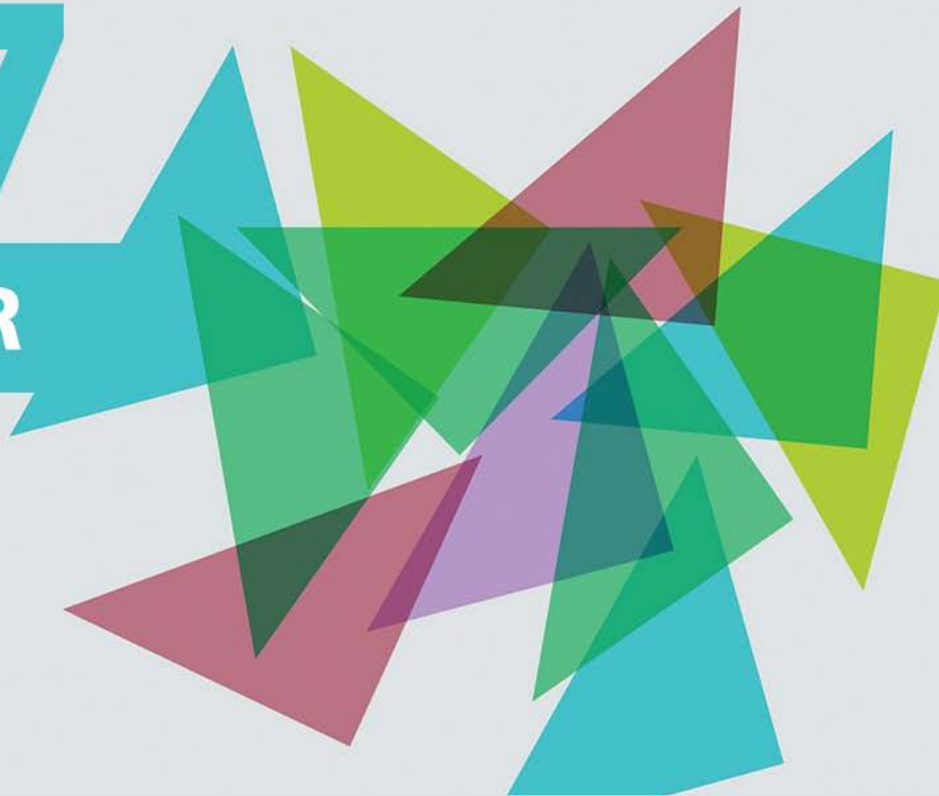




the **JOURNAL**
of the Pennsylvania Osteopathic Medical Association

December 2016

2017
HAPPY NEW YEAR



*Wishing You Health,
Happiness and Prosperity
in the New Year!*

ART THERAPY IN PTSD



Join us for the LECOM Primary Care 2017 CME Conference, March 2-5, 2017

Presented By: **LECOM** HEALTH

Conference Information

Primary Care 2017 offers a unique learning experience for physicians and health care professionals seeking to learn the latest information about medical advancements and treatment options. LECOM faculty and guest lecturers will present topics pertinent to primary care physicians as well as to specialists.

Primary Care 2017 will focus upon health problems commonly seen in the offices of primary care physicians. The objective of this four-day seminar is to provide participating physicians with information about new medical advancements in order to increase the scope of treatment options available to primary care physicians and to enhance the physicians' existing knowledge of topics that will be covered.

Two hours will also be devoted to the education and training on child abuse recognition and reporting approved by the Department of Human Services in accordance with Act 31.

Pre-Conference Workshop

The Lake Erie Integrated Geriatric Health Team (LIGHT) is supported by a \$2.2 million Geriatric Workforce Enhancement Program (GWEP) grant. The GWEP supports the development of a health care workforce that improves health outcomes for older adults by integrating geriatrics with primary care, maximizing patient and family engagement, and transforming the health care system. This pre-conference workshop will consist of continuing education sessions for all levels of licensed health care professionals and will prepare them for certification in geriatrics through the certifying body for each discipline. The workshop will be held on Thursday, March 2 from 12-5pm.

CME Credits

The Lake Erie College of Osteopathic Medicine anticipates Primary Care 2017 being approved for up to 25 AOA Category I-A CME credit hours pending approval by the AOA CCME. LECOM anticipates this activity will be approved for up to 25.00 prescribed credits by the American Academy of Family Physicians. An application for CME credit will be filed with the American Academy of Family Physicians. Determination of credit is pending. Primary Care 2017 will include up to 5 hours devoted to patient safety and risk management requirements.

Resort Information

The conference will be held at Peek'n Peak Resort and Conference Center, 1405 Olde Road, Clymer, NY 14724. To reserve a room, call (716) 355-4141 or visit pknpk.com using promo code LECOM to receive the discounted room rate.

Register Online at LECOM.edu/CME

Early-bird Registration Ends: February 1, 2017



THE

Journal OF THE PENNSYLVANIA OSTEOPATHIC MEDICAL ASSOCIATION

December 2016 / Vol. 60, No. 4

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The Journal of the Pennsylvania Osteopathic Medical Association (ISSN 0479-9534) is published four (4) times a year, in March, June, September and December, as the official publication of the Pennsylvania Osteopathic Medical Association, Inc., 1330 Eisenhower Boulevard, Harrisburg, PA 17111-2395. Subscription \$20 per year, included in membership dues. Periodicals postage paid at Harrisburg, PA, and additional mailing offices. All original papers and other correspondence should be directed to the editor at the above address. Telephone (717) 939-9318 or toll-free in Pennsylvania, (800) 544-7662. POSTMASTER: Send address changes to *The Journal of the Pennsylvania Osteopathic Medical Association*, 1330 Eisenhower Boulevard, Harrisburg, PA 17111-2395.

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FROM THE EDITOR'S DESK

Alice J. Zal, D.O., F.A.C.O.F.P.



Alice J. Zal, D.O.
Editor-in-Chief

What is post-traumatic stress disorder? According to the Mayo Clinic, it is "symptoms that can develop within three months of the event or up to years after the event and are grouped into four types: intrusive memories, avoidance, negative changes in thinking or mood, or changes in emotional reactions."

I personally always thought of people coming home from wars as the people with PTSD. How many of you in your practices see people with this disorder? When you stop to think about it, can it also encompass many other situations? Traumatic events can take on many forms. What is traumatic to one person may be a normal circumstance to someone else. Many people going through traumatic events can have trouble adjusting or coping for a while, but they do not have PTSD. With time and good support networks they can get better. However, if the symptoms get worse or last months or years and interfere with functioning, they may have PTSD.

There are many situations that have been given other titles. After the delivery of a baby, a mother who may have had a very active professional lifestyle, may become "depressed." Is this baby blues or is this a form of PTSD? I guess it all depends on how long it lasts and if it interferes with the care of the baby. In your practice, have you encountered these patients? What do you do for them?

When a person is in an automobile accident do you monitor their emotional reaction to it as well as their physical injuries? Do they relay to you that they are hypervigilant when they now drive or that they avoid certain types of roads or tunnels/bridges? Do you monitor them six months or a year from then to see how their avoidance and coping is progressing? With today's time limited patient contact,

imposed upon doctors by insurance companies and corporations, do we have the time to deal with these issues? When do doctors become caring care-givers again?

After a patient had surgery or a serious diagnosis given to them, how does the physician deal with the patient's reaction. Do we have the time to sit with the patient and their family or do we farm them out to strangers? When I say strangers, I mean a social worker or a psychiatrist who never knew the patient prior to this upheaval in their life. Also, the patient's support network may need supporting. Caregivers often burn out or are in a state of shock after their whole worlds are turned upside down by a devastating diagnosis for their loved ones. They no longer can participate in normal activities that they always did (i.e. going to the theater, going on vacations, or even discussing current events with their significant other).

All of these and many other situations can fall into the category of PTSD. Have you sufficiently dealt with these with your patients? What else can you put in your armamentarium of dealing significantly with upheavals in your patient's lives? Just give it a little thought.

