People – 2020 report, healthcare-associated infections could potentially be reduced by 75% with proper education and adherence to universal precautions, standards and guidelines.⁹ Surgical technologists have both an obligation and an opportunity to impact the infection rates of the future. It is their responsibility to emphasize the standards and guidelines established by such organizations as the Association of Surgical Technologists (AST), the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the Centers for Disease Control (CDC) and the World Health Organization (WHO). The surgical technologist’s main role is to be a patient-care advocate. To be a good patient-care advocate requires the practice of surgical conscience and strict adherence to aseptic technique.

While not common, the retention of a surgical item can have catastrophic consequences. At particular risk are patients undergoing open cavity procedures. The legal doctrine of *res ipsa loquitur* (Latin for “the thing speaks for itself”) establishes that the retention of foreign objects during surgery is legally indefensible. While the sponge count may be documented in four or five different places in the record, the fact that a sponge was left behind undeniably points out that something went wrong with the count. The consequences of a retained object can vary widely and they are rarely positive if ever. The risk of retained objects

Throughout the past 20 to 25 years, there has been an increase in the number of ED visits resulting from adverse effects of patient care. The adverse effect of medical treatment was the third leading cause of ED visits in 2006 behind unintentional injury and intentional injury.

HEALTHY PEOPLE 2020 – OBJECTIVE

Healthy People is a government initiative designed to improve the overall health of the American population. The Healthy People initiative sets new objectives every 10 years that are intended to make the general population healthier.⁹

increases during emergency surgery, unexpected changes in surgery, high patient body mass index and the failure to follow procedures for sponge, sharps and instrument counts.

One recent study puts the cost of retained objects ranging from \$37,041 to \$2,350,000 per incident with an average

cost of \$95,000.⁵ Patients with retained objects can experience multiple problems depending upon the item retained and the location of the retention. A closer look at the causes of retained objects shows a number of contributing factors. The article “Managing the prevention of retained surgical instruments: what is the value of counting?”⁴ points out that for every two hours of additional surgery time the risk of a discrepancy in counts rises by 2.67 times. Additionally, the authors identified that a change in personnel during a procedure accounted for 80% of all count discrepancies. They also identified an increased risk of count errors during procedures that took place late in the day excluding procedures that were emergencies, or took place on the weekends or holidays.

The question then becomes: How is this issue addressed? Some of the more common strategies include standard procedures for counting sponges, sharps and instruments, routine post-op X-rays and sponges tagged with radio-

frequency identification (RFID). Counting sponges is the traditional method employed in most settings. This method has the advantage of already being in place with established protocols to guide the process. However, counts can be labor intensive, time consuming and are obviously subject to human errors. X-rays can be safely and easily used in the OR to check for retained objects, but they are an additional expense, and often yield poor quality films that are of little value and can result in retained items being missed.

High resolution X-ray detection has been suggested as one strategy for reducing the incidence of retained objects during surgery. While there is little risk to the patient, the costs can be high and there is a distinct logistical problem in using this strategy. Additionally, the use of high resolution X-rays as a routine strategy for the prevention of retained objects would result in unnecessary radiation exposure for OR personnel and can present false negatives in about 10-25% of the time.⁵



RFID is a relatively new technology that has been introduced to the OR in an effort to reduce the retention of foreign objects, in particular, sponges. In tests performed by the manufacturers, RFID works well with a high rate of accuracy. However, in the OR their effectiveness has not yet been proven, and there are no randomized control trials (RCT) to date. The system is prone to error. Scans can be performed incorrectly or at the wrong time during the procedure resulting in retained objects and there is no evidence comparing the costs to the benefits at this time.

The best strategy may involve the use of barcodes or QR-coded sponges in tandem with the count procedures in current use. Barcodes have been used in healthcare for some time in various applications. The use of barcodes would result in improved accuracy of counts due to the fact that a missing barcode would trigger an alert to let the staff know that they need to search for a missing sponge or other item. RCTs have demonstrated the effectiveness of this strategy and the technique has been used in the clinical setting with strongly positive results. The downside to this strategy is that it may increase sponge count times, provides a steep learning curve – which may become frustrating due to the need to repeat counts – and there has been no cost/benefit analysis.

For now the answer seems to be that surgical personnel, specifically surgical technologists, must constantly be vigilant in assuring the accuracy of their counts. Surgical technologists must hold themselves and their coworkers to

procedure when there is a breach in protocol or a count is not correct.

Surgical technologists also possess knowledge of sterile processing techniques that allows them to recognize when the sterility of items may be compromised leading to a potential for infection. This practice allows surgical technologists to help avoid the potential of exposing patients to infection sources. Competency in sterile processing techniques also promotes confidence. This confidence enables the healthcare worker to interact in a meaningful and constructive manner with other members of the patient care team and work together to resolve any problems that arise.

Creation and maintenance of the sterile field is the central critical skill in preventing

Surgical Site Infections (SSI). SSI's can be difficult and expensive to treat and may lead to further complications or death of the patient. The protocols of the operating room are designed to assure maximum efficiency in the creation and maintenance of the sterile field. Yet, too often, surgical technologists hear things like “that’s what the OR policy says” from someone that doesn’t really know what the policy says. Surgical technologists need to take the time to familiarize themselves with the policies and procedures and speak up when there is a question about them.

The continued reduction of HAIs and SSIs will require a multi-pronged approach. Success will involve education of the healthcare professionals, legislative action, enforcement of the standards and guidelines, and patient education. By

According to the Healthy People – 2020 report, healthcare-associated infections could potentially be reduced by 75% with proper education and adherence to universal precautions, standards and guidelines.⁹ Surgical technologists have both an obligation and an opportunity to impact the infection rates of the future.

a higher standard of patient advocacy. Sponge, sharps and instrument counts during personnel exchanges need to be conducted during periods of minimal stress with personnel exchanges kept to a minimum. Familiarity with the procedure and the surgeons’ preferences will help minimize the time to completion with the additional benefit of the decreased risk of infection. Also, familiarity with the protocols used by their facilities, such as the AST Standards of Practice, can result in the confidence necessary to stop a

taking an active part in the education of future healthcare professionals and participating in the various professional organizations such as the AST, surgical technologists can help to reach the goal of a 75% reduction in the number of HAIs.

