the JOURNAL
of the Pennsylvania Osteopathic Medical Association
Fall 2019

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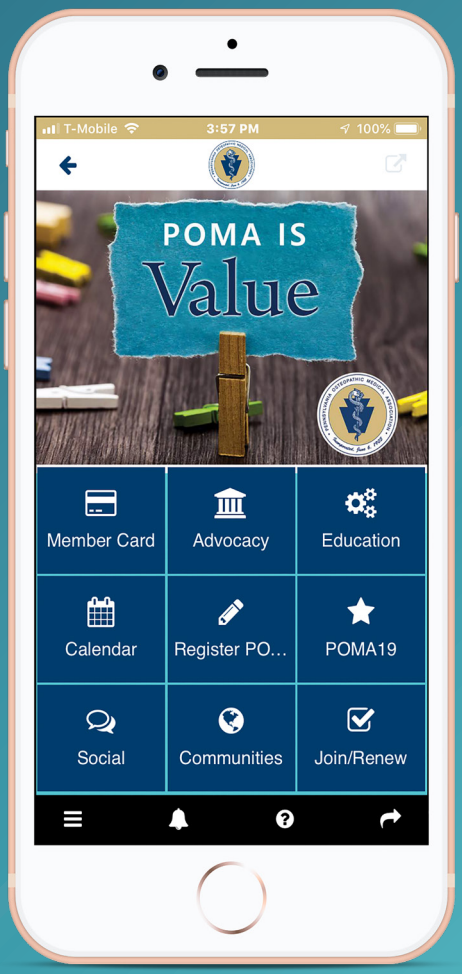

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FROM THE EDITOR'S DESK

Mark B. Abraham, DO, JD

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

Summer has passed, welcome autumn. The words and images in some contexts may even be poetic. Typically, the weather becomes cooler (although we seem to have had more hot days in September than we did in August), the leaves change, football starts.

But what if the thoughts of summer into fall were not of weather, leaves and sports but something else, such as politics? Congress goes on recess and then returns. Politicians seeking office in an off year and those seeking their party nomination in order to run for President at the next chance increase the rhetoric and solicitation of donations. Images are not as pleasant, regardless of your own beliefs.

For many Pennsylvanians and Americans, those same feelings are not just reserved for the general view towards politicians and the political process. They are much closer to home. The "talking points" more often than not do involve real issues. Issues that We the People want addressed. Our system is created in such a way that all of us are to have a representative voice. We may not always agree with the final decisions in all situations, but we are supposed to have a voice. What are we to do when our "voice" is not that of the people but instead the voice of politicians with their own careers and goals ahead of the needs of the people that elected them?

The health care debate has become one of these issues. People want health care. Physicians and health systems want to make a profit. Insurance companies want to make a profit. Governmental bodies look to save money by reducing the costs associated with health care — delivery, disease prevention, research, medication, diagnosis, etc. The politicians seem too content to offer broad statements and talking points without concern for the realities associated with their "plans." The biggest reality being who will pay for their grand and lofty goals?

I was very clear previously as to my thoughts on Medicare for All. For those of you who missed it, the short version — HORRIBLE IDEA.

Health care is not a "talking point." People really are sick. People need medications. People need physicians to care for them. Physicians do not go to school for free. We are not all "rich." Depending upon the politician speaking, maybe we are all in the "top 1%" or maybe not. (Of course there are those who also seem to think that anyone with a J-O-B is in the "top 1%", but I digress). Don't fool yourselves; those talking points have nothing to do with us (Pennsylvanians, Americans, Patients and Physicians) and are all about getting themselves/keeping a J-O-B.

The comparisons to other countries and health care systems miss some key provisions. First, the cost in those countries is high. It is covered not by "taxing the wealthy" (which some include to mean the small, mom-pop businesses) but usually by a Value Added Tax (VAT) which is a national sales tax and not a cheap one. Everyone pays it. Some countries may allow for tourists to complete forms and apply to have the VAT "refunded" if the tourists purchased goods while in the country, but that is not a guaranty. Additionally, most tourists are not going to take the time to complete the paperwork. Second, many of those same countries ration care. Call them death panels or whatever you want, but it is still rationing. That is what helps keep costs down. How would that play in the USA? We already have a difficult time just explaining to patients that they need a prior authorization for a medication or pre-certification for a test. If those conversations then turned to the reasons the payor (government/insurance company) now have decided that it is not cost effective to treat the specific patient, how much harder would the conversations be? Third, there are many countries where the costs for education are covered by the government. That is not the case here. If you receive a scholarship or grant, great! If you do not have to rely upon loans, great! For everyone else, the loans do add up. At some point we need to make enough money to pay off the education debt and most of us would like to have a family, a home and enjoy ourselves in our free time.

We all know that the cost of education beyond high school has been increasing and along with it debt. It is not unique to physicians. What is unique is that unlike the rest of the free market, there are forces trying to reduce our income yet still call for there to be more physicians, especially in primary care. One of the subtler realities being that we are the only profession which attempts to put ourselves out of business — make everyone well and prevent disease. We also have the privilege of dealing with a "rigged" legal system. Lawyers become judges and often the politicians. The negligence (malpractice) laws favor the lawyers so that they can make a nice living. Essentially, it is "lawyers helping lawyers." When tort reform is mentioned as needed to help deal with the costs of health care, it is usually

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OP-ED — Medicare for All!

Howard N. Brooks, DO

The allure of Medicare, which signs you up and takes care of you for the rest of your life (sort of), is undeniable. It is likely that this concept will come before the next Congress, especially so if the lawsuit initiated by the "red state" attorneys general succeeds in having Obamacare declared unconstitutional, as unlikely as that seems. Strangely enough, I can actually see their point. If you believe, as they do, that government does not have the right to interfere in business, even medical business, then you must trust the free market to correct itself.

This has not occurred because that market is not "free." The market is, in fact, tightly controlled by associations of physicians, the integrated health systems, and by omnipotent pharmaceutical companies, among others. In addition, State medical boards and federal patent laws guarantee that each segment can hold onto its piece of that pie. And the giant corporations providing most health insurance collect and redistribute the moneys that fund it all. It is not in the interest of any of the aforementioned folks to keep the total costs down. Everyone is feeding at this trough. So, it would take a meltdown to alter this cozy cabal.

One payer, however, is unhappy with this arrangement. That would be the taxpayer, through the current Medicare program. Medicare acts like an insurance company but without the obligation to make a profit to mollify its shareholders or overpaid CEOs. So, it has been constantly making efforts to moderate the increase in healthcare expenses from one year to the next. Initially a formula was created to limit the yearly increase in Medicare expenditures to the increase in the gross domestic product each year. This was supposed to work by adjusting the value of the multiplier in the RVU system to set the price for all medical procedures for the upcoming year. That was OK for those years that were good for business in general. For "down" years, however, it was a disaster. The end of each such year was marked by a panicky warning from our medical associations that the reduction called for in the SGR (sustained growth rate) formula would destroy us, especially those whose practices included significant amounts of these Medicare covered patients. After too many years of this drama, resulting in recurrent "temporary fixes," Congress finally acknowledged that medical care could not be expected to mirror the business cycle, (and that it was in fact countercyclical) so they junked that formula. But government being government, they had to replace it with something. They then reasoned that good medical practices could save lives and save money too. So, MIPS was born. We'll have to see how that works out. But I have my doubts that financial salvation could be found in more intense record keeping.

The reason for this tirade is as stated above. Medicare is about to, maybe, be called upon to totally replace all the health insurance companies. Why? Because it is a fairly successful healthcare financing system that is working, is settled law, and could be upgraded to universal coverage relatively simply. But will it be ready, and will it be suitable? I think the answers here are no, and no. That is because the built-in glitch in our healthcare payment "system" is that it is only an insurance scheme designed to cover for our beloved "fee for service" practices. This venerable way of doing business has fed off the rocket fuel of an ever expanding RVU system, which has spawned upcoding, documentation guidelines, electronic medical records, bloated diagnosis coding (ICD9, 10, 11...), and a whole industry of coders, billers and administrators dedicated to maximize the financial returns on the work we alone do. Our healthcare managers integrate the RVU into doctors' contracts to "encourage productivity" while assuring the public and the payers of healthcare of their commitment to reduce utilization. That's all a sham though; their very existence depends on their ability to squeeze additional money out of our efforts. All this is due to our preservation of "fee for service" medicine and it's evil RVU spawn. I apologize for using "RVU" as shorthand for the Resource-based-relative value scale (RBRVS), (but y'know, "keep it simple stupid!")

