



the **JOURNAL**

of the Pennsylvania Osteopathic Medical Association
September 2018

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LIVES.”**

- JOHN F. KENNEDY

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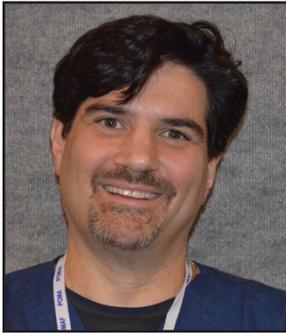
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The Journal of the Pennsylvania Osteopathic Medical Association (ISSN 0479-9534) is published four (4) times a year, in March, June, September and December, as the official publication of the Pennsylvania Osteopathic Medical Association, Inc., 1330 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

Mark B. Abraham, DO, JD



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

It's hard to believe that fall is here already! I hope everyone had an enjoyable summer.

The premise for this issue was to discuss and highlight someone who has made a difference in medicine, health care, or is otherwise unique and deserving of praise. We received many submissions. When you read the submissions, you will understand why the author wrote what (s)he did.

As it turned out, one physician and professor, Dr. John Simelaro, was honored by the PCOM community. Dr. Simelaro, or "Chief" as many of us called him in school, retired this past summer. For those of you that have met and know him, I am sure you will read the articles and smile since you probably have similar stories and/or memories from school. For those of you that never met "Chief", I expect that you will get a sense of why the PCOM community will miss his being part of the every day teaching at the school.

LECOM also has its own history and plays an important role in the education of osteopathic physicians and other health professionals. One of the reasons for LECOM's success is due to the leadership of Dr. John M. Ferretti. When you read the submission about him, I am sure that anyone unfamiliar with LECOM or Dr. Ferretti, will quickly understand and appreciate how vital he has been to LECOM.

Inside you will also read the Third Place and Honorable Mention winning articles from POMA's annual writing contest. "Characterization of the Retinal Nerve Fiber Layer Thickness in Nepalese Cohort by Spectral Domain Optical

Coherence Tomography" as well as "Medication Reconciliation: Obstacles to Compliance" are both very interesting. I hope that for next year's contest we will have as many worthy submissions as we had this past year.

For the winter issue, I would like to again discuss pain management. However, I would like the focus to be what you, the physician, feel needs to be done to help better manage patients' pain, as well as how physicians can help our elected officials, both State and Federal, handle the situation and combat the opioid crisis. At the Clinical Assembly, many of you asked not only Attorney General Josh Shapiro in depth questions about pain management and combatting the opioid crisis, but also raised similar questions to the session moderators. Now is your turn to offer those comments and feelings to the entire membership.

Lastly, as I write this, the NFL season has started and there have been some interesting games already. One of the stories of the early NFL season has been the play of the Cleveland Browns. Perhaps it is due to the osteopathic influence and sponsorship by LECOM during Browns training camp. When I was at PCOM we clearly had the best basketball team of any osteopathic college, the Sixers (who trained at PCOM) did make it to the NBA Finals. By the same thinking, this season, LECOM has the best football team, even though they play their home games in Ohio.

Collegially,

Mark B. Abraham, DO, JD

Amnestic Memories

Dictionary.com defines a wing man as a pilot in a plane that flies just outside and behind the right wing of the lead aircraft in a flight formation, in order to provide protective support. In slang, it means a man who helps, protects, or guides a friend or associate. It defines leadership as the position or function of a leader, a person who guides or directs a group.

There are those that describe six leadership styles, nine leadership styles, twelve leadership styles or more. Four styles that are always included are autocratic leadership, transformational leadership, transactional leadership and servant leadership. Autocratic leadership involves control of staff and little, if any, sharing of power. This arrangement often leads to a lack of creativity. While effective during the moment, this leadership style is typically not long-lasting. Ask Adolph, Joseph or Benito in the next life if you are unfortunate enough to meet them.

Transformational leadership inspires staff through communication and the fostering of intellectual stimulation. These leaders typically rely on group members to help them achieve their goals. Transactional leaders utilize reward and punishment as this can be highly effective completing short term tasks. Unfortunately, group members cannot reach full creative potential under this design.

It is my observation over the years that servant leadership is the most effective and respected style as it utilizes power sharing of authority and collective decision-making. It has also been called altruistic leadership and democratic leadership. However, at times it can take longer to achieve goals due to consensus building.

Looking back at my time in osteopathic medicine in Pennsylvania, I have had the fortune of meeting and knowing many great leaders. In addition to leadership at POMA and POFPS, we have sent many leaders to the AOA and ACOFP. In addition, the accomplishments of people such as A. Archie Feinstein, Ben Agresti, Joe Namey, Ron Esper, Ken Veit, John Ferretti, Silvia Ferretti and countless others must not be overlooked. These men and women helped guide, build, maintain

and plan the future of the profession and its education. That is not to say that we have not had great leadership and support from non-physicians. Two that come immediately to mind are Basil Merenda, the former Secretary of the Commonwealth and Mario Lanni, our past executive director. This is not to say that all these individuals, at all times practiced servant leadership. In order to accomplish results, a mixture of styles must be employed.

I'm certain that you noticed not all great leaders are listed. Please fill in the blanks with your picks. I chose only those I knew or currently know. Space does not permit a more exhaustive list.

Returning to leadership and wingmen, I had the pleasure of serving on the board of POMA and the State Board of Osteopathic Medicine (SBOM), with the late Al Poggi. Al first caught my eye on the POMA board. He was always scanning the room observing and evaluating the responses of his fellow members. Al seldom spoke. When he did, others listened. He never forced his views or insight on others, but those who engaged him in conversation quickly discovered that he had laser vision and remarkable insight and interpretations into reports and comments. He never held back information from others who sought it. He never sought advancement. He always served. Serving with him on the SBOM was a pleasure. He kept us informed and made everyone's decisions better and more accurate. He was the consummate wingman. Al was the man we all learned to turn to for clarity. I suspect his devotion to his duties was born out of a pure love for osteopathic medicine. In addition, he faithfully served his district for years. Obviously, his name is not as well-known as the others mentioned in this and other articles in the journal. His contributions to the profession in Pennsylvania, however are just as large.

Al was my friend, colleague, advisor and mentor. I miss our discussions and his wisdom and insight. He was a servant leader who never sought a leadership role.

John Wayne was not the Quiet Man, Al Poggi was.



Samuel J. Garloff, DO

LECOM DEAN'S CORNER

Lake Erie College of Osteopathic Medicine

John M. Ferretti, DO — Purpose with a Passion



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

Henry Ford maintained that “you can't build a reputation on that which you are *going* to do.” It seems that John M. Ferretti, DO has lived by that credo. His life is a testament to action, to objective — to purpose.

Hailing from Erie's Little Italy, this native son — teamed with his sister, Silvia M. Ferretti, DO — founded the Lake Erie College of Osteopathic Medicine (LECOM). Boasting more than a quarter century in the vanguard of excellence in medical education, LECOM did not *find* its way to the pinnacle of attainment, it was painstakingly *placed* there.

Indeed, throughout history, legacy creating, innovative decisions have distinguished between leader and follower; between insight and apathy; and ultimately, between success and failure. Such is the case with the history that has come to form the heritage of LECOM.

As the 20th Century drew to a close, and at a time during which much of the medical community (including Pew Research, the American Osteopathic Association, and the American Medical Association) did not see a need for additional medical colleges, much less the need for further physicians, Dr. John Ferretti saw it differently. As a leader in the governance of the Millcreek Community Hospital (MCH), he presciently understood that the hospital existed in an area within close proximity to Pittsburgh, Cleveland, and Buffalo; an area underserved by physicians. The establishment of a medical college in Erie, Pennsylvania had the intended effect of allowing the hospital to train needed new doctors and to accommodate the open positions at MCH and at other hospitals throughout the region.

His wholly visionary and forward-thinking strategy served as the very catalyst for the growth of the osteopathic profession.

As a champion of exceptionalism in education, Dr. John Ferretti has forged the way for the LECOM place in health care history. When he, along with the Board of Trustees of MCH, founded LECOM in 1993, the College became the 16th college of osteopathic medicine in the United States thus shattering the decades of dearth in medical college foundings. Since that time, LECOM has grown to become the

largest school of its kind in the United States and the only Osteopathic Academic Health Center in the nation. Its meteoric success has served as a beacon and as the paradigm for the tremendous growth of osteopathic medical colleges across the country.

Under Dr. John Ferretti's vigilant auspices, LECOM has taken pride in a faculty of great merit, led and ably advanced by the assiduous and inexhaustible personage of Dr. Silvia M. Ferretti. Bolstered by a team of professors, lecturers, technicians, and administrative staff, LECOM is established as a superb facility — architecturally beautiful and equipped to the highest standards. Now with three national campuses, LECOM has an undisputed reputation as a competitive, first rate osteopathic medical college with an innovative curriculum and excellent clinical training delivered by a network of professionals in the hospital, throughout the community, and across all sectors of society. None of that is coincidence. It is the result of the passion of Dr. Ferretti's purpose.

John M. Ferretti, DO is the President and CEO of LECOM. He received his Doctor of Osteopathic Medicine degree from the Philadelphia College of Osteopathic Medicine in Philadelphia, Pennsylvania; and in 1973 he earned his Masters of Science from that prestigious school as well. Taking his internship at Metro Health Center in Erie, Pennsylvania in 1974, Dr. Ferretti subsequently completed his residency in Internal Medicine at the Hospital of the Philadelphia College of Osteopathic Medicine.
(continued on page 22)



PCOM DEAN'S CORNER

Philadelphia College of Osteopathic Medicine

One question we as physicians ask ourselves is, "Did I really make a difference?" I can say with complete certainty that there is one man at PCOM who has indeed made a difference in the lives of not only his patients, but his students and colleagues as well.