Surgical technologists are a small, yet elite workforce with a great potential for impact in the area of healthcare-associated infections. With the advent of robotics, the development of new laser technologies, ultrasonic instruments,



3-D video technology, GPS for the human body and more, this profession will see many new developments in the near future. As surgery moves forward into the new frontiers, so will surgical technologists, all the while continuing to be steadfast in their position as the utmost “Defenders of Sterility” and patient-care advocate.

AUTHOR'S NOTE:

As a Certified Surgical Technologist this is an area very near to my heart. In addition to affecting me as a professional healthcare provider, the issue also affects my family as potential participants in a healthcare system that may result in post-medical care ED visits, and my community by resulting in decreased public health and wasted resources.

Many of us are instructors and preceptors associated with surgical technology programs across the country. This gives us a unique opportunity to influence the practice of tomorrow's healthcare providers. It is important as an instructor, preceptor or clinical mentor to assure that the new graduates entering our field receive the skills and knowledge necessary to

provide patients with the quality care they deserve.

By gaining for ourselves and providing others with a deeper understanding of the techniques utilized to prevent infection and practicing those concepts, we hope to provide our students and ourselves with the tools necessary to employ critical thinking in situations that we have not encountered or discussed previously in our practice.



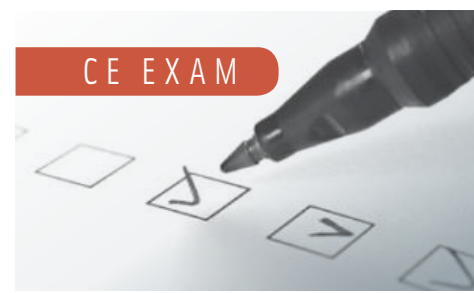
AUTHOR'S BIO

Don Martin, CST, MEd, ETL, is a Certified Surgical Technologist with more than 25 years of operating room and allied health education experience. Don currently serves as the associate dean of allied health at El Centro College. Prior to taking this position, he was the director of surgical technology at Collin College for six years. Don graduated with an AAS in surgical technology which became the foundation for a BAAS in surgical technology/education technology. In 2015, Don

graduated with a master's of education in curriculum and instruction design as well as a graduate certificate in education technology leadership. He is currently pursuing a doctor of education in higher education at Texas Tech University. Don is a life-long learner with a commitment to doing all he can to make the educational experience of the students at El Centro College and throughout the state of Texas both beneficial and a good investment. Don is an active participant with the Texas Higher Education Coordinating Board (THECB) on a number of initiatives including the recent 60 SCH initiative, Workforce Education Course Manual (WECM) Workshops and as a member of the THECB Advisory Committee on Allied Health Education for the statewide Program of Study Initiative. He is also an active member of the National Network of Healthcare Education in Two-year Colleges (NN2), The Texas Society of Allied Health Professionals (TSAHP), the Health Professions Pathways Consortium (H2P), an accreditation site-visitor for the Committee on Accreditation for Allied Health Education Programs (CAAHEP) and a former member of the Board of Directors of the Texas State Assembly of the Association of Surgical Technologists. This varied experience has helped him to develop a broad view of how education and healthcare combine to affect the health and welfare of our communities.

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Emergency Department Visits and the Public Health

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1. According to the article, _____ of all post-care adverse effect emergency department visits are medically or surgically related.
 - a. 42%
 - b. 60%
 - c. 58%
 - d. 63%
2. The 1999-2000 Institute of Medicine study indicated that as many as _____ people a year die as a result of medical errors.
 - a. 1.9 million
 - b. 98,000
 - c. 2,446
 - d. 315,000
3. _____ of the sterile field is the central critical skill in preventing surgical site infections.
 - a. Creation
 - b. Maintenance
 - c. Observation
 - d. Both A and B
4. The Healthy People - 2020 report states that _____ could be potentially reduced by 75% with proper education and adherence to universal precautions, standards and guidelines.
 - a. Patient burns
 - b. Healthcare associated infections
 - c. Patient falls
 - d. Surgical injuries
5. The Healthy People Initiative sets new objectives every _____ years that are intended to make the general population healthier.
 - a. 20
 - b. 15
 - c. 10
 - d. 5
6. A study by Bua, et al estimates that _____ of medical errors resulting in harm to the patient are preventable.
 - a. 42%
 - b. 60%
 - c. 58%
 - d. 63%
7. The public will benefit from the decrease in post-medical treatment emergency department visits by seeing a decrease in the cost of healthcare as well as a(n) _____.
 - a. Increase in the public health
 - b. Increase in the number of people with access to healthcare
 - c. Decrease in the number of emergency departments
 - d. Increase in the number of medical treatments
8. According to the US News and World report, by 2011 the number of hospitals with emergency departments had declined from 2,446 to _____.
 - a. 617
 - b. 2,009
 - c. 1,779
 - d. 1,990
9. To be a good patient care advocate requires the practice of surgical conscience and strict adherence to _____.
 - a. Sterile processing techniques
 - b. Creation of the sterile field
 - c. Maintenance of the sterile field
 - d. Aseptic technique
10. Knowledge of _____ enables the surgical technologist to recognize when the sterility of items may be compromised leading to a potential for infection.
 - a. Sterile processing techniques
 - b. The AST Standards and Guidelines
 - c. Creation and maintenance of the sterile field
 - d. Operating room policies and procedures

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CST's first trip to the Philippines sets foundation for subsequent missions

Jennifer Tran, CST

Jennifer was one of the 2016 Medical Mission Assistance Award recipients from the Foundation for Surgical Technology.



Ever since I was a little girl I knew I wanted to make a difference in the world. I always wanted a career that allowed me to help the less fortunate. In February 2016 I finally had a chance to volunteer my services as a surgical technologist through the World Surgical Foundation (WSF). I went on a medical mission trip to Binan, Philippines. Although it was my first, it definitely won't be my last.

The World Surgical Foundation has performed more than 5,000 free surgeries to third world countries since October 1997. Every year, WSF would travel to countries where proper medical care was scarce. These countries have included Ecuador, Ethiopia, Haiti, Honduras, India, Philippines and Thailand. WSF volunteers not only provide life-changing surgeries, but they also educate the local medical staff and donate medical supplies such as medicine and bandages to local hospitals.

