



# the JOURNAL

of the Pennsylvania Osteopathic Medical Association  
March 2018

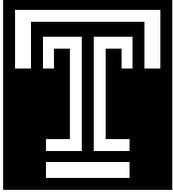
## The Joy of Medicine



## Our Great Stories

JOIN US ON SOCIAL MEDIA!





Temple Physicians, Inc.

**Outpatient Primary Care, Urgent Care, & Specialty Opportunities**  
Philadelphia, Pennsylvania

Temple Physicians, Inc. seeks qualified physicians for our primary care, urgent care and specialty practices located in Philadelphia, PA.

Temple Physicians, Inc. is a multi-specialty group practice in and around Philadelphia that is a part of Temple University Health System's network. Established in 1996, TPI have grown to become one of the largest and most-respected physician organizations in the area consisting of more than 400 employees caring for patients in a broad range of community-based sites.

TPI doctors practice medicine in a wide range of medical specialties, including: Family Medicine, Internal Medicine, Obstetrics and Gynecology, Pediatrics, Bariatric, Cardiology, Gastroenterology, Geriatrics, Hematology/Oncology, Nephrology, Orthopedics and Sports Medicine, and Pulmonology.

Temple Physicians offer a competitive salary plus comprehensive benefits including a full insurance package of: health, dental, vision, life, pharmaceutical coverage, medical malpractice insurance, paid vacation and disability at group rates.

### **Candidate Qualifications**

- D.O or M.D. with successful completion of an accredited residency training program.
- BC/BE in Family Practice, Internal Medicine, or other appropriate specialty.
- Exceptional communication and customer service skills.
- Ability to work and flourish in a fast-paced and patient-centric environment.
- Ability to obtain medical licensure in Pennsylvania.

Interested candidates should submit a resume to the address below:

Marc P. Hurowitz, D.O., MBA, FAAFP, Chief Executive Office TPI, C/O Julie Brissett, Assistant Director, 3420 N. Broad Street, Philadelphia, PA, 19140, Email: [julie.brissett@tuhs.temple.edu](mailto:julie.brissett@tuhs.temple.edu) Phone: 215-707-4419 Fax: 215-707-9452.

Temple is an Affirmative Action/Equal Opportunity Employer and strongly encourages applications from women, minorities, veterans, and persons with disabilities.



THE

# Journal OF THE PENNSYLVANIA OSTEOPATHIC MEDICAL ASSOCIATION

March 2018 / Vol. 62, No. 1

## ASSOCIATION OFFICERS

**President** — George D. Vermeire, DO  
**President-elect** — Joan M. Grzybowski, DO, FACOFP  
**Vice President** — Pamela S.N. Goldman, DO, MHA, FACOI  
**Secretary/Treasurer** — William A. Wewer, DO, FACOFP  
**Immediate Past President** — Anthony E. DiMarco, DO, FACOFP  
**Chief Executive Officer** — Diana M. Ewert, MPA, CAE

## EDITORIAL STAFF

**Editor-in-Chief** — Mark B. Abraham, DO, JD  
**Editor Emeritus** — Leonard H. Finkelstein, DO, FACOS  
**Managing Editors** — Diana M. Ewert and Brenda R. Dill  
**Layout** — Brenda R. Dill

## EDITORIAL CONSULTANTS

**Chairman:** Mark B. Abraham, DO, JD  
**Anesthesiology:** James T. Arscott DO, *chairman*  
**Pain Mgmt:** Harry Glass, DO; Jan T. Hendryx, DO; Christopher A. Davis, DO  
**Acupuncture:** Gregory W. Coppola, DO, Silvia M. Ferretti, DO; Jan T. Hendryx, DO  
**Dermatology:** Anthony Benedetto, DO; Richard Johnson, DO; Jana Lynn Ebbert, DO  
**Family Practice:** Marc A. Monaco, DO, *chairman*  
**Geriatrics:** Katherine E. Galluzzi, DO; Robert A. Weisberg, DO, *co-chairmen*  
**Medicine:** Joseph M.P. Zawisza, DO, *chairman*  
**Alcoholism, Drug Addiction, Toxicology:** Joseph M. Kosakoski, Jr., DO, *chairman*  
**Allergy & Immunology:** Timothy Craig, DO; James DeAngelo, DO; Timothy McCloskey, DO  
**Cardiology:** Peter F. Stracci, DO  
**Critical Care:** Michael A. Venditto, DO  
**Emergency Medicine:** Gary W. Welch, DO, *chairman*  
**Gastroenterology:** Richard E. Moses, DO, J.D.; Glenn S. Freed, DO  
**General Internal Medicine:** Joseph M.P. Zawisza, DO; Pamela S.N. Goldman, DO  
**Infectious Diseases:** Robert S. Jones, DO; David H. Loughran, DO; Amanda E. Wehler, DO  
**Metabolic Diseases:** Jeffrey S. Freeman, DO; James E. McCann, DO; Marc A. Vengrove, DO  
**Nephrology:** Michael L. Levin, DO; Edward J. Zaloga, DO  
**Neurology:** Jeffrey J. Esper, DO  
**Oncology/Hematology:** John Conroy, Jr., DO; Carlin McLaughlin, DO; Jeffrey Stevens, DO  
**Pulmonary:** Gilbert E. D'Alonzo, Jr., DO; Michael A. Venditto, DO  
**Urgent Care:** Mark B. Abraham, DO; Glenn R. Ortley, DO  
**Obstetrics & Gynecology:** Ralph E. Aldinger, Jr., DO, *chairman*  
**Human Sexuality:** Richard A. Ortoski, DO  
**Osteopathic Principles & Practices:** Alexander S. Nicholas, DO; Evan A. Nicholas, DO, *co-chairmen*  
**Pathology:** Amanda E. Wehler, DO  
**Pediatrics:** Michael E. Ryan, DO, *chairman*  
**Allergy & Immunology:** Timothy J. Craig, DO; Timothy J. McCloskey, DO  
**Cardiology:** Harry P. Flanagan, III, DO  
**Neonatology:** Steven M. Snyder, DO  
**Physiatry/Rehabilitative Medicine:** Silvia M. Ferretti, DO, *chairman*  
**Psychiatry:** Timothy S. Mitzel, DO; Elizabeth A. Ramsey, DO  
**Radiology:** Richard M. Purse, DO, *chairman*  
**Diagnostic Radiology & Nuclear Medicine:** Richard M. Purse, DO  
**Invasive Radiology:** Terry N. York, DO  
**Radiotherapy:** Ellen M. O'Mara, DO; Desiree Lerro, DO  
**Ultrasonography:** David A. Levin, DO  
**Rheumatology:** Richard A. Pascucci, DO  
**Sports Medicine:** Patrick F. Leary, DO, *chairman*  
**Surgery:** Theodore S. Eisenberg, DO, *chairman*  
**Cardiovascular:** Joseph J. Stella, DO  
**General Surgery:** Theodore S. Eisenberg, DO; Steven Katz, DO  
**Neurological:** Richard B. Kanoff, DO  
**Ophthalmology:** Elena R. Farrell, DO  
**Orthopedics:** John J. McPhilemy, DO  
**Otorhinolaryngology:** Carol L. St. George, DO  
**Plastic & Reconstructive:** Sherman N. Leis, DO  
**Proctology:** Jerome A. Greenspan, DO  
**Urologic:** Laurence H. Belkoff, DO; George T. Zaborian, III, DO  
**Trauma:** Susan M. Baro, DO; Jan A. Oleginski, DO; Regan P. Shabloski, DO

## CONTENTS

- 4 From the Editor's Desk
- 5 Out of My Mind
- 6 LECOM Dean's Corner
- 7 PCOM Dean's Corner
- 8 A Student's Voice — PCOM
- 9 POMA 100th Annual Clinical Assembly Information and Registration Form
- 13 About the Authors
- 13 Index to Advertisers
- 14 Medical Update  
Full Risk, Full Reward: Managed Care  
*Anna E. Augustin, OMS-IV*
- 17 Medical Update  
Criteria and Controversies Regarding Surgical vs. Conservative Management of Fractures of the Shoulder Girdle: A Meta Analysis  
*Chad Walls, DO*
- 22 Information for Contributors
- 23 CME Quiz

**Connect with POMA on Social Media —**  
Click on the Icons or Search for Us with Our Handles

 facebook	@POMADOs
 twitter	@POMA_DOs
 LinkedIn	Pennsylvania Osteopathic Medical Association (POMA)

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.

© 2018 by the Pennsylvania Osteopathic Medical Association. All material subject to this copyright may be photocopied only for noncommercial educational or scientific uses. Permission to reprint articles or portions of articles may be obtained by writing to the managing editor. Proper credit and copyright notice should accompany all reprinted material. We reserve the right to edit material submitted for clarity and length. Opinions expressed by individuals through the pages of this magazine do not necessarily represent the official position of the Pennsylvania Osteopathic Medical Association.

# FROM THE EDITOR'S DESK

Mark B. Abraham, DO, JD



Mark B. Abraham, DO, JD  
Editor-in-Chief

So, anything interesting happen this past winter? Crazy snow? March Nor'easters? Tom Brady fumbles late in the Super Bowl and the Patriots lose? Who won Super Bowl LII, could it have been the Eagles? Most of us in Eagle Nation are still in shock. Hopefully, next year we can have an all Pennsylvania battle. Personally, if the Steelers made it, I thought the game should be moved from Minnesota to State College for the Commonwealth Clash. Ok, enough (for now on the Super Bowl). We know the Steelers "Got Six?" (I actually like that shirt and bumper sticker), but this first for the Eagles is just indescribable as to how much it means to Eagle Nation.