So, how would we pay (or get paid) for medical care without "fee for service"? "Direct Primary Care" provides one possible model on the medical (non-surgical) side. This is a fixed monthly fee for each patient for all necessary primary care services, paid to a practice of their choice. No billing, no coding, no record submission to Uncle Sam to earn those miniscule "brownie point payments." And some variation could also cover most of the medical subspecialties as well, including, I'm afraid, most of their customary in-office procedures. Radiology also needs to be decoupled from the type and number of studies they perform. Oncology services as well should be freed from their dependence on the chemotherapy agent markup. Fee for service, however, may make some sense for major surgery when referred

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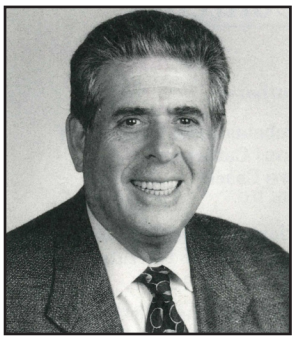
Remembering a Visionary: Leonard H. Finkelstein, DO



Leonard H. Finkelstein, DO
POMA Past President and Editor-in-Chief Emeritus

This past summer, the osteopathic profession lost a visionary leader, Leonard H. Finkelstein, DO, FACOS, FCPP. A strong proponent of education, research and the osteopathic profession, his illustrious career included leading POMA as the 1983-1984 president and serving as JPOMA editor for 16 years, as well as steering the Philadelphia College of Osteopathic Medicine (PCOM) as chancellor, president and professor emeritus.

Dr. Finkelstein earned his DO degree from PCOM in 1959. He completed his internship and general surgery residency at Zieger Osteopathic Hospital in Detroit, Michigan, and a urologic surgery residency at PCOM. He joined the faculty of PCOM in 1963 and was named chairman of the Division of Urology in 1973. He retired from his position as professor of urologic surgery and chair of the division in 2014, being named professor emeritus in 2015. From 1990 to 2000, he served as PCOM's sixth president and chief executive officer where he expanded the graduate medical education program. He served as chancellor from 2006 until his death.

A distinguished researcher and author, he became the first osteopathic urologist to publish in *Surgical Clinics of North America* and was the first osteopathic physician not affiliated with an allopathic institution to publish in *The American Journal of Surgery*. Dr. Finkelstein served as editor-in-chief of *The Journal of the POMA* for 16 years, with the goal of installing a professional component for DOs in the commonwealth. During his tenure, he published over 200 articles, often providing young physicians the opportunity to publish their first professional article. He also developed POMA's Golden Quill Award, which recently celebrated its 45th year. He was privileged to put his own thoughts, opinions and recommendations in writing for readers to peruse, ponder and comment. In 1999, POMA presented the Editor-in-Chief Award to Dr. Finkelstein for his unselfish devotion and loyalty to The Journal.

Dr. Finkelstein was honored with many awards throughout his career. For his dedication to education he was awarded PCOM's Lindback Foundation Award for Distinguished Teaching, the Student Osteopathic Medical Association's Northup Distinguished Service Award, the American College of Osteopathic Surgeon's Ballinger Distinguished Osteopathic Surgeon Award, and PCOM's Student National Medical Association Mentor Award. For contributions to the advancement and support of the osteopathic profession he received a presidential citation from the American Osteopathic Association, the Dale Dodson Award from the American Association of Colleges of Osteopathic Medicine and the OJ Snyder Memorial Medal from PCOM.

In addition to his professional involvement with POMA and PCOM, Dr. Finkelstein was a fellow of the American College of Osteopathic Surgeons and the College of Physicians of Philadelphia. He also served as president of the American Osteopathic Foundation Board of Directors, chair of the American Association of Colleges of Osteopathic Medicine and was a member of the American Osteopathic Association and the American Urologic Association.

Dr. Finkelstein's leadership, professionalism and dedication to the osteopathic profession will be missed by all. POMA extends its deepest sympathy to the Finkelstein family.

Leonard H. Finkelstein, DO, (left) is installed as POMA's 1983-84 president by Arthur L. Feldman, DO, immediate past president.

Leonard H. Finkelstein, DO, presents the 1999 POMA Golden Quill Award to Cathleen S. McGonigle, DO.

Leonard H. Finkelstein, DO, (left) receives the POMA Editor-in-Chief Award from Michael F. Avallone, DO.

POMA POLICY POINTS

Andy Sandusky

POMA Advocacy Update — Fall 2019

Andy Sandusky
POMA EVP Public Policy and Association Affairs

The Pennsylvania General Assembly returned to legislative session in September and will recess in December. This is the first of a 2-year session and all bills introduced in 2019 will rollover into 2020.

During this fall/winter session, POMA will be hard at work in opposition to the CRNP independent practice legislation, SB 50. This bill would provide certified registered nurse practitioners (CRNPs) with the ability to make medical diagnoses and prescribe therapeutic response for patients without collaborating with a physician. POMA continues to advocate against this legislation because the rigors of medical education and residency training far outweighs that of the CRNP. Additionally, POMA will be advocating for legislation that would streamline the prior authorization process as well as the failed-first policies for greater transparency for physicians and patients. The legislation is expected to be introduced before the end of the year.

POMA's Committee on Legislation and Public Policy (CLPP) has been hard at work considering and taking positions on multiple pieces of legislation facing the General Assembly. The CLPP is co-chaired by Drs. Gene M. Battistella (Allegheny) and Hans T. Zuckerman (Lebanon). Some of these issues include the list below.

SB 112 – Limitations on Opioid Prescribing for Acute Pain at 7-days for All Patients — Neutral

Under current law, patients under the age of 18 are limited to a 7-day supply of a controlled substance containing an opioid. SB 112 would expand this to all patients. The CLPP was pleased the legislation applies to chronic pain and not acute pain. Further, the CLPP believed most hospital settings are already limiting opioid prescriptions within the parameters of the legislation and to some extent, the bill would enact best practices. However, the CLPP was not inclined to make a position of support or opposition. SB 112 passed the Senate and is awaiting action in the House Health Committee.

SB 572 – Opioid Treatment Agreements — Support

SB 572, PN 997 would legislate the process of physician-patient agreements when prescribing opioids for chronic pain that includes the requirement to obtain informed consent. SB 572 also requires a baseline urine test and results that must be received by the physician before an initial prescription is made for chronic pain and ongoing testing for high-risk patients or those being treated with opioid addiction. The policy lens the CLPP used concluded that as long as the bill only addressed chronic pain treatment, it is consistent with best practices and CLPP voted to support the bill. SB 572 passed the Senate in June and is in the House Health Committee.

HB 1795 – Any Willing Provider — Support

The CLPP reviewed existing policy from the POMA House of Delegates and concluded that HB 1795, PN 2418 conformed to the underlying policy already decided by POMA. As a result, no action was needed and POMA supports the bill. HB 1795 has been introduced and is in the House Insurance Committee.

HB 533 – Time Limits for Insurer Credentialing — Support

HB 533, PN 525 would limit the time an insurer has to make a credentialing decision to 45 days. The CLPP believed it was important to have a quick turnaround on credentialing so that osteopathic physicians could begin working as soon as possible providing patient access to care. HB 533 was voted favorably from the House Health Committee on September 18 and awaits consideration by the full House of Representatives. POMA was one of four hospital and physician organizations to support the bill in a joint letter to the House Health Committee.