John Simelaro, DO, recently retired as professor, internal medicine and chair emeritus, internal medicine, after more than five decades at our College: first as a student in the class of 1971, and then as a beloved educator. John was the 2007 recipient of PCOM's O.J. Snyder Memorial Medal, the College's highest honor. And John's students continuously showed their appreciation for his extraordinary skill and dedication by honoring him with the Teacher of the Year award 10 times over. He's also a recipient of the prestigious Lindback Foundation Award for Distinguished Teaching.

John, who has been described as a "showman" in the classroom, developed his passion for teaching while studying at PCOM. He has said that when he teaches, he performs. In his own words: "Teaching and entertaining are really the same thing. You have to spice it up and bring medicine to life to make it memorable."

Indeed, the thousands of students whom he has taught regard him as hard-working, yet willing to think outside the box to help them learn important scientific and clinical information. They appreciate his unparalleled humor. One former student recalled a video, "Dr. Simelaro's Office," — a spoof on "Mr. Rogers' Neighborhood" — which John produced himself to teach the students about ventilators.

His love for teaching aside, John has made noteworthy contributions to PCOM, most notably the establishment of our Division of Pulmonary Medicine in 1976. He also established the Gina M. Simelaro Memorial Scholarship in memory of his daughter, Gina, who died at just three years old from leukemia.

His clinical research on the treatment of asthma and complicated chest infections is renowned, and over the years has secured substantial funding from the American Lung Association, Merck and Pfizer, among many others.

And, he has served the osteopathic profession proudly with appointments on the American College of Osteopathic Internists, the Pennsylvania Osteopathic Medical Association, the College of Physicians of Philadelphia, the American College of Chest Physicians and the American College of Angiology.

John fully retired from PCOM in June. His absence leaves a void that will be difficult to fill; he was a driving force on our campus, a dedicated educator and a tireless advocate for compassionate care. He has said that he hoped to leave the medical profession better than he found it, and by touching the lives of thousands of osteopathic physicians, I believe he has done exactly that.



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



Photo by Bruce Fairfield

A STUDENT'S VOICE — PCOM

Amy Brady, OMS-II and Justin Owens, II



Amy Brady
PCOM OMS-II



Justin Owens
PCOM OMS-II

"This one is for you, Dr. Rowland — I did it!"
These were the exuberant, gratified final words of the gregarious, yet humble 72-year-old Dr. John P. Simelaro last spring as he finished his last lecture as a Clinical Professor of Pulmonary Medicine at PCOM. A thunderous applause from first-year students and PCOM faculty followed as he made a teary-eyed nod to his friend and mentor, Dr. Thomas Rowland. As Dr. Simelaro turned to exchange handshakes with friends and colleagues, Drs. Michael Venditto and Daniel Parenti, he was met with a well-deserved standing ovation from yet another generation of student physicians touched by his teaching and leading example.

Affectionately known as "the face of pulmonary at PCOM," Dr. Simelaro received his DO degree from PCOM and completed the Internal Medicine residency there as well. He also completed a Pulmonary Medicine residency at Hahnemann Hospital in Philadelphia, then returned to PCOM to formulate a pulmonary curriculum for its CRP (cardiology-renal-pulmonology) course. Before PCOM's hospital on City Avenue closed, he implemented the Pulmonary Fellowship there, and he ran the internal medicine residency for 20 years, "turning out several hundred internists," which Dr. Venditto shared with us. After the hospital closed, he continued teaching the medical students at PCOM.

For over 40 years he has served as a professor of Pulmonary Medicine and been active within the Philadelphia community. Drawing upon his own medical expertise and personal battles with severe asthma and a meningioma, Dr. Simelaro taught many students what it means to be an osteopathic physician. He has stressed the importance of talking with a patient and obtaining a thorough history and physical,

in particular identifying the significance of their stated occupation. He even passed on his unique chest percussion technique, involving a reflex hammer (believe us, it works!). Through his passion and dedication to teaching, Dr. Simelaro has provided hundreds of future physicians with the tools they need to be successful, compassionate, osteopathic clinicians.

Dr. Simelaro has made it a priority to give back to his community, not only to student physicians, but also to his fellow Philadelphians. For years, he has taken a major role in the Athlete Health Organization, which provides free, comprehensive health screenings to young student athletes in underserved areas. Each year, by partnering with local medical students at PCOM, Dr. Simelaro has saved children's lives, while simultaneously providing his students with the opportunity to practice their clinical skills, bestow their [supervised] medical education, and promote health maintenance behaviors to those overlooked, at-risk populations in Philadelphia. He and his student "marines," have saved the lives of young boys and girls by precluding any sudden death that may have resulted from an undiagnosed medical problem. In recruiting PCOM students from the class of 2021 this year, Dr. Simelaro's mission has been to "find five
(continued on page 24)



Photos by Bruce Fairfield

ABOUT THE AUTHORS

Peter Laucks, DO, received an honorable mention award in the 2018 POMA Clinical Writing Contest for his manuscript, *“Medication Reconciliation: Obstacles to Compliance.”* A third-year internal medicine resident and attending emergency department physician at Millcreek Community Hospital in Erie, Pennsylvania, he is a graduate of Dickinson College in Carlisle, Pennsylvania, and a 2015 graduate of the Lake Erie College of Osteopathic Medicine. Dr. Laucks also completed the Chinese Language Certification Program where he lived and worked between 2004-2005. In his free time, he enjoys rock climbing, mountaineering, metalsmithing, lutherie, woodworking, music, programming and circuit design.

Olga Stetsyuk, DO, received the third place award in the 2018 POMA Clinical Writing Contest for her manuscript, *“Characterization of the Retinal Nerve Fiber Layer Thickness in Nepalese Cohort by Spectral Domain Optical Coherence Tomography.”* A third-year ophthalmology resident at Millcreek Community Hospital in Erie, Pennsylvania, she completed an internship at Saint John’s Episcopal Hospital in Far Rockaway, New York. Dr. Stetsyuk is a graduate of Saint Anselm College in Manchester, New Hampshire, and a 2014 graduate of the University of New England College of Osteopathic Medicine in Biddeford, Maine.



Peter Laucks, DO



Olga Stetsyuk, DO

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Attention Writers...

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

The December 2018 issue will focus on the physician's perspective on pain management, including what you feel needs to be done to better manage patients' pain, as well as how physicians can help elected officials combat the opioid crisis.

Submissions welcome from POMA members and the public!

E-mail entries to the *JPOMA* Editor
c/o bdill@poma.org.

PERSONAL REFLECTIONS: TEACHERS, MENTORS,

Living Each Day as an Example of What an Osteopathic Physician Should Be Submitted by Lisa A. Witherite-Rieg, DO



Jessica Masser, DO (l) & Lisa Witherite-Rieg, DO (r)

As medicine changes, and the process for medical education changes, and demands on physicians increase, it is refreshing to know that there are some osteopathic physicians that embrace change while adhering to their osteopathic roots.

Though young in her career, Jessica Masser, DO, is a respected osteopathic family physician, leader within the profession, educator, mentor, coach, wife, mother and friend. Dr. Masser can frequently be seen with her young children accompanying her to the POMA Clinical Assembly or the POFPS Symposium. Family first has always been her focus, and her children, like mine, will grow up appreciating the importance of the osteopathic family.

Committed to education, Dr. Masser is a clinical instructor of family medicine, incorporating osteopathic manipulative medicine in her patient interactions, modeling what an osteopathic physician should be. As a member of the planning committee for the District 8 Winter Seminar, she continues to

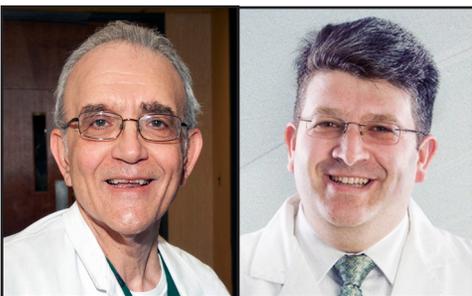
help produce one of the PREMIERE educational opportunities for DOs throughout the region. Lifelong learning has been a cornerstone of Jessica's philosophy on education. You are never too young, or old to learn something new.

Jessica has been instrumental in developing leadership programs for young physicians and medical students. Her pilot program at the POFPS Symposium has served as a model for similar programs throughout the state. Dr. Masser serves on POMA's Professional Guidance Committee. Her interaction with our residents in the western part of the state PROVES that being an osteopathic physician is FUN! Engaging our legacy at an early age will bolster our profession.

Our strength as a profession hinges on our roots in osteopathic philosophy, acknowledging that the BODY-MIND-SPIRIT continuum is the key to wellness. POMA's Hospitality Task Force was commissioned to create an inviting environment for colleagues to socialize and unwind while representing POMA. Jessica more than graciously shared her hidden talents with POMA members to help create that setting, lifting everyone's spirit!

Living each day as an example of what an osteopathic physician should be, Jessica Masser, DO, represents our profession well in her interactions with patients, colleagues, learners, her family and our communities.

The Gift of Transformation Submitted by Avidon Appel, DO



John Simelaro, DO (l) & Avidon Appel, DO (r)

I met Dr. Simelaro after having an asthma attack during the start of my Master's program at PCOM. I had recently been cutting wood without a proper face mask. After his exam and treatment, we spoke about my work at a laboratory at Fox Chase Cancer Center and my part-time job working in the audio field as a speaker cabinet maker. He asked me why I was doing research and that I should consider becoming a physician. He must have seen something I did not. I explained to him that coming from a blue-collar family, I did not think it was possible. He then shared with me that he grew up working alongside his father making custom cabinetry from childhood through his graduate school days. He said the most important part of cabinetry is finding quality stock wood you can work with.