The theme of this issue is what we enjoy about our profession and/or why we chose it. I think you will enjoy the various submissions. They all cut to the essence and importance of the idea of this theme.

As for what I enjoy, it is relatively simple. While I never know what will walk through the office door, there is always the possibility of seeing something for the first time or the unique nature of complaint or injury. That can always lead to the "great story" which many of us in medicine and health care appreciate. We all have our share. As I wrote in the last Journal, the entire reason a fraternity brother of mine chose Emergency Medicine was for the stories. Things which he saw and experienced on his rotation, which was in the Northeastern part of Pennsylvania, were too enjoyable.

Another aspect of medicine is that we have the ability to heal. In law, clients are usually less happy with results than happy. Why? Well in criminal law, if a person is found guilty it is the lawyer's fault (from the client's perspective) and never the client's for actually committing the crime. In civil litigation, often plaintiff clients have expectations of larger recoveries (settlements or judgments) than what they receive. On the defense side, money paid is often "too much" since no-one wants to pay. I could give many more examples from other areas of law, but you get the idea. In medicine, we heal. People are appreciative. Is it always that way? Of course not. There may be bad outcomes or realities which patients do not like to face. There may be issues people don't like which are outside of the actual care and treatment (office staff, office layout, wait times, etc.), but for the most part we get to help heal

patients and there is personal satisfaction in that which you can share with the patient and sometimes family as well.

Many of you know that my father is a retired general surgeon. I first observed him in the OR at the age of 5. Scrubs were obviously too large for me. The sterile gown was like a tent on me but was safer for me to wear, so I stood on a stool, just far enough away from the table so I could see as much as possible. With the hat, mask and gown, I probably looked like Casper the Friendly Ghost. But I loved it. Was that when I decided to be a physician? I don't know; it certainly was memorable.

I also remember his various stories, the "world's worst hit man," the teenage girl crowning when in his office complaining of abdominal pain and 100% denied being pregnant, the drug dealer who swallowed bags of cocaine and a court order was needed to perform the surgery, I could go on. I recently learned of a story from when he was younger which he feels motivated him to become a surgeon. He was visiting an Aunt and Uncle in West Virginia. A neighbor had just sliced his hand open and went over to his Uncle's house for evaluation. Right in the house, while still in his pajamas, his Uncle poured whiskey over the hand and sutured him right there in the house. As my Dad said, "I thought that was the neatest thing, that he could do that."

Yes, we all have stories. What makes them great and entertaining is being able to share them (without violating privacy).

Do I have stories from the short time I actively practiced defense litigation? Absolutely. Unless someone else is a lawyer or involved in law, those stories are hard to share. Not everyone can understand or appreciate them. Almost everyone can relate to the medical stories. Not because everyone is involved in health care, but because we have all been patients on some level at some point or will likely be in the future, no matter how minor.

Thank you to everyone who has submitted Letters to the Editor and guest articles. A congratulations to Dr. Amy Davis. One of her submissions has been requested for republishing in another state's medical journal.

Everyone, please keep them coming. Our next issue will concern research. While it will

*(continued on page 20)*

## *Eureka or Eurisko?*

It was the 50s. I was taking trumpet lessons at Osiecki's on Parade Street in Erie, Pennsylvania. At the time, I was progressing nicely. My father surprised me by informing me that it was time to give up my rental horn for a new instrument. Fortunately for me, my instructor was present at the store. He selected a Holton Stratodyne. I had no way of knowing at that time that it was one of the best trumpets ever produced.

Others started to notice my ability and I started to play in a number of different dance bands in the Erie area. As time moved on, I was quite accustomed to throwing my horn on the backseat of my Studebaker and playing in bars and recital halls throughout Northwest Pennsylvania and eventually into New York and Ohio. Life was good. I was smokin' and jokin' and playin' music. I fondly remember discussions with Maynard Ferguson and Stan Kenton when they would play at Rainbow Gardens in Erie. It never occurred to me not to engage in conversation with them as we played "pretty for the people" albeit in different venues.

Off to college to major in music. During Thanksgiving break my first year I received a call from a fellow named Dale Higgins. I had played in his dance band in the past and he called to see if I was available for a bus trip that night to Warren, Pennsylvania. His lead man was down and he was in a bind. I was glad to help. That night changed my life. The new vocalist that night eventually became my wife and we are closing in on 50 years together. After we met I changed my major to mathematics. I determined that a life on the road playing music would not be compatible for life together.

Fast-forward. We are now living in Baltimore, Maryland. I'm working at an ESSO station in the summer, finishing my master's degree and teaching junior high school mathematics in Towson, Maryland. One evening I received a call from a friend of mine from undergraduate school. He had been teaching history in Plymouth, Pennsylvania. He came to visit us. He was in the Air Force. He was a student at PCOM on a HPSP scholarship. I was not surprised as he had wanted all his life to be a physician.

Being an opportunistic organism, I had him detail how to apply to both PCOM and the military scholarship program. There was only one problem. I had never taken organic and inorganic chemistry. I spent the next summer taking organic chemistry in the morning, inorganic chemistry at night and labs all day long. PCOM accepted me and I was on my way.

After graduation from PCOM I interned at Walter Reed. After my internship I volunteered to become a general medical officer prior to selecting a residency. The advantage of this was that GMOs had first pick of residencies when they applied. I enjoyed my years of general medicine. I had intended to go into family practice as a resident. Instead I had a most unusual case present itself to my office at Rock Island Arsenal in Illinois. It was a civilian emergency and the patient was an undiagnosed psychiatric emergency. I arranged for hospitalization with a local psychiatrist who then invited me to follow the patient's progress with him in the hospital. He talked to me continuously about the needs in psychiatry and encouraged me to enter the field. I applied for and was accepted into a psychiatric residency at Dwight David Eisenhower Army Medical Center, Fort Gordon, Georgia.

After leaving the military we returned to Pennsylvania and I entered private practice in Pottsville. One year later our son left for college. Three years after that our daughter left for college. I had entered into hospital administration and now had more time available for attendance at district meetings and POMA conventions. One thing led to another and I eventually became a trustee and then an officer. One of the great privileges of my life was to be president of the organization.

I no longer played music and my wife no longer sang. However, I loved my private practice, my clinic practice, my time in administration and the ability on occasion to lecture. A few years ago at a conference, Dr. Tom DeGregory from District 8 and I talked about music. He is an accomplished percussionist. Those who know him are, of course, aware of that. He encouraged me to return to my musical roots.

*(continued on page 21)*



Samuel J. Garloff, DO

# LECOM DEAN'S CORNER

## Lake Erie College of Osteopathic Medicine

### *A Physician's Joy — Not by Accident*



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

Having grown up in Erie, Pennsylvania, the daughter of hardworking, faith-filled Italian-American parents, I chose my path into medicine literally by accident.

The year was 1969. I was a 17-year-old girl with visions of pursuing a career in the art field. All of that changed when a car in which I was a passenger was struck violently by another vehicle with an intoxicated driver behind the wheel.

The searing impact thrust me through the windshield. Seriously injured, with head trauma and struggling to hold on to life, my life's path would be revealed in that sentinel moment.

My journey to finding the joy of medicine soon would come into focus.

In the weeks and months that followed the horrific accident, I was attended to by many caring and capable osteopathic physicians. After my hospitalization and as I labored to rehabilitate my broken body, they warmly welcomed me into their offices, working with me to help me regain strength, performing OMT on my injured limbs, and all the while, nurturing my fractured spirit.

Hopes that seemed dashed as a result of the accident slowly transformed into possibilities. With my loving family to support me, I was renewed further by the hopeful spirit of the medical professionals who cared for me, who encouraged me, and who assured me that although everything was different than once it had been, life was still full of possibilities and purpose.

It has been said that we come to our purpose in life not by accident, rather by Providence. I came to find joy in medicine by feeling personally the incremental and positive changes that came about through the dedicated work of those capable and compassionate physicians who treated me. I wanted to share the joy of my new found hope with others. My life wasn't over, my options were *not* limited, my entire outlook broadened.

I attended Gannon University and my desire to take up the calling of medicine became increasingly important to me. Through my

personal experience — that of finding joy in rehabilitation, of appreciating even the smallest of gains as a reward — the positivity that I felt in the field of rehabilitation stirred within me. Here was joy!

As I followed my brothers into the Philadelphia College of Osteopathic Medicine, the full view of my "accidental" path grew clearer. Helen Keller once stated that "Life's true happiness is attained through fidelity to a worthy purpose."

One step at a time, edging closer to the path that, perhaps, already was chosen for me by my Creator, I delved into seeking to restore others in the same way that I had been restored.

From the time of my early girlhood, I had worked a local bowling alley where I spent fulfilling hours serving the disabled. There, at the lanes, bodies were strengthened and tested, camaraderie engaged the mind, and friendship calmed the spirit. I recalled the hopeful smiles at each of their accomplishments as a testament to the calling of medicine. The threads of an ever-instructive fabric of life revealed to me that the osteopathic philosophy was the true healing philosophy.

As the years past and I reflected upon that fateful moment in 1969, I felt an almost inexplicable gratitude for the traumatizing event that would, in its fruition, bring about so much hope.