HB 96 – CME Mandate for Tick-Borne Illnesses — Oppose

HB 96, PN 98 would require two hours of CME for physicians as a portion of the total CME required for a licensing period. The CLPP reasoned that no matter how well-intentioned the bill was, opposition was grounded on the fundamental issue that the government should not mandate the content of CME for physicians. HB 96 has been introduced and sent to the House Professional Licensure Committee.

HB 629 and SB 100 – Insurance Coverage for Long-Term Treatment Chronic Lyme Disease — Oppose

HB 629, PN 1353 and SB 100, PN 123 enacts the Lyme Disease and Tick-Borne Diagnosis and Treatment Act. The bill would permit physicians to prescribe antibiotic therapy for as long as they deem appropriate. HB 629 also requires insurers to cover the treatment but permits the use of utilization management tools by insurers in making the determination for payment. In rendering its position, the

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LECOM DEAN'S CORNER

Lake Erie College of Osteopathic Medicine

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

The Healthcare Caldron of Concern — Assessing the Shortcomings a Decade after the Affordable Care Act

Conjuring more effectively than three witches over a brew, Washington leadership managed to create an illusion of colossal proportions with its sweeping healthcare bill that became law in April of 2010. The pledge, centering upon the guarantee that Americans could "keep their insurance plans and their physicians" has vanished into thin air more deftly than a coin palmed by a sidewalk magician. It is evident, and wholly thus, that the foregoing promise was not, and cannot, be maintained. Physicians and insurance companies have re-crafted their businesses to adapt to the scheme, but despite these adjustments, healthcare premiums are rising and services are being reduced.

The present law limits the amount that insurance companies can spend to cover their expenses and to make profits. In 2011, health care programs contained a floor, fully regulated based upon cost ratios to medical-loss. That ratio entails the amount of revenue that insurers are allowed to spend for medical claims. Insurance companies are permitted to spend only 20% of their premiums from their operating plans if they sell policies directly to consumers or to small employers. The spending limit is 15% for policies that are offered to large employers.

The government regulation presents the greatest hurdle and has the most invasive impact upon insurance directly sold to consumers, known as "individual market" policies. Such policies carry increased medical cost, resulting primarily from options taken by consumers experiencing problematic health issues. The cost of individual plans is skyrocketing.

In addition, the individual market policies contain significantly increased start-up pricing that engenders an end result of insurers writing fewer new policies. If an insurance company is forced to lose control over its offerings, it will reduce that which it offers to the market.

Many of the largest insurers in the individual market are facing significant and detrimental fall-out as a result of this health care law. Regulations addressing the way in which insurance companies are permitted to spend internal monies also are affected by burgeoning limits upon the way in which they are permitted to manage their expenses. In 2014, insurance benefits were mandated to be standardized and a new federal agency placed minimum values upon medical policies. Insurance companies are compelled to cover expensive primary care services in full. While this may seem to be a positive step for consumers, it is, in reality, a measure that blocks insurers from raising premiums and results in driving private companies out of the market – leaving the government option as the last available reasonable choice.

One of the final remaining means by which costs may be decreased is to reduce the actual price of the products by encouraging healthcare providers to accept reduced fees and to reduce their use of expensive services such as diagnostic testing. To effectuate this practice, insurance companies seek to gain increasing control; and in those situations where they cannot own medical providers directly, insurers maintain a reduced access network of doctors with whom they contract. This strategy then allows insurers to manage physicians' activities with increased scrutiny. The result means fewer choices for patients while insurance companies offset the expense of the new government restrictions.

The overwhelming result of this almost decade-long fermenting debacle is that physicians are selling their practices to hospitals; a situation that is becoming more common with each passing day. American Medical Association statistics show that five years before the enactment of the so-called Affordable Care Act, physicians owned over 70% of all medical practices. Now, almost two-thirds of all doctors are salaried employees with approximately one-third of those physicians employed by hospitals. There has been an unprecedented increase in hospital physician hiring and the trend has continued as doctors and highly paid specialists alike are absorbed into the system.

Patients wait times for routine examinations have increased and a reduction in medical options has been the norm. Physicians are facing increased costs to maintain their operations while the existing health program places burdensome mandates upon their internal practice. Doctors are now forced to purchase expensive Information Technology Systems and to maintain enhanced record-keeping practices. With costs to operate a medical fa-

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PCOM DEAN'S CORNER

Philadelphia College of Osteopathic Medicine

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

I have asked Dr. Jeffery Dunkelberger, one of POMA's many fine family doctors, to deliver some thoughts on the state and future of family medicine. As you will appreciate in his article, his thoughts and ideas are right on the mark and challenging. POMA should be proud of our many primary care doctors practicing across Pennsylvania. Our state would be much poorer in healthcare quality and access without the strength and uniqueness of our DO community.

Fraternally,
Kenneth J. Veit, DO

Primary care medicine is called such because we are the first and sometimes the only doctors a patient will see. Medicine is a complex system of interrelated parts all moving in, hopefully, the same direction. We, the primary care doctors, need to be the leaders that make sure the care of the patient is moving in the right direction, a direction leading to quality care delivered in a timely fashion. If expenditures continue on today's trajectory we will not be able to sustain the level of care our patients have become accustomed to. Dr. Veit in his last article discussed how primary care needs to take the lead in medicine as we move forward. A recent article in US News & World Report talks about how the level of participation in primary care residencies continues to decline. One of the postulates for this decline is the salary discrepancy between primary care and specialists.

Reimbursement models are changing to include reimbursement for achieving and maintaining defined metrics associated with chronic healthcare and health screenings. These are all things we as primary care doctors have been doing for years, but now we have an opportunity to share the savings generated by having healthier patients. As we move toward these models the insurance companies will begin to realize savings from our taking better care of patients. The savings will be shared with the employers in reduced premiums, they will be shared with the patients in reduced copays and reduced deductibles. It also needs to be shared with the providers who are going to drive it. Independent providers will realize these shared savings, hospital systems and healthcare systems which employ primary care physicians need to make sure the savings are included in the provider's compensation packages.

The insurance companies will use data to quantitate these savings, they will use this data to determine how they can modify their premiums, copays and deductibles. There needs to be transparency and sharing of the data with the primary care physicians. The data will show where cost effective medicine is being done, we will know where high quality care is being done and with the data we can marry the two and help our patients find high quality, lower cost healthcare. Software programs which can mine this data and present it in a useful manner are available. In addition to showing us where we can provide high quality lower cost healthcare these programs can also show us gaps in care, gaps we can help to close. We will also be able to identify patients who are high utilizers of healthcare resources and identify their needs and guide them to become healthier. We can then use our education and skills to spend time with these patients and help them. Nowhere should we be releasing patients who are high utilizers; we need to identify them and use all the tools available to help them to be healthier. These tools will include chronic care nurses who reach out to these patients on a regular basis, it may include increased visits in your office in an attempt to keep them from feeling they need the ER. Close follow-up after hospital discharge to respond to any complications quickly. All of these things have shown to improve the outcomes of our patients and decrease their healthcare spend. As we do these things we should be fairly compensated with the savings we have helped to generate.

Current fee for service payment structures have removed the incentive to be a busy, productive primary care doctor who wants to do good medicine in a cost effective manner. We need to incentivize doctors to do quality population health-based medicine. We need to have those incentives in place to encourage medical students to want to be Primary Care doctors.

As we help patients to become healthier there will be shared savings, those savings need to be shared with everyone. Tools to evaluate the population health data need to be available at affordable prices. Tools which help us to monitor where the money is being spent and are we getting good service and good outcomes for that money.

We don't need single payer systems, we don't need something else to disincentivize primary care docs and have them feel more frustrated. We need to empower primary care docs to take control of their work life. To take control of how their patients are treated, to use available data to provide high quality, low cost healthcare. Let's figure out how to move medicine in this direction.