At this time of change, I would personally like to thank Mario E.J. Lanni, D.Sc., for his years of devotion and dedication to the POMA organization. He has worn so many hats during his tenure that only time will reveal all the work that he had done. There is a time for everything in life. A time to be born and a time to retire. A time to work and a time to relax. Mario, you deserve only the best in life for everything you have given to POMA.

A handwritten signature in cursive script that reads "Alice J. Zal, D.O.".

All editorial columns published in The Journal of the POMA are the opinions of the author and do not necessarily reflect the view of the POMA.

INFO FOR CONTRIBUTORS

What to Submit

Articles relating to osteopathic medicine in either the clinical or scientific area are welcomed. Articles should either document an osteopathic contribution in these areas or contribute to the education of the osteopathic physician. All articles will be reviewed by consultant(s) in the proper field and will be subject to a careful editing process. Interns, residents and fellows should include their trainer(s) as author(s). If the trainee is the sole author and wishes the paper to be published in his/her name only, a letter indicating the trainer's release of the paper from his/her department must accompany the manuscript.

Articles dealing with management problems, current legislation or regulation and similar topics will also be considered for publication. Such articles must be original work.

A short biography (C.V. acceptable), photograph of the author(s) and, in the case of medical articles, three questions (i.e., multiple choice, true/false) pertaining to the article for use in *The Journal's* "CME Quiz" feature should accompany the manuscript.

Types of Articles

Original articles — Original articles present information that is new and important to osteopathic medicine. They may document clinical material, applied research or laboratory research. Article length may range from 2,000 to 4,000 words (approximately 8 to 16 typewritten pages).

Clinical reports — These include case reports and brief descriptions of new techniques, equipment or research. They usually range from 1,000 to 2,000 words. Since they do not require abstracts, a final paragraph should provide a summary.

Reviews — Reviews are comprehensive surveys that synthesize established ideas and develop new ones. They may deal with clinical, investigational or basic science subjects. Length may vary from 3,000 to 5,000 words (12 to 20 typewritten pages).

Special articles — Articles that do not fall into the above categories (i.e., those on history, demographics, education) will be considered for publication as feature articles.

Manuscripts

Authors are encouraged to submit manuscripts via e-mail to publ@poma.org. Papers may also be submitted by regular mail. Manuscripts sent by e-mail should be sent as an attachment in .doc, .wpd or .rtf format. Papers submitted by regular mail should be typed in double spacing on 8-1/2" x 11" white paper, one side only, preferably with one-inch margins all around the page. Each page should be numbered. To facilitate the editorial process, authors who submit papers via regular mail are asked to include an original manuscript, one photocopy and a clearly labeled IBM-compatible 3.5" disk or CD-ROM containing an electronic version of the text in one of the above formats. Any electronic artwork pertaining to the article should be saved on the disk as a separate file.

The manuscript should include:

- title;
- author(s) name(s) with highest academic degree;
- abbreviated title;
- abstract, if applicable;
- text;
- references.

Submit articles to: publ@poma.org or
The Journal of the POMA, 1330 Eisenhower
Blvd., Suite 100, Harrisburg, PA 17111-2319.

References

References should be typed, double-spaced, on a separate sheet. All references listed should be cited in superscript throughout the text. They should be numbered in the sequence in which they first appear in the text, listing each one only once.

Examples of properly listed references follow:

Journal reference — List the author's name, article title, journal name as abbreviated in *Index Medicus*, year, volume number, page number(s).

Example — Davidson C, Burkinshaw L, McLachlan MSE, et al: Effect of long-term diuretic treatment on body potassium in heart disease. *Lancet* 1976;2:1044.

Book reference — List the author's name, book title, location and name of publisher, year of publication. Exact page numbers are required for direct quotes.

Example — Fudenberg HH, Stites DP, Caldwell JL, et al: *Basic and Clinical Immunology*, ed 2. Los Altos, California, Lange Medical Publications, 1978.

Book chapter reference — List the author's name, chapter heading, editor's name, book title, location and name of publisher, year of publication and page number(s).

Example — Elias M, Elias P: Motivation and activity, in Birren JE, Schaie KE (eds): *Handbook of the Psychology of Aging*. New York, Van Nostrand, 1976, p 357.

References generally should not exceed 30 in major articles, fewer in shorter articles.

Illustrations

Illustrations include photographs, line drawings, graphs and charts. All illustrations should be numbered and cited within the text. X-ray films are generally not acceptable.

Electronic Artwork — Please note that *The JPOMA* cannot use line art or photographs that are inserted, embedded or copied into an electronic text file. Authors are asked to send the original electronic artwork files separately. Line art must be saved in .eps, .jpeg, .tif or .pdf format. Digital photographs should be sent using the highest print resolution available in .jpeg format, whenever possible. The minimum resolution for digital photographs in .jpeg format is 1024x768 pixels; no less than 72 dpi. Compressed .tif files with a minimum of 300 dpi are also acceptable. Scanned photographs should be sent at 100 percent of the original with a minimum resolution of 300 dpi.

Printed Photographs — Please do not bend, fold or use paper clips to attach to the manuscript. Photographs should be unmounted and untrimmed high-quality, glossy, black-and-white or color prints. A label listing the author's name, article title and a number keying the photograph to its place in the article should be affixed to the back of the photograph. *Please note* — Photographs that include patients, staff, etc., must be accompanied by a signed legal release form.

Other Illustrations — Figures, charts and graphs should be of professional quality. Lettering should be large and clear to allow for reduction, if necessary. Glossy, black-and-white prints of drawings, rather than originals, should be submitted whenever possible.

Editorial Review

Each article submitted will be forwarded to the editor-in-chief for review. Articles deemed acceptable will then be sent to the head of the POMA committee related to the subject involved, and an independent reviewer at the editor-in-chief's discretion. Authors whose articles are accepted for publication will be notified in writing, and will be notified if any rewrites or clarifications are needed before publication. Manuscripts submitted cannot be returned.

LECOM DEAN'S CORNER

Lake Erie College of Osteopathic Medicine



*Silvia M. Ferretti, D.O.
LECOM Provost,
Vice President and
Dean of Academic Affairs*

When the board of trustees of Millcreek Community Hospital founded the Lake Erie College of Osteopathic Medicine (LECOM) in the early 1990s, it became the sixteenth college of osteopathic medicine in the nation. Since that time, the indefatigable efforts of faculty, staff and students alike have propelled LECOM to its place as the largest educational institution of its kind. The tremendous growth of LECOM is one of the top entrepreneurial American success stories; further fulfilling its mission, it has become the core of LECOM Health, the only osteopathic academic health center in the nation.

From the very genesis of its now luminary position, one of the many attributes that has distinguished LECOM from others in the field of health care education has been its unflagging commitment to service.

LECOM educates osteopathic physicians, pharmacists and dentists to practice medicine at a superlative level. It inculcates the values of leadership excellence — not solely in educational training, but in community service and through awareness of the human condition.

To what can one attribute this LECOM success? In a word — service!

Leadership in service is comprised of many attributes: integrity, self-discipline, purpose, preparedness, common-sense and compassion, to name a few. Service leaders are not born, they are made — through hard work, through sacrifice, through determination. LECOM students have led the way, serving on mission trips to provide medical treatment and care to those suffering in tattered villages of distant lands; and LECOM volunteers have served in the shadows of the inner-cities, right here, in the United States.

LECOM stands stalwartly in the vanguard of promoting wellness for the communities that it touches. The college sets an example by supporting service organizations such as the Bridging the Gaps Program as it promotes health care, wellness, education, and improves the well-being of underserved children and adults within the community. Each summer, LECOM students sacrifice their only break in four years of medical school to venture into more than 20 social service and health care

agencies, where they make a difference in the lives of people in need.