It would be another accident — a broken shoulder — far less severe, but nevertheless transformative, that would take me out of my active medical practice and joyfully into a host of administrative duties at LECOM. My time was dedicated to establishing a thriving medical college at Seton Hill in Greensburg, Pennsylvania.

My journey continued through teaching as I sought to bring to others the profound hope that had urged me onward. I sought to give back; and *to give forward* to young people who stand on the precipice of their own self-discovery. The classroom is, for all of us, a laboratory of the mind. For education is not a demonstration of the knowledge of the instruc-

*(continued on page 21)*

# PCOM DEAN'S CORNER

## Philadelphia College of Osteopathic Medicine

*The great question we as physicians must answer is: Why do I love medicine? What about it brings me joy? For me, knowing that I have a hand in educating the future physicians of this country brings me a great deal of joy. My longtime colleague, Robert Cuzzolino, EdD, vice president for graduate programs and planning at PCOM, shares that joy, and as someone who did not come to PCOM as a physician, it has been heartening to see the tremendous role he has played in the development of our College and ultimately, our profession.*

*Bob was recently honored with the PCOM Alumni Association Certificate of Honor at our Founders' Day celebration, and in it, he spoke of his love of the institution, and the joy he feels from being a part of educating the health care providers and innovators of the future. An edited excerpt of his remarks follow.*

*Fraternally,  
Kenneth J. Veit, DO*

I first set foot on the PCOM campus in September, 1978 for my first position as assistant director of admissions and student affairs, and that began the process of developing what turned out to be a lifelong commitment to PCOM and what it stands for.

On the list of past winners of this award, I see names of people who taught me that osteopathic medicine was more than a set of physical maneuvers to be learned, but rather, that it was a belief — and a complex theory of integrated physiology and anatomy. They taught me early on that osteopathic medicine is a unique and powerful way to view health and disease, to define the role of the physician, to recognize the healing capacity of the human body, and most importantly, to underscore the relationship of the physician to the patient rather than the relationship of the physician to the disease or its symptomatology.

One afternoon many years ago, I asked a colleague: "If you took OMT away from a DO, would it render him or her an MD? And conversely, if an MD acquired OMT skills, would that elevate him or her to a DO?"

"Robert," he said, "You are thinking about osteopathic medicine allopathically. Our treatments are not an instrument to be pulled from a toolbox — OMT is the rose at the end

of a philosophical vine. The vine is the way we think."

I believe that philosophical vine is still growing and developing, and I see its future in the eyes of every young osteopathic physician-in-training at PCOM.

I was fortunate to have been cast in the role of a change agent at PCOM, and I've found myself to be part of a constantly changing institution. I consider myself among the very few and the very fortunate to have had that opportunity. As I near the end of my tenure, I have one piece of advice for young people starting their careers: You can stay young if you join an organization or profession that is ripe for change, and throw yourself into the middle of it.

Since 1978, I have seen PCOM modernize its curricula, embrace the new technologies, become regionally accredited, expanded our enrollments, ignite research, make a commitment to community-based outpatient care, expand our academic programs, open a new campus and establish a School of Pharmacy. And, we've grasped our imperative as the leaders of neuro-musculoskeletal science to establish a doctorate in physical therapy, with the first students arriving this summer.

Many organizations measure their worth based on their capital assets, but as a college, we have invested most heavily in our *intellectual* capital — which is the real worth of any institution of higher education. It has been both a thrill and an honor to serve an institution whose intellectual capital has grown steadily for the four decades that I have been a part of PCOM.

Looking forward, we must continue to define our values based on the osteopathic philosophy, and the view of the student as scholar-practitioner. Those values can be evolved and expanded upon to make our students effective health care providers for the 21st century, and beyond.

Our success is not measured by what we on the faculty, the staff or the leadership achieve, but rather by what our students achieve. I firmly believe that PCOM's best years lie ahead of us, and they will be built on the shoulders of our students and alumni.



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

# A STUDENT'S VOICE — PCOM

*Elisa Giusto, OMS-IV and Olivia Hurwitz, OMS-IV*

## *The Joy of Medicine*



*Elisa Giusto*  
PCOM OMS-IV



*Olivia Hurwitz*  
PCOM OMS-IV

Delving down to the root of medicine, “patient” comes from the Old French “paciēt” meaning “enduring without complaint” and the Latin “patientem” meaning “suffering” while “physician” comes from the Old French “fisque” meaning “art of healing” and the Ancient Greek “phusike episteme” meaning “knowledge of nature.” We aim to tread that fine line between the art and science of medicine and chose to pursue a career as primary care physicians for multiple reasons. We look forward to the opportunity to solidify lifelong relationships with our patients, satisfy our thirst for knowledge, and advocate for an optimal health care system. As former Girl Scouts and active volunteer members in our community, we have come to realize that there is no limit to what can be accomplished with support and an unwavering mindset. As current osteopathic medical students, we strive for social justice and appreciate the multifaceted unity of the mind, body and soul. We aspire to sharpen our Osteopathic Manipulative Treatment techniques and utilize this extra skill set to offer relief to our patients. As women in a male-dominated field, we appreciate that the basic human rights of kindness and respect have no data limit or expiration date. As current residents of Pennsylvania, we aim to serve our community members of all ages from diverse upbringings to best prepare us to provide optimal health care services. For when those exam room doors shut across the private practices and clinics throughout Pennsylvania, we endeavor to be one of those physicians who balance the “art of healing” with “knowledge of nature” in order to relieve the “suffering” of my patients all the while “enduring without complaint.”

A large portion of our reflections on medical school and beginning our careers in medicine has been focused on the fact that we are about to have an enormous and direct effect on the lives of our patients, and the great responsibility that comes with such great power (shout out to Uncle Ben for teaching us the most valuable and quotable of all life lessons). In fourth year, however, with a short reprieve from exams and formal didactics, we have finally come to experience the more entertaining aspects of medicine. We’ve been exposed to a wide variety of rotations that show the breadth of what “practicing medicine” means: we’ve worked inpatient and outpatient, participated in consults and home visits, seen high-income and low-income clinics, learned about general practice and sub-specialties; we’ve encountered hands-off and hands-on physicians, physicians who have taken on a more administrative role, and physicians who teach. The beauty of becoming a doctor is that our futures can be molded to work with whatever patient population we choose, and however we choose. We have the opportunity to explore our passions and interact with a diverse group of people. We have seen all that medicine can offer, and all that we can offer it, and it’s exciting to be on the precipice of residency, about to be free to choose how and what we want to practice, knowing every day can be unique, if we want it to be.

It’s easy to get caught up in the drudgery of our daily routines, all the testing and hoops we’ve had to jump through, and to forget all the interesting opportunities ahead of us, truly within our reach.

# Improving Patient Care Through CME

The Pennsylvania Osteopathic Medical Association presents the  
**Clinical Assembly & Scientific Seminar**  
**May 2-5, 2018**

Radisson Valley Forge & Valley Forge Event Center, King of Prussia, Pennsylvania



**110<sup>TH</sup>  
ANNUAL**

## EDUCATIONAL SESSION TOPICS

- BLS for Physicians
- Cardiology
- Endocrinology
- Family Medicine Pearls
- Pediatrics
- Sports Medicine & Orthopedics
- OMM Workshop
- CPSL Course
- PA Licensure Requirements  
*(including opioids, risk management, patient safety)*

## EXHIBIT & SESSION HOURS

### EXHIBIT HOURS

Wed., May 2 ..... 9:00 am - 4:00 pm  
Thur., May 3..... 9:00 am - 4:00 pm  
Fri., May 4..... 9:00 am - 12:00 pm

### SESSION HOURS

Wed., May 2 ..... 9:00 am - 10:00 pm  
Thur., May 3..... 7:00 am - 9:00 pm  
Fri., May 4..... 7:00 am - 5:15 pm  
Sat., May 5..... 7:00 am - 5:00 pm

## CME CREDITS BY CATEGORY

**CATEGORY 1A\***  
*(lectures/workshops)*  
**34 CREDITS**

**CATEGORY 1B**  
*(audiovisuals)*  
**6 CREDITS**

**TOTAL 40 CREDITS**

*\* Program includes opioids, CPSL, patient safety and other PA licensure requirements.*

## Hotel Room Reservations

POMA's 110th Annual Clinical Assembly & Scientific Seminar will be held at the Radisson Valley Forge & Valley Forge Event Center. The conference site has two hotels, which are connected with interior access. Room blocks are available at both the Radisson Hotel Valley Forge and the Valley Forge Casino Tower. To reserve your room in the **Radisson Hotel Valley Forge**, call (800) 333-3333 or visit <http://bit.ly/POMARadissonRooms>. To reserve your room in the **Valley Forge Casino Tower**, call (800) 596-0341 or visit <http://bit.ly/POMATowerRooms>.