A STUDENT'S VOICE

Ashley Pinckney, PCOM OMS-III

Ashley Pinckney
PCOM OMS-III

To the detriment of patients' well-being, the healthcare system in the United States is currently run as a business. It is no secret that those who can afford premium health insurance plans have better health outcomes than those with Medicaid, Medicare or no insurance coverage at all. Pharmaceutical companies continue to raise the costs of medications. In one of the world's richest countries, patients should not have to ration their medications because they can't afford their refills or skip health maintenance appointments because they can't afford copayments. Should healthcare be considered a right or a privilege? Many say it should be a right, but our current system treats it as a privilege. Simply put, it is a right for those who have the resources to afford it. Healthcare is a privilege to everyone else – the poor, the less educated.

A local hospital in Philadelphia is in the midst of bankruptcy and closing its doors. Part of the explanation for the hospital's financial despair is due to having a large population of Medicaid and Medicare patients. Medicaid and Medicare are both known to reimburse hospitals at rates considerably less than private insurance companies. While these government-funded insurance plans are adequate for some, they provide woefully inadequate healthcare to many more. Such plans are often the only choice for patients of lower socioeconomic status. The closure of a hospital due to financial problems impacts not only that hospital itself, but also the patient population and surrounding hospitals in the area. Where will those patients go for care? How long will they need to wait to be seen as new patients in a different practice? What will come of the continuity of their healthcare? What burdens will this place on the other local hospitals? If adequate healthcare were available to all patients regardless of their financial status, these questions would be less of an issue. A crisis would be averted.

As a third year medical student, I am only six weeks into my clinical rotations. I am already learning so much, not only about clinical medicine but also about the details of medicine that go far beyond the science. Medications that are the best choice for a patient as indicated by evidence-based medicine sometimes are not readily available to the patient. In those cases, my team finds it necessary to decide on an alternate because the patient's insurance does not cover the preferred drug (unless the patient is willing to pay an exorbitant out of pocket price per month for the rest of their life). I observed a case in which a patient needed to be discharged to an acute rehab facility, but Medicare would not cover the cost of rehab because the patient spent fewer than three nights admitted to the hospital. So, my team kept the patient additional nights (increasing risk of infection and further complications) to ultimately get the patient into the rehab facility that was needed. It seems that physicians are not able to practice medicine to the best of their abilities; instead, they are only able to apply their knowledge and skills within the confines of insurance companies' parameters. How does that benefit the patients? In some instances, it seems that business practices take priority over the healthcare needs of patients.

It goes without saying that reorganization of a country's healthcare is an enormous task. This conversation goes beyond finances and insurance company stakeholders. This is about the health and well-being of our patients. Without healthcare providers advocating for change on behalf of their patients, we cannot expect meaningful reform of the current system.

OUT OF MY MIND

Samuel J. Garloff, DO

Strategoi of American Medicine

Samuel J. Garloff, DO

This is perhaps my fifth or sixth rewrite of this column. Now a word of caution. If you are of an extreme right political base, you may be unhappy with this article. If you are of an extreme left political base, you may be unhappy with this article. For the remaining six of you, I hope you enjoy what you are about to read.

The current hot debate in the interface of politics and medicine in America happens to be about "Medicare for All." It will probably behoove us to either remind ourselves, or familiarize ourselves, with the history of medicine and politics over the last 40 to 50 years.

The year was 1973. The date was December 29. On this date President Richard Nixon signed Bill S. 14 into law. This bill made Health Maintenance Organizations (HMOs) a reality. Mr. Nixon's famous quote at this time was "doctors don't want to be managed." This was in reference to the face that the bill was initially called Health Management Organizations.

On February 6, 1974, President Nixon addressed the Congress of the United States. "Three years ago, I proposed a major health insurance program to the Congress, seeking to guarantee adequate financing of healthcare on a nationwide basis. That proposal generated widespread discussion and useful debate. But no legislation reached my desk." He then addressed the average cost of a day of hospital care, delivering a baby, postnatal care and terminal cancer. He stated that "for the average family, it is clear that without adequate insurance, even normal care can be a financial burden while a catastrophic illness can mean catastrophic debt." Furthermore, he stated he worked with the Secretaries of Health, Education and Welfare to prepare a new and improved plan for comprehensive health insurance.

He then stated his seven principles. First it will offer every American an opportunity to obtain a balanced, comprehensive range of health insurance; second, it will cause no American more than he can afford to pay; third, it builds on the strength and diversity of our existing public and private systems of health financing; fourth, it uses public funds only when needed and requires no new federal taxes; fifth, it would maintain freedom of choice of patients and ensure that doctors work for the patient, not the federal government; sixth, and encourages more effective use of our healthcare resources; and finally, it is organized so that all parties would have a better direct stake in making the system work-consumer, provider, insurer, state governments and the federal government.

His plan stated that Americans would receive "the same broad and balanced health protection through one of three major programs." The first would be employee health insurance shared by the employer and employee, assisted health insurance, covering low income persons and persons who would be ineligible for the other two programs, with state and federal government paying these costs beyond the means of the individual who was insured and an improved Medicare plan, covering those over 65 that would be modified, to include additional needed benefits. One of these three programs would be available to everyone, but participation in the program would be voluntary. Benefits would provide hospital care, physicians care in and out of the hospital, prescription and life-saving drugs, laboratory tests and x-rays, medical device, ambulance service and ancillary health care. There would be no exclusions of coverage based on the nature of illness.

The Comprehensive Health Insurance Plan would cover treatment for mental illness and alcohol and drug addiction, whether treatment was inpatient, outpatient or in the physician's office. Children would receive preventive care up to age 6, eye examinations, hearing examinations and regular dental care up to age 13. This way, a physician could base their decisions on the needs of the patient, not on insurance.

Americans would be insured for catastrophic illnesses preventing debt. No family would expend more than $1500 annually and low income families would have smaller expenses. Each American would receive a health card, similar to a credit card, that would be honored by hospitals, nursing homes, emergency rooms, doctors and clinics across the country. It would also carry information on blood type and drug sensitivities. The entire program was to become effective in 1976.

This plan was part of the Republican dogma at the time. Democrats since at least the era of Harry Truman desired a national health plan. Why then did this proposal not manifest?

Historically, two things prevented passage of Nixon's plan. The first was Senator Ted Kennedy, a liberal Democrat whose desire was to prevent passage during a Republican administration. While this did succeed in slowing the process, the end cause was Watergate.

(continued on page 21)

ABOUT THE AUTHORS

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Kenny S. Hirschi, DO

Chrisalbeth Jimenez Guillermo, DO, MPH, MSMed, was presented with second place in the 2019 POMA Clinical Writing Contest for her article, *"Establishing a Student-Run Clinic to Boost Confidence in Osteopathic Manipulative Medicine."* Dr. Guillermo completed her residency training in psychiatry at the Lake Erie College of Osteopathic Medicine in Erie, Pennsylvania. A 2015 graduate of Touro University Nevada: College of Osteopathic Medicine, she majored in psychology and earned a master of public health with an emphasis in epidemiology and biostatistics at the University of Nevada, Las Vegas. During her academic career, she has conducted research and published articles related to the influence of sex hormones on mood, cognition, and behavior. Her goals are to foster her career in academic psychiatry, to educate and train future physicians, as well as to address the psychiatric needs of patients among under-served and complicated populations.

Kenny S. Hirschi, DO, MHSA, was presented with second place in the 2019 POMA Clinical Writing Contest for his article, *"Cholecalciferol Supplementation as an Adjunctive Treatment for Major Depressive Disorder in the Child and Adolescent Inpatient Population: A Randomized, Open Label, Control Clinical Trial."* Dr. Hirschi is a child and adolescent psychiatry fellow at Penn State Health Milton S. Hershey Medical Center in Hershey, Pennsylvania. A 2016 graduate of A.T Still University School of Osteopathic Medicine in Mesa, Arizona, he majored in psychology at the University of Utah. A father of three children, Dr. Hirschi served a two-year ecclesiastical service mission in Peru and is fluent in Spanish.