The principle of service leadership has brought LECOM to generously support organizations such as the Chamber of Commerce, Wellsville, the YMCA, the Erie Housing Authority, the Erie Bayhawks and countless outreach programs that work in the areas of health and wellness. LECOM has established the 31-million dollar John M. Ferretti and Silvia M. Ferretti Health and Wellness Center in Erie, Pennsylvania, as a state-of-the-art facility offering a bevy of personal trainers, an indoor track and three pools — including one for warm water therapy. Through the joint service leadership of the LECOM family — faculty, staff, students, alumni and friends — the LECOM Auction raises significant sums annually to aid students in attending medical school. The cycle of service continues as the students raise thousands of dollars each year by participating in the fund-raising efforts of many health service organizations such as the cancer, Alzheimer's, heart, diabetes and other associations. Service begets service.

LECOM recognizes that service leadership centers upon building a community of leaders at all levels of society. A leader is best when people scarcely know that he exists; so that when his work is complete and his aim fulfilled, they will say: "we did this ourselves." That is the mission of LECOM. To instill leadership into the capable and well-trained hands of the physician, pharmacist and dentist such that they will have the ability to lead and to serve.

LECOM students volunteer over 30,000 community service hours annually. The TOUCH Points Program, supported by the LECOM Student Government organizations, is a reward program based upon student participation in service-based events and undertakings. Mentoring clubs and outreach programs abound, resulting in LECOM students being recognized repeatedly for service-based awards.

LECOM celebrates service leadership, for it is essential to fueling passion, to valuing people, and to creating a sense of progress through which may be confronted many is-

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PCOM DEAN'S CORNER

Philadelphia College of Osteopathic Medicine

Over the past two years, our institution has embarked on a strategic plan that will drive the growth of PCOM, both physically and academically, all to ensure that our College best fulfills its mission to create competent, caring health practitioners. In this month's column, Chief Advancement Officer Carrie Collins, J.D., discusses how we are striving to meet the goals of that plan, and how our alumni within POMA can not only help us achieve those goals, but have the opportunity to contribute to the very future of health care.

Fraternally,

Kenneth J. Veit, D.O.

Shaping the Future of Health

Philadelphia College of Osteopathic Medicine's five-year strategic plan, PCOM2020: A Shared Vision, is a dynamic statement that will serve as a roadmap toward the PCOM of the future. We have been prominent within medicine for over a century, and as we continue to gain strength, our expertise in health and behavioral health will solidify our position as a leader in primary care. The following priorities show that we are providing solutions to our most pressing health care problems; investing in PCOM will help us develop and implement those solutions more quickly to benefit more patients. You can help us shape the future of health.

Transforming primary care

PCOM has always been focused on educating primary care physicians. Approximately 60 percent of our graduates practice in this field. Positioned as a leader in primary care education, we will build upon this tradition to transform primary care for the betterment of patients, health care providers and payors. We are applying osteopathic concepts to our endeavors and will emphasize the preventive aspects of nutrition, exercise physiology and behavioral medicine in our curricula — across all disciplines. We will teach our physicians to teach their patients to adopt healthy behaviors to prevent and reduce the burden of chronic disease.

Improving training to improve health care

We will leverage technology to fully equip our students for the rigors of health care practice. By providing a safe, controlled and fully monitored simulation environment, all

PCOM students can learn and practice technical skills, develop communication abilities and demonstrate mastery of clinical competencies. We are also addressing the problem of uncoordinated patient care by establishing a fully interdisciplinary approach to training health care providers. The integration of training across multiple programs of study, infused with osteopathic thought, education and therapies, will ensure PCOM graduates possess the ability to collaborate with other providers and improve outcomes.

Promoting and diversifying research

Today, a mere 20 percent of research tackles health care delivery and outcomes, and we will supplement our basic science research with work in this area. The PCOM behavioral health faculty is nationally renowned and working to develop programs to reduce the burden of chronic disease through behavioral change.

Expanding programs and people

There are numerous shortages projected for mental health, public health and dental providers in the coming years. Our expansion into new educational programs that support our mission and additional instructional locations will reach more health professions students. With this expansion, we will be well suited to meet the demand to train these health professionals. Further, we are committed to fostering and maintaining a campus environment and resources for students that will optimize the educational experience and enhance their career opportunities.

PCOM invites all of its alumni to...

Be Inspired

Guided by a dynamic strategic plan, PCOM is providing solutions to our most pressing health care problems. You can be a part of the change we are driving, and help us impact the way we train health care providers, as we capitalize on our osteopathic heritage and emphasize a whole-patient philosophy.

Make an Investment

Supporting PCOM will help us develop and implement these solutions more quickly to benefit more patients. Your support can be

(continued on page 19)



*Kenneth J. Veit, D.O.
PCOM Provost, Senior Vice
President for Academic
Affairs and Dean*

A STUDENT'S VOICE — LECOM

Jordan Spencer, OMS-II



*Jordan Spencer
LECOM OMS-II*

I was recently privileged to attend the Association of Medicine and Psychiatry conference in Chicago. This is an organization of physicians who are board certified in either family or internal medicine, as well as psychiatry. This is a dynamic group of physicians who are passionate about a number of varying topics, including integrative care models and how to bring medicine to new horizons in an organized fashion. One of the common themes that I pulled out of many of the presentations was an integrative model regarding psychiatrists at the extreme end of consultation liaison psychiatry. In this model, there were a few organizations that had a roaming outpatient psychiatrist. In this practice of primary care physicians, or PCPs (naturally with enough physicians in the practice to make this model sustainable), there would be a psychiatrist roaming the halls who would be pulled into rooms as needed by the PCPs. The results were powerful and the effectiveness of the model was appreciated by the psychiatrists, the PCPs and the patients alike. As an osteopathic student who is particularly interested in osteopathic manipulative medicine (OMM), business and integrative care, I could not help but think of a similar model with manipulative medicine.

While OMM in most hospitals has not yet become mainstream, a consult in osteopathic manipulative medicine is not entirely unheard of in an inpatient setting, helping with post-surgical ileus, lymphatic pumping and so forth. That being said, I believe there is also an opportunity in an outpatient setting for OMM consult. With the advent of the Accountable Care Organization (ACO), I believe roaming osteopathic physicians will have an excellent opportunity to cut costs and provide excellent patient care in the outpatient setting, thus placing our modalities as a mainstay in the future of medicine. An ACO functions as an organization that will receive a "lump sum" payment for each patient they care for from their insurance company. This money can be used as the practice sees fit; however, when the funds are exhausted by the practice, the insurance company will no longer provide more. Rather, the organization will provide further care at their own expense.

This model is geared toward encouraging individual groups to provide effective and efficient medicine, keeping them theoretically under the lump sum amount provided by the insurance company, thus yielding revenue. Part of being an ACO, therefore, includes troubleshooting and discovering new, affordable ways to provide quality care and low costs. To that end, I can think of no more affordable procedure than OMM. Apart from the compensation for the time of the physician, OMM requires no overhead for a business, no flashy machinery, no expensive tools — just the patient, a doc and a table.

The ACO model may create an opportunity to put osteopathic manipulative medicine as one of the first recommended treatments for all indicated symptomatology, and adjunctive to other treatment options. If one's headaches, pain, constipation and so forth can be cured or, at a minimum, relieved with five minutes of manipulation, then labs, expensive imaging, cyclical meetings with specialists, repeat visits and so forth, may possibly be avoided. This may be a way to prevent any osteopathic principles and philosophy teacher from ever being able to say the classic "after the patient went to every type of specialist in the book, including ____ (name your favorite big academic center), I fixed their problem in 10 minutes." story that we have all heard more than once. Not because OMM will no longer be in use, but rather because OMM will be used so often and in such a broad way.

Hopefully, in time, a general requirement before reaching out to consult another specialist will be that of a manipulative course of treatment. While every doctor can't be a D.O., through this model every patient can and will have easy access to osteopathy. Now, while I do not intend for this roaming osteopathic position to cure everything in the office, I do believe in the right setting, with the correct ratio of primary care physicians, this model has the potential to create enormous benefits.