**QUESTIONS? Call the POMA Central Office and a staff member will gladly assist you:**

717.939.9318 ext 170 or toll-free in Pennsylvania 800.544.POMA ext 170 | f: 717.939.7255 | e: [cme@poma.org](mailto:cme@poma.org)

# 110TH ANNUAL CLINICAL ASSE SCHEDULE

## WEDNESDAY, MAY 2

<b>REGISTRATION</b>	New Jersey Room	8:00 AM – 6:30 PM
<b>EXHIBITS</b>	Pennsylvania Room	9:00 AM – 4:00 PM
<b>POMA CLINICAL ASSEMBLY OPENING SESSION INTRODUCTION</b>	Delaware Room	9:00 AM – 9:30 AM
<b>COMBATING THE OPIOID AND HEROIN CRISIS IN PA</b> - Attorney General Josh Shapiro	Delaware Room	9:30 AM – 10:00 AM
<b>THE FEDERAL APPROACH TO PAIN MANAGEMENT</b> - David Pugach, JD, AOA SVP Public Policy	Delaware Room	9:30 AM – 10:00 AM
<b>PAIN MANAGEMENT: A PALLIATIVE CARE APPROACH</b> - Katherine E. Galluzzi, DO	Delaware Room	9:30 AM – 10:00 AM
<b>POMA CLINICAL WRITING CONTEST AWARDS PRESENTATION</b>	Delaware Room	11:45 AM – 12:00 PM
<b>BASIC LIFE SUPPORT FOR PHYSICIANS</b> - John W. Becher, DO, and staff	Parkview Ballroom	9:00 AM – 12:00 PM
<b>BREAK – EXHIBITS</b>	Pennsylvania Room	12:00 PM – 1:00 PM
<b>CARDIAC ONCOLOGY</b> - Deborah W. Sundlof, DO	Delaware Room	1:00 PM – 2:00 PM
<b>CAROTID ARTERY DISEASE MANAGEMENT</b> - Bryan W. Kluck, DO	Delaware Room	2:00 PM – 3:00 PM
<b>BREAK – EXHIBITS</b>	Pennsylvania Room	3:00 PM – 3:30 PM
<b>OSTEOPATHIC COMMENT IN CARDIOLOGY</b> - Jennifer A. Lorine, DO	Delaware Room	3:30 PM – 3:45 PM
<b>ATRIAL FIBRILLATION UPDATE</b> - Kristen Rainear, DO	Delaware Room	3:45 PM – 4:45 PM
<b>LEFT ATRIAL APPENDAGE OCCLUSION</b> - Benjamin A. D'Souza, MD	Delaware Room	4:45 PM – 5:30 PM
<b>LEFT VENTRICULAR ASSIST DEVICES AND OTHER MECHANICAL ASSIST DEVICES IN CARDIOTHORACIC SURGERY</b> - Matthew L. Williams, MD	Delaware Room	5:30 PM – 6:30 PM
<b>ATTENDEE WELCOME RECEPTION</b>	Pennsylvania Room	6:15 PM – 7:30 PM
<b>AUDIOVISUAL SESSION</b>	Juniper & Maple	7:00 PM – 10:00 PM
<b>POMA HOUSE OF DELEGATES BUSINESS MEETING</b>	Grand Ballroom	8:00 PM – 10:00 PM

## THURSDAY, MAY 3

<b>REGISTRATION</b>	New Jersey Room	6:30 AM – 6:30 PM
<b>EXHIBITS</b>	Pennsylvania Room	9:00 AM – 4:00 PM
<b>BREAKFAST</b>	Pennsylvania Room	6:45 AM – 7:15 AM
<b>SCIENTIFIC POSTER PRESENTATIONS</b>	Pennsylvania Room	9:30 AM – 3:30 PM
<b>FAMOUS PEOPLE WITH DIABETES</b> - Louis Kuritzky, MD	Delaware Room	7:00 AM – 8:00 AM
<b>ASSESSING CURRENT TRENDS IN DIABETES</b> - Jeffrey S. Freeman DO	Delaware Room	8:00 AM – 8:45 AM
<b>Q&amp;A PANEL DISCUSSION</b>	Delaware Room	8:45 AM – 9:15 AM
<b>POMA HOUSE OF DELEGATES BUSINESS MEETING</b>	Grand Ballroom	9:00 AM – 11:00 AM
<b>BREAK – EXHIBITS</b>	Pennsylvania Room	9:15 AM – 9:45 AM
<b>OSTEOPATHIC COMMENT IN ENDOCRINOLOGY</b> - Jennifer A. Lorine, DO	Delaware Room	9:45 AM – 10:00 AM
<b>THYROID CONCERNS FOR THE PRIMARY CARE PROVIDER</b> - Gregory J. Barone, DO	Delaware Room	10:00 AM – 10:45 AM
<b>MEDICAL AND SURGICAL OPTIONS TO TREAT OBESITY</b> - Christopher D. Still, DO	Delaware Room	10:45 AM – 11:30 AM
<b>Q&amp;A PANEL DISCUSSION</b>	Delaware Room	11:30 AM – 12:00 PM
<b>PRODUCT THEATER LUNCHEON</b>	The Venue	12:15 PM – 1:15 PM
<b>FIRST LINE ANTIBIOTIC CHOICE FOR COMMON OUTPATIENT INFECTIONS</b> - Erik G. Polan, DO	Delaware Room	1:30 PM – 2:30 PM
<b>MISSING THE MARK: MISSED OPPORTUNITIES FOR SCREENING</b> - David Kuo, DO	Delaware Room	2:30 PM – 3:30 PM
<b>BREAK – EXHIBITS</b>	Pennsylvania Room	3:30 PM – 4:00 PM
<b>OSTEOPATHIC COMMENT IN PRIMARY CARE</b> - Jennifer A. Lorine, DO	Delaware Room	4:00 PM – 4:15 PM
<b>CONTROVERSIES IN PROSTATE SCREENING</b> - Laurence H. Belkoff, DO	Delaware Room	4:15 PM – 5:15 PM
<b>DERMATOLOGY PEARLS FOR PRIMARY CARE</b> - Richard E. Johnson, DO	Delaware Room	5:15 PM – 6:15 PM
<b>BEERS 'N CAREERS NETWORKING EVENT</b>	Pennsylvania Room	6:00 PM – 7:30 PM
<b>AUDIOVISUAL SESSION</b>	Juniper & Maple	6:30 PM – 9:30 PM

# MBLY & SCIENTIFIC SEMINAR OF EVENTS



## FRIDAY, MAY 4

<b>REGISTRATION</b>	New Jersey Room	6:30 AM – 5:00 PM
<b>EXHIBITS</b>	Pennsylvania Room	9:00 AM – 12:00 PM
<b>BREAKFAST</b>	Pennsylvania Room	6:45 AM – 7:15 AM
<b>PEDIATRIC NEUROLOGY</b> - Anne Marie Morse, DO	Delaware Room	7:00 AM – 8:00 AM
<b>PEDIATRIC GASTROENTEROLOGY</b> - Lindsey G. Albenberg, DO	Delaware Room	8:00 AM – 9:00 AM
<b>BREAK – EXHIBITS</b>	Pennsylvania Room	9:00 AM – 9:30 AM
<b>CARING FOR THE MEDICALLY COMPLEX PEDIATRIC PATIENT</b> - Michaelyn Notz, DO	Delaware Room	9:30 AM – 10:30 AM
<b>ASSESSING AND TREATING ANXIETY DISORDERS IN YOUTH</b> - Paul W. Kettlewell, PhD	Delaware Room	10:30 AM – 11:30 AM
<b>2018 TOP PUBLICATIONS IN PEDIATRIC OSTEOPATHY</b> - Benjamin Kuhn, DO	Delaware Room	11:30 AM – 12:00 PM
<b>POFPS BUSINESS MEETING LUNCHEON (FOR POFPS MEMBERS ONLY)</b>	Grand Ballroom	12:15 PM – 1:15 PM
<b>PRODUCT THEATER LUNCHEON</b>	The Venue	12:15 PM – 1:15 PM
<b>OMM WORKSHOP</b> - Alexander S. Nicholas, DO, and staff	Parkview Ballroom	1:30 PM – 4:30 PM
<b>COMMON ISSUES IN THE FEMALE ATHLETE</b> - Erick C. Thorell, DO	Delaware Room	1:30 PM – 2:15 PM
<b>ADVANCES IN OSTEOARTHRITIS</b> - Barry L. Getzoff, DO	Delaware Room	2:15 PM – 3:00 PM
<b>COMMON ORTHOPEDIC PROBLEMS ENCOUNTERED IN THE OFFICE</b> - Ryan Schreiter, DO	Delaware Room	3:00 PM – 3:45 PM
<b>CONCUSSIONS</b> - Ryan Schreiter, DO	Delaware Room	3:45 PM – 4:30 PM
<b>COMMON PEDIATRIC PROBLEMS IN THE OFFICE</b> - Joseph M. Rosenblatt, DO	Delaware Room	4:30 PM – 5:15 PM
<b>POMA PRESIDENT'S RECEPTION</b>	The Venue/Valley Beach	6:00 PM – 6:45 PM
<b>POMA STATE BANQUET</b>	The Venue	7:00 PM – 10:00 PM

## SATURDAY, MAY 5

<b>REGISTRATION</b>	New Jersey Room	7:00 AM – 12:00 PM
<b>BREAKFAST</b>	Delaware Room	6:45 AM – 7:15 AM
<b>RESIDENT LEADERSHIP FORUM</b>	Parkview Ballroom	10:00 AM – 3:00 PM
<b>A COMMUNITY RESPONSE TO THE OPIOID EPIDEMIC</b> - Donna M. Eget, DO	Delaware Room	7:00 AM – 8:00 AM
<b>PROVIDING PATIENT CARE BY CARING FOR THE DOC</b> - Pamela S.N. Goldman, DO	Delaware Room	8:00 AM – 9:00 AM
<b>RECORD KEEPING NOW AND FOR THE FUTURE</b> - Richard E. Moses, DO, JD	Delaware Room	9:00 AM – 10:00 AM
<b>CROSS-GENERATIONAL COMMUNICATION</b> - Alissa Carpenter	Delaware Room	10:00 AM – 11:00 AM
<b>ADDICTION MANAGEMENT</b>	Delaware Room	11:00 AM – 12:00 PM
<b>PRODUCT THEATER LUNCHEON</b>	Pennsylvania Room	12:00 PM – 1:00 PM
<b>CHILD ABUSE RECOGNITION AND REPORTING</b> - Support Center for Child Advocates	Delaware Room	1:00 PM – 3:00 PM
<b>PENNSYLVANIA LAWS AND RULES</b> - Lawrence J. Beaser, Esq.	Delaware Room	3:00 PM – 4:00 PM
<b>FLORIDA LAWS AND RULES</b> - Lawrence J. Beaser, Esq.	Delaware Room	4:00 PM – 5:00 PM