My flight arrived in Manila (the capital of the Philippines) on a Saturday night and I met up with the rest of the volunteers. We then took a two-hour bus ride to Binan. It was very late at night when we arrived at our hotel and since we had to set up our surgery room the next morning, we were ready to rest. While our volunteer surgeons prescreened patients in the clinic, we setup



It's the feeling of being part of a world bigger than my own. It is the hugs from my surgeons, colleagues and patients. It is the facial expression of a young mother looking at me saying "Please, take care of my baby," as I carried her little girl back to the OR. It is an adventure of a lifetime. I feel good. I feel lucky. I feel blessed for the life I have.

the ORs, organized our supplies and stocked all the rooms. We began operations on that Monday. I was circulating for Dr Chinh Pham, a general surgeon, and Dr Domingo Alvear, WSF's founder and a pediatric surgeon. They kept me busy and on my feet all day. Some of my duties included prepping patients, sanitizing rooms, performing counts, managing traffic flow in the OR, getting needed supplies and cleaning and sterilizing instruments.

It was overwhelming, but I took every challenge as an opportunity to learn and care for the patients. I didn't allow it to bother me when I was with



Dr Pham's patient and heard Dr Alvear yelling for my name across the room. Calmly, I would yell back: "I'm busy! You have to wait." When I was done with Dr Pham, I would run to Dr Alvear's side to see what he needed. It was a constant running back and forth from one side of the room to the other. I think I did a whole year worth of cardio exercise in one week. Toward the end of the week, I finally had the chance to scrub in for several thyroidectomies and hernias. Before I left for the Philippines, Dr Alvear had asked me to prepare a lecture to the local medical and nursing students on surgical attire, aseptic technique, patient safety, disinfection and sterilization. It was an honor for me to stand and give a lecture in front of 30-plus students and local medical staff. It was nerve-wracking, but also very satisfying knowing that my lecture would help the local medical staff to provide better care for their patients. During my mission week with them, I had the chance to use my operating room skills to the fullest.

Since then, I've gone to India for another medical mission trip and I am planning to go to Africa for another one. Going on medical mission trips are like going back in time for me. I was born and raised in a very poor neighborhood in Ho Chi Minh City, Vietnam. It reminds me of where I came from and the struggles of staying healthy that my own family and friends had to go through.

I love the feeling of helping people with the skills I have. I love being part of a team that consists of many good-hearted and intelligent people. However, the best part is how good I feel when I come back to my well-conditioned home. It's the feeling of being part of a world bigger than my own. It is the hugs from my surgeons, colleagues and patients. It is the facial expression of a young mother



It was overwhelming, but I took every challenge as an opportunity to learn and care for the patients.

looking at me saying "Please, take care of my baby," as I carried her little girl back to the OR. It is an adventure of a lifetime. I feel good. I feel lucky. I feel blessed for the life I have. I think every healthcare professional should volunteer for at least one mission trip during their lifetime because one of the greatest gifts you can give is your time to help people.

ON A MISSION:

Love shows no boundaries when tech travels to Haiti to help those in need

Kimberly Jorgensen, CST

Kimberly was one of the 2016 Medical Mission Assistance Award recipients from the Foundation for Surgical Technology.



We don't speak the same language as our Haitian friends, but that is not a barrier. ... Actions always speak louder than words.

Grace4Haiti Medical Missions was formed by Dr. Joe Miller, a family physician from Nebraska, to serve the impoverished people of that country. I have been privileged to be part of this organization since April 2010, which was just three months after the devastating earthquake that affected nearly three million people. Our group provides medical/surgical services at a hospital in Pierre Payen, a small town north of Port-au-Prince.

The teams we assemble are made up of volunteers from across North America and Canada. Our backgrounds may be different, but our hearts are the same place. We come together for two weeks, every April and November, to contribute to the ministry of service. In Romans 12:7, the Bible says, "If your gift is serving others, serve them well. If you are a teacher, teach well." We take this to heart, and show

God's love through our actions. We don't speak the same language as our Haitian friends, but that is not a barrier. We have interpreters when we treat patients, but much of our communication is done with our hands and our hearts. Actions always speak louder than words. I have learned so much from the people we are honored to serve, as well as those whom I am privileged to serve with. Love has no borders.

Patience, kindness and gentleness are qualities the Haitian people practice every day. Their lives are difficult and their days are long, yet you will never hear them complain. Many patients have waited months, even years, to be seen by our physicians. Some may wait all day in the hot sun because of the number of people in front of them. Yet, they sit quietly. Life in Haiti is difficult. They walk long distances to accomplish all of their daily chores. Water has to be pumped from a local well, and then carried home in a five-gallon bucket placed on top of their head. The women go to the



river to wash their clothes by hand, and then hang them to dry. The trash is taken to the same shore to be burned. The smell of Haiti is one that is engrained in my mind, and in my heart; it is something I have learned to appreciate because of the feelings it evokes. There is a sense of peace because of the love for one another and for God. Life in Haiti is chaotic, yet calm.

It is a wonderful thing when a career and a passion come together. Caring for others, in my role as a surgical technologist, has been one of my greatest blessings. I never could have imagined the journey that my passion would take me on. Serving others, whether it be in my daily job, or mission work in Haiti, is what fills my heart.



The traffic in Haiti is crazy. The highway is one lane, each way, but you often see cars, buses and trucks, three wide, going 50 to 60 miles an hour through the small towns. They honk their horns telling you to get out of the way because they will not stop, or even slow down. And people are walking right next to the road. So it's no surprise that many of our patients have injuries that are related to motor vehicle accidents. We deal with trauma as best we can, and if it's more than we are capable of handling, we arrange for transfer, and then we pray. On several occasions, we have been able to save nearly amputated limbs, but it's sad to think what happens when we, or another team, are not there. Although we are not able to help everyone, we can help those that God puts in our path, and that's why we keep going back.

The procedures we perform are dependent on what surgeons we have with us. Our ENTs have done major, life-changing surgery on several patients with huge jaw masses. Removing their facial deformities gives these people a new lease on life. Often they come back, on our next visit, to show

us how their lives have been transformed. They are grateful, and we are humbled. Our urologists are able to perform TURPs to give men the ability to urinate again, after having supra public catheters for too many years. For these hard-working men, a lot of them being farmers and fishermen, this procedure gives them a new found freedom. Our OB/GYNs perform C-sections, which bring joy in the midst of chaos. One night, we delivered a beautiful baby girl, and the next day when I went to visit this precious little gift, her mother told me the baby's name was Kimberly. I was so surprised that she had named her daughter after me, it brought me to tears. Moments like this make it

clear that this is what God has called me to do, to be His hands and His feet.