From the perspective of the patients, they will receive superior care by a physician who indeed uses a level of humanism not often seen in the medical community anymore. From the perspective of the business, costs are cut and waste is reduced with efficiency increasing.

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A STUDENT'S VOICE — PCOM

Elisa Giusto, OMS-III, and Olivia Hurwitz, OMS-III

The United States has one of the highest rates of obesity in the world, with 69 percent of our population being either overweight or obese in 2012. That same year, \$190 billion, or 20.6 percent, of health expenditures was spent on treating conditions tied to obesity. In 2009, the average American consumed 46 gallons of soda, with half of Americans drinking sugary drinks every day. It has been estimated that soda consumption caused one fifth of the weight gain in America between 1977 and 2007. With the obesity epidemic in America being fueled in part by the overconsumption of sugar, the soda industry may be at greater fault than meets the eye.

Researchers at Boston University School of Medicine recently published a study in the *American Journal of Preventive Medicine* reporting that between 2011 and 2015, 95 national health organizations accepted money from Coca-Cola and PepsiCo. These organizations included Centers for Disease Control, National Institutes of Health, American Diabetes Association and American Heart Association. During the study period, Coca-Cola and PepsiCo also lobbied against numerous public health bills, including soda taxes, Supplemental Nutrition Assistance Program regulations, and advertising regulations.

These findings were quite disheartening considering that the sponsorships of health organizations can have a reprehensible impact on public health that is difficult to deny. After receiving over \$5 million from Coca-Cola and PepsiCo in 2009, Save the Children suddenly dropped its effort to promote soda taxes. The Academy of Nutrition and Dietetics, who also accepts money from the same two soda companies, declined to support the soda portion size limit in New York City, saying that education about sound nutrition should be re-emphasized. As a result, organizations that accept money generate a conflict of interest that introduces a subconscious bias in favor of the donor company.

Lessons can be learned from the history of tobacco companies, who gave money to sympathetic organizations that dealt with domestic abuse, hunger and minority advancements. It is, therefore, recommended that these 95 health organizations find alternate sources of revenue to prevent an inadvertent increase

in soda consumption and overall harm to Americans.

Of course, conflicts of interest such as these are also prevalent on a more individual level. As medical students, we participate in countless appointments where patients are told to limit sugar and salt, get more exercise, stop smoking, not drink too much, sleep more, and find a healthy method of stress relief. As soon as the door closes behind us, we are scarfing down a pharmaceutical-sponsored cookie and chasing it with a cup of soda while hunching over our phones until six o'clock when we traipse to the car, sit for an hour in traffic while sipping on a sugary electrolyte drink before stumbling into our houses, heating up a frozen burrito, and plopping on the couch with a bowl of ice cream to stare at the TV (or, if we're good students — a question bank) for a few hours before watching Netflix in bed — only to fall asleep and wake up six hours later to repeat the same thing over again.

True, not every rotation or specialty allows for more constructive self-care (a trip to the gym or the produce aisle in the grocery store), and it would be too much to ask every doctor to always choose the healthy option just because she is a doctor — that's not practical or achievable. But we can hold ourselves to higher standards so that our allocated "snack money" can be spent on fresh vegetables and help fund local farms instead of funding the cream-filled cookie industry (most of the time).

In some way, our personal habits act as a microcosm for the same inconsistencies we see in the NIH/PepsiCo relationship. The more personal funds we funnel into our own unhealthy habits only help further the political power of the companies that fuel them. The more power they have, the cheaper their products, and the more available they are to most of the American population, while more expensive healthier options become less available. It is hard to worry about personal responsibility at four in the morning when we're choking down a Twizzler before heading to the OR, but it's worth it to consider how our choices can impact the health of our own patients, just as we expect health organizations to do the same.



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Source

Aaron DG, Siegel MB: Sponsorship of national health organizations by two major soda companies. *Am J Prev Med* 2017;52(1):20-30.

A YOUNG PHYSICIAN'S PERSPECTIVE

Mark B. Abraham, D.O., J.D.



*Mark B. Abraham,
D.O., J.D.*

Every election cycle brings changes. Whether government control changes from one party to the other or not, there are changes. From our perspectives as physicians, there will be changes on both federal and state levels. While the Trump administration and Congress will attempt to handle the issue of health care and the Affordable Care Act (whether fixing or repealing and replacing), there is another issue that is sure to be addressed at both the state and local levels — opioid pain medications: prescribing and addiction.

This issue seems to be growing by the day. There have been various attempts to handle it. Some states, including Pennsylvania, have a website in order to check whether or not a patient has received any controlled substances, including when, where and prescribed by whom. It is a good start and useful. I have used Pennsylvania's and New Jersey's. When a problem shows, such as numerous prescriptions in a short time period, it also makes it easier to tell the patient why you cannot prescribe a narcotic. This is only a start.

The larger problem is how to help manage pain. Pain management specialists and palliative care specialists have their arsenals and strategies. Sometimes they involve the narcotics; sometimes it is other modalities. I know many osteopathic physicians who make use of manipulation techniques themselves or refer to the neuromuscular and osteopathic manipulative medicine (OMM) specialists. It can help and does work. Andrew Taylor Still figured that out over a hundred years ago.

In this day and age, things move so fast that immediate results are expected. As such, patients want the immediate relief and fix that a medication may provide. Many do not want injections or forms of manipulation or physical therapy. Some have tried and failed. What is left? Medication. The next dilemma becomes who will prescribe it.

As we all know, whether as practitioners or patients, it is not always easy to get in to see a

specialist, or even your primary care physician (PCP). It can be even more difficult if you are establishing care as a new patient. Many PCPs are becoming more cautious in prescribing controlled substances to their patients, especially for long term, and are turning to specialists. One great pitfall remains, what happens when the patient no longer wants to see the specialist and only wants you to write the prescription as you used to do? You cannot just abandon your patient. While some emergency department and urgent care physicians might prescribe a few days of a controlled substance, your patient cannot repeatedly go there for pain management. How do you then know, track and ensure that if you do prescribe medication to your patient, that the patient won't be taking similar medication that could result in an overdose? Well, that is another benefit to using the website. It is another way to protect your patient and take time to educate them if you see numerous prescriptions overlapping. They could be in danger of narcotic overdose or even acetaminophen overdose. That was a major driving force when the formulation of hydrocodone/APAP was changed. The acetaminophen was decreased.

One of the newly-elected officials in Pennsylvania is our new attorney general, Josh Shapiro. Mr. Shapiro is planning to tackle the issue as best possible from his perspective and within his power. One of the advantages he has is coming from a medical family. His father is a very well established and successful pediatrician, osteopathic may I add, in Montgomery County. Just as when I wrote about how nice it would be for a physician, such as Dr. Ben Carson, to possibly become president, any elected official who has some connection to health care, other than being a patient, I feel brings a valuable asset to any discussion of medical and health care treatment issues.

However, as the issue of opioids plays out, on a state and/or federal level, it will need the help of everyone — physicians and patients alike.

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Amy M. Young



Patrick P. Ottman



Edmond J. Fenton

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Medical Update

Art Therapy in PTSD

by Jessica L.
Morel, D.O.

Introduction

Art therapy has been used in the mental health field for years, and can include music, drawing, painting, sculpting and anything in-between. The arts are ever changing and are only limited to an individual's imagination. It is a wonderful way for patients to express their thoughts and emotions when verbalizing them is difficult or when they are suppressed.

As our veterans return from conflicts overseas, they are coming back with a wide range of injuries, including physical and emotional pain. Recent studies have sought to find effective therapies for our military members that address the unique symptoms that accompany post-traumatic stress disorder (PTSD) and traumatic injuries. The U.S. Department of Defense released a document called *The White Paper* exploring the use of the arts in veterans' mental health care. Since its publication, there have been a few more attempts to research the utility of art therapy in the mental health care of veterans; we will explore those publications here.