Over the course of the next few months we kept in contact and he kept encouraging me to consider spending a day with him "seeing patients". Eventually, I accepted his offer and literally had an epiphany. A chance meeting changed my life forever. I was not sure if it was a one-time experience, so I asked to spend some more time doing this. After realizing that this would be my career goal, I applied to PCOM and was accepted the following year. I would often stop by during lunch hours for one-on-one lectures and discussions of what he called "medical potpourri". To someone from my background this was amazing and almost unheard of. He always would say do everything you can for the patient, the rest does not matter.

Dr. Simelaro had the ability to find raw wood and make amazing items, but his greatest ability was taking students, recognizing their characters and helping transform them into diagnosticians, caring physicians and quality medical providers. Our job now is to pass these qualities on to student doctors and others in training.

LEADERS, COLLEAGUES, FRIENDS IN MEDICINE

Learning How to Become a Great Osteopathic Physician

Submitted by Brody Lipsett, OMS-III

Whether it be in one's personal life or professional life, I strongly believe that everyone should have a mentor who leaves a reigning mark on your life's journey. For me, that mentor is Myron Haas, DO. Dr. Haas has provided both surgical and non-surgical orthopedic services to the residents of Schuylkill County, Pennsylvania for many years. While I was pursuing my undergraduate degree, I had an interest in a future career in medicine. Dr. Haas introduced me, as well as many others, to the field of osteopathic medicine. I could not be more thankful for that exposure as I am now in the midst of clinical rotations as a third-year medical student at Lake Erie College of Osteopathic Medicine — Erie Campus.

I can recall from my shadowing opportunities with Dr. Haas, not only the qualities and responsibilities of becoming a great physician but more importantly, those of an osteopathic physician. Every patient encounter started with a distinct warm greeting followed by a hearty laugh, a firm handshake and an open ear. Even though the patient might have been tipped-off of his coming by the echoes of his cowboy boots clunking through the hallways of the clinic, he always entered the patient's room with a warm greeting. In fact, each visit would not be complete if he did not ask about his patients' families. His goal is to always provide the highest quality of care, compassion, and professionalism to every single one of his patients, no matter what.

As I embarked on my journey in medical school, Dr. Haas continued to mentor me. We would periodically talk on the phone or exchange text messages, discussing how classes were going, what I enjoyed or did not enjoy about medical school, or even his own recounts of medical school. I truly enjoyed and looked forward to these check-ins. They were small reminders that someone outside of my immediate family was genuinely interested in both my progress in school and in my life's story. Most importantly, I was heard and supported by someone in the field who was confident in my qualities and abilities to be a physician. These conversations always reassured me that I am meant to be in medicine; they helped eliminate the feeling of inadequacy and overcome the self-doubt of impostor syndrome. I believe we all experience at one point or another in our lives the internal turmoil of self-doubt, but it is the influential people in our lives who help us overcome that feeling. As menial as these exchanges may have seemed, they were essential to my overall well-being and growth.

As I continue my clinical rotations, these calls and texts still carry on; reminding me that every day is a learning experience and to be open-minded. Everyone has a unique story to tell or lesson to be learned from them, aiding in grooming myself into the practitioner I will soon become. Whether it be the patient that I am rounding on or the attending physician I am following, every person I meet has an impact on my experiential education. I aspire to one day make a positive impact on those who I treat and to be a mentor for future physicians like Dr. Haas has been to not only myself, but a countless amount of other people. His wise words and teachings will always remain with me, especially this piece of advice that resonates with me, and I believe our vocation as well: "Do what is in the best interest for the patient. It is why you are there, and it is why you love your profession."



Myron Haas, DO (l) & Brody Lipsett, OMS-III (r)

The Lion & The Man

Submitted by Pat A. Lannutti, DO

The lion of PCOM has retired after 51 years of service. Others will catalog Dr. John Simelaro's accomplishments. I will attempt to honor the man.

John and I graduated from PCOM in 1971. We were known as SIMENUTTI. We have studied, worked, played, cried and laughed together for 51 years. At PCOM, the lion would roar creating a magnificent pulmonary division and internal medicine department. The man at work loved lecturing, his research, and his many students. John sought ACGME approval in 1998 but was prevented from completing the certification.

The man loves deep-sea fishing, working with his tools, carving wood in his shop and operating his ham radio. He is a passionate family man with a devoted wife, Felice, and two lovely daughters, Christina and Annette. I am Christina's godfather. His oldest daughter, Gina, passed away at the age of four in 1976. I established the Gina Simelaro Memorial scholarship in her honor in 1986 which continues to benefit our students.

John, the Man, has surmounted many obstacles to achieve success and lasting accomplishment. I have worked with him as an educator and physician. We will not hear the lion roar any longer at PCOM. I am fortunate still to be able to enjoy the man as a companion. PCOM will not see his like again.

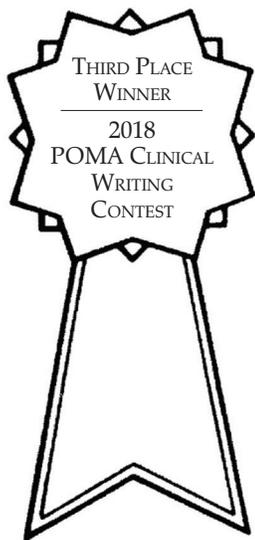


Pat Lannutti, DO (l) & John Simelaro, DO (r)

Medical Update

Characterization of the Retinal Nerve Fiber Layer Thickness in Nepalese Cohort by Spectral Domain Optical Coherence Tomography

by Olga
Stetsyuk, DO



Abstract

Purpose: To characterize and determine the normal values of peripapillary retinal nerve fiber layer (RNFL) thickness in the Nepalese population at the Sterrettania Ophthalmology Clinic in Erie, Pennsylvania as measured by spectral domain optical coherence tomography (OCT).

Methods: Retrospective chart review of the Nepalese patient population at Sterrettania Ophthalmology Clinic in Erie, Pennsylvania who underwent OCT of the optic nerve head between January 1, 2015 and June 30, 2016. RNFL thickness of the superior, inferior, nasal, and temporal quadrants, as well as the global RNFL thickness, was recorded for each eye in each patient. The RNFL thickness measurements were compared between genders and among the various age groups.

Results: The OCTs of the optic nerve head of a total of 72 eyes (35 left eyes, 37 right eyes) of 38 (20 males and 18 females) healthy Nepalese patients were studied. The mean age of the subjects was 54.49 ± 14.77 (range 29 to 91 years). The mean peripapillary RNFL thickness was found to be $87.09 \mu\text{m} \pm 11.73 \mu\text{m}$ 95% CI [$87.05 \mu\text{m}$, $87.14 \mu\text{m}$]. The average \pm SD peripapillary RNFL thickness at the superior, nasal, inferior and temporal sectors in the study cohort were $111.59 \mu\text{m} \pm 21.82 \mu\text{m}$, $68.19 \mu\text{m} \pm 11.74 \mu\text{m}$, $112.53 \mu\text{m} \pm 20.63 \mu\text{m}$, and $55.42 \mu\text{m} \pm 14.06 \mu\text{m}$, respectively. Peripapillary RNFL thickness between sectors was significant at the $p < 0.01$ level in all four quadrants except superior versus inferior quadrants. The average peripapillary RNFL thickness was $91.61 \pm 11.06 \mu\text{m}$ in male patients and $82.58 \pm 10.72 \mu\text{m}$ in female patients. There was a slightly positive correlation with average peripapillary RNFL thickness and

increasing age, which was not statistically significant, $r(70) = 0.195$, $p = 0.100$.

Conclusion: The average peripapillary RNFL thickness in the Nepalese cohort in this study was $87.09 \mu\text{m} \pm 11.73 \mu\text{m}$. The sectoral RNFL thickness differences followed the expected pattern as described in literature and were significant at the $p < 0.01$ level with exception of the superior versus inferior quadrants. Age and gender dependent variability of the peripapillary RNFL thickness can be useful in diagnosing and managing glaucoma in the Nepalese patient. The peripapillary RNFL thickness data obtained in this study can contribute to the reference literature of the characterization of peripapillary RNFL thickness in the Nepalese population in further study of healthy and diseased optic nerves in Nepalese patients.

Introduction

Glaucoma is the second leading cause of visual impairment and blindness worldwide.^{1,2} There are over 2.7 million individuals over the age of 40 with visual impairment due to glaucoma just in the United States based on a 2010 census report.³ As studies have demonstrated optic nerve and peripapillary retinal nerve fiber layer (RNFL) damage in glaucoma,^{4,7} careful evaluation of the optic nerve head and RNFL is vital in accurately diagnosing and appropriately managing glaucoma in any patient population. Glaucoma can affect different ethnic populations with varying degrees of severity and by different mechanisms, and, as there may also be racial variation in the peripapillary RNFL thickness of healthy nerves, it is important to determine and understand baseline normal parameters of various ethnicities.⁸⁻¹¹ The RNFL thickness can

be measured by optical coherence tomography (OCT), an imaging technique first described by Huang et al in 1991.¹² The purpose of this study was to provide a retrospective review of the RNFL thickness in eyes of a normal Nepalese cohort in a local ophthalmology clinic in order to demonstrate baseline normal parameters on patients encountered on a regular basis and also possibly to contribute to the reference literature characterizing RNFL thickness in a healthy Nepalese population.