Our orthopedic doctors are invaluable. One of our patients was an 8-year-old boy who had fallen from a mango tree. He had a compound fracture of his right wrist, a fractured unstable left wrist and a fractured femur, all requiring surgery. After more than five hours of surgery, his fractures were stabilized.

His recovery would be long, but the outcome would have been devastating had our surgeons not been there. There have been many successes, but often the challenges are unanswerable without the tools, tests and equipment we have at home. However, no matter what the result is, we are able to care for and serve our Haitian brothers and sisters.

Along with our medical staff, we have a group of “MacGyvers.” They repair, replace, fix and find. They come running to be of service anytime, day or night, they are needed. We

are a team, a family, and in Haiti it’s about doing what we can to provide a caring environment for those we serve. Our MacGyvers built benches so that our patients would have a place to rest their sick, weary bodies. In Haiti there are no titles; when work needs to be done, whoever is available, picks up a mop, gathers supplies or lends a helping hand.

It is a wonderful thing when a career and a passion come together. Caring for others, in my role as a surgical technologist, has been one of my greatest blessings. I never could have imagined the journey that my passion would take me on. Serving others, whether it be in my daily job, or mission work in Haiti, is what fills my heart. And for this, I am grateful.

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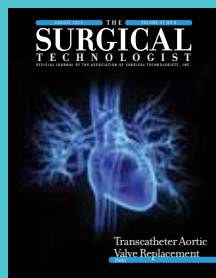
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We are always looking for CE authors and surgical procedures that haven't been written about or the latest advancements on a commonplace surgery. You don't have to be a writer to contribute to the Journal. We'll help you every step of the way, AND you'll earn CE credits by writing a CE article that gets published! Here are some guidelines to kick start your way on becoming an author:

- 1 An article submitted for a CE must have a unique thesis or angle and be relevant to the surgical technology profession.
- 2 The article must have a clear message and be accurate, thorough and concise.
- 3 It must be in a format that maintains the Journal's integrity of style.
- 4 It must be an original topic (one that hasn't been published in the Journal recently.)

WRITE A CE

How to Get Started

The process for writing a CE can be painless. We are here to assist you every step of the way and make sure that you are proud of your article.

- Write to publications@ast.org, and state your interest in writing, and what topic you would like to author.
- Submit an outline of your proposed topic for review. Once the outline is returned to you for approval, begin writing your manuscript. Getting your outline approved will save you time and effort of writing a manuscript that may be rejected.
- Submit your manuscript, as well as any art to illustrate your authored topic. You will be notified upon receipt of receiving the manuscript and as well as any changes, additions or concerns.

Things to Remember:

- **Length:** Continuing education articles should run a minimum of 2,000 words and a maximum of 5,000 words.
- **References:** Every article concludes with a list of ALL references cited in the text. All articles that include facts, history, anatomy or other specific or scientific information must cite sources.
- **Copyright:** When in doubt about copyright, ask the AST editor for clarification.
- **Author's Responsibility:** All articles submitted for publication should be free from plagiarism, should properly document sources and should have attained written documentation of copyright release when necessary. *AST may refuse to publish material that they believe is unauthorized use of copyrighted material or a manuscript without complete documentation.*

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Overcoming Challenges: A Note of Encouragement to the Next Generation

LYDA J AMAYA

FINDING MY CALLING



The operating room always has been appealing to me. Its characteristic odor, the sound of the anaesthetic machine that keeps the patient alive while the surgical team fights to improve the patient's quality of life, the wires and cables to and from the patient and the incandescent, bright lights illuminating the organs that look so dead even on the best-illustrated textbooks, helped me to find my calling back in 1993 when I finished high school in Barrancabermeja, a small town in northern Colombia. Far – perhaps too far – was I to realize that a long, at times exhausting, journey had just begun.

In early 1994, I enrolled the Instrumentación Quirúrgica program at Universidad de Santander in Bucaramanga, a city located about 72 miles east to Barrancabermeja, where my parents used to live. In Colombia, Instrumentación Quirúrgica is a professional degree: it lasts four years and completion of a research project is mandatory before graduation. Financial difficulties, unwise decisions, extensive assignments, overnight shifts requiring most of us to take public transportation at the most unexpected hours in a country that back then was regarded as “the most dangerous on Earth” and failed attempts to give up, made me appreciate my profession when I graduated on May 16, 2000. Though difficult, the final semester came with few rewards: a cum laude distinction to my research project, two prizes at different meetings in Colombia, and an invitation to be a guest speaker at a scientific meeting, which I accepted without hesitation although it scared me to death. At that point, I thought I was ready to conquer the world.

Finding a great job in Colombia can be extremely difficult. But despite that, I managed to work both in the OR

and as a sales representative for a dental company. When I thought that from the professional standpoint my life was all set, things changed for better. Back in 1991, I met the man who became my husband, three years after graduation. We started a new life together in 2003 and relocated to Los Angeles shortly after. Due to immigration policies, I had to wait until 2006 to join him. Ignoring the requirements needed to work as a surgical technologist in the US, I started my job search, only to learn that I was not going to be able to work as such since my credentials were from an international, non-accredited surgical technology program. After a short period of mourning, an encouraging conversation with my husband made me realize that I had

After a short period of mourning, an encouraging conversation with my husband made me realize that I had only two options: to complain the rest of my life about my “non-accredited” thing or to start again. I chose the latter.

only two options: to complain the rest of my life about my “non-accredited” thing or to start again. I chose the latter. Now I had to fight two different battles, one at a time. First, mastering English. Then, going back to school. The difficult times as an undergraduate had made me realize that life is all about challenges. Once one is overcome, then a new one must show in the horizon.

I found that new horizon at American Career College in Los Angeles, where I completed my training in 2010. Some people, both in Colombia and in the US, had told me things like “you better prepare yourself mentally to do something else.” The day I had both my diploma and my license in my hands, I remembered that “opportunity lies in the middle

of every difficulty,” to quote Einstein. I was about to return to the OR when my husband was accepted into an oral and maxillofacial surgery residency program ... back in Colombia. Reluctantly, I packed my things and accompanied him into his own journey. From 2010 to mid-2016 many things happened. I became a mother of three, worked as a ST and became a ST instructor.