Content

Post-traumatic stress disorder is a growing problem in the military today. The U.S. Department of Veterans Affairs recognizes PTSD as defined in the DSM-V: "diagnostic criteria for PTSD include a history of exposure to a traumatic event that meets specific stipulations and symptoms from each of four symptom clusters: intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity. The sixth criterion concerns duration of symptoms; the seventh assesses functioning; and the eighth criterion clarifies symptoms as not attributable to a substance or co-occurring medical condition."¹

Art therapy is a growing field and has drawn much attention in the treatment of PTSD in both the civilian and military sectors. The American Art Therapy Association defines art therapists as "master's level professionals who have a degree in art therapy or a related

field. They generally hold a credential in the field of art therapy such as registration or board certification. Many art therapists also hold an additional license in counseling, psychology or marriage and family therapy."² Art therapy is not always limited to professional therapists. They work closely with musicians, local artists, peer supports and volunteers, creating a network for integrating the patients back into their communities.

In October 2011, Rear Admiral Alton L. Stocks held the first National Summit: Arts and Healing for Warriors. He identified this as the first time members from all branches of the armed services were able to meet with civilian agencies and collaborate on using the arts to address military health issues. His movement grew from there, leading to additional summits and *The White Paper* in 2013. Rear Admiral Stocks noted, "the challenges service members face are more complex and difficult than any branch of the military, federal agency or civilian organization can address alone. We have seen first-hand the success and value of creative arts programs and will be expanding our arts programs through partnerships with artists and art organizations to ensure that those who are most in need have access."³

The White Paper contains a great synopsis of the arts in the history of the military. It described the use of art and music as far back as the war for independence in our country, and even further in human history. The military used to have a drum corps not just for entertainment, but as a way to announce the specific battle plans, initiation of a march, retreat, etc. It was utilitarian in the earlier years and served as a means of communication across miles. At night, the men would sit around a fire and many hymns were generated. They were a way to relieve stress from the day and increase comradery. The flags that were commissioned for the respective sides were a work of art, just as the quilts of the period tell stories. In World Wars I and II, the paper describes the art painted on the sides of each airplane, identifying the different squadrons.³

Robert L. Lynch identifies different uses of the arts, noting “music through this instrument (the bugle) has been used to order the life of the military from dawn to dusk for the last 200 years, up to and including at the end of that life ‘Taps,’ which was adapted and introduced for that purpose in July of 1862.” “In WWII, 500 bands were serving in the U.S. Army and the war department had established an emergency Army Music School.” “The Ghost Army... during WWII, (which was) classified until 1996, was a 1,100 man unit of the U.S. Army made up entirely of artists, painters, actors, sound engineers, writers and others. It was designed to create disinformation — like the famous inflatable tanks.” “We salute a visual art creation, and call it Old Glory, the flag of our nation.”⁴ These symbols have persisted through the years, and the different patches worn on the military uniforms are small works of art in their own right. Battlefield art is collected and highly valued today.

If we look at modern soldiers, we simply need to look to technology to see their creativity coming alive. They play songs, choreograph dances, and design tattoos while killing time overseas and relieving stress. Charlene Rubush noted, “The National Vietnam Veterans Art Museum was formed in 1981, by a few Vietnam combat veterans. They put together an artistic and historical collection that has become a timeless statement of war on behalf of all veterans for future generations. The rare collection blossomed from a group of veterans in the post-war era, and has now grown into the world’s only museum with a permanent collection focusing on the subject of war from an artistic perspective.” She explained, “the artwork presented at the museum provides a unique viewpoint on the controversial subject of war to all visitors. It’s a tenuous and reflective balance of the beauty and horror, giving unique insight into the psyche of combat veterans and the consequential hindsight war leaves on its survivors. Visitors express that the body of work is a universal message to all generations and cultures.”⁵ With further recognition, veterans’ art may be exhibited across the world, giving the community a small glimpse into the struggles of our veterans, and also giving them the opportunity to support them in their healing. Art is something that is shared across generations and its traditions are passed on throughout the years, whether it be in military traditions and customs, through song, or in formal museums.

By participating in the arts, veterans are able to address fears and memories that are often

difficult to express verbally. Songwriting and poetry allow them to tell their stories. Emotions that sometimes defy definition can be expressed through drawing and paint. The veterans can sit close to each other providing silent support while they work on their individual traumas. When they want to talk to those around them, they know they can find understanding and, when sharing their pieces, their comrades in arms have a unique understanding of their meaning. Art also allows the veterans to express their emotions to the public. While others might not have been on the battlefield, these art forms bring the emotion of the war front home to them. Now, more than ever, the military conflicts are documented through photography, and the news crews are coming home with scars themselves. War affects not only those in the armed services, but also the refugees, the news crews, the aid workers and beyond. The effects are very wide spread and the need for therapy to help address the aftermath is growing.

Jeffery Stadler touches on the importance of art as a tool in treating PTSD — “art serves as a non-verbal means to express unresolved memories and feelings, which have often been suppressed or avoided since the time of trauma,” “many veterans find imagery more accurate than words in conveying how they think and feel,” “unresolved mental representations of trauma are salient and frequently experienced as if they are actually occurring (as in flashback), and often arise when triggered in waking life (intrusive thoughts),” “traumatic memories are encoded differently than non-traumatic memories, ‘locked’ in the right brain and, therefore, less accessible through verbal language.” He goes on to state that “veterans who have been unwilling to participate in any form of trauma therapy have been able to tolerate discussing images they created, providing a cathartic release and a sense of mastery over something they were convinced they could not tolerate.”⁶

Collie, Backos, Maichiodi and Speigel elaborate on this further, “non-verbal expression, as is used in art therapy, can facilitate both the shift to declarative memory and the creation of a coherent narrative.” “Group therapy is particularly useful for combat-related PTSD because military training and combat operations are group experiences.” The group interviewed art therapists who treat PTSD through the American Art Therapy Association and conducted a survey. There was considerable agreement, and they identified “the seven primary therapeutic mechanisms (of art therapy)

(a) reconsolidation of memories, (b) externalization, (c) progressive exposure, (d) reduction of arousal, (e) reactivation of positive emotion, (f) enhancement of emotional self-efficacy, and (g) improved self-esteem.”⁷

Suicide rates amongst veterans are at an all-time high. While there are formal therapy and psychiatry services offered at the VA medical centers and military hospitals, servicemen are still afraid of the damage it may cause their careers if they seek help. Sometimes the best way to reach them is through non-traditional and informal means such as support groups, art classes, peer supports and music. The American Art Therapy Association interviewed Steve Piscatelli, who admitted, “if art therapy programs had been there when I returned from Vietnam, I would have taken advantage of them and would most likely be able to work today, but I suffered with it too long. Not only would art therapy have helped me, it would have saved a lot of money in the long run. If I hadn’t found art therapy, I would have probably committed suicide. I needed art therapy to purge the horrific experiences. So many returning veterans commit suicide.”⁴

The support of the community can be just as therapeutic as a formal office setting when our servicemen and women return home. Evie Lindemann, with the American Art Therapy Association, describes a residential program where “veterans participate in weekly PTSD and recovery groups, individual trauma-focused therapy, yoga, art therapy groups and wellness classes. They also work in the community two days per week in various settings such as elementary schools and soup kitchens, where they can practice the skills that will help them discover that they belong, that they have a purpose, and that they can make a difference not only to themselves but also to others.”⁸

Hansen spoke to several veterans in an art therapy group and she quotes Carlos Robles as saying, “I have learned that I’m not a useless person, through this program we have been able to sell our art to make money to contribute to disasters like Hurricane Katrina and the tsunami. When we do stuff like that, we find that we do contribute.”⁹ Therapy is not only helping the veterans deal with their personal struggles and PTSD, it is helping them to re-integrate into the community and find ways to interact with others who don’t understand their history.