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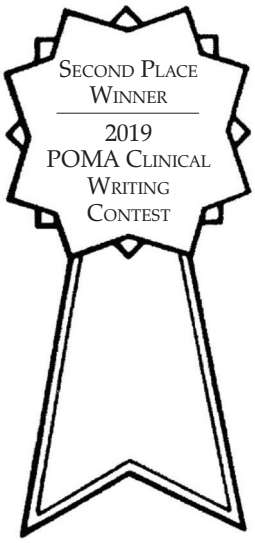
Medical Update
Establishing a Student-Run Clinic to Boost Confidence in Osteopathic Manipulative Medicine

by Chrisalbeth Jimenez Guillermo, DO, MPH, MSMed



Abstract

Background: The first core competency of osteopathic medicine for medical students is osteopathic principles and practices (OPP), which entails understanding the tenets of osteopathic manipulative medicine (OMM), acquiring knowledge of best practices from the medical literature, and applying osteopathic manipulative treatment (OMT) techniques in the clinical setting. Within osteopathic training, there is a need to increase confidence in and utilization of OPP, as students transition into clinical practice. Furthermore, there is a need to educate and expose the general public to the benefits of OPP. A student-run OMM clinic would meet these needs. The framework of a student-run OMM clinic has been successfully initiated at other institutions, and the Lake Erie College of Osteopathic Medicine (LECOM) provides a great opportunity to further implement this type of clinic. Therefore, the goal of this study is to assess whether a student-run OMM clinic would improve confidence in medical students' and residents' practice of OMT.

Methods: A review of the literature and examination of other medical schools that have established student-run OMM clinics were conducted. Moreover, communication was initiated with an osteopathic medical school that has begun the process of creating a student-run clinic. Lastly, contact was made with key personnel in the local osteopathic medical school and the community. A needs assessment questionnaire was drafted and data collected from osteopathic students and medical residents.

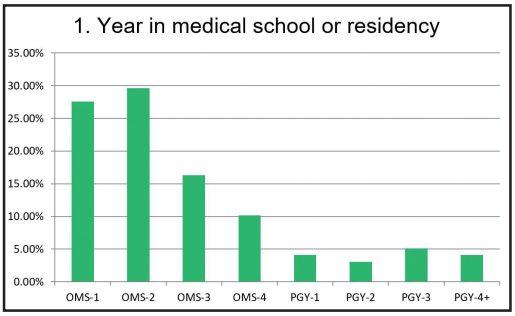
Results: There were a total of 98 respondents, ranging from first-year medical student to fourth-year or higher. Training and education in OMM/OMT primarily included didactic learning and practice in the lab, whereas fewer respondents acquired experience through use in clinic or the hospital. Only 8% of all respondents enrolled in an intensive course in OMM. Although a great majority agree that OMM is a useful treatment modality (89.8%), only 58.17% show confidence in their knowledge of OMM. Among the respondents, 86.73% believe that participation in a student-run OMM clinic would be beneficial. Moreover, 74.49% would volunteer to practice at such a clinic, as well as serve as a patient on whom students and residents would practice.

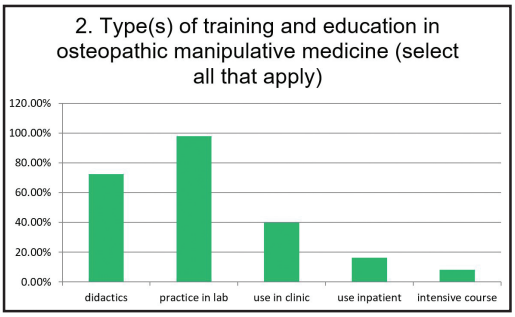
Discussion: Research has shown that medical students are more confident in their abilities and are more likely to perform OMT during clinical clerkships when they have more experience. Therefore, the establishment of a student-run OMM clinic will provide broad opportunities to practice osteopathic techniques in a formal setting. Furthermore, this would satisfy core competencies of osteopathic medicine through the American Osteopathic Association.

Introduction

Research has shown that medical students are more confident in their abilities and more likely to perform osteopathic manipulative treatment (OMT) during clinical clerkships when they have more experience. Furthermore, it is established that firsthand experience of any manual techniques or procedures is key in skills development. This study examines the efficacy of participating in a student-run osteopathic manipulative medicine (OMM) clinic on medical students' confidence and likelihood to practice OMT in both clinical years and in practice.

A student-run OMM clinic would be established through the affiliated osteopathic medical school (LECOM) and local training community hospital (LECOM Health – Millcreek Community Hospital) to schedule, diagnose, treat, and manage patients from the students, faculty, and staff of the school; ultimately, upon establishment of the clinic, the patient population would then expand to members of the community. Faculty and staff involved would include those invested in the education of osteopathic principles and practices (OPP). An appropriate facility, such as the Plaza 38 Medical Center or West Grandview Primary Care clinic, would be utilized once a week during off-business hours to schedule patients and conduct medical care. Thus, continuation





	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	TOTAL	WEIGHTED AVERAGE
1. I believe that osteopathic manipulative medicine (OMM) is a useful treatment modality.	50.00% 49	39.80% 39	4.08% 4	6.12% 6	0.00% 0	98	4.34
2. It is convenient if my physician practices osteopathic manipulative therapy/treatment (OMT).	45.92% 45	42.86% 42	6.12% 6	5.10% 5	0.00% 0	98	4.30
3. I receive OMT from either a physician or colleague to treat a medical condition.	25.51% 25	23.47% 23	16.33% 16	26.53% 26	8.16% 8	98	3.32
4. I practice OMT on my colleagues, friends, and/or family.	37.76% 37	39.80% 39	13.27% 13	6.12% 6	3.06% 3	98	4.03
5. I am confident in my knowledge of OMM.	18.37% 18	39.80% 39	32.65% 32	9.18% 9	0.00% 0	98	3.67
6. My training in OMM at school has been sufficient to prepare me for my licensing examinations.	18.37% 18	53.06% 52	19.39% 19	5.10% 5	4.08% 4	98	3.77
7. My training in OMM at school has been sufficient to practice OMT in the clinical setting.	18.37% 18	44.90% 44	21.43% 21	10.20% 10	5.10% 5	98	3.61
8. I am confident in my ability to conduct an osteopathic physical exam.	18.37% 18	42.86% 42	24.49% 24	13.27% 13	1.02% 1	98	3.64
9. I am confident in my documentation of patients with physiological dysfunction on a SOAP note.	17.35% 17	37.76% 37	26.53% 26	13.27% 13	5.10% 5	98	3.49
10. I am confident in my ability to perform OMT that I was taught.	22.45% 22	54.08% 53	16.33% 16	6.12% 6	1.02% 1	98	3.91
11. I would utilize OMT in my future practice.	29.59% 29	34.69% 34	22.45% 22	7.14% 7	6.12% 6	98	3.74
12. Volunteering at a student-run clinic for OMM assessment and treatment would be beneficial in my training.	53.06% 52	33.67% 33	7.14% 7	3.06% 3	3.06% 3	98	4.31
13. I would volunteer in a student-run clinic for OMM.	43.88% 43	30.61% 30	14.29% 14	6.12% 6	5.10% 5	98	4.02
14. I would participate as a patient in a student-run clinic for OMM.	40.82% 40	36.73% 36	9.18% 9	8.16% 8	5.10% 5	98	4.00

of the curriculum would be ensured for several years to come, beyond the timeframe of this project.

Success in the curriculum would be determined by the presence of a significant difference in confidence and likelihood of practicing OMT. This would be reproducible at any medical school with a willing faculty and interested students. Not only would such an endeavor improve skills among medical trainees and increase the use of a tool that is unique to the osteopathic profession, but it would also lead to greater awareness and utilization of OMM in the community.

Methods

Needs assessment was determined via the Training in Osteopathic Manipulative Medicine Questionnaire *(see Appendix)*. Students and residents from all years were recruited from the LECOM and Millcreek Community Hospital residency programs to complete a questionnaire that comprised two indicators for participants' level of medical training, as well as 14 statements regarding attitudes on OMM and OMT, confidence in performing OMT in the hospital and clinic setting, as well as interest in participating in a student-run OMM clinic, either as a patient or as a volunteer. Measurable variables were on a Likert-type scale of ordinal responses, ranging from "strongly agree" to "strongly disagree." Need was then analyzed by a low degree of confidence in the knowledge and application of OMT in the clinical setting, as well as high rate of interest in establishing a student-run OMM clinic.