I was still breastfeeding my littlest one when an opportunity presented itself in Kentucky. With three little kids and two job interviews arranged over the telephone for the day after our arrival to Lexington, we returned to the US. This time, for good. I have been working for the University of Kentucky – Chandler Medical Center at the Endoscopy Department since the last half of 2016, where I have found a working place where I can grow both personally and professionally.

Am I all-set? I'm sure not, as new challenges started to appear in my horizon: becoming an instructor, academic writer and speaker, which are all there just to remind me that life is all about challenges.

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2017 ASA Annual Fall Meeting

Delta Marriott | Richmond, Virginia | September 29-30, 2017

A full-page background image showing a person's legs in motion, running on a rocky, sunlit trail. In the foreground, a blue and black running shoe is shown from a low angle, emphasizing its sole. The background is a blurred landscape of hills and dry grass under a bright sky. A semi-transparent orange banner is at the top, and a yellow horizontal line is below the text.

The Marathon and Surgical How I use my profession as

Technology a running motivation.

John C Springer, CST



The marathon is a running event that commemorates the 25-mile run of a Greek soldier from the battlefield near the town of Marathon, Greece, to announce the victory ahead, to the anxious citizens of Athens.

The modern-day marathon attracts participants in thousands, who come from all walks of life, possess different experience levels and travel from different parts of the globe. There are some who were born to run a marathon, but most runners bring his or her personal motivation. I did my first marathon three

years ago, when my wife signed me up exactly one month before the event (she did her first one the year prior), and it was like a baptism with fire.

Imbued with her credence and encouragement, I did it and I crossed the finish line of this strenuous, but not impossible feat of human endurance triumphant. The experience has changed and taught me one good lesson: “Never give up; it’ll just get better.”

Looking back, I have developed a keen respect for any person who endures a long and arduous undertaking to perform a task or duty and the challenges that are presented to them. These types of people give the utmost, unwavering and undivided commitment toward their goal. For me, this reflection epitomizes my career as a surgical technologist, one that I use to compare it with the marathon and used it as my running motivation.

This year’s marathon ran was especially meaningful for me as I elected to run representing the surgical technology profession. I felt the need to get noticed in our communities. I hope I was recognized by the public by wearing the slogan: “I am a Surgical Technologist” and that “Behind every good surgeon, is a great Surgical Technologist.” After all, both endeavors (marathon and surgical technology) characterize and closely resemble the same physical and mental manifestation.

To me, the marathon metaphorically correlates the beginning and the diurnal responsibility of a surgical technologist. Like starting in the surgical technology program, I was persuaded to enroll and take on this emerging and little known profession in healthcare. It

was not my first career choice as I had other motivations in mind. In some way, however, I became fascinated and curious after orientation and upon learning the nature of the work. Upon admission almost instantaneously, I picked up the surgical technologist textbook and started perusing the pages to get a glimpse of what would lie ahead. I felt the same in the days following my registration to run my first event, and how I ardently developed fortitude and a desire of finishing my first marathon. I began researching and reading

my capacity, gain knowledge, acquire skills and build up speed and mileage, I was allowing my body and mind to succeed while keeping in line with my goals.

Studying the fundamentals of good running form, wearing the proper footwear and practicing rhythmic breathing to improve your aerobic and muscular endurance are synonymous to learning aseptic technique, instrumentation, surgical procedures and the basics of human anatomy. As I continued, experience was gained and confidence was built in both pursuits. I developed



After that first experience, I found my passion in running much like I discovered my calling in surgical technology. Crossing the finish line and receiving your medal is the highlight of such endeavor. The lure of the marathon provides a juncture for a physical, emotional and intellectual challenge that can change you. As a surgical technologist, that same opportunity is presented in a more profound way influencing the life of every surgical patient.

information from running publications about running a marathon.

Eagerness and being resolve are feelings I experienced with both forays. The long stretch of open road and the hills that you must run, mile after mile, to build stamina, as well as the long lectures and instructions both in the classroom and in your clinical site that you must pay attention to gain proficiency, both seem to be daunting at first. But, my enthusiasm grown out of curiosity and ambition, helped move me up to the different levels of my training and learning. By taking small steps and pacing myself to increase

discipline, respect and dedication toward both my goal and my passion.

Standing at the starting line with the crowd of people is akin to an operating room filled with clinicians taking part in the procedure. Like everyone else, you prepare for the day with optimism and anticipation to finish strong and safe. However, I must admit that even now when I am cramped inside the corral with the rest of the participants, even after doing this for three years, I still get a wave of emotions mixed with excitement and apprehension. Similarly, after having almost 10 years of experience in the OR, every time I scrub in for a case, I

experience a disquieted moment as prepare to try my best for this patient.

There are no better means to get you well prepared, whether, you're standing beside the operating table or behind the starting line of what is ahead than to condition yourself, give it your best and faced the effort and task beforehand directly. You know your basic and you warm up your legs, it is all mental grit from here on.

Running events adopts the philosophy of the honor system based on trust, honor and honesty. Likewise, a surgical technologist adheres to the aphorism of surgical conscience and the maxim "Aeger Primo," or patient first. So while you don't cut corners and cheat to get ahead of your fellow participant, you also don't skip steps and negate from your responsibility of protecting your patient.

Here are some other parallels I've witnessed between the two positions:

- The day of the event closely resembles our daily routine as it usually starts at the break of dawn.
- Surgical technologist are constantly on the go to gather and set up the needed instrument, equipment and supplies for each surgical procedure, opening and setting-up your back table and mayo, assisting during the operation and then breaking down and turning over the room for the next case.
- Our duties and efforts together with our dedication to our profession dictates the obvious: we are our own breed of super athletes.
- Just as the horn blows signaling the start of the race and all the runners set out to accomplish the same goal of finishing, I'm reminded clocking in to work those long cases with my surgical team members.
- Some runners like to sprint on those first couple of miles eager to reach the finish line while others are just trying to get through the commotion. This is akin to the instrument room and the rush in setting up your back table before the patient rolls in.
- The endorphin rush or "runners high" is equivalent to that feeling of excitement and adrenaline rushing through your veins when you prepare to scrub emergency cases.