As our veterans return, there have been limited resources available for programming to address PTSD and other battlefield injuries.

The White Paper served to point out a need and the utility of art therapy. The government set aside resources for programs interested in developing veterans’ programming and collecting data to prove outcomes. With more data, the government can justify diverting more funds into art therapy for our wounded vets. The American Art Therapy Association published an *Art Therapy Outcome Bibliography* that they describe as “the listing of art therapy outcome and single subject studies for the purpose of research, grant writing, demonstrating support for your art therapy program, and as evidence of the effects of art therapy with various client populations.”¹⁰ As more programs collect data and apply for grants, more evidence can be collected on the usefulness of art therapy in the veteran population, and more funds can be re-appropriated to this form of treatment.

Conclusion

There have been several organizations that have taken up this cause. Some of the programs have come through the veterans’ administration and others through private organizations and volunteer services. Sometimes spreading the word about these wonderful programs is the first step that makes a world of a difference. Operation We Are Here published a list of therapy groups across the country and provided links to their information; they include such things as “papermaking workshops where participants use their uniforms and articles of clothing that have personal significance to create works of art,” “a Michigan organization that sends art kits to war wounded recovering in hospitals,” “woodworking for veterans,” and so much more.¹¹ Other resources include the VA medical centers, vets’ centers and local medical providers. The more resources that veterans can tap into, the stronger their supports will become. They will spread the word amongst each other faster than one program alone can penetrate their silent comradery.

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LECOM DEAN'S CORNER (continued from page 6)

sues and challenges. Service leadership is not a one-day activity; rather it is a constant commitment to excellence — a habit and a daily practice.

The noble principle of service: the code of practice that each student finds honed through protracted hours of study and through tireless determination of single-minded purpose; the awareness that to be able to lead others to serve, one often must be willing to go forward alone; the realization that service leaders do not wait — they shape their own frontiers, seeing challenge as opportunity rather than impediment — these attributes comprise the LECOM tenet: *Non Sibi sed Aliis* — Not for Ourselves, but for Others.

In the realm of medical education and community service, the pledge to a cause beyond oneself underscores the essence of all that comprises the LECOM mission. The promise and the possibility that is stirred in the heart of those most committed to the purpose of this

noble calling is evidenced in the result and in the accomplishment of each day in service.

Fraternally,
Silvia M. Ferretti, D.O.

LECOM STUDENT'S VOICE (continued from page 8)

Lastly, from the position of osteopathic medicine as a whole, I believe this will create a mainstay niche where osteopathy will be able to flourish.

I know that there are a number of people concerned that we as D.O.s will possibly lose part of our identity with the ongoing ever-so-tumultuous merger. I believe this is a solid way that could possibly help us retain a large part of the core of what we do. It has the potential to make us a necessary pillar in the landscape of the ever-increasing integrated medical world. I believe at this point there will need to be someone (or rather some group) somewhere who gives this bare bones model a try and see if indeed costs are cut and satisfaction goes up. Will you be that group who goes out on a limb?

Medical Update

Adapting Unmanned Aerial Vehicles for Emergency Medical Response

by *MariaLisa S.M. Itoze, OMS-I; Amy M. Young, OMS-II; Patrick P. Ottoman, OMS-II; Edward J. Fenton, OMS-III; et al.*

Abstract

There is an urgent and growing need for faster response times in emergent medical situations, such as cardiac arrest. The national average response time by emergency medical services is currently 9.4 minutes; however, it has been suggested that the actions performed in the first six minutes after a cardiac arrest are the most significant in predicting survival. In this pilot study, we investigated the use of an unmanned aerial vehicle (UAV) as an alternative means to reach victims in need of emergency medical services. We equipped a modified DJI Phantom 2 Vision, a quadcopter UAV with audio and visual capabilities, with an iPhone 5 carrying an electrocardiogram (ECG) application called Kardia. We developed a written ECG protocol with instructions that could be interpreted by a layperson in a real time situation. In order to test the efficacy of our UAV, we conducted a 100-yard flight. Our drone was able to traverse from point A (dispatch site) to point B (mock emergency site) without failure at a rate of 2.5 feet/second.

This study demonstrates that UAV technology has great application in the medical field. Not only is a UAV capable of making a successful flight while equipped with ECG technology, but a mock bystander was able to apply said technology by following our protocol. There is a specific need to utilize UAV technology in rural environments where emergency response times are their lowest. UAVs can further be used to assist emergency medical services by surveying a scene and sending information to improve the care of patients in the field. This technology has the potential to significantly decrease the amount of time it takes to get medical information and resources in an emergency situation. This is the first phase of a multi-phase study that we believe has future applications in multiple medical situations, even beyond ECG and cardiac arrest.

Introduction

An emergent medical situation requires a multi-faceted approach from first responders, bystanders and emergency operators. Although there are many different types of medical emergencies, cardiac arrest is one of the most serious, with an estimated annual mortality rate of over 300,000 in the United States alone. One of the most significant factors on patient outcome in emergency medical situations is the response time for trained personnel and proper equipment to arrive at the scene.

Response time encompasses the period from which an emergency team is notified by dispatch of a potential situation, to the time the team arrives at the scene. The National EMS Information System (NESIS) states that the average response time in the United States for adult patients is 9.4 minutes.¹ The fire and emergency medical services (EMS) department in Washington, D.C., has found that, on average, 11.2 percent of response times to emergency situations are greater than 12 minutes.² However, it has been suggested that the actions performed in the first six minutes after a cardiac arrest are potentially the most important for improving survival.³ This notion is further supported by the fact that early defibrillation and cardiopulmonary resuscitation (CPR) performed by civilians prior to EMS arrival is associated with a 6.5 percent increase in patient survival.⁴ Based on these estimates of response times and the impact of shorter response times on cardiac arrest patients, there is still potential to both shorten response times and improve survival.

With the significant impact of cardiac arrests in the U.S., and because there is a clear correlation between response time and survival, we sought to investigate a means of expediting delivery of necessary medications and lifesaving equipment to an emergency scene. Additionally, our investigation attempts to target a unique aspect not considered in the previously mentioned studies — that is, response times

in rural or underserved regions. While many first responders can adequately reach patients on the infrastructure built in urban and suburban settings, this is not always the case in less populated areas where resources are sparse. For instance, cardiac arrest has been associated with approximately half of all mountain climbing fatalities, most of which are not easily accessible by traditional means of travel.⁵ In many instances, it is not feasible for EMS to respond in an appropriate amount of time to offer a meaningful chance of survival to these patients in rural or underserved regions.

Recognizing the potential for improved response times, we examined alternative means for efficiently reaching victims in need of emergency services. With advances in technology, we considered the potential role for unmanned aerial vehicles (UAV) in emergency medical situations. The goal of this pilot study utilizing UAVs for emergency situations, was to determine the feasibility of using UAVs, equipped with medical technology, as a first line of response to emergency medical situations. An electrocardiogram (ECG) was chosen as the first medical equipment to be attached to the UAV given their role for patients in cardiac arrest or myocardial infarction.⁶ Furthermore, we investigated whether an ECG application could be delivered to the site of a mock cardiac emergency and used to deliver a valid real-time reading. Such combined technologies could expedite the process of patient assessment and facilitate EMS preparation and response.

Methods

UAV and ECG

A DJI Phantom 2 Vision, a quadcopter UAV, was chosen due to its optimal power-to-lift ratio, 14 megapixel camera, high definition (HD) video camera capabilities, and durability.⁷ To examine the UAV's ability to lift and carry useful technology, we downloaded a mobile ECG application called Kardia (Alive Technologies, Ashmore, Queensland, Australia),⁸ onto an iPhone 5 (Apple, Cupertino, CA).⁹ This ECG was chosen because of its small size and accurate ECG readings.⁸ The mobile phone/ECG device was mounted to the struts of the drone along with a counter balance, as seen in Figure 1.