Methods

A retrospective chart review was performed and a composite list was obtained of all Nepalese patients who had undergone an OCT scan of the optic nerve head at the Sterrettania Ophthalmology Clinic between the dates of January 1, 2015 and June 30, 2016. IRB exemption status was approved. The scans of all subjects had been obtained using the available HD-OCT (spectral domain, Cirrus HD-OCT, Carl Zeiss Group). The instrument uses as its optical source a super luminescent diode with a wavelength of 840 nm and performs up to 68,000 A-scans/sec to obtain the OCT scan. The Zeiss Cirrus HD-OCT software version 8.1.0 was used to analyze measurements of the total and sectoral RNFL thickness. The patients' age, gender, global RNFL thickness, and sectoral RNFL thickness per eye was recorded. Patients with ICD 9 codes for glaucoma were identified and this history was also recorded. The mean \pm one standard deviation RNFL thickness was calculated for the global and sectoral measurements. A one-way analysis of variance (ANOVA) test was performed on the four quadrant means ($k=4$) using Open Source Statistical Computation,¹³ and was followed by a post-hoc Tukey HSD test to determine the statistical difference in each of the four quadrants of RNFL thickness. Multiple regression analyses were performed with global and sectoral mean RNFL thickness measurements as the dependent variables and age and gender as independent variables. Linear models with corresponding scatter plots and best-fit regression curves and regression coefficients were performed. Association of RNFL thickness with age was analyzed using the Pearson correlation coefficient. Unpaired t-test was carried out to examine the gender-specific differences in the RNFL measurements.

Inclusion and Exclusion Criteria

A raw total of 81 eyes (42 right eyes, 39 left eyes) of 43 patients were reviewed during

this time period. Studies with poor OCT scan quality due to either low signal strength or poor tracking were excluded from the final data analysis. Patients with documented history of glaucoma or ocular hypertension were also excluded from the final data analysis. Following exclusion criteria, a total of 72 eyes (35 left eyes and 37 right eyes) of 38 healthy Nepalese patients (20 males and 18 females) were submitted for final data analysis.

Data Analysis and Results

A net total of 38 Nepalese patients and 72 eyes were reviewed during this period. The age range of the subjects studied was 29 to 91 years, with mean age of 54.49 ± 14.77 years. The distribution of the subjects according to the age group and gender is shown in Table 1.

The mean peripapillary RNFL thickness in the study population was found to be $87.09 \mu\text{m} \pm 11.73 \mu\text{m}$ 95% CI [$87.05 \mu\text{m}$, $87.14 \mu\text{m}$]. The average \pm SD peripapillary RNFL thickness at the superior, nasal, inferior, and temporal sectors in the study cohort were $111.59 \mu\text{m} \pm 21.82 \mu\text{m}$, $68.19 \mu\text{m} \pm 11.74 \mu\text{m}$, $112.53 \mu\text{m} \pm 20.63 \mu\text{m}$, and $55.42 \mu\text{m} \pm 14.06 \mu\text{m}$, respectively (Figure 1). Peripapillary RNFL was thickest in the inferior quadrant, followed by the superior, nasal, and temporal quadrants.

Multiple regression analyses were performed to determine correlation between age and average and sectoral RNFL thickness in the Nepalese cohort. The average RNFL thickness was $77.00 \pm 1.00 \mu\text{m}$ in the 20-29 years group, $80.25 \pm 3.30 \mu\text{m}$ in the 30-39 years group, $86.08 \pm 12.01 \mu\text{m}$

Age group (in years)	Gender		Number of Subjects
	Male	Female	
20-29	1	0	1
30-39	2	0	2
40-49	3	9	12
50-59	7	5	12
60 and above	7	4	11
TOTAL	20	18	38

Table 1: Distribution of study subjects by age and gender.

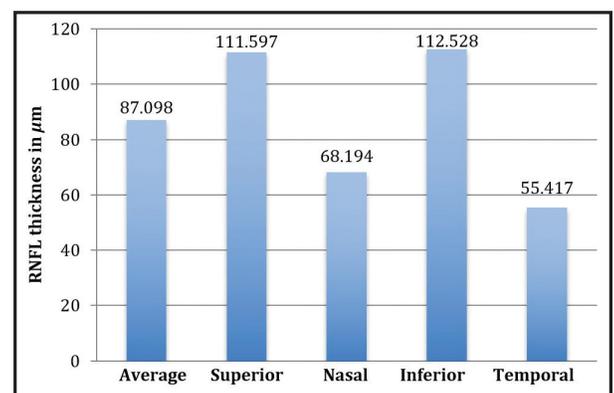


Figure 1: Average and Quadrant RNFL thickness in μm .

Age (in years)	RNFL thickness in μm (Mean \pm SD)				
	Average	Superior	Nasal	Inferior	Temporal
20-29	77.00 \pm 1.00	95.33 \pm 6.66	60.33 \pm 0.58	80.00 \pm 3.46	73.33 \pm 1.15
30-39	80.25 \pm 3.30	101.50 \pm 7.19	71.00 \pm 4.69	98.00 \pm 13.71	49.25 \pm 13.72
40-49	86.08 \pm 12.01	113.46 \pm 22.22	64.46 \pm 11.59	114.71 \pm 21.56	50.92 \pm 15.10
50-59	89.45 \pm 11.75	111.73 \pm 17.69	70.77 \pm 13.04	119.09 \pm 16.40	55.68 \pm 11.85
60+	87.61 \pm 12.36	112.38 \pm 27.89	69.57 \pm 13.77	107.29 \pm 23.30	60.67 \pm 13.38

Table 2: Average and sectoral RNFL thickness in μm based on age.

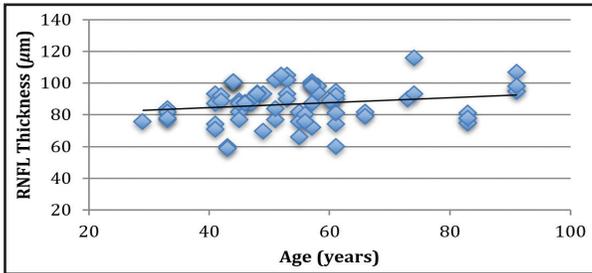


Figure 2: Correlation between age and mean RNFL thickness in all subjects.

$$y = 0.1558x + 78.502$$

$$r = 0.195, p = 0.100$$

RNFL sector	Best-fit equation	r	p
Superior Quadrant	$y = 0.0909x + 106.58$	0.061	0.614
Nasal Quadrant	$y = 0.2363x + 55.155$	0.278	0.018
Inferior Quadrant	$y = 0.0846x + 107.86$	0.059	0.620
Temporal Quadrant	$y = 0.1972x + 44.536$	0.208	0.080

Table 3: Correlation between age and sectoral RNFL thickness in all subjects.

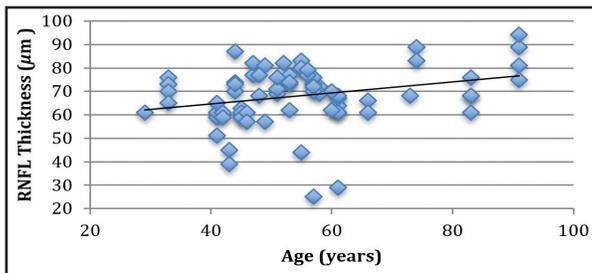


Figure 3: Correlation between age and nasal RNFL thickness in all subjects.

$$y = 0.2363x + 55.155$$

$$r = 0.278, p < 0.05$$

in the 40-49 years group, $89.45 \pm 11.75 \mu\text{m}$ in the 50-59 years group, and $87.61 \pm 12.36 \mu\text{m}$ in the 60 and above age group (Table 2). There was a small positive correlation between the average RNFL thickness and increasing age, which was not statistically significant ($r = 0.195, p = 0.100$). There was also found to be a weakly positive correlation between all sector RNFL thicknesses and increased age; the only statistically significant correlation was noted of the nasal quadrant RNFL thickness ($r = 0.278, p < 0.05$) (Table 3, Figures 2-3).

The average peripapillary RNFL thickness was $91.61 \pm 11.06 \mu\text{m}$ in male subjects and $82.58 \pm 10.72 \mu\text{m}$ in female subjects. Unpaired t-test demonstrated that global, superior, and nasal RNFL measurements in male subjects were significantly thicker than corresponding sectors in female subjects ($p < 0.01, p < 0.05, p < 0.01$, respectively).

Conclusion

The average peripapillary RNFL thickness in the Nepalese cohort in this study was $87.09 \mu\text{m} \pm 11.73 \mu\text{m}$. The sectoral RNFL thickness differences followed the expected pattern as described in literature and were significant at the $p < 0.01$ level with exception of the superior versus inferior quadrants. Age and gender dependent variability of the peripapillary RNFL thickness can be useful in diagnosing and managing glaucoma in the Nepalese patient.

Discussion

Evaluation of the optic nerve head and peripapillary retinal nerve fiber layer (RNFL) thickness is an important element of any ophthalmic examination, but especially when assessing visual impairment in an individual. Glaucoma is the second leading cause of visual impairment and blindness worldwide.^{1-2,14} The prevalence of adult vision impairment as determined by the National Eye Institute and Prevent Blindness America based on 2010 U.S. Census populations estimated over 2.7 million cases of glaucoma related vision impairment in adults over the age of 40.^{2,14} Glaucoma has been shown to cause damage of the peripapillary RNFL,^{4,7} thus careful examination and assessment of the optic nerve head and RNFL is vital in correctly diagnosing and appropriately managing glaucoma in any patient population. Studies have also shown a racial variation in normal baseline RNFL measurements.⁸⁻¹¹ Alasil et al¹⁵ demonstrated in a cross-sectional study that healthy Asian and Hispanic individuals have thicker peripapillary RNFL measurements than do Caucasians. Further, Hwang et al¹⁶ demonstrated that there is an interocular difference (right eye versus left eye in the same subject) in RNFL thicknesses of healthy eyes as well, particularly in the superior quadrant. Retinal thickness mapping of the posterior pole, therefore, seems to be an important parameter in evaluating for a glaucoma-related threat to visual function. The RNFL thickness can be measured by optical coherence tomography (OCT), an imaging technique first described by Huang et al in 1991,¹² and this modality has since been updated and enhanced and has become an important diagnostic tool in detecting early glaucomatous changes of the optic nerve and peripapillary nerve fiber layer.¹⁷⁻¹⁹

As mentioned above, the peripapillary RNFL demonstrates racial variation in healthy eyes, and Asian and Hispanic populations tend to have thicker RNFL measurement than

do Caucasian populations.^{8-11,15} Thapa et al²⁰ performed an observational, cross-sectional hospital-based study that has yielded a normative database of the RNFL thickness in healthy Nepalese eyes. They reported the average RNFL thickness to be $102.64 \pm 9.56 \mu\text{m}$, which was similar to prior studies demonstrating a range of 103.0 to $108.4 \mu\text{m}$ in other Asian countries. Comparable results were reported by Khanal et al¹⁸ who demonstrated a mean RNFL thickness of $109.8 \pm 8.32 \mu\text{m}$ in the normal Nepalese population. The mean RNFL thickness of normal eyes of the Western populations has been reported in the range of $85.8 - 99.36 \mu\text{m}$, lower than in the Asian population.^{4,8,15,21} The mean RNFL thickness calculated for the Nepalese cohort in this study was $87.09 \mu\text{m} \pm 11.73 \mu\text{m}$, more comparable to the measurements obtained for Western populations and less than the range reported for Asian populations.