- When I run, I take it one mile at a time, all the while paying attention to myself, and my surroundings much like when I'm in the middle of the case and ready to anticipate the surgeon needs and in case a sudden unexpected change in the patient condition while under anesthesia.
- The crowd, and even your fellow participants cheering for you and giving you words of encouragement, is phenomenal. They are the soul of the event. Despite not having that same crowd inside the operating room, the occasional nice comment from the people that you're working with, like "Good catch," "Good job" and my favorite "What would I do without you?" surprisingly echoes the same chant of approval I heard on the road.

The last remaining miles on the course portends the defining moment of the whole event. The physical exhaustion can cause discomfort on your lower extremities and your feet may feel unusually heavy, making it more difficult to take the next step. Even worse is the mental fatigue, which can a serious canvas of doubt about finishing what you have started some 20-plus miles ago. But much like surgical technologists, many runners find the strength to push on through the long, tedious and demanding situation. We persevere, case after case and mile after mile.

After that first experience, I found my passion in running much like I discovered my calling in surgical technology. Crossing the finish line and receiving your medal is the highlight of such endeavor. The lure of the marathon provides a juncture for a physical, emotional and intellectual challenge that can change you. As a surgical technologist, that same opportunity is presented in a more profound way influencing the life of every surgical patient.

The journey doesn't end here. In preparation for next year's marathon, I have already started my training. Likewise, as a surgical technologist, I never cease to learn and I am constantly seeking occasions to improve.



UPCOMING PROGRAMS

AST MEMBERS: Keep your member profile updated to ensure that you receive the latest news and events from your state.

As an AST member you can update your profile by using your login information at www.ast.org. You may also live chat at www.ast.org or contact Member Services at memserv@ast.org or call 1-800-637-7433. AST business hours are Monday-Friday, 8 am - 4:30 pm, MST.

ALASKA

Anchorage: September 16, 2017. Alaska State Assembly. Title: 3rd Annual Surgical Technology Conference. Location: Providence Alaska Medical Center, 3200 Providence Dr, Anchorage, AK 99508. Contact: Dawn Burns, PO Box 230041, Anchorage, AK 99523, 907-212-2057 or 631-566-4600, dawn.burns@providence.org or dawnalyssa@yahoo.com. 6 CE credits, pending Alaska's submission of CE documentation.

ARIZONA

Lake Havasu City: August 5, 2017. Arizona State Assembly. Title: Lake Havasu Workshop. Location: Mohave Community College, 1977 W Acoma Blvd, Lake Havasu City, AZ 86403. Contact: Michelle Schmidt, 1977 W Acoma Blvd Building 600, Lake Havasu City, AZ 86403, 928-302-5374, mschmidt@mohave.edu. 4 CE credits, pending Arizona's submission of CE documentation.

Phoenix: September 23, 2017. Arizona State Assembly. Title: Fall Annual Workshop. Location: Gateway Community College-Health Science Building, 108 N 40th St, Phoenix, AZ 85034. Contact: Alison Wilson, PO Box 52015, Mesa, AZ 85208, 608-354-2467, alison_gierach@yahoo.com. 7 CE credits, pending Arizona's submission of CE documentation.

Tempe: September 24, 2017. Arizona State Assembly. Title: Hands on Workshop. Location: Brookline College-Tempe, 1140 S Priest Dr, Tempe, AZ 85281. Contact: Alison Wilson, PO Box 52015, Mesa, AZ 85208, 608-354-2467, alison_gierach@yahoo.com. 8 CE credits, pending Arizona's submission of CE documentation.

ARKANSAS

Fort Smith: October 28, 2017. Arkansas State Assembly. Title: Annual Business Meeting & Elections. Location: Mercy Hospital - Hennessey Center, 7301 Rogers Ave, Fort Smith, AR 72903. Contact: Rachel Ray, 1905 Lexington Ave, Fort Smith, AR 72901, 479-629-5367, rmray18@hotmail.com. 6-7 CE credits, pending Arkansas's submission of CE documentation.

CALIFORNIA

Los Angeles: September 23, 2017. California State Assembly. Title: 2017 CA-SA Business Meeting and Workshop. Location: TBD, Los Angeles, CA 90033. Contact: Debra Mays, 7148 Marshfield Way, Los Angeles, CA 90046,

818-606-0438, dlmays@sbcglobal.net. 4 CE credits, pending California's submission of CE documentation.

COLORADO / WYOMING

Aurora: September 9, 2017. Colorado / Wyoming State Assembly. Title: Fall Business Meeting and Workshop. Location: UCHHealth Eye Center Anschutz, 1675 Aurora Court, Aurora, CO 80045. Contact: Mark Wilms, PO Box 21825, Denver, CO 80221, 303-430-3358, mwilms@pmi.edu. 6 CE credits, pending Colorado / Wyoming's submission of CE documentation.

GEORGIA

Savannah: September 9, 2017. Georgia State Assembly. Title: Midnight in the Garden of Good Surgery. Location: Savannah Technical College, 5717 White Bluff Road, Savannah, GA 31405. Contact: TC Parker, 2051 Grayfield Dr, Grayson, GA 30017 or 678-226-6348, 678-963-6056, tcparker22@bellsouth.net or tcparker@gwinnetttech.edu. 8 CE credits, pending Georgia's submission of CE documentation.

Valdosta: September 8, 2018. Georgia State Assembly. Title: GASA Surgery Southern Style. Location: Wiregrass Technical College, 4089 Val Tech Road, Valdosta, GA 31602. Contact: Dustin Cain, PO Box 4131, Canton, GA 30114, 678-314-5773, dustin_caincst@yahoo.com. 8 CE credits, pending Georgia's submission of CE documentation.

HAWAII

Honolulu: July 22, 2017. Hawaii State Assembly. Title: Summer Workshop. Location: Kapiolani Medical Center for Women and Children, 1319 Punahou St, Honolulu, HI 96826. Contact: Ana Zarate, PO Box 2129, Ewa Beach, HI 96706, 910-599-2086, anazarate804@gmail.com. 6 CE credits, pending Hawaii's submission of CE documentation.

Honolulu: September 23, 2017. Hawaii State Assembly. Title: Fall Workshop. Location: Kapiolani Medical Center for Women and Children, 1319 Punahou St, Honolulu, HI 96826. Contact: Ana Zarate, PO Box 2129, Ewa Beach, HI 96706, 910-599-2086, anazarate804@gmail.com. 6 CE credits, pending Hawaii's submission of CE documentation.