*Improving Patient  
Care Through CME*

FOLLOW US: #POMA110





# The Pennsylvania Osteopathic Medical Association

## 110th Annual Clinical Assembly Registration Form • May 2-5, 2018

Radisson Valley Forge & Valley Forge Event Center, King of Prussia, PA



**MAIL OR FAX COMPLETED REGISTRATION FORM TO POMA**

**MAIL:** 1330 Eisenhower Blvd., Harrisburg, PA 17111  
**FAX:** 717.939.7255 **PHONE:** 717.939.9318 ext. 170

**OR**

**REGISTER ONLINE**  
**www.POMA.org**

### PART 1 — REGISTRANT INFORMATION

Name \_\_\_\_\_ AOA Number \_\_\_\_\_ Guest Name \_\_\_\_\_  
 Office Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone ( \_\_\_\_\_ ) \_\_\_\_\_  
 Email \_\_\_\_\_ COM/Grad. Year \_\_\_\_\_ DOB\* \_\_\_\_\_ Last 4 SSN\* \_\_\_\_\_  
\*REQUIRED FOR CHILD ABUSE COURSE  
 Board Certified?  Yes  No If yes, are you:  Osteopathic Boarded  Allopathic Boarded  Dual Boarded  
 Specialty(s) \_\_\_\_\_ PA MedMal Expiration (MM/YY) \_\_\_\_\_

### PART 2A — REGISTRATION TYPE

	BEFORE 4/1	4/1-4/22	ON-SITE
<b>PHYSICIAN</b>			
<input type="checkbox"/> DO, MD Active or Life Member of POMA or Respective State Association	\$495	\$595	\$695
<input type="checkbox"/> Life Member of POMA or Retired Physician — No CME Credits	\$125	\$125	\$125
<input type="checkbox"/> DO, MD Non-member of POMA or Respective State Association	\$870	\$970	\$1070
<b>RESIDENT/STUDENT</b>			
<input type="checkbox"/> Osteopathic Resident	\$50	\$50	\$50
<input type="checkbox"/> Osteopathic Student	\$0	\$0	\$0
<b>OTHER</b>			
<input type="checkbox"/> Allied Health Professionals (PA, RN, CRNP, etc.)	\$495	\$595	\$695
<input type="checkbox"/> Practice Manager/Administrator (registered physician name: _____)	\$75	\$75	\$75

### PART 2B — OPTIONAL BLS COURSE REGISTRATION

**BLS COURSE: WEDNESDAY, MAY 2, 9:00 AM – 12:00 PM**

This course provides an opportunity to refresh your skills in foreign body airway obstruction and CPR for victims of all ages plus the use of an AED, all in an American Heart Association course led by AHA-certified instructors. Course materials will be sent the week of April 1, 2018 (pocket mask will be distributed during the course). Course is limited to 60 participants. Participants MUST be registered for the Clinical Assembly.

Yes, I would like to register for the BLS for Physicians course..... \$75

### PART 3 — FUNCTION ATTENDANCE (INCLUDED WITH REGISTRATION)

DO YOU PLAN TO ATTEND THE:	I PLAN TO ATTEND	I DO NOT PLAN TO ATTEND
Wednesday Attendee Reception	<input type="checkbox"/>	<input type="checkbox"/>
Thursday Beers 'n Careers Function	<input type="checkbox"/>	<input type="checkbox"/>
Thursday Product Theater Luncheon	<input type="checkbox"/>	<input type="checkbox"/>
Friday Product Theater Luncheon	<input type="checkbox"/>	<input type="checkbox"/>
Friday POFPS Business Meeting (POFPS Members Only)	<input type="checkbox"/>	<input type="checkbox"/>
Friday President's Reception & Banquet (2 tickets)	<input type="checkbox"/>	<input type="checkbox"/>
Saturday Product Theater Luncheon	<input type="checkbox"/>	<input type="checkbox"/>

### PART 4 — PAYMENT METHOD

**CHOOSE ONE:**

Check made payable to "POMA" |  Visa  Mastercard  American Express  Discover  
 Name on Card \_\_\_\_\_ Card No. \_\_\_\_\_ Exp. \_\_\_\_/\_\_\_\_/\_\_\_\_ CWV \_\_\_\_\_

**IF BILLING INFO IS DIFFERENT PART 1:**

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**REGISTRATION FEE TOTAL:** \_\_\_\_\_ POMA OFFICE USE ONLY: CHECK NO. \_\_\_\_\_ AMOUNT \_\_\_\_\_

Note, all registrations will be reviewed for accuracy and completeness by POMA prior to approval.

No CME credits or attendance confirmation will be granted for osteopathic medical students, residents and fellows.

A \$75 processing fee will be deducted on cancellations received before April 1, 2018; a \$100 processing fee will be deducted on cancellations between April 1 - April 22, 2018. NO REFUNDS will be given AFTER April 22. A grievance policy is included in the Clinical Assembly program booklet.

# ABOUT THE AUTHORS

**Anna E. Augustin (LECOM Bradenton '18)**, *"Full Risk, Full Reward: Managed Care,"* is a fourth-year osteopathic medical student at LECOM Bradenton in Florida. Originally from Pennsylvania, Ms. Augustin has a passion for writing and has been published in *The DO* and *JAMA Dermatology*.

**Chad Walls, DO**, is the author of *"Criteria and Controversies Regarding Surgical vs. Conservative Management of Fractures of the Shoulder Girdle: A Meta-Analysis."* An orthopedic surgery resident at Millcreek Community Hospital

(MCH) in Erie, Pennsylvania, Dr. Walls is a graduate of the University of North Dakota and a 2010 graduate of LECOM Bradenton. He completed an internship at the Naval Medical Center Portsmouth in Virginia and flight surgeon training at the Naval Aerospace Medical Institute in Pensacola, Florida. Prior to training at MCH, he served as a Wing Flight Surgeon in Corpus Christi, Texas. Dr. Walls is a member of POMA, the American Osteopathic Association and the American Academy of Family Physicians.



Anna E. Augustin, OMS-IV



Chad Walls, DO

## Index to Advertisers

Classified Ads.....	21
NORCAL Mutual Insurance Company.....	cover 4
Physicians' Health Programs.....	13
POMPAC.....	23
Temple Physicians, Inc.....	cover 2

**Physician Alert!**

If your colleague has these WARNING SIGNS, he or she might need help...

- Isolation
- Unexplained absences
- Unreliability
- Personality changes
- Unpredictable behavior

**717-558-7819**  
or within PA  
**866-747-2255**

Physicians' Health Programs  
a program of  
The Foundation  
of the Pennsylvania Medical Society

Physicians' Health Programs helps chemically impaired physicians.

## Attention Writers...

The Journal of the POMA is seeking professional articles from YOU!

The June 2018 issue will focus on medical research.

The September 2018 issue will focus on people in Pennsylvania who have made a difference or done something special in health care.

Submissions welcome from POMA members and the public!

E-mail entries to the JPOMA Editor  
c/o [bdill@poma.org](mailto:bdill@poma.org).

# Medical Update

## Full Risk, Full Reward: Managed Care

---

---

by Anna E.  
Augustin,  
OMS-IV

---

I'll have to admit — I've seen many people shudder and scoff when the phrase "managed care" is brought up. To many, it's a fearful subject — a practice that is risky, misunderstood and stigmatized. As a student, I didn't know much about the style of care either. I had only experienced the negative connotations ascribed to it, from eye rolls to sarcastic remarks. Needless to say, I was led to believe that managed care was not an ideal way to practice medicine. I also didn't realize, as I walked in to start the first day of my family medicine rotation, that I was diving headfirst into the world of a fully functioning managed care office.

My first experience in a managed care setting came as a bit of a shock. Most offices I had been in previously had strict appointment windows with heavy patient loads consuming most of the day. Visits were quick, to the point and impersonal. To my surprise, my new attending bragged to me about the 30-minute appointments his office designated to each patient. With this time, we not only sat down to discuss pertinent lab and health issues with each patient, but also had time to connect in other ways. We used osteopathic manipulation, discussed supplements and medications with patients, and were able to talk with the both the patient and their family to clarify any misconceptions about their diagnoses and treatment plans. By the end of the day, I was amazed. This care model that I had heard so many negative things about seemed to be paradoxically a hidden gem of modern medicine.

To understand this type of practice, I had to ask the most pressing question — what exactly is managed care? Conducting a flash search, I realized that it's actually not too easy to define. According to *Medicaid.gov*, managed care is a "health care delivery system organized to manage cost, utilization, and quality."<sup>1</sup> *Medline.gov* goes a bit further, defining managed care as a health insurance plan that has "contracts with health care providers and medical facilities to provide care for members at reduced costs."<sup>2</sup> The ambiguity attached to these definitions leaves many questions to be answered.