Evaluation of the sectoral thickness showed that the RNFL was thickest at the inferior quadrant, followed by the superior, nasal and temporal quadrants, with two humps at the superior ($111.59 \mu\text{m}$) and inferior ($112.53 \mu\text{m}$) quadrants and two troughs at the nasal ($68.19 \mu\text{m}$) and temporal ($55.42 \mu\text{m}$) quadrants, following the 'ISNT' rule. The 'ISNT' principle has been reported by multiple studies^{4,15,22} and has depicted a pattern of sectoral RNFL thickness in which the inferior quadrant is thickest, followed by the superior, nasal and temporal quadrants. The differences among the sectoral RNFL thicknesses were statistically significant at the $p < 0.01$ level, with exception of the superior versus inferior quadrants.

There was a significant difference between the male and female subjects' RNFL thickness. The average RNFL thickness in the male subjects in this cohort was $91.61 \pm 11.06 \mu\text{m}$, which was greater and statistically significantly different from the average RNFL thickness in the female subjects, which was $82.58 \pm 10.72 \mu\text{m}$ ($p < 0.01$). Thapa et al²⁰ demonstrated the opposite effect and reported a statistically significant difference between the male and female cohorts with male RNFL thickness averaging significantly thinner than female RNFL thickness (male $99.47 \pm 10.18 \mu\text{m}$, female $105.09 \pm 8.31 \mu\text{m}$). Alasil et al¹⁵ and Mansoori et al²³ did not find a statistically significant difference in RNFL thickness between genders.

Several studies have shown that RNFL thickness decreases with increasing age.^{5,15,23} Thapa et al²⁰ also demonstrated this pattern of RNFL thinning in the normal Nepalese population with $2.26 \mu\text{m}$ decrease in RNFL

thickness per decade of age. There was a weakly positive correlation to increasing age demonstrated in this study, but it was not statistically significant.

Characterization of the RNFL thickness in the normal Nepalese population based on age and gender is useful in establishing baseline parameters by which to monitor the optic nerve head and RNFL thickness for early signs of glaucoma or other optic nerve pathology potentially leading to functional visual impairment. OCT, which at the time of this writing is considered to be standard of care in evaluating optic nerve head and peripapillary RNFL pathology and atrophy, particularly in glaucoma, can be used with good accuracy in evaluating the RNFL thickness in any patient population.

Study Limitations and Future Considerations

The most significant and noteworthy limitation of this study was its retrospective design and small cohort. The retrospective nature of this study allowed the possibility of inter-operator variability in obtaining the OCT scans and increased variability in the signal strength of the scans. Another limitation of the retrospective design is that there may have been undocumented or undiagnosed optic nerve pathology besides glaucoma at the time of the scans which was not taken into account when reviewing the scans. This study also did not evaluate the effect of refractive error on RNFL thickness; prior studies have shown that myopia can result in thinner RNFL thickness in normal eyes.²⁰ Although this study can contribute to the existing normative database of RNFL thickness parameters in the Nepalese population, these factors should be included in future prospective studies aimed at further characterizing healthy and diseased eyes in the Nepalese community in order to provide effective ophthalmic care and help prevent the onset or progression of visual impairment.

References

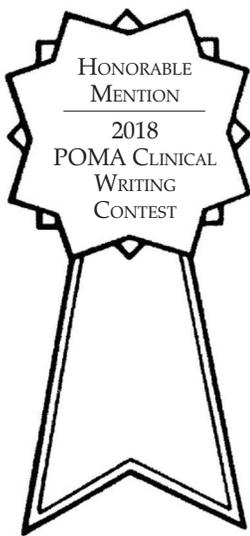
1. American Academy of Ophthalmology: Epidemiologic aspects of glaucoma, in Cioffi GA (ed): *2015-2016 Basic and Clinical Science Course (BCSC), Section 10: Glaucoma*. 2015, p 8-10.
2. World Health Organization. *Prevention of blindness and visual impairment. Causes of blindness and visual impairment*. Retrieved from <http://www.who.int/blindness/causes>.

(continued on page 23)

Medical Update

Medication Reconciliation: Obstacles to Compliance

by Peter
Laucks, DO



Abstract

Medication reconciliation is one of the most challenging logistical issues during inpatient hospitalizations. Previous research by this author identified statistics on the completion of medication reconciliation in various hospital units. The purpose of this project was to elucidate, via a pointed questionnaire, some of the obstacles to compliance. Most of the respondents were physicians, the majority whom do complete medication reconciliation as part of their job. Most feel that the task of medication reconciliation is best completed by a pharmacist. Most respondents feel that their patients do not have a good handle on their medication list. Compliance seemed to be worst with cardiac meds. The med-surg/general medical floor seems to be the unit where medication reconciliation is completed most often. The biggest obstacle reported by respondents was the inability to acquire updated and current medication lists from either the primary care physician office or the pharmacy, especially overnight or on the weekends. Some suggestions for improving medication reconciliation completion and compliance are offered, including protocolizing the process.

Introduction

Medication errors are a major cause of morbidity and mortality in our healthcare system. Everyone agrees that we need to do a better job of accomplishing medication reconciliation, but there seems to be some disparity in regards to whose job it is to do this. With over 60 percent of hospitalized patients having at least one medication discrepancy, it is incumbent upon the practicing physicians ordering medications, as well as the pharmacists filling these orders, to always cross-reference medication lists and interactions to make sure that prescribing is overall a safe endeavor.¹ Error reporting has been the most useful way thus far to identify medication errors, but this method is rife with bias.²

Previous research conducted by this author identified some issues with medication reconciliation performance from both physicians and pharmacists at a representative small community hospital and provided a useful assessment of where the issue lies. It does not, however, describe the reasons for the data observed. The purpose of this project was to generate a questionnaire that could further describe some of the obstacles which may have contributed to the results shown in the previous study.

Most current research in this area has been focused on medication reconciliation during the time of hospital admission and discharge. The purpose of this study was to determine some of the local obstacles to medication reconciliation completion which are very likely specific to Millcreek Community Hospital (MCH) and the electronic medical record (EMR) system that we use. The hope was that the results will be generalizable to other hospitals of this scale. Prior research has revealed data about different hospital units (ICU vs. General Medical Floor) and some papers have dealt with particular classes of drugs (cardiac drugs have the most errors). Most of the research is focused in large academic centers. This project was designed to provide beneficial insight into what the specific obstacles are for a small community hospital, and there does not seem to be a body of literature specifically related to this question.

Respondents were questioned about their basic information to better elucidate who is completing medication reconciliation. They were asked about the process of medication reconciliation completion itself, in terms of what outside resources are regularly used to get an accurate medication list. Information was collected about different classes of medications and how they may contribute to difficulty in medication reconciliation. Some questions focused on behaviors of medication reconciliation in different types of inpatient units, and various interpersonal obstacles.

Finally, a comments section was added so that respondents could contribute their own thoughts about why medication reconciliation can be so difficult.

The target audience was physicians, residents, medical students, pharmacists, pharmacy residents, and pharmacy students that rotate through MCH during the study period. I anticipated over 50 people answering the questionnaire and there were 54 respondents. I used an online survey module with *www.surveymonkey.com* to keep the process simple. Anonymity was ensured by utilizing the non-IP-logging option as further explained here: http://help.surveymonkey.com/articles/en_US/kb/Are-my-survey-responses-anonymous-and-secure. This project qualified for institutional review board exemption for research.

This study was designed as an exploration of the obstacles, for both physicians and pharmacists, to completing a medication reconciliation on all inpatients at a small community hospital. The expectation was that the study would reveal institutional and cultural obstacles to medication reconciliation which are specific to each field of personnel performing this task (physician and pharmacist). By creating an anonymous survey, it was felt that respondents would be more likely to be honest about the reasons for their own deficiencies in completing medication reconciliation. These findings were then summarized into a coherent picture that contributing to an action plan for how to improve medication reconciliation completion at a small community hospital.

The results of the survey were meant to be synthesized along with the body of current research on the subject to generate some actionable areas for improvement. These areas include: a focus on elderly patients with long medication lists and how the interdisciplinary care team of primary care physicians and other providers should work together to make sure this list stays up to date; process integration, where a medication reconciliation survey is initiated within a few hours of admission to a unit and the process survey is not completed until discharge; systematic identification of the more complicated patients with more extensive medical needs and a more pointed focus on a detailed medication reconciliation for them. The hope has been that some of what is learned can be generalizable to all hospitals of the smaller scale.