ILLINOIS

Springfield: September 16, 2017. Illinois State Assembly. Title: Fall Seminar to Kick off National ST Week. Location: Memorial Center for Learning and Innovation, 228 W Miller St, Springfield, IL 62702. Contact: Janice Lovekamp, PO Box 3832, Decatur, IL 62524, 217-521-7188, illinoisstateassembly@gmail.com. 6 CE credits, pending Illinois's submission of CE documentation.

IOWA

Davenport: September 16, 2017. Iowa State Assembly. Title: Iowa State Assembly Annual Business Meeting and Workshop. Location: Best Western Plus Steeplegate, 100 W 76th St, Davenport, IA 52806. Contact: Toni Steward, 3800 Avenue D, Council Bluffs, IA 51501, 402-689-7460, tsteward@iawcc.edu. 7 CE credits, pending Iowa's submission of CE documentation.

KANSAS

Ottawa: September 23, 2017. Kansas State Assembly. Title: Kansas State Assembly Half Day Workshop. Location:

Neosho County Community College – Ottawa Campus, 900 E Logan St, Ottawa, KS 66067. Contact: Jennifer Cain, 900 E Logan St, Ottawa, KS 66067, 785-248-2837, jcain@neosho.edu. 4 CE credits, pending Kansas's submission of CE documentation.

MAINE

Portland: October 21, 2017. Maine State Assembly. Title: MESA 2017 Fall Workshop & Business Meeting. Location: Maine Medical Center – Dana Conference Center, 22 Bramhall St, Portland, ME 04102. Contact: Allison Kipp, PO Box 718, South China, ME 04358, 207-408-2221, mainestateassembly@gmail.com. 7 CE credits, pending Maine's submission of CE documentation.

MARYLAND

Glen Burnie: September 16, 2017. Maryland State Assembly. Title: Maryland AST State Assembly Fall Workshop. Location: Baltimore Washington Medical Center – Courtney Conference Center, 301 Hospital Dr, Glen Burnie, MD 21061. Contact: Robin McMahon, 2321 Laconia Court, Crofton, MD 21114, 410-708-9941, robinmcmahon9941@gmail.com. 7 CE credits, pending Maryland's submission of CE documentation.

MICHIGAN

Port Huron: September 23, 2017. Michigan State Assembly. Title: Fall Patchwork with MSA. Location: Double Tree by Hilton, 800 Harker St, Port Huron, MI 48060. Contact: Mary Jo Nowicki, 1548 S Renaud Road, Grosse Pointe Woods, MI 48236, 586-552-3135, maryjo.nowicki@gmail.com. 6 CE credits, pending Michigan's submission of CE documentation.

MINNESOTA

St Paul: September 23, 2017. Minnesota State Assembly. Title: 2017 Fall Workshop & Annual Business Meeting. Location: Best Western Plus Capitol Ridge, 161 Saint Anthony Ave, St Paul, MN 55103. Contact: Naydeen Pol-lak, 4659 Blaine Ave, Inver Grove Heights, MN

55076, 612-866-3592, ndj118@gmail.com. 6 CE credits, pending Minnesota's submission of CE documentation.

MISSOURI

Jefferson City: September 23, 2017. Missouri State Assembly. Title: Missouri Fall 2017 Program. Location: Capital Regional Medical Center, 1125 Madison St, Jefferson City, MO 65101. Contact: Rachael Barnett, 3143 Algoa Road Unit B, Jefferson City, MO 65101, 314-570-5366, rachaelbarnett@att.net. 7 CE credits, pending Missouri's submission of CE documentation.

NEBRASKA

Grand Island: August 5, 2017. Nebraska State Assembly. Title: Nebraska State Assembly Summer 2017 Workshop. Location: CHI Health St Francis, 2620 W Faidley Ave, Grand Island, NE 68803. Contact: Casey Glassburner, PO Box 67034, Lincoln, NE 68506, 402-437-2786, nebraskastateassembly@gmail.com. 6 CE credits, pending Nebraska's submission of CE documentation.

Lincoln: March 3, 2018. Nebraska State Assembly. Title: 2018 Winter Workshop and Annual Meeting with Elections. Location: Lincoln Surgical Hospital, 1710 S 70th St, Lincoln, NE 68506. Contact: Casey Glassburner, PO Box 67034, Lincoln, NE 68506, 402-580-0057, nebraskastateassembly@gmail.com. 6 CE credits, pending Nebraska's submission of CE documentation.

NEW MEXICO

Farmington: July 15, 2017. New Mexico State Assembly. Title: Summer Potpourri. Location: San Juan College, 4601 College Blvd, Farmington, NM 87402. Contact: Donna Kirby, 505-280-2891, dlkirbynm@comcast.net. 4 CE credits, pending New Mexico's submission of CE documentation.

NEW YORK

Niagara Falls: September 16, 2017. New York State Assembly. Title: NYAST Fall Conference, Business Meeting & Elections. Location: Sene-

ca Niagara Resort & Casino, 310 4th St, Niagara Falls, NY 14303. Contact: Emily Runions, 576 E River Road, Grand Island, NY 14072, 716-380-0677, boardnyast@gmail.com. 6 CE credits, pending New York's submission of CE documentation.

NORTH DAKOTA

Bismarck: October 7, 2017. North Dakota State Assembly. Title: NDSA Fall Workshop 2017. Location: St Alexius Health Boniface Auditorium CHI, 900 E Broadway Ave, Bismarck, ND 58501. Contact: Nicole Zander, PO Box 231, Mandan, ND 58554, 701-426-2943, nicolemerghardt@yahoo.com. 6-7 CE credits, pending North Dakota's submission of CE documentation

OREGON

Tualatin: October 14, 2017. Oregon State Assembly. Title: Fall Workshop. Location: Legacy Meridian Park Hospital, 19300 SW 65th Ave, Tualatin, OR 97062. Contact: Sonia Lopez, PO Box 1461, Wilsonville, OR 97070, 503-679-7753, mgaringeroast@outlook.com. 6 CE credits, pending Oregon's submission of CE documentation.