To start, there are three main subsets of managed care: HMO (health maintenance organization), PPO (preferred provider organization), and POS (point of service.) An HMO is generally made up of a group of contracted doctors. The client must choose a primary care physician in the network and is only allowed to use the particular providers within the HMO. A PPO is less strict, having its own contracted set of doctors but allowing the client to use other providers at a higher cost. The client does not have to choose a primary care physician in the network. A POS is a bit of a hybrid between HMO and PPO — the client must choose a primary care physician in the network, but can be referred to physicians outside of the network for a higher fee. Although each plan is different, they all follow the same principle. A patient will have the best financial results by choosing a physician in their network and faithfully committing to services within their plan of care.

Plans can be broken down further into either capitation or fee-for-service. In a capitation plan, the physician is paid a set amount for each patient enrolled in the particular group, no matter the amount of office visits accumulated by each patient. By participating in this plan, the doctor takes on the risk of seeing a patient more frequently than anticipated for the same designated amount.<sup>3</sup> Doctors participating in a fee-for-service plan are paid by services rendered and total encounters for each patient. The risk is placed on the insurance company or payer to cover the physician's financial compensation rendered for each patient seen.<sup>3</sup>

The particular office I rotated in was a capitated, full-risk HMO. My attending explained his view of this subset of managed care to me very simply. To him, each patient and their associated diagnoses allocate a certain amount of funding each year the insurance company provides for. The more complicated the medical diagnoses, the more compensation the physician receives for that patient. Each time a patient uses a specialist, is admitted to the hospital, or enrolls in rehabilitation, the insurance company uses the funds allocated

for that patient to cover each service used. If the patient continues to accumulate costs above their threshold, the physician becomes responsible for the additional costs.

In essence, the total amount of funding for each patient in the practice goes into one large bucket. The less time spent in the hospital and the less referrals to specialists all contribute to keeping money in the bucket. If too many patients are using too many outside services, the bucket can empty very quickly. The majority of most practices are made up of medium to high-risk patients with chronic conditions and comorbidities. For the managed care model to be successful, the physician must stabilize the chronic issues each patient faces and actively strive to prevent any exacerbation that would lead to an adverse outcome.

Looking at the setup, it is easy to understand the substantial amount of risk — and reward — that comes with managed care. A high-risk patient comes with a larger “bucket amount,” but additionally comes with a huge amount of liability attached. To some physicians, these patients may seem like a disaster waiting to unfold. However, there are forms of protection that most care offices can take to prevent such a catastrophic event from occurring. The network (specialists, hospitals) in a particular plan usually has contracts that guarantee lower costs for their particular HMO group. Another protection, called re-insurance, assumes financial responsibility for a patient’s care once costs meet a set deductible.

How can a physician successfully manage this seemingly volatile type of practice? It may be easy to keep low-risk patients healthy, but the chronic comorbidities associated with high-risk patients are the biggest challenge to managed care. To the dedicated physician, these patients are the success stories that keep them in business. They are the patients that, after intense intervention, are more compliant with their medications than before. They are the patients that have a flare up and contact their primary care physician instead of rushing straight to the emergency room. They are the patients that can make or break a practice, but are the most important patients that a managed care doctor can invest his or her time in.

The formula for reward is very simple — a strong doctor-patient relationship can truly work miracles in managed care. Studies have shown that chronically ill patients take a more active role in their health management if they have a strong relationship with their physician. The answer almost seems too simple to be true. In a technology driven world where

time and numbers seem to matter more than personal interaction, the doctor-patient relationship has become paramount to successful primary care practice.

The best part about the managed care practice is that the patients can see and feel the difference. Whether it’s a phone call over the weekend to check in or a simple embrace at the office visit, the patients enrolled in this type of medical care feel — and are — special. They put faith into their doctor and respect each aspect of the physician’s expertise. They see a provider addressing all of their health issues, instead of focusing on one or two problems crammed into an abbreviated visit. They trust their physician to understand not only their medical issues but also their unique psyche and desires. The doctor visit becomes more than a chore to be completed every few months. The doctor becomes a caregiver, a friend and a companion.

During my rotation, I started to realize that this type of practice fundamentally fit the principles I had been learning throughout medical school — the osteopathic philosophies, adapted to the pace of our modern world. The idea of caring for the whole person, not just a disease, is embodied in the managed care structure. Instead of referring any complicated issue out to a specialist, the primary care physician has the time and incentive to treat each particular problem the patient presents with. The physician has the time to address the social, mental and familial aspects of disease instead of focusing in on quick treatment and temporary solutions. The goal of managing complicated diagnoses and conditions to keep a steady homeostasis on even the sickest of patients is absolutely crucial to managed care. By communicating with a set group of hospitalists and specialists, the primary care doctor becomes one instrument in a well functioning machine of continuous care.

I was privileged enough to see the best qualities of managed care shine through during a complicated case in my rotation. One of our patients had been in the hospital for over a month. Chronic sputum production with low oxygen saturation and a tracheal tube had sidelined this woman for some time. The hospital’s ultimate plan was to transfer her to a long-term assisted care facility, which was an outcome the patient and her family had hesitated to pursue from the start. Within a week of being on her care, my attending had set up his own plan for continued care, instructed each member of this woman’s family on proper suction techniques and tracheal cleaning, and

declined unnecessary long term rehabilitation treatment in favor of the patient's wishes — home care with familial assistance. Those extra minutes spent teaching the patient how to properly use a spirometer, the use of a percussion vest, and the time educating the family made all of these outcomes possible. Antibiotics and ventilator care had only done so much to stabilize the patient's chronic condition. It was the physician intervention that pushed a stagnant plan of care into a patient desired action course.

Sure, the choice of home care absolutely saved the patient and insurance company a substantial amount of costs. Yes, for the physician it meant less money would be spent continuing this woman's care. However, in the long run, the patient used her free will to choose the best option she felt suited her needs. She remained autonomous, the family felt comfortable being responsible for her continued care, and the physician maintained a high level of trust with both the patient and her supportive unit. The extra time spent managing the patient's wants alongside her family's wishes led to lower costs for both patient and provider. Most importantly, it resulted in a better quality of life for the patient, the most important aspect of the situation.

Managed care has its flaws. A few "high risk" patients could theoretically serve to make or break the bank for a physician. However, the outcomes for both patient and physician in the proper setting are exponential. All patients desire a caring doctor they can confide in, relate to, and trust with their health and mental fortitude. Many patients find solace in having one doctor to care for their many needs, both outpatient and in. Through all of their quiescent periods and exacerbations, they want one familiar doctor to continuously monitor their well-being. All physicians want to see their patients thrive in their unique situations while maintaining a trusting, confident relationship throughout their length of care. Most doctors are happier spending more time understanding their patients and having time to establish a doctor-patient relationship instead of a hurried clinic visit with no personal affect attached. At it's peak, managed care has the capability to embody the future of ideal-

istic medical care. The deciding factor is the effort the primary care physician chooses to invest into his or her practice. As osteopathically trained physicians, this should be our number one priority. Relationships, time and understanding turn into the strongest tools for even the most accomplished of doctors to hold.

The stigma of managed care may be a hard taboo to erase, but the future of medicine is already embracing many of the concepts the practice uses. Managed care has set the framework for the new wave of physician accountability recently proposed by Medicare. As osteopathic physicians, the idea of managed care is the modern adaptation of true holistic care in a fast-paced world. It gives us time to heal both the body and mind, and pushes us to practice preventive care. It allows us to bypass the modern idea of quick medicine and pulls us back to our roots of true mental and physical healers. Instead of focusing on the flaws of the system, it is essential to realize the benefits of patient outcome-based practice and the reward it can bring to both patient and physician. It isn't perfect, but managed care is rapidly growing and still can be molded in its early years into what we make of it. Now is the time to embrace this type of care and refine it even further to maximize both physician and patient benefit. In a technologically driven society, most of our patients are thirsting for a physician to truly make a difference in their lives. It is our duty to fall back on our principles and let this happen.

## References

1. Managed Care: Medicaid.gov. (n.d.). Retrieved March 31, 2017, from <https://www.medicaid.gov/medicaid/managed-care/index.html>
2. Managed Care: MedlinePlus. (n.d.). Retrieved March 31, 2017, from <https://medlineplus.gov/managedcare.html>
3. Capitation vs. Fee-for-Service. (n.d.). Retrieved March 31, 2017, from [http://www.differen.com/difference/Capitation\\_vs\\_Fee\\_For\\_Service](http://www.differen.com/difference/Capitation_vs_Fee_For_Service)
4. Alexander JA, Hearld LR, Mittler JN, Harvey J: Patient-Physician Role Relationships and Patient Activation among Individuals with Chronic Illness. *Health Serv Res.* 2012;47:1201-1223. doi:10.1111/j.1475-6773.2011.01354.x

# Medical Update

## Criteria and Controversies

### Regarding Surgical vs. Conservative Management of Fractures of the Shoulder Girdle: A Meta Analysis

---

#### Background

Clavicle fractures are very common injuries, accounting for 5-15 percent of all fractures with as many as 80 percent occurring in the middle third. Traditionally these fractures have been treated non-surgically based on early studies by Neer and Rowe, in which Neer reported a nonunion rate of 0.1% percent<sup>1</sup> and Rowe reported a nonunion rate of 0.8 percent<sup>2</sup> in conservatively treated clavicle fractures. However, these studies only reported on the nonunion rate and did not report on functional outcomes. More recent studies by Hill et al.<sup>3</sup> and McKee<sup>4</sup> have demonstrated higher rates of non-unions and lower patient satisfaction and function associated with non-surgical treatment of displaced mid-shaft clavicle fractures in the presence of greater than 20mm of shortening. Because of this, more recent relative indications for surgical treatment of mid-shaft clavicle fractures have included greater than 100 percent displacement and shortening of more than 2cm. However, despite these new findings, there continues to be controversy regarding the surgical management of these displaced mid-shaft clavicle fractures.