Methods

At the beginning of the study, institutional review board exemption status was achieved

based on the completely anonymous nature of the data collection. No respondent identifiers, either direct or indirect, were preserved. Data points were procured from the online website *www.surveymonkey.com* with the help of the research team at the Lake Erie College of Osteopathic Medicine. An email was sent to all physician and pharmacy staff at Millcreek Community Hospital, including medical and pharmacy interns, residents, and attendings. The only inclusion criteria was that the respondent be a medical or pharmacy staff member directly involved in patient care that completes medication reconciliations.

The questionnaire itself was administered as follows:

1. Are you:
 - a) pharmacy staff (pharmacist, pharmacy resident, pharmacy student)
 - b) medical staff (attending physician, resident physician, medical student)

2. Do you complete medication reconciliations as part of your job at the hospital?
 - a) sometimes
 - b) always
 - c) never

3. Are you more likely to complete a medication reconciliation if the medication list is simple?
 - a) yes
 - b) no

4. Do you feel your patients know what medications they are on at home?
 - a) yes
 - b) no

5. Have you, in the last few months, called a pharmacy or an outside physicians office in order to get a better medication list for your patients?
 - a) yes
 - b) no

6. In which class of drugs do you think there are most likely to be mistakes in home medication list or medication reconciliation?
 - a) cardiac/blood pressure/lipid management
 - b) pulmonary/COPD/asthma
 - c) diabetes
 - d) pain management
 - e) other

7. In which hospital unit are you most likely to complete a medication reconciliation on both admission and discharge?

- a) ICU
- b) med surg
- c) rehabilitation/therapy
- d) long term care

8. What, in your opinion, is the biggest obstacle to completing medication reconciliation?

- a) It takes too long
- b) It's overwhelming
- c) There is no way to truly tell what the patient is on
- d) Understanding what each medication is for
- e) Ability to contact pharmacies and PCP offices for updated lists

f) Limitations of local formulary at the hospital

g) Other, please specify: _____

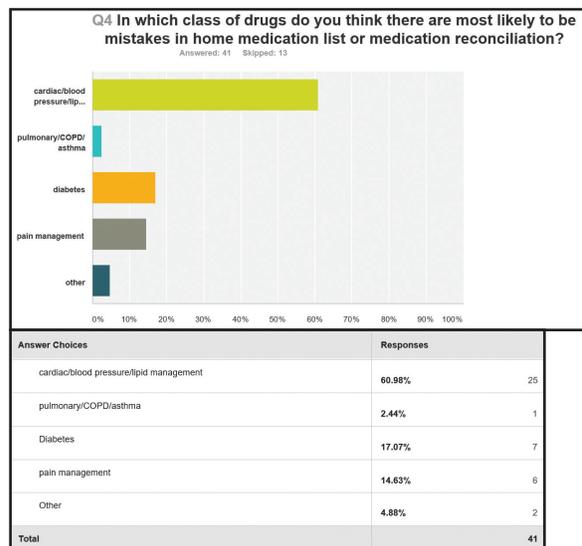
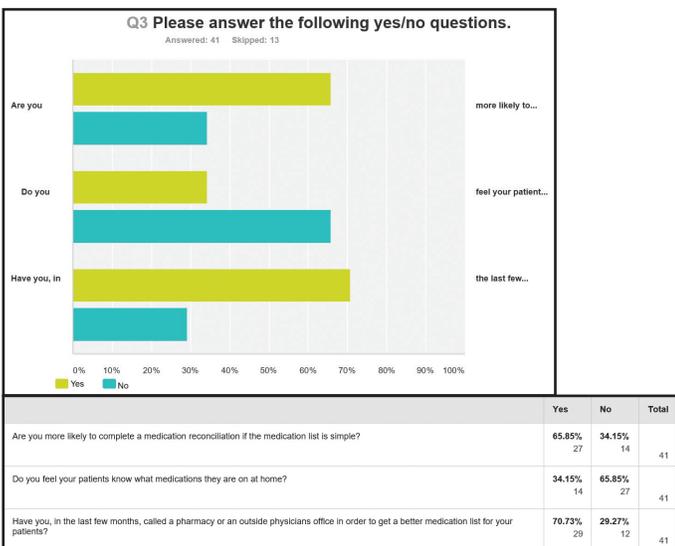
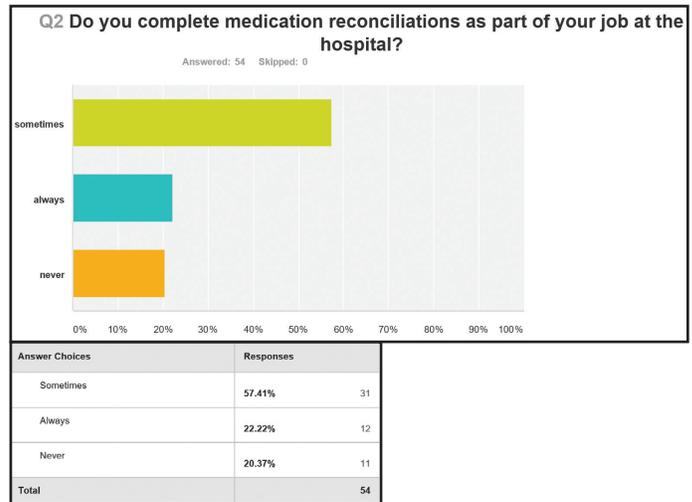
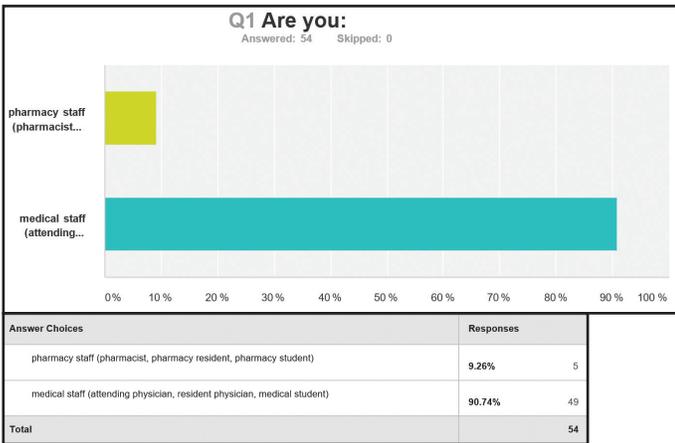
9. Do you think pharmacists or physicians are more likely to complete a medication reconciliation?

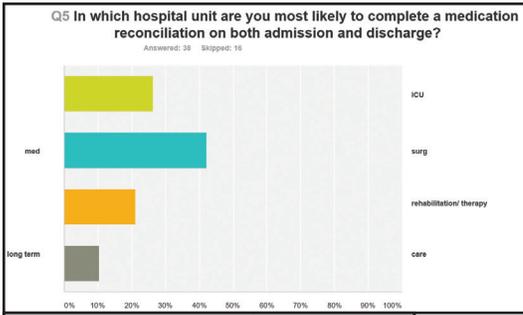
- a) pharmacists
- b) physicians

The data generated from the questionnaire was largely self-explanatory and subjective in nature, without need for statistical data analysis.

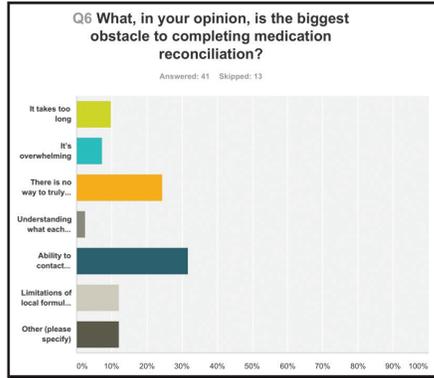
Data and Analysis

See the following charts and data:



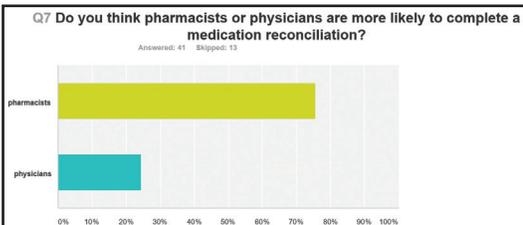


Answer Choices	Responses	Count
ICU	26.32%	10
med surg	42.11%	16
rehabilitation/therapy	21.05%	8
long term care	10.53%	4
Total		38



Answer Choices	Responses	Count
It takes too long	9.76%	4
It's overwhelming	7.32%	3
There is no way to truly tell what the patient is on	24.39%	10
Understanding what each medication is for	2.44%	1
Ability to contact pharmacies and PCP offices for updated lists	31.71%	13
Limitations of local formulary at the hospital	12.20%	5
Other (please specify)	12.20%	5
Total		41

#	Other (please specify)	Date
1	Too many duplicate/overlapping meds because both home & hospital meds generate on the discharge reconciliation form (ie: IV & PO routes of same med, hospital formulary PPI vs what pt is on at home, etc).	3/2/2017 3:32 PM
2	Time involved in confirming the medications and process of inputting into EMR	2/16/2017 4:49 PM
3	It has to be a group effort for med rec completely to be successful.	2/12/2017 6:47 PM
4	None. Always complete it.	2/10/2017 9:16 PM
5	Poor patient education on what they are taking and why	2/10/2017 4:38 PM



Answer Choices	Responses	Count
Pharmacists	75.61%	31
Physicians	24.39%	10
Total		41