Results

Surveys were given to students and resident/fellow physicians at the LECOM campus and Millcreek Community Hospital. Among the 98 people who responded, 57.44% (n=27+29) were students in their first or second year of education, 26.53% (n=16+10) were students in their clinical years, and 16.32% (n=4+3+5+4) were resident physicians or higher *(see Chart 1)*. Respondents' experience comprised primarily of practice in the OMM lab (97.96%, n=96) and in-class lecture (72.45%, n=71). Only 39.8% (n=39) of respondents practice OMT in clinic, whereas only 16.33% (n=16) practice in the hospital. Among all respondents, 8.16% (n=8) have participated in an intensive course in OMM *(see Chart 2)*.

As shown in the table, the majority of osteopathic medical students, residents, and fellows believe that osteopathic manipulative treatment is a useful modality for medical care, with 89.8% (n=88) responding they either strongly agree or agree with that statement. However, a lower proportion of survey respondents are confident in their knowledge of OMT (58.17%, n=57) and in their ability to document physiological dysfunction in a SOAP note (55.11%, n=54). Among the 98 individuals, most agree that volunteering at a student-run OMM clinic would be beneficial for their training (86.73%, n=85). Moreover, 74.49% (n=73) would participate as a volunteer in a student-run clinic, while 77.55% (n=76) would receive care as a patient in such a clinic *(see Table 1)*.

Discussion

The establishment of a student-run OMM clinic in Erie, Pennsylvania would address multiple needs for osteopathic medical students and residents, as well as for the community. The current body of literature suggests that medical students are more confident and more likely to practice OMT when they have more experience. This project may also provide opportunities for physician trainees to teach and experience the social aspects of medicine, while disseminating public awareness of OMM. Lastly, participation in student-run clinics introduces concepts such as interprofessionalism, student leadership, and social accountability. In closing, this study can accomplish multiple goals within osteopathic medical training. The project not only benefits the osteopathic medical students, residents, fellows and school faculty, but also the greater Erie community.

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(continued on page 22)

Appendix

Training in Osteopathic Manipulative Medicine Questionnaire

The purpose of this questionnaire is to determine the need and utility of incorporating a student-run osteopathic manipulative medicine (OMM) clinic. All responses will be anonymous to protect your privacy and confidentiality, and they will be used to conduct research on implementing a new curriculum for the Lake Erie College of Osteopathic Medicine (LECOM). Thank you for your time.

For the following, please provide the most accurate response that applies to you:

1. Year in medical school or residency
☐OMS-1 ☐OMS-2 ☐OMS-3 ☐OMS-4
☐PGY-1 ☐PGY-2 ☐PGY-3 ☐PGY-4+

2. Type(s) of training and education in osteopathic manipulative medicine (select all that apply)
☐didactics ☐practice in lab ☐use in clinic ☐use inpatient ☐intensive course

For the following, please rate how much you agree with the statement:

1. I believe that osteopathic manipulative medicine (OMM) is a useful treatment modality.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

2. It is convenient if my physician practices osteopathic manipulative therapy/treatment (OMT).
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

3. I receive OMT from either a physician or colleague to treat a medical condition.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

4. I practice OMT on my colleagues, friends, and/or family.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

5. I am confident in my knowledge of OMM.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

6. My training in OMM at school has been sufficient to prepare me for my licensing examinations.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

7. My training in OMM at school has been sufficient to practice OMT in the clinical setting.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

8. I am confident in my ability to conduct an osteopathic physical exam.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

9. I am confident in my documentation of patients with physiological dysfunction on a SOAP note.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

10. I am confident in my ability to perform OMT that I was taught.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

11. I would utilize OMT in my future practice.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

12. Volunteering at a student-run clinic for OMM assessment and treatment would be beneficial in my training.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

13. I would volunteer in a student-run clinic for OMM.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

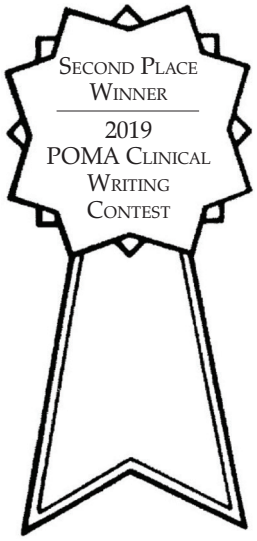
14. I would participate as a patient in a student-run clinic for OMM.
☐strongly agree ☐agree ☐neutral ☐disagree ☐strongly disagree

Thank you for your participation.

Medical Update

Cholecalciferol Supplementation as an Adjunctive Treatment for Major Depressive Disorder in the Child and Adolescent Inpatient Population: A Randomized, Open Label, Control Clinical Trial

by Kenny S. Hirschi, DO, MHSA



Introduction

There are many augmentation strategies for the treatment of major depressive disorder. These strategies often times involve using advanced psychopharmacological techniques such as adding mood stabilizers, dopamine antagonists, stimulants, vitamins, and even thyroid hormone to an existing antidepressant medication.[1] These strategies, although at times necessary, can precipitate severe side effects and adverse reactions, especially in the child and adolescent population. Vitamin D is a fat-soluble vitamin that occurs naturally in very few foods but is essential for normal physiological functions. The main source of the vitamin in the body is through dermal synthesis.[2-4] Vitamin D3 (Cholecalciferol or 1,25-dihydroxyvitamind3) has proven to be of benefit in many different physiological processes such as: increasing bone density, decreasing inflammatory response of our body and even decreasing obesity and heart disease.[5-10] There have also been studies involving Vitamin D3 as an adjunctive treatment and as a monotherapy in treatment of psychiatric illness and behavioral disturbances.[8,9,11-13]

The purpose of this study is to investigate the antidepressant/mood stabilizing properties of Vitamin D3 in the child and adolescent population afflicted with depression, or formally known as major depressive disorder. Previous studies have shown efficacy in using Vitamin D3 as an adjunctive treatment for major depressive disorder when added to an existing regimen of Fluoxetine in the adult population.[14] But to our knowledge no such study has been performed in the child and adolescent population.

Methodology

Subjects: The participants were recruited from the inpatient setting of Millcreek Community Hospital child and adolescent psychiatric wing. There was a total of 34 patients that met the inclusion criteria and were initially enrolled in the study. The inclusion criteria are that they met the criteria for having the diagnosis of major depressive disorder without psychotic features based on the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5) criteria. All subjects scored greater than raw score of 5 on the initial patient health questionnaire 9 modified for adolescents (PHQ-A) screening tool indicating at least mild depression. Of those that were recruited only 13 finished the study. Most of the drop out was due to the research team unsuccessfully attempting to make contact with the patients once they left the inpatient unit. Another reason for drop out was due to non-adherence to the treatment phase of the study, which resulted in administrative discharge from the study. The patient demographics were as follows: of the 13 subjects, 2 were male and 11 were female; 90% of participants were of the Caucasian race with the rest a mix of Hispanic and African American; age range was 11 years to 17 years with a mean age of 14.6 years.

Test Drugs: Tablets of 1000 IU, Vitamin D3 tablets were obtained from Millcreek Community Hospital Pharmacy, the supplier was major pharmaceuticals. A 60 day supply of 1.5 tablets was given without cost to the patients in the treatment arm of the study during their inpatient stay. When the time came, they were subsequently discharged from the hospital

with the remaining tablets to continue to take outside of the hospital.