On the other hand, scapular fractures tend to be fairly rare, due to the significant soft tissue protection, and account for only 1 percent of all fractures and 3-5 percent of upper extremity fractures. Historically, non-operative management and early range of motion have resulted in predictable healing<sup>5</sup>, however, it has been shown that substantially displaced scapular fractures may alter shoulder girdle function.<sup>6,7</sup> Surgical treatment of scapular fractures has shown good results, even with delayed treatment.<sup>8</sup> Despite this, the criteria for operative treatment of the scapula remains

controversial and there continues to be no universal parameters in the literature.

The purpose of this meta-analysis is to investigate current controversies regarding criteria for surgical and non-surgical treatment of fractures about the shoulder girdle, as well as complication rates of both treatment approaches including rates of nonunion, mal-union, shoulder dysfunction and patient dissatisfaction.

#### Methods

A search using the PubMed online database was performed in order to investigate the research objective. The key words "clavicle fractures" and "scapular fractures" were used with all studies dating back to 2005 being reviewed. For clavicle fractures, studies selected were original studies comparing surgical and nonsurgical treatment of displaced mid-shaft clavicle fractures. All selected studies had at least 50 subjects, reported rates of union and complications, and also reported functional outcomes scores. Studies comparing all surgical approaches for clavicle fractures were included, which included: plate fixation, elastic intramedullary nails, and modified Hagie pins. All studies comparing surgical versus non-surgical treatment of scapular fractures were also selected.

#### Results

Six studies were identified that compared the results of non-operative versus operative treatment of displaced mid-shaft clavicle fractures. Five of them were prospective randomized controlled studies, while one was a prospective cohort studies. This resulted in a

---

*by Chad  
Walls, DO*

---

total of 592 patients, with 292 treated non-operatively and 298 treated with primary operative fixation. In four of the studies, operative fixation was achieved with plate fixation, one study utilized elastic intramedullary nails, and one study used modified Hagie pins. The total non-union rate for non-operative treatment was 14 percent and varied between 4 to 29 percent. The non-union rate after operative fixation was 1 percent and varied between 0 to 3 percent. There was no difference in non-union rates when comparing the type of fixation. The total complication rate was 28 percent for the non-operative group and 24 percent for the operative group, with equivalent rates in most studies, however one study reported significantly more complications in the non-operative group, and one study reported significantly more complications in the operative group. In all studies, the complication rates in the non-operative group were related to re-operation for non-union or mal-union, and the complications in the operative group were mostly related to local plate irritation. In all studies, functional outcomes were better for the operative group.

For scapular body fracture, only one comparative study could be identified. This was a retrospective review study. In this study, there were no non-unions reported in either the operative or non-operative groups. There was also no difference in pain, return to work and complications, however, the operative treatment group did have greater amounts of displacement and angulation pre-operatively, when compared to the non-operatively treated groups.

## Discussion

Clavicle fractures are common fractures that account for 5-15 percent of all fractures, with as many as 80 percent occurring in the middle third. On the other hand, scapula fractures account for only 1 percent of all fracture and only 3-5 percent of upper extremity fractures. Even though the occurrence rate of these fractures around the shoulder girdle differs significantly, surgical treatment of both continues to remain controversial.

Definitive indications for surgical treatment of mid-shaft clavicle fractures include skin tenting, open fractures, presence of neurovascular compromise, multiple trauma, and floating shoulder. Outside of these indications, management continues to remain somewhat controversial. Traditionally displaced clavicle fractures have been treated non-surgically based on early studies by Neer and Rowe,

very low rates of non-union with non-surgical management of these fractures.<sup>12</sup> More recently studies have demonstrated higher rates of non-union, lower patient satisfaction, and lower functional scores with non-operative treatment in the setting of complete displacement and greater than 2 cm of shortening. Because of this, more recent relative indications for surgical fixation have included 100 percent displacement and 2 cm of shortening. However, Jones et al.<sup>9</sup> have demonstrated poor intra-observer and inter-observer reliability with regards to determination of shortening based off standard radiographs and recommend against using the amount of shortening as the sole determinant for surgical treatment.

In comparison of operative versus non-operative treatment of displaced mid-shaft clavicle fracture in this meta-analysis, the non-operatively treated continue to show higher rates of non-union, lower patient satisfaction, and functional scores when compared to the operative groups. These better outcomes in surgically treated groups appears to be regardless of the type of fixation with plate fixation, elastic intramedullary nails, modified Hagie pins reported on. This was consistent with comparison studies of plate versus intramedullary nail fixation performed by Andrade-Silva et al.<sup>10</sup> and van der Meijden et al.<sup>11</sup>, in which long term functional outcomes were equivalent when comparing the two types of fixation. However, when comparing treatment with modified Hagie pins to non-operative treatment Judd et al. demonstrated early improvement in functional outcomes with Modified Hagie pins, but no difference in scores at long-term follow-up.

Complication rates were equivalent in most of the included studies, however Judd et al. reported significantly more complications in patients treated with modified Hagie pins, and in a comparison of 132 fractures by the Canadian Orthopedic Trauma Society there was a slightly higher complication rate reported in the non-operative group.<sup>12</sup> Most complications in the non-operative groups were related to non-unions and symptomatic malunions. In the operative group most of the complications were related to local hardware irritation with rates of local wound infection and mechanical failure being low. Kulshrestha et al.<sup>13</sup> demonstrated that with a switch to an anteroinferior approach there were no complaints of hardware irritation, requiring hardware removal.

Although the functional outcomes of the operative group were better in all studies, Robinson et al.<sup>14</sup> showed that if the patients

with non-unions were excluded, functional outcomes were similar to that of the operative groups. Robinson also demonstrated that the cost of treatment was significantly higher in the operatively treated group and could not recommend routine operative treatment for mid-shaft clavicle fractures.

With regards to scapular studies, there were no prospective studies comparing surgical versus non-surgical treatment found in the PubMed search. This is no doubt the result of the rarity of these fractures, as well as the fact that these are typically treated by sub-specialist trained in these difficult surgeries.

Jones and Sietsema performed a retrospective review in which there were no non-unions reported in either the operative and non-operative groups.<sup>15</sup> There was also no difference in pain, return to work and complications, however the operative treatment group did have greater amounts of displacement and angulation pre-operatively when compared to the non-operatively treated groups. Despite operative fixation resulting in no complications and restoration of anatomical function, they do not recommend surgery for scapula fractures with less than 20 mm displacement.

In a previous systematic review Zlowodzki et al.<sup>16</sup> reported 520 scapular fractures from 22 published series. Because of a high variability between studies, use of different outcome measurements, and associated injuries, validated comparison of non-operative with operative treatment could not be accomplished for any fracture type.

In another systematic review of 17 studies encompassing 243 cases of surgically treated scapula fracture, Lantry et al.<sup>17</sup> demonstrated good functional outcomes with low complication rates. Indications for surgery, however, did vary widely amongst the included studies. However, most indications for surgeries did include: displaced glenoid fractures, rim fractures with subluxation of the humeral head, scapular neck fractures with >40 degrees of angulation, and grossly displaced acromion or coracoid. Some studies also took into account the patient's age, occupation and general health. With regards to glenoid displacement the studies varied widely in the indications for surgery with ranges from 4-10mm, however 5mm was most commonly used.

## Conclusions

Treatment of mid-shaft clavicle fractures continues to be a topic of debate. Newer studies have shown the operative fixation does decrease the rates of non-unions and also

improves functional outcomes, however, there may be some increased complication rates and re-operation rates related to local hardware irritation and also significantly increased cost of treatment associated with operative treatment. These complications related to local hardware irritation may be decreased by newer lower profile plates and newer surgical approaches, but newer studies are required to compare these newer techniques.

Treatment of scapular fractures also continues to be controversial. Studies have shown that regardless of treatment these fractures will heal, but there are no good controlled trials or definitive indications for surgical treatment of these fractures. There is need for future studies to definitively determine surgical indications. However, these studies may be limited by the rarity of these types of fractures and the fact that the complexity of surgical fixation requires surgeons familiar with this type of treatment.