Q8 Comments

Answered: 10 Skipped: 44

#	Responses	Date
1	I think it would greatly increase pt medication compliance (as well as pt knowledge/education) if the pt was given a simple, concise one-page list of his/her medications that included drug name (both Trade & generic names), dose, frequency, and reason/indication for the medication. This would also give pts an accurate & updated list to carry with them to their various medical appointments, which would likely improve/facilitate continuity of care in the outpatient setting.	3/2/2017 3:41 PM
2	Patient med recs should be completed any time a person is seen by a physician. This includes outpatient, inpatient, or ER visits.	2/16/2017 4:51 PM
3	I work in an outpatient subspecialty setting where we rarely prescribe medications.	2/14/2017 8:16 AM
4	Medication Reconciliation is particularly difficult when patients are being admitted from the ER in the middle of the night and the patient is asleep/drowsy and a poor historian or the patient cannot recall what their medications are and the pharmacy and PCP are closed at night. It is also difficult when the patients are on multiple medications for the same thing, (example: blood pressure meds, DM meds or psych meds) and the patient cannot recall which medication they are currently on or what is the appropriate medication.	2/11/2017 6:25 PM
5	In general I spot check for certain types of medication that pertain to surgery, often the Med rec is inaccurate. Complete and accurate Med reconciliation is a time consuming task. It is an inefficient task for the physician to undertake and should be the responsibility of nursing / pharmacy departments. The job of a physician is to diagnose and treat patients, not to undertake tasks that are appropriate for support staff.	2/11/2017 10:43 AM
6	If the emr system was more simplistic and there was a way to make sure that all meds were linked between databases	2/10/2017 10:34 PM
7	Good luck with your research!	2/10/2017 10:13 PM
8	I consult medicine to do it	2/10/2017 7:59 PM
9	I believe that medication reconciliation is possibly the most important aspect of transitions of care, but it can often be a challenge upon admission to assess what the patient actually does at home. Upon discharge, I think there needs to be better communication between the physicians and the pharmacists to make sure that nothing is missed and that the patient's medications are optimized.	2/10/2017 7:42 PM
10	I want to select bp and pulm meds for most likely to be incorrect	2/10/2017 4:38 PM

Conclusion

The number of respondents to this questionnaire was on par with the expectations of this author, and the population that submitted responses is indicative at least of the personnel doing medication reconciliation and interacting with medication lists at Millcreek Community Hospital. There was a disappointing bias toward physician staff completing the survey as opposed to pharmacy staff and this represents a weakness of the authors advertising of the study and the biggest problem with the study model itself. These issues are attributable to a paucity of research experience on the part of this investigator.

There was a total of 54 respondents to this questionnaire, all of whom work for the same organization. This lends consistency within their answers that speaks to a few issues endemic to the local healthcare system. The great majority of respondents were physicians (90.74 percent) which, as stated earlier, is a failure of the method of dissemination of this survey. The majority of respondents feel that pharmacists are more likely to complete a medication reconciliation than physicians.

The majority of respondents (79.63 percent) endorsed that they either sometimes or always complete a medication reconciliation as part of their daily job. The majority feel that they would be more likely to complete a medication reconciliation if the medication list in question was relatively simple and straightforward. The majority of respondents do not believe that their patients have any idea what medications they are supposed to be taking. On a positive note, most respondents to this study do go out of their way to call the patient's primary care physician (PCP) or pharmacy for a medication list.

Regarding obstacles to medication reconciliation, the overwhelming majority of respondents feel that cardiac medications are the most challenging to keep track of. They feel that the med/surg unit is the most likely to fulfill the obligation of medication reconciliation, and the long-term care setting is the least likely to accomplish this. When asked what they feel the biggest obstacle is to compliance with tight medication reconciliation, the largest number of respondents chose inability to contact pharmacies and PCP offices for updated lists. The second most common reason given was that there is never an absolute way to tell what the patient is truly on.

In the individualized response section, one respondent suggested that there were too many overlapping medication entries between

inpatient and home lists, and implicated the discharge reconciliation as the culprit for that disconnect. Another respondent emphasized that truly tight medication reconciliation requires a group effort. An additional respondent suggested that patient education about what they are taking and why would be most beneficial.

Opportunities for Improvement

For the cases where a patient is admitted to the general med/surg floor with very few medications, none of which are cardiac, there are few obstacles to accomplishing a tight medication reconciliation. On the other end of the spectrum, elderly patients admitted to long-term care late at night whose PCPs are out of the hospital system and who have multiple cardiac medications are most likely to have catastrophic communication breakdowns regarding medication lists that can lead to morbidity and mortality.

Physicians consider it to be the job of pharmacists to complete medication reconciliation. Efforts at improving medication reconciliation compliance should be aimed at increasing the institutional level of responsibility that pharmacists have in doing this while at the same time reminding physicians that since they are ordering the medications, they are equally responsible for auditing these lists.³ Even at a small community hospital, the presence of medical and pharmacy students is an indispensable resource to this end. In both cases, these personnel have ample time to reach out to pharmacies and primary care offices to gather all possible historical information pertinent to an accurate medication reconciliation.⁴

Regarding the general consensus that medication reconciliation would be more likely to be completed if there was a simpler way to do it, the institution of a form to aid in this process would be beneficial. The form could have different sections for different types of medications (cardiac, diabetic, etc.) and could serve as a worksheet for reference later to achieve completion. This might make the task seem less daunting and would help with a more thorough investigation.⁵ Patients sometimes know why they take a medication, or what it looks like, but not what it is called. This way, a description of the medication could be put in the appropriate box to be referenced later, i.e. "the blue pill, 10 mg, for blood pressure" could then be researched later.

As far as reconciliation of specific medications, the biggest challenge seems to be cardiac medications. This represents an opportunity

for the pharmacy to flag this, or other classes of medications, for later review as more important. Although it is critical and good practice to clarify all classes of drugs, certainly procainamide should be considered a higher priority drug than melatonin when it comes time to clarify the dosing regimen. To expand this idea, the pharmacy should flag and review any medication where a patient abruptly starting or stopping it could cause problems. Some patients are prescribed Ativan TID PRN for example, but have not used it in a long time. If this medication were to be accidentally entered as a scheduled TID medication, the patient that is not habituated to that dosing could have dire consequences. There should be a high alert list of medications like this that automatically flag a thorough review.⁶

Regarding medication reconciliation in the long-term care setting, this task should be delegated to a specific and highly skilled person who is aware of the pitfalls of this situation. Elderly patients are more likely to be unclear about what medications they are supposed to be taking.⁷ They are often admitted to a long-term care facility after an acute inpatient stay where a comprehensive medication reconciliation may not have been accomplished. The discharge medication list from that stay is often used as the admission medication list for the nursing home and the opportunities for error abound. Having dedicated personnel whose task it is to correct some of these problems would be indispensable, and could save the facility a great deal of time and resources in the future by subverting problems that are easy to solve with some basic research.

Medication reconciliation is a challenging endeavor, and medical and pharmaceutical staff alike have been conditioned to perceive it as a daunting and unpleasant task. With some small changes on the institutional level, this perspective can be changed and the activity can be yet another opportunity for us, as health care providers, to serve our patients

needs and prevent any harm from coming to them.

References

1. Kwan JL, Lo L, Sampson M, Shojania KG: Medication reconciliation during transitions of care as a patient safety strategy: a systematic review. *Ann Intern Med.* 2013;158(5 Pt 2):397-403.
2. Barnsteiner JH: Medication reconciliation: transfer of medication information across settings-keeping it free from error. *Am J Nurs.* 2005;105(Suppl 3):31-36.
3. Gleason KM, McDaniel MR, Feinglass J, Baker DW, Lindquist L, Liss D, Noskin GA: Results of the Medications at Transitions and Clinical Handoffs (MATCH) study: an analysis of medication reconciliation errors and risk factors at hospital admission. *J Gen Intern Med.* 2010;25(5):441-447.
4. Varkey P, Cunningham J, O'Meara J, Bonacci R, Desai N, Sheeler R: Multidisciplinary approach to inpatient medication reconciliation in an academic setting. *Am J Health Syst Pharm.* 2007;64(8):850-854.
5. Greenwald JL, Halasyamani L, Greene J, Lacivita C, Stucky E, Benjamin B, Williams MV: Making inpatient medication reconciliation patient centered, clinically relevant and implementable: a consensus statement on key principles and necessary first steps. *J Hosp Med.* 2010;5(8):477-485.
6. Wong JD, Bajcar JM, Wong GG, Alibhai SM, Huh JH, Cesta A, Pond GR, Fernandes OA: Medication reconciliation at hospital discharge: evaluating discrepancies. *Ann Pharmacother.* 2008;42(10):1373-1379.
7. Unroe KT, Pfeiffenberger T, Riegelhaupt S, Jastrzembski J, Lokhnygina Y, Colón-Emeric C: Inpatient medication reconciliation at admission and discharge: A retrospective cohort study of age and other risk factors for medication discrepancies. *Am J Geriatr Pharmacother.* 2010;8(2):115-126.

Medicine where he served as Chief Medical Resident.

As the past Medical Director/Director of Medical Education at Millcreek Community Hospital, and the former Director of the Internal Medicine Residency Program at the hospital, Dr. Ferretti has trained hundreds of osteopathic physicians. He is a forward-thinking champion of medical education who values the attainment of knowledge and the passion of medical understanding as the hallmark of his purpose. His residents and students fondly remember how he kept them on their toes drilling the fundamentals of medicine into their daily interaction with patients that they still adhere to today.

In 2015, Dr. Ferretti led the establishment of LECOM Health, the only osteopathic academic health center. LECOM Health is a highly innovative health care and education system that strives to add to the quality of life of its neighbors by bringing total health care to the community. Members of LECOM Health include the College, Millcreek Community Hospital, Corry Memorial Hospital, the clinical practices of Medical Associates of Erie, LECOM Senior Living Center, LECOM Senior Living Communities, LECOM Medical Fitness and Wellness Center, LECOM Nursing and Rehabilitation Center, Lifeworks Erie, and Visiting Nurses Association of Erie County.