Trial Design: This is an IRB approved open label, randomized, clinical trial that took place over the course of 9 months at Millcreek Community Hospital. Participants and their legal guardians had information concerning the study provided to them and both the participant and their guardian signed informed assent/consent documentation. Participants were randomly assigned to either the intervention group or the control group after all necessary consent forms were signed and received. The control group received only medication intervention deemed necessary by the inpatient treatment team that was managed by the child and adolescent psychiatry attending physician. The intervention group received Vitamin D3 supplementation at 1500 IU that they took by mouth once daily in addition to antidepressant or other medications prescribed by child and adolescent treatment team and physician. Prior to initiation of Vitamin D3 supplementation serum Calcium and Creatine, clearance labs were reviewed for each candidate. If any abnormal range was found, that patient would not be allowed to participate in the study going forward. Vitamin D3 supplementation once initiated would continue for 60 days.

Participants were recruited from those that were admitted to the child and adolescent inpatient psychiatric unit of Millcreek Community Hospital. The participants had to be under the age of 18 but at least 11 years of age. All recruits, after an initial psychiatric evaluation by the attending physician, had to meet diagnostic criteria for major depressive disorder according to the DSM 5 criteria. Subjects must also have had to be taking, for treatment of depression, a selective serotonin reuptake inhibitor (SSRI) class of medication.

Measures: PHQ-A was the tool of measurement used in this study. It is a peer reviewed and validated screening tool used to screen for and rate depression in terms of none to severe based on scores ranging from 0-27. This questionnaire was completed at three separate times during the study as follows: 1. Upon entering into the study and completing all necessary paperwork; 2. Upon discharge from the acute psychiatric unit; 3. 60 days after the initial questionnaire was filled out. Compliance to medication regimen would be measured by subjective responses by the participant, and/or their guardian, in the affirmative or the negative if they had continued to take all medications as prescribed.

Results

Data was collected from the time period of April 1, 2018 to December 30, 2018. Analysis was performed on the 13 subjects' responses from the PHQ-A and are as follows: Intervention group: n=7, all female ranging in age from 12-17 y/o, mean age of 14.8 years standard deviation (SD): (2.26), all were Caucasian with a mean BMI of 25.0 SD: (3.35), mean score of admission PHQ-A: 19 SD: (3.96), mean score at discharge PHQ-A:11.13 SD: (4.88), mean score at day 60 follow up PHQ-A: 7.86 SD: (1.68). None of the patients involved in the treatment group had a subsequent admission to the inpatient psych unit to date. Mean length of stay 12 days with a range of 2-34 days SD: (11.24).

Control group: n=6, this group included subjects aged 11-17 with a mean age of 14.5 years SD: (1.97), five females and two males with Caucasian the predominate race followed by African American and Hispanic. Mean body mass index was 23.23 for the group SD: (3.38). Mean length of stay was 10.5 days, with a range of 7-20 days SD: (5). Mean score of admission PHQA: 12.1 SD: (7.5), mean score at discharge PHQ-A: 5.5 SD: (6.8). Mean score at day 60 follow up PHQ-A: 7.67 SD (3.88). None of the patients involved in the treatment group had a subsequent readmission to the inpatient psych unit to date. See *Figure 1* for group comparison.

ANOVA single factor test for intervention showed a significant main effect F= (2, 18) = 16.280, p=9.186E-05. The same test for the Control group did not show a significant effect F= (2, 15) =1.765, p=0.205. There was a significant decrease in the depressive symptoms of the patients at time of admission vs. time of discharge for the intervention group but not for the control group, p=0.002, p=0.02, respectively. At 60 day follow up for the intervention and the control group there was a significant decrease in depressive symptoms when compared to time of discharge (p=0.038) but not for the control group (p=0.09). Both groups showed a significant decrease between depressive symptoms at time of admission vs. time at 60 day follow up. See *Table 1* for comparison. All 13 participants were questioned concerning medication/treatment compliance, and all answered in the affirmative.

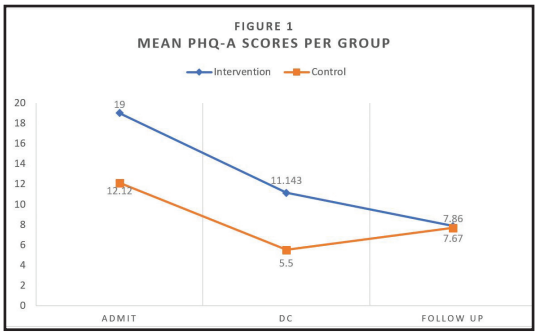


Table 1

Condition vs PHQ-A score	Results
I* vs C*: admit	I: (M=19, SD=3.96) C (M=12.1, SD=7.49) p=0.0296
I vs C: DC*	I: (M=11.14, SD=4.88) C (M=5.5 SD=6.83) p=0.0554
I vs C: f/u	I: (M=7.86, SD=1.68) C (M=7.66, SD=3.88) p=0.4539
I: admit vs DC	I: (M=19, SD=3.96) I (M=11.14, SD=4.88) p=0.0023
I: DC vs f/u	I: (M=11.14, SD=3.4.88) I (M=7.86, SD=1.68) p=0.0383
I: admit vs f/u	I: (M=19, SD=3.96) I (M=7.86, SD=1.68) p=0.0002
C: admit vs DC	C: (M=12.1, SD=7.41) C (M=5.5, SD=6.83) p=0.0237
C: DC vs f/u	C: (M=5.5, SD=6.83) C (M=7.66, SD=3.88) p=0.0912
C: Admit vs f/u	C: (M=12.1, SD=7.41) C (M=7.66, SD=3.88) p=0.0430

*I: Intervention group; C: Control Group; DC: Discharge from hospital setting; f/u: follow up at day 60
Bonferroni correction for alpha: 0.016

Discussion

We are aware that this study of Vitamin D3 supplementation to an antidepressant regimen as an augmentation strategy in treatment of major depressive disorder (MDD) is not the first of its kind.[15] However, to our knowledge this is the first randomized, open labeled clinical trial to be performed with Vitamin D3 as an adjunctive treatment in the child and adolescent population specifically to mitigate the symptoms of depression. Vitamin D3 was chosen due to recent research citing its ability to upregulate tryptophan hydroxylase 2 in glial cells and thus shows potential to increase central nervous system serotonin concentration.[16] As the results show Vitamin D3 is safe and effective as an adjunctive treatment to a selective serotonin re-uptake inhibitor (SSRI) medication for MDD and appears to help maintain remission of depressive symptoms more efficaciously than SSRI alone. It is interesting to note that although the treatment and the control group both showed significant improvements in depressive symptoms at time of discharge from the hospital, only the intervention group showed a statistically significant difference. It is also noted that although the study participants underwent simple randomization, the intervention group showed more severe depressive symptoms numerically per PHQ-A than did the control group. Yet at day 60, follow up scores were not statistically different between the groups. Which is interpreted as, although initially more intensive depressive symptoms existed in the treatment group, the participants were able to achieve a similar remission to the control group who initially showed significantly less intense depressive symptoms, in the same amount of time. The intervention group also continued to show improvement in their depressive symptoms at the time of discharge until day 60 follow up, the control group did not. It is significant to note that only the intervention group showed a statistically significant decrease in their depressive symptoms when comparing symptoms at admit vs. discharge, as well as admit vs. 60 day follow up.

Limitations

Patient recruitment became a barrier in this study due to the fact that recruitment came only from inpatient admissions to the inpatient child and adolescent psychiatric unit. Initially this was thought of as a strength of the study to ensure that the depressive symptoms that were being manifested were in fact severe. Unfortunately, the majority of the admissions to the inpatient unit during the time of this study were rarely diagnosed with MDD compared to other disorders. There were also times where the stay was limited to only a few days and potential recruits were discharged prior to obtaining approval to participate in the study from the guardian of the participant. At other times the participant was awarded custody of the state thus complicating the consent process even further. This study would most likely obtain larger numbers of recruits, and thus increase the power of the study, if performed in an outpatient setting where legal guardians are almost always present at the time of the visit.

Patient retention also proved to be difficult as many participants that were recruited were eventually lost to follow up. There were originally 36 participants in the study but only 13 were able to be contacted for the necessary 60 day follow up and subsequent completion of the questionnaire. This was mostly due to the inability to contact guardians of the participants via phone call or having erroneous contact information given by the guardian or having the telephone coverage change or terminated. Due to the low power of the study this is the most likely reason that no statistically significant changes were seen in the depressive symptoms in the control group.