## References

1. Neer CS: Nonunion of the Clavicle. *JAMA*. 1960;172(10):1006.
2. Rowe CR: An atlas of anatomy and treatment of midclavicular fractures. *Clin Orthop Relat Res*. 1968; 58:29-42.
3. Hill JM, McGuire MH, Crosby LA: Closed treatment of displaced middle-third fractures of the clavicle gives poor results. *J Bone Joint Surg Br*. 1997;79(4):537-539.
4. McKee MD, Pederson EM, Jones C, et al: Deficits following nonoperative treatment of displaced midshaft clavicular fractures. *J Bone Joint Surg Am*. 2006;88(1):35-40.
5. Goss TP: Scapular Fractures and Dislocations: Diagnosis and Treatment. *J Am Acad Orthop Surg*. 1995;3(1):22-33.
6. Armstrong CP, Van der Spuy J: The fractured scapula: importance and management based on a series of 62 patients. *Injury*. 1984;15:324-329.
7. Bozkurt M, Can F, Kirdemir V, Erden Z, et al: Conservative treatment of scapular neck fracture: the effect of stability and glenopolar angle on clinical outcome. *Injury*. 2005;36(10):1176-1181.
8. Herrera DA, Anavian J, Tarkin IS, et al: Delayed operative management of fractures of the scapula. *J Bone Joint Surg Br*. 2009;91(5):619-626.
9. Jones GL, Bishop JY, Lewis B, et al: Intraobserver and interobserver agreement in the classification and treatment of midshaft clavicle fractures. *Am J Sports Med*. 2014;42(5):1176-1181.

10. Andrade-Silva FB, Kojima KE, Joeris A, et al: Single, superiorly placed reconstruction plate compared with flexible intramedullary nailing for midshaft clavicular fractures: a prospective, randomized controlled trial. *J Bone Joint Surg Am.* 2015;97(8):620-626.
11. van der Meijden OA, Houwert RM, Hulsmans M, et al: Operative treatment of dislocated midshaft clavicular fractures: plate or intramedullary nail fixation? A randomized controlled trial. *J Bone Joint Surg Am.* 2015;97(8):613-619.
12. Canadian Orthopaedic Trauma Society: Nonoperative treatment compared with plate fixation of displaced midshaft clavicular fractures: A multicenter, randomized clinical trial. *J Bone Joint Surg Am.* 2007;89(1):1-10.
13. Kulshrestha V, Roy T, Audige L: Operative versus nonoperative management of displaced midshaft clavicle fractures: a prospective cohort study. *J Orthop Trauma.* 2011;25(1):31-38.
14. Robinson CM, Goudie EB, Murray IR, et al: Open reduction and plate fixation versus nonoperative treatment for displaced midshaft clavicular fractures: a multicenter, randomized, controlled trial. *J Bone Joint Surg Am.* 2013;95(17):1576-1584.
15. Jones CB, Sietsema DL: Analysis of operative versus nonoperative treatment of displaced scapular fractures. *Clin Orthop Relat Res.* 2011;469(12):3379-3389.
16. Zlowodzki M, Bhandari M, Zelle BA, et al: Treatment of scapula fractures: systematic review of 520 fractures in 22 case series. *J Orthop Trauma.* 2006;20(3):230-233.
17. Lantry JM, Roberts CS, Giannoudis PV: Operative treatment of scapular fractures: a systematic review. *Injury.* 2008;39(3):271-283.
18. Altamimi SA, McKee MD; Canadian Orthopaedic Trauma Society: Nonoperative treatment compared with plate fixation of displaced midshaft clavicular fractures. Surgical technique. *J Bone Joint Surg Am.* 2008;90 Suppl 2 Pt 1:1-8.
19. Smekal V, Irenberger A, Struve P, et al: Elastic stable intramedullary nailing versus nonoperative treatment of displaced midshaft clavicular fractures—a randomized, controlled, clinical trial. *J Ortho Trauma.* 2009;23(2):106-112.

## **FROM THE EDITOR'S DESK** *(continued from page 4)*

---

include information pertaining to the Clinical Essay Contest, I am sure many others are engaged in research. Please consider submitting your papers to the *POMA Journal* whether for full publication or general discussion and communication.

Our fall theme will pertain to people who have made a difference or done something special with regards to health care. Please have a Pennsylvania connection. We will need you to submit the articles about your colleagues, students or others. If there is something which you personally are doing, now is the time to write about it.

Lastly, I have spoken with colleagues who are concerned about submitting Letters to the Editor or writing pieces which may be controversial. Please, submit them. An effective and valuable publication does not contain only the “rah rah, yea team” material. I value the concept of making things “a little uncomfortable” and challenging; it can be very beneficial.

I look forward to seeing you at the Convention. If you want to ask me about “the world’s worst hit man,” I am happy to tell you the story.

Collegially,  
Mark B. Abraham, DO, JD

## LECOM DEAN'S CORNER (continued from page 6)

---

tor, rather it is an attempt to provoke students into a discovery of his or her own talents.

Imagine the innermost delight and satisfaction of soul one may find in seeing that his or her knowledge in the medical field has resulted in saving a life, in restoring an injured man to health, or in delivering a beautiful new life into the loving arms of a mother.

Perhaps routine acts of expert care, patience, perseverance and compassion do not

make headlines, but they do change lives. As a society, we do not devote much attention to the everyday heroes among us, to recognize all of the undercover angels in our midst.

I discovered those angels in 1969 and they have been with me ever since. This grateful, faith-filled physician's joy was *not by accident*.

Fraternally,  
*Silvia M. Ferretti, DO*

## OUT OF MY MIND (continued from page 5)

---

I am now the proud owner of a Jupiter 1604 large bore trumpet with a reverse leadpipe and rose brass bell. At Christmas time, I received a 1956 Olds Mendez trumpet fully restored and silverplated. I have several other instruments in the arsenal at this point, particularly John Packer/Smith-Watkins designs. My wife is still my fair Euridice.

Have there been good times in the practice of osteopathic medicine? There have been only

incredible times. Osteopathic medicine has allowed me to educate my children, provide for my wife, serve my profession and my colleagues, and allowed me to return to the passion of my youth.

Cherish your profession. Give it your passion. Devote yourself to its service. You will receive more in return than you will ever give.

## CLASSIFIED ADVERTISEMENTS

---

**FOR SALE: RITTER POWER PROCEDURE CHAIR** — Excellent condition, teal. \$1,000 plus shipping from Huntingdon Valley. Email inquiries to [jmkrettekdo@gmail.com](mailto:jmkrettekdo@gmail.com).

**SEEKING FAMILY PHYSICIAN OR INTERNIST**, board certified MD or DO, for independent multi-specialty Johnstown, PA group established in 1984. Currently comprised of

twelve physicians and physician assistants practicing family practice, podiatry, gynecology, medical psychology and non-narcotic pain management. Imaging, clinical trials, lab and numerous other on-site ancillary services available. Offering a four ten-hour day work week with no hospital work. Submit CV to [cfleegle@atlanticbbn.net](mailto:cfleegle@atlanticbbn.net) or call 814-288-1418 extension 7.

# 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](mailto: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 CD 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: [bdill@poma.org](mailto:bdill@poma.org) or  
The Journal of the POMA, 1330 Eisenhower  
Blvd., Suite 100, Harrisburg, PA 17111-2395.

---

## 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 MSF, 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.

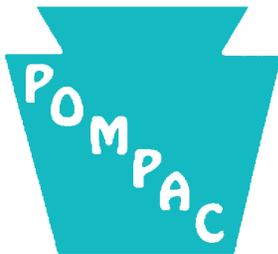
**Other Illustrations** — Figures, charts and graphs should be of professional quality. Lettering should be large and clear to allow for reduction, if necessary. Glossy, black-and-white prints of drawings, rather than originals, should be submitted whenever possible.

## 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.

# POMPAC IS

The Collective Voice  
of the  
Osteopathic Profession



Pennsylvania Osteopathic  
Medical Political Action  
Committee

Send your personal check today to  
POMPAC in care of the POMA  
Central Office, 1330 Eisenhower  
Boulevard, Harrisburg, PA  
17111-2395, or charge your  
contribution to your  
VISA or Master Card!

PAC contributions  
are not tax-deductible.

## CME Quiz

Name \_\_\_\_\_

AOA # \_\_\_\_\_

1. What type of managed care plan does not allow patients to use services outside of the preferred network?

- a. HMO
- b. PPO
- c. POS

2. What type of protection is available for full risk capitated HMO plans in the event of a catastrophic patient bill?

- a. Severance for physician
- b. Re-insurance
- c. None

3. What is the non-union rate for non-operatively treated displaced mid-shaft clavicle fractures?

- a. 10 percent
- b. 14 percent
- c. 23 percent
- d. 5 percent

4. What is the complication rate following operatively treated clavicle fractures?

- a. 9 percent
- b. 15 percent
- c. 24 percent
- d. 30 percent

5. All recent articles recommend early operative treatment of displaced mid-shaft clavicle fractures.

True      False

**To apply for CME credit,** answer the following questions and return the completed page to the POMA Central Office, 1330 Eisenhower Boulevard, Harrisburg, PA 17111-2395. Upon receipt of the quiz, we will forward it to the AOA CME Department. You will receive 0.5 Category 2B AOA CME credits. Please include your AOA number.

### Answers to Last Issue's CME Quiz

- 1. a, b
- 2. c
- 3. question dismissed
- 4. false
- 5. true

(Questions appeared  
in the December 2017  
Journal.)



MEDICAL PROFESSIONAL LIABILITY INSURANCE  
**PHYSICIANS DESERVE**

Offering top-tier educational resources essential to reducing risk, providing versatile coverage solutions to safeguard your practice and serving as a staunch advocate on behalf of the medical community.

A photograph of three medical professionals in a meeting. On the left, a man in a white lab coat is looking towards the center. In the middle, a man in a grey suit and blue shirt is looking down at a document. On the right, a woman in a white lab coat and stethoscope is smiling and looking at the document. The background is a bright, out-of-focus office or hospital setting.

Talk to an agent/broker about NORCAL Mutual today.

[NORCALMUTUAL.COM](http://NORCALMUTUAL.COM) | 844.4NORCAL