The LECOM Health nexus, built from the LECOM core, encompasses the full breadth of its provider organizations to help patients navigate the health care journey. The health center is imbued with powerful insight, cutting edge expertise, and solutions that convert health education into health care intelligence. Whether enabling treatment protocols, empowering collaborative care, or providing services, LECOM Health has become *the recognized name* in health care. The visionary leadership that has brought LECOM and

LECOM Health to the pinnacle of attainment is the brainchild of John M. Ferretti, DO.

Dr. Ferretti has lent his expertise while serving on key committees in the Pennsylvania Osteopathic Medical Association, the American Association of Colleges of Osteopathic Medicine; the American Osteopathic Association Commission on Osteopathic College Accreditation, and a variety of State Licensure Board positions. He has been a frequent keynote speaker, lecturer, and presenter at symposiums, conventions, and seminars both nationally and internationally.

Awards and honors abound with Dr. Ferretti receiving frequent Distinguished Teaching Awards; the Distinguished Pennsylvanian Award from Gannon University in Erie, Pennsylvania in recognition of his contributions to the community; an Honorary Doctor of Science Degree awarded by Seton Hill University following the opening of the LECOM at Seton Hill campus; the Great Pioneer in Osteopathic Medicine Award from the American Osteopathic Association; and the international Newcomen Society honored Dr. Ferretti for the college's role as an educational leader and community partner. Dr. Ferretti received the Thomas B. Hagen Dignitas Award from The Jefferson Educational Society of Erie. The award is given to Erie citizens who have made a profound impact on society.

All that is LECOM exists as a result of that heartfelt passion coupled with a focused mission. The betterment of the community in which he serves and the improved health care of generations to come stand as a tribute to that purpose.

Henry Ford's words were not lost on John M. Ferretti, DO, for indeed, this passionate physician-educator, nationally recognized leader, and venerable architect of futures has built his august reputation solidly upon accomplishment.

RNFL Thickness in Nepalese Cohort

(continued from page 15)

3. National Eye Institute. Prevalence of adult vision impairment and age-related eye diseases in America. 2010. Retrieved from https://nei.nih.gov/eyedata/adultvision_usa.

4. Bowd C, Weinreb RN, Williams JM, Zangwill LM: The retinal nerve fiber layer thickness in ocular hypertensive, normal, and glaucomatous eyes with optical coherence tomography. *Arch Ophthalmol*. 2000;118(1):22-26.

5. Sommer A, Miller NR, Pollack I, et al: The nerve fiber layer in the diagnosis of glaucoma. *Arch Ophthalmol*. 1977;95(12):2149-2156.

6. Quigley HA, Miller NR, George T: Clinical evaluation of nerve fiber layer atrophy as an indicator of glaucomatous optic nerve damage. *Arch Ophthalmol*. 1980;98(9):1564-1571.

7. Saha M, Bandyopadhyay S, Das D, Ghosh: Comparative analysis of macular and peripapillary retinal nerve fiber layer thickness in normal, glaucoma suspect and glaucomatous eyes by optical coherence tomography. *Nepal J Ophthalmol*. 2016;8(16):110-118. doi: 10.3126/nepjoph.v8i2.16991.

8. Bendschneider D, Tornow RP, Horn FK, Laemmer R, et al: Retinal nerve fiber layer thickness in normals measured by spectral domain OCT. *J Glaucoma*. 2010;19(7):475-482.

9. Hougaard JL, Ostensfeld C, Heijl A, Bengtsson B: Modelling the normal retinal nerve fibre layer thickness as measured by Stratus optical coherence tomography. *Graefes Arch Clin Exp Ophthalmol*. 2006;244(12):1607-1614.

10. Tsai CS, Zangwill L, Gonzalez C, Irak I, et al: Ethnic differences in optic nerve head topography. *J Glaucoma*. 1995;4(4):248-257.

11. Girkin CA, McGwin G Jr, Sinai MJ, Sekhar GC, et al: Variation in optic nerve and macular structure with age and race with spectral-domain optical coherence tomography. *Ophthalmology*. 2011;118(12):2403-2408. doi: 10.1016/j.ophtha.2011.06.013.

12. Huang D, Swanson EA, Lin CP, Schuman JS, et al: Optical coherence tomography. *Science*. 1991;254(5035):1178-1181.

13. Open Source Website for Statistical Computation. Accessed through <http://vassarstats.net/anova1u.html>.

14. Prevent Blindness America. Vision Problems in the U.S. — Prevalence of Adult Vision Impairment and Age-Related Eye Disease in

America. 2012. Retrieved from <http://www.visionproblemsus.org>.

15. Alasil T, Wang K, Keane PA, Lee H, et al: Analysis of normal retinal nerve fiber layer thickness by age, sex, and race using spectral domain optical coherence tomography. *J Glaucoma*. 2013;22(7):532-541. doi: 10.1097/IJG.0b013e318255bb4a.

16. Hwang YH, Song M, Kim YY, et al: Interocular symmetry of retinal nerve fibre layer thickness in healthy eyes: a spectral-domain optical coherence tomography study. *Clin Exp Optom*. 2014;97(6):550-554. doi: 10.1111/cxo.12218.

17. Zeimer R, Asrani S, Zou S, Quigley H, Jampel H: Quantitative detection of glaucomatous damage at the posterior pole by retinal thickness mapping. A pilot study. *Ophthalmology*. 1998;105(2):224-231.

18. Khanal S, Thapa M, Racette L, et al: Retinal nerve fiber layer thickness in glaucomatous Nepalese eyes and its relation with visual field sensitivity. *J Optom*. 2014;7(4):217-224. doi: 10.1016/j.optom.2014.05.002.

19. Anton A, Moreno-Montanes J, Blazquez F, Alvarez A, Martin B, Molina B: Usefulness of optical coherence tomography parameters of the optic disc and the retinal nerve fiber layer to differentiate glaucomatous, ocular hypertensive, and normal eyes. *J Glaucoma* 2007;16(1):1-8.

20. Thapa M, Khanal S, Shrestha GB, Sharma AK: Retinal nerve fibre layer thickness in a healthy Nepalese population by spectral domain optical coherence tomography. *Nepal J Ophthalmol* 2014;6(2):131-139. doi: 10.3126/nepjoph.v6i2.11709.

21. Lopez-Pena MJ, Ferreras A, Larrosa JM, Polo V, Pablo LE: Relationship between standard automated perimetry and retinal nerve fiber layer parameters obtained with optical coherence tomography. *J Glaucoma*. 2011;20(7):422-432.

22. Kanamori A, Nakamura M, Escano MF, Seya R, Maeda H, Negi A: Evaluation of the glaucomatous damage on retinal nerve fiber layer thickness measured by optical coherence tomography. *Am J Ophthalmol*. 2003;135(4):513-520.

23. Mansoori T, Viswanath K, Balakrishna N: Quantification of retinal nerve fiber layer thickness using spectral domain optical coherence tomography in normal Indian population. *Indian J Ophthalmol* 2012;60(6):555-558.

Dr. Stetsyuk would like to thank Anthony D. Sala, II, DO, for his contributions to this paper.

PCOM STUDENT'S VOICE (continued from page 8)

[sick athletes] and prevent them from dying." These words epitomize not only his altruistic disposition, but also the passion that galvanized his practice, even outside of the clinic.

Dr. Simelaro has modeled the practice of osteopathic medicine by taking note of the unique commonalities present in his unique patient population (specifically those with pneumonias, occupational lung diseases, asthma, or other lower respiratory tract pathologies) after years of clinical practice. Linking these ailments with the corresponding structural lesions, Dr. Simelaro has identified in the thoraxes and chest walls of his patients, he published multiple case reports and articles describing his findings and, more importantly, emphasizing the importance of a comprehensive osteopathic exam. In speaking to the class

of 2021, he cautioned the osteopathic physician-in-training not to overlook Chapman's points found posteriorly between T3 and T4, as these reflexes have been inexorably linked to asthma in his practice. This commitment to elucidating clinical evidence has inspired generations of PCOM students to pursue excellence in their practice and embrace their distinction as osteopathic physicians.

Dr. Simelaro has touched countless lives in Philadelphia. While he will be returning to PCOM this upcoming fall as a professor emeritus, his heartfelt farewell to his alma mater was fitting, as he hung his hat on a movie-script ending in the city that he loves — a city that owes him many thanks for years of wise teaching, counsel and service to his fellow man.



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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; fax (717) 939-7255; e-mail cme@poma.org. Upon receipt and a passing scores of the quiz, we will forward 0.5 Category 2-B AOA CME credits to the AOA CME Department and record them in the POMA CME module.

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AOA # _____

1. What is the correct arrangement that describes the optic nerve head retinal nerve fiber layer quadrant thickness in ascending (least to most) order? This is an important concept when evaluating optic nerve head pathology in glaucoma.

- a. nasal, temporal, superior, inferior
- b. nasal, inferior, temporal, superior
- c. temporal, nasal, superior, inferior
- d. temporal, superior, nasal, inferior

2. According to literature reviewed in the article, the retinal nerve fiber layer thickness is static in a healthy eye as a function of age.

True False

3. According to respondents, what is the biggest obstacle to medication reconciliation compliance?

- a. Confusion about drugs and their uses
- b. Communication issues between patients and their pharmacies
- c. The inability to acquire updated and current medication lists
- d. User input error
- e. Work load of the provider

4. What class of drugs has the greatest issues with medication reconciliation and accuracy?

- a. Diabetes medications
- b. Cardiac medications
- c. Pain medications
- d. Other endocrine medications (thyroid, etc.)
- e. Psychiatric medications (including for depression)

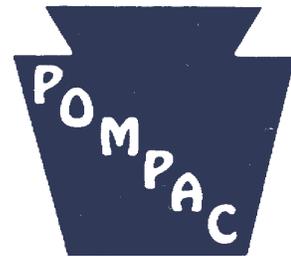
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- 1. d
- 2. e
- 3. b
- 4. e
- 5. d
- 6. True

(Questions appeared in the June 2018 Journal.)

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