PENNSYLVANIA

Media: September 23, 2017. Pennsylvania State Assembly. Title: Fall Workshop. Location: Delaware County Community College, 901 S Media Line Road, Media, PA 19063. Contact: Michelle Muhammad, 306 Dague Farm Dr, Coatesville, PA 19320, 281-703-3593, mmcst19@gmail.com. 6 CE credits, pending Pennsylvania's submission of CE documentation.

SOUTH CAROLINA

Myrtle Beach: August 26, 2017. South Carolina State Assembly. Title: Fall Workshop. Location: Horry Georgetown Technical College – Grand Strand Campus, 950 Crabtree Lane, Myrtle Beach, SC 29577. Contact: Nadine Connelly, PO Box 1925, Lexington, SC 29071, 803-627-4278, scsa.secretary@gmail.com. 6 CE

credits, pending South Carolina's submission of CE documentation.

TENNESSEE

Memphis: October 14, 2017. Tennessee State Assembly. Title: TN AST Fall Regional Meeting – Memphis. Location: Regional One Health, 877 Jefferson Ave, Memphis, TN 38103. Contact: Shirley Abram, PO Box 16223, Memphis, TN 38186, shirleyabram@comcast.net. 6 CE credits, pending Tennessee's submission of CE documentation.

VIRGINIA

Reston: September 30, 2017. Virginia State Assembly. Title: Advancements in Orthopedic & Spine Surgery. Location: Reston Hospital Center, 1850 Town Center Pkwy, Reston, VA 20190. Contact: Lisa Day, 13284 Firefly Road, Culpeper, VA 22701, 540-422-9471, ldaycs-fa@gmail.com. 6 CE credits, pending Virginia's submission of CE documentation.

WASHINGTON

Spokane: October 14-15, 2017. Washington State Assembly. Title: Fall 2017 Workshop & Annual Business Meeting. Location: Spokane Community College – Allied Health Bldg #9, 1810 N Greene St, Spokane, WA 99217. Contact: Ronda Armstrong, 4500 Steilacoom Blvd, Lakewood, WA 98499, 253-589-5554, ronda.armstrong@cptc.edu. 10 CE credits, pending Washington's submission of CE documentation.

WEST VIRGINIA

Morgantown: October 21, 2017. West Virginia State Assembly. Title: Fall Workshop and Business Meeting. Location: Monongalia General Hospital – Hazel Ruby McQuain Conference Center, 1200 J D Anderson Dr, Morgantown, WV 26505. Contact: Kimberly Miller, PO Box 983, Dellslow, WV 26531, 304-415-3341, klucionmiller@aol.com. 6 CE credits, pending West Virginia's submission of CE documentation.

WISCONSIN

Milwaukee: October 7, 2017. Wisconsin State Assembly. Title: Froedtert Fest. Location: Froedtert Hospital, 9200 W Wisconsin Ave, Milwaukee, WI 53226. Contact: Kelly Thurman, thurman6026@sbcglobal.net. 6 CE credits, pending Wisconsin's submission of CE documentation.

Weston: March 3, 2018. Wisconsin State Assembly. Title: Spring Center Wausau. Location: Ministry Saint Clare's Hospital, 3400 Ministry Parkway, Weston WI 54476. Contact: Michelle McKellips, 1020 Pine Crest Ave, Mosinee, WI 54455, 715-693-4983, micklips1966@yahoo.com. 6 CE credits, pending Wisconsin's submission of CE documentation.

Waukesha: October 13, 2018. Wisconsin State Assembly. Title: "Fall" Into Learning. Location: Waukesha Memorial Hospital, 725 American Ave, Waukesha WI 53188. Contact: Tricia Colaanni, 633 Heron Dr, Mukwonago, WI 53149, 262-391-8730, triciacola911@hotmail.com. 6 CE credits, pending Wisconsin's submission of CE documentation.

State Assembly Annual Business Meetings

Members interested in the election of officers & the business issues of their state assembly should ensure their attendance at the following meetings:

ARIZONA

Phoenix:
September 23, 2017
Annual meeting
BOD & 2018 delegate elections

IOWA

Davenport:
September 16, 2017
Annual meeting
BOD & 2018 delegate elections

NEBRASKA

Lincoln:
March 3, 2018
Annual meeting
BOD & 2018 delegate elections

WASHINGTON

Spokane:
October 14-15, 2017
Annual meeting
BOD & 2018 delegate elections

ARKANSAS

Fort Smith:
October 28, 2017
Annual meeting
BOD & 2018 delegate elections

MAINE

Portland:
October 21, 2017
Annual meeting
BOD & 2018 delegate elections

NEW YORK

Niagara Falls:
September 16, 2017
Annual meeting
BOD & 2018 delegate elections

WEST VIRGINIA

Morgantown:
October 21, 2017
Annual meeting
BOD & 2018 delegate elections

CALIFORNIA

Los Angeles:
September 23, 2017
Annual meeting
BOD & 2018 delegate elections

MICHIGAN

Port Huron:
September 23, 2017
Annual meeting
BOD & 2018 delegate elections

NORTH DAKOTA

Bismarck:
October 7, 2017
Annual meeting
BOD & 2018 delegate elections

WISCONSIN

Milwaukee:
October 7, 2017
Annual meeting
BOD & 2018 delegate elections

COLORADO / WYOMING

Aurora:
September 9, 2017
Annual meeting
BOD & 2018 delegate elections

MINNESOTA

St Paul:
September 23, 2017
Annual meeting
BOD & 2018 delegate elections

SOUTH CAROLINA

Myrtle Beach:
August 26, 2017
Annual meeting
BOD & 2018 delegate elections

Waukesha:
October 13, 2018
Annual meeting
BOD & 2019 delegate elections

Program Approvals: The Date Request Form must be submitted to AST 120 days and the Application for Approval of State Assembly Continuing Education Programs 30 days before the program date to stateassembly@ast.org. How-to material and forms are available at stateassembly.ast.org, the State Assembly Policy and Procedure Online Manual. The completed Date Request Form must be submitted before the first of the current month to be published in the next month's issue of The Surgical Technologist. A confirmation email as receipt received will be sent upon approval.

- ▲ **Approved** indicates a continuing education program approved by AST for CE credit.
- ▲ **Pending submission of CE documentation** indicates the state assembly has not submitted all required materials and signatures to AST for continuing education program approval.
- ▲ **Accredited** indicates a formal, college-based surgical technology or surgical assisting program that has been accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

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