ECG Protocol

In order for a lay person to apply the Kardia ECG, we developed and summarized protocol (Figure 2) for operating the Kardia system, along with the iPhone 5 and the drone mount.

Response Time Calculation

The UAV, with ECG attached, was flown 100 yards from point A (mock dispatch site) to point B (mock cardiac emergency) in this pilot study. We also assessed whether a bystander could interpret the devised protocol, properly apply the ECG, and get an accurate reading in a timely manner.

Results

We conducted one 100-yard flight. The flight time from point A (dispatch site) to point B (mock cardiac emergency site) was two minutes, or approximately 2.5 feet/second. The ECG was properly applied by our bystander utilizing our summarized written instructions (Figure 2), and an accurate ECG reading obtained.

Discussion

Our study demonstrated that UAV technology has great potential in the medical field, specifically during emergency situations. This

Figure 1 (top): Our fully equipped DJI Phantom 2 Vision UAV, with the iPhone 5 AliveCor ECG software mantled to the underside.

Figure 2: Written instructions on device usage.



AliveCor ECG Protocol

1. Remove Smartphone device from drone.
2. Remove all other electrical devices at least 5 steps away from patient.
3. Position patient so that their back is flat on the ground.
4. Launch the AliveCor ECG application as shown below:
5. Remove shirt to expose chest. EKG will be placed on the left side of the chest below the breast.
 - a. For female patients, elevate left breast to ensure accurate reading*
6. Clean area under breast with provided alcohol swab
7. Place phone on chest under breast with screen facing out, and red marker closest to middle of chest
8. Record EKG. Remain still until recording is complete.
9. Once recording is finished, you will be automatically directed to the "Journal" tab. Your EKG will be at the top of the screen (Please confirm with proper date and time).
10. Tap your EKG
11. At top right corner of EKG screen, there is an envelope icon. Tap this icon.
12. From the pop-up menu, select "EMAIL"
13. In "Send to" bar, email EKG to: projectdroneekg@gmail.com
14. Await EMT arrival

study provided evidence that a UAV is capable of successfully taking off, flying and landing while carrying the iPhone with ECG application. At the end point of the 100-yard distance, a mock bystander was able to receive the UAV, apply the ECG to a mock cardiac patient, and obtain a reliable reading.

Although our UAV contains a high definition camera and the capacity for a two-way audio system, we did not attempt to use these features in this pilot study. In the next phases, we hope to use both the camera and the audio system in order to gather visual information about a patient's condition, while allowing verbal communication of specific instructions for the patient's care prior to EMS arrival. This so-called "telemedicine," or video assisted two-way communication, has become a popular new tool for health care providers to access and interact with patients both in the pre-hospital setting and in remote areas. Receiving such an advanced picture of a presenting patient via technology mounted on our UAV would be an invaluable asset to any receiving physician or emergency service.

There is tremendous potential to utilize the above described UAV technology for medical purposes in both rural and urban environments. The efficiency of UAV technology could be especially beneficial in rural settings, where emergency response times are at their lowest.¹⁰ For example, a patient trapped in an austere, isolated terrain may benefit from a UAV that delivers certain medications or supplies that would increase his or her chance of survival while awaiting rescue personnel.¹¹ There is also a need for such technology in urban areas where unpredictable travel factors and congestion can hinder the response time and performance of emergency medical services. While emergency responders have to follow the infrastructure laid out, a UAV can fly from point A to point B in a straight line, thus avoiding unpredictable conditions on urban streets. UAVs also have a clear use by city-based fire, EMS and police agencies. Sending a medical UAV to assess victims on rooftops, those in environments where chemical or biological hazards may exist, or even in the ever-increasing active shooter/dynamic threat situation, allows faster care to be delivered without putting additional human lives in immediate risk.

This technology has been advanced by the military in the past few decades and during wartimes — specifically, when utilized for reconnaissance and for armed aerial attacks. Recently, military, government and private industry¹² have been tailoring UAVs for do-

mestic use by search and rescue teams, as well in the delivery of medical supplies to areas not readily accessible by conventional transport.¹³ With the advances and availability of global positioning satellite technology (GPS), it is also now possible for UAVs to fly a specific, preprogrammed route using GPS waypoint mapping.¹⁴ Although maximizing flight distance was not our primary concern in this first phase of our project, the future incorporation of such technology would allow for longer flights beyond the simpler, line-of-sight flight, which was the method we used in order to prove the feasibility of UAV application in an emergency. With the combined GPS-enabled cellular devices and local municipality 911 mapping systems, a future UAV could easily localize the exact setting of a patient in distress.

Additionally, with minor increases in the size and lift power of our UAV, we could obtain a significantly longer flight time. Incorporating navigation technology and mechanically adjusting our UAV to improve flight performance are two future directions for our project. These adjustments will improve the practical application of our device and expand its ability to respond to emergencies across entire cities and municipalities. It is important to acknowledge that the UAV launch point does not have to be limited to a fixed base, provided the design can be further improved to allow the device to be folded and stored in a mobile container or vehicle. The subsequent increase in portability and flexibility would allow for multiple modes of deployment and transport. An increase in lift power would allow for an increase in the variety of medical equipment that our UAV could carry. A specific potential device applicable to UAV technology is the automatic external defibrillator (AED). The smallest available automatic external defibrillator (Lifebot DEFIB) currently weighs only 2.8 pounds.

It is important to acknowledge the limitations of this study. While we included written instructions on the use of the Kardia application so that a bystander would theoretically be able to use it, the bystander in this study had been familiarized with the technology. Our study also only navigated the UAV a 100-yard distance, which is not necessarily representative of real world scenarios. Future studies should employ a non-trained bystander and an attempt to fly the UAV a longer distance. Additional runs could also make the operator more facile with the technology.

Conclusion

Our study demonstrates that unmanned aerial vehicles can be utilized in emergency medical situations and have the potential to significantly decrease the amount of time it takes to get medical technology or resources to an emergency situation. This first phase of a multi-phase project provides incentive and justification to continue exploring how UAV technology can be used not only to obtain a 12-lead EKG, but to also deliver potentially therapeutic medical interventions in innumerable settings and conditions.

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PCOM DEAN'S CORNER (continued from page 7)

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Mario E.J. Lanni, D.Sc., LL.D. (hon) Retires as POMA Executive Director

After 31 years of service to the Pennsylvania Osteopathic Medical Association (POMA), Mario E.J. Lanni, D.Sc., LL.D. (hon), retired as executive director of the association this past September. He also retired as executive director of the POMA Foundation, where he served for 31 years, and the Pennsylvania Osteopathic Family Physicians Society (POFPS), after 22 years of service.

During his decades with POMA, Dr. Lanni worked tirelessly to promote the state association and the osteopathic profession. The association thrived under his leadership, and he guided the growth of the POMA Clinical Assembly to its current record-breaking status. For members and staff, he was an endless source of information relating to the profession and the regulations governing it.

Dr. Lanni has served the osteopathic profession in various capacities for 47 years. A member of the AOA Council on Continuing Medical Education for 15 years, he was also an administrative surveyor for the Healthcare Facilities Accreditation Program and an OPTI administrative surveyor.

Dr. Lanni served as president of the Association of Osteopathic State Executive Directors, the Pennsylvania Osteopathic Hospital Association, the Harrisburg Area Trade Association Executives and the Parkway West Rotary, as well as chairman of the Western Area YMCA in Pittsburgh, Pennsylvania. He is a member of numerous osteopathic and medical professional organizations and other executive-related organizations.

A graduate of Temple University School of Business and Management, Dr. Lanni holds a certificate in accounting with additional studies in hospital administration and public health administration.

Dr. Lanni received an honorary Doctor of Science degree from the Lake Erie College of Osteopathic Medicine in 2001 and an honorary Doctor of Laws degree from the Philadelphia College of Osteopathic Medicine in 2006. He also received the POMA Distinguished Service Award in 1989, the POFPS Distinguished Service Award in 2000, the American Osteopathic Association (AOA) Presidential Citation in 2003, and the AOA Bob E. Jones Award in 2012.