Heterogeneous medication regimens and diagnosis during this trial may have also influenced the results of this study. Although similar medication regimens existed between the participants during this trial, no medication regimen was the same. Although all met the inclusion criteria for taking SSRI during this study which consisted of Sertraline, Escitalopram or Fluoxetine, some medication regimens were intermittently ceased due to confounding factors (litigation, sickness, parental discretion). Some medication regimens were also already using adjunctive agents such as antipsychotics, stimulant medication, and mood stabilizing agents for treatment of depressive symptoms. Concerning diagnoses given in the hospital the majority of the patients aside from a diagnosis of MDD also had diagnosis of disruptive mood dysregulation disorder or oppositional defiant disorder. There were also other diagnoses noted such as substance use disorders, anxiety disorders, personality disorders, medical comorbidities such as asthma, and metabolic disturbances due to complications of intentional overdose. Another factor to be considered is the fact that all of the participants did not return directly to their home environment but instead were diverted to residential treatment facilities prior to the 60 day follow up.

In other studies, performed using Vitamin D3 as a dietary supplementation, serum 25(OH)D was measured. In our study this was not the case. The reasons for not measuring serum levels of vitamin D in our participants are as follows: performing this test would have increased the risk level of the study to the participants and also require more time-consuming follow up. This study took place on the inpatient psychiatric unit at a facility that does not have outpatient services. Thus, main-

tenance of treatment is performed elsewhere for all of the patients involved in the study. Furthermore, there have already been numerous studies that correlate Vitamin D3 levels and severity of depressive symptoms,[12,17-19] which was not the design of this study. Obtaining an initial serum 25(OH)D level was discussed but ultimately decided against as continued monitoring would have been necessary to see the change induced by the supplement. This would have required the subject to come back to the hospital to obtain blood work which would not have been feasible for the majority of the subjects in the study due to issues involving transportation and time required to return to the hospital. Also, the authors felt that due to the low dose of supplementation that the subjects received for only eight weeks, the change in serum vitamin D3 level from baseline would have been minimal. The true measure of this study is not vitamin D levels, but for 5HT levels in the central nervous system. But as there is no formal test for CNS 5HT concentrations, we felt that our results could be seen through a depressive screening tool that is peer reviewed and easily performed by a child (PHQ-A).

Conclusion

Despite the limitations of this study it is clear that from the results obtained through rigorous statistical analysis, Vitamin D3 supplementation for treatment of major depressive disorder in the child and adolescent inpatient population mitigates the symptoms of depression even in the face of comorbid psychiatric illness, more effectively at 60 days than SSRI alone. Vitamin D3 supplementation serves as a safe and cost-effective augmentation to an SSRI compared to more traditional augmentation strategies. Thus, Vitamin D3 supplementation should be considered in adolescents receiving SSRI medication that are not fully responsive to treatment, prior to other augmentation strategies. Future larger studies on the outpatient setting are warranted due to the higher probability of frequent follow up and also greater ability to screen for homogenous pathology (MDD) due to greater patient volume. It is also important to recognize/emphasize the efficacy of inpatient hospitalization as an extremely effective treatment for depressive symptoms based on results of this study.

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

dismissed. Defensive medicine is real. Sometimes following the standard of care and best practices mirrors defensive medicine. Many times there may be other ways to manage a patient without resorting to the "million-dollar work-up", but the need to practice defensively takes us down that path. When it does, health care costs rise.

Some of you may know my political beliefs from personal conversations. Some of you may presume you can tell from what I have written be it here and now or in the past. It doesn't matter one way or the other. We can all have our own opinions. What we need is to make sure that our elected "leaders" start to LISTEN to us instead of TELLING us what we need.

There are many topics which may be a little "edgy" or "risky" or "controversial" but still worthy of conversation. I want us to start to get uncomfortable and have the conversations. Discuss them, raise them, pursue them. We have an organization which advocates for physicians on many levels. However, it starts with you raising your voice. This Journal allows you to be heard. Take advantage of it.

Collegially,
Mark B. Abraham, DO, JD

OP-ED (continued from page 5)

by an unaffiliated source (think Stark!), and for obstetrical deliveries as well. Will this result in lower physician incomes? Yes, it's likely. Can they do that? Yes. Medicare even today has the power to set prices for physician services, for hospital stays, for lab fees, for almost everything in medical practice.

What about the other actors in this dramatic healthcare reimagining? As in other Western Democracies, pharmaceutical companies would need to negotiate to find an acceptable price for their new or overpriced existing products. Reliable generics would need to remain in the formulary if they are deemed effective, subsidized by the government if needed. Anticompetitive practices by companies must be uncovered and appropriately punished, perhaps even by rescinding patent protection on those products.

I don't see that the political will exists to completely restructure our healthcare system like this, even among the current progressive crowd. But if none of these built-in poison pills were addressed, "Medicare For All" would only perpetuate the ills of the current system. Do I really expect any of this to happen? Actually no, not anytime soon. At some point when healthcare expense hits 20% of GDP, or 30%, or 50% for that matter, at some point we will have to junk this inflationary insurance-based system. We need to just put a reasonable value on our medical services and move on! There's a world of issues out there begging for our attention and our resources. It's time to get real.

LECOM DEAN (continued from page 8)

cility accounting for almost two-thirds of the revenue generated by a medical practice, doctors also find their Medicare reimbursements declining. Combine all of this regulation with a healthy dose of increased annual medical liability insurance and the cauldron of this health care brew can turn deadly for patients. Less patient choice, reduced access to physicians, higher costs, and limited procedure options are leading the health care community into the next decade with some very disheartening considerations. The question remains – will the healthcare community stir the pot or boil in it?

POMA POLICY POINTS (continued from page 7)

CLPP reasoned that POMA should follow the recommendations of the CDC and evidenced-based medicine and as a result, oppose HB 629 and SB 100. HB 629 passed the House in April and is in the Senate Banking and Insurance Committee.

SB 675 – Limiting Access to Buprenorphine in Office-Based Settings — Oppose

Senate Bill 675, PN 820 enacts the Buprenorphine Medically Assisted Treatment Act. The bill would require physicians to register and pay a fee with the state before they could treat patients with buprenorphine. Additionally, a patient must be receiving counseling from a state-licensed facility before an office-based physician could prescribe the drug. The CLPP reasoned that providers who prescribe buprenorphine already register and take required training with the federal Drug Enforcement Agency. Additionally, many patients do not have access to state-licensed facilities and/or are receiving counseling from other community resources. For these reasons and more, the CLPP voted to oppose SB 675. The bill has already made it from the Senate to the House and has been the subject of controversy and multiple amendments in the House Human Services Committee. The bill is likely to be amended in some form in the next few months, but POMA will advocate in a way that preserves access for patients who need it.

OUT OF MY MIND (continued from page 11)

It we fast-forward to passage of the Affordable Care Act, aka Obamacare, we can easily compare and contrast the two offerings. The ACA was signed into law by President Barack Obama on March 23, 2010. Unlike Nixon's plan that made coverage voluntary, Obamacare instituted an individual mandate. Both plans hinged on employer benefit packages. Under Obama's plan, employers with more than 50 employees must offer affordable insurance with a minimum set of benefits or pay extra if their employees qualify for a tax credit to buy insurance on the marketplace instead. Smaller employers can buy through a special program and the smallest employers can get a tax credit. Affordable coverage is defined as costing less than 9.5% of household income. Subsidies and tax credits will be available to many. Medicaid expanded by offering states funding to cover individuals earning up to 133% of poverty level at first. Over time, 133% would become 90%. The Affordable Care Act demanded a minimum package of insurance benefits for all newly eligible individuals. Lastly, it pays providers equal rates for Medicaid and Medicare patients.

In addition, abortion benefits would be limited to cases of rape, incest or to preserve the life of the mother. This is known as the Hyde amendment. Health insurance companies and the pharmaceutical industry will pay higher taxes.

Attorney Ben Stein, who