(clockwise from top):
Dr. Lanni addresses the
AOA House of Delegates
after receiving the Bob E.
Jones Award in 2012.

Dr. Lanni receives the
Presidential Citation from
AOA Outgoing President
and POMA member
Anthony A. Minissale, D.O.
(left), and AOA Incoming
President Darryl A.
Beehler, D.O., in 2003.

Dr. and Mrs. Lanni enjoy
the POMA Centennial
Gala in 2003.

Dr. Lanni initiated a
Fit for Life Relay for the
POMA 2009 Clinical
Assembly.



H. Michael Zal, D.O., Passes Away

On December 16, 2016, H. Michael Zal, D.O., past editor-in-chief of *The Journal of the POMA* (*The JPOMA*), passed away. A psychiatrist for 43 years, he was a clinical professor at the Philadelphia College of Osteopathic Medicine (PCOM).

During his six years as editor-in-chief of *The JPOMA*, Dr. Zal added several new features, including columns designed to reach D.O.s at every stage of their osteopathic journey. He also guided changes to the POMA Annual Clinical Writing Contest. Along with the Publications Committee, Dr. Zal revised the submission guidelines, significantly raising the requirements for inclusion in the final judging.

The author of five books, Dr. Zal received many awards for his writing, including the Eric W. Martin Memorial Award and the Francis Larsin Memorial Award for excellence in medical writing from the American Medical Writers Association. He also had his own cable television show for four years, "Mental Notes with Dr. Michael Zal," for which he received two awards for excellence.

Dr. Zal was a fellow of the American College of Osteopathic Neurology and Psychiatry and a distinguished life fellow of the American Psychiatric Association.

Dr. Zal is survived by his wife, POMA past president Alice J. Zal, D.O., two children, two grandchildren and a sister. Contributions in Dr. Zal's memory may be made to The Alice and Michael Zal Scholarship at PCOM, 4170 City Avenue, Philadelphia, PA 19131.



(Left) Dr. Zal with his wife Alice Zal, D.O., during her 2010 installation as POMA president.



Dr. Zal presents the Golden Quill Award to Michael D. Sobolewski, D.O., in 2011.

Gerald Scharf, D.O., Passes Away

Gerald Scharf, D.O., passed away on December 16, 2016. He was a past editor-in-chief of *The Journal of the POMA* and cardiology session coordinator for the POMA Clinical Assembly.

Dr. Scharf, who resided in Sarasota, Florida, at the time of his passing, previously practiced with Philadelphia Cardiology Associates. He was also a clinical professor of medicine at Thomas Jefferson University Hospital in Philadelphia.

During his 10 years as editor-in-chief of *The Journal of the POMA*, Dr. Scharf added columns by the deans of the Lake Erie College of Osteopathic Medicine and the Philadelphia College of Osteopathic Medicine. He also created "Poet's Potpourri," which ran throughout his term as editor-in-chief.

Dr. Scharf was a fellow of the American College of Osteopathic Internists, the American College of Cardiology and the College of Physicians of Philadelphia.

He is survived by his wife Marilyn, son Glenn, and three grandchildren.



(Left) Dr. Scharf and his wife Marilyn at the 2003 POMA Clinical Assembly.

Dr. Scharf presents the Golden Quill Award to Jessica R. Terrana, D.O., in 2009.



OUT OF MY MIND

Samuel J. Garloff, D.O.



Samuel J. Garloff, D.O.

"To everything there is a season, and a time to every purpose under the heaven: a time to be born, and a time to die..." Ecclesiastes 3, 1-2.

You may be familiar with the first eight verses sung as "Turn, Turn, Turn." The song was first recorded in 1952 by Pete Seeger and in 1965 by The Byrds. It reached number one on the pop charts in 1965. The quotation is interesting at this time of year for two reasons: First, it represents what is known as open source or common literature. Secondly, as we close out this year, it reminds us that this season, also known as 2016, is about to end and a new season is soon to be starting.

In tribute to 2016 on the national level, it would appear that multiple stories have unfolded. Three of the most significant are Bob Dylan receiving the Nobel Prize in literature, Donald Trump becoming president-elect, and the Chicago Cubs winning the World Series for the first time in 108 years.

Obviously, we could highlight a dozen or more events for the year; however, just for fun, let's take a closer look at the above three.

Those of us with enough gray in our hair lived through a time when, as a student, if you were found to be plagiarizing, you were

expelled from your studies. Your undergraduate school could readmit you at a later date after a review process. Bob Dylan has been accused on several occasions of plagiarism, most publicly in 2010 by Joni Mitchell. His supporters state that he didn't plagiarize, "he was sampling." His detractors scoffed at this description, stating with a feeling of certainty, that he in fact lifted entire lines of the Civil War poet Henri Timrod. Others who have studied

his music have described a long list of authors from whom he allegedly has taken lines. This list includes Jack London. I doubt that the lyrics written by Dylan could compete with the philosophical conjectures of the captain of the Seawolf. Perhaps this is why the Nobel committee never asked for my opinion.

Donald Trump is president-elect. To state that his campaign was unusual or unorthodox is to trivialize its meaning. It appears at this moment that his election may alter for generations, relationships among ourselves, as well as our relationships with the sovereign nations of the world. Will this be good or not? I suspect that time will answer the question for us. I suggest that under no circumstances should Vladimir Putin be underestimated. Those of you with a knowledge of history have no doubt noted that, quietly over time, he has built an incredibly strong relationship with the Orthodox Christian church. He is also a man who understands the significance of espionage and intelligence. He appears to be able to combine the lessons of the past with the complexities of the present.

Having stated the above, the arrival of the new year comes filled with great potential. Mr. Dylan may use his Nobel speech to applaud the great literature masters who came before him and encourage the proliferation of his art. Mr. Trump may well steer this country in a different direction allowing us to prosper financially without neglecting the physical, emotional and intellectual needs of our citizenry.

Potential is a wonderful thing, but as author Margaret Atwood admonishes us, "potential has a shelf life." In one short year, we will see what both gentlemen do with the potential they now have.

The end of the season is a bittersweet thing. It signifies the end of things and lost potential, but allows for the arrival of the new with even more hopeful potential.

Reflections are personal and I have shared some of mine with you. Without the human psyche, there is no humanness. Allow me to share one more remembrance with you – rest well my friend, you exceeded your potential.

Oh yes. I almost forgot. "Go, Cubs, Go!"

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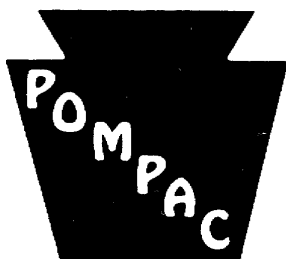
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CME Quiz

Name _____

AOA # _____

1. *The White Paper* 2013 refers to:
 - a. a research article on PTSD.
 - b. a resource for family counseling.
 - c. government plans to integrate art therapy into treatment.
2. Art therapy is provided by:
 - a. therapists
 - b. social workers
 - c. physicians
 - d. artists
 - e. all of the above
3. Art therapy includes:
 - a. painting
 - b. music
 - c. crafts
 - d. anything creative
4. How long is the average response time for emergency medical services?
 - a. 5.2 minutes
 - b. 7.5 minutes
 - c. 9.4 minutes
 - d. 11.5 minutes
5. ECG data is transmitted via:
 - a. WiFi unsecured network
 - b. WiFi secured network
 - c. radio
 - d. computer
6. All of the following were specifically mentioned in this paper as using UAV technology, except:
 - a. academia
 - b. military
 - c. government
 - d. private industry

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Answers to Last Issue's CME Quiz

1. b
2. false
3. a
4. false

*(Questions appeared
in the September 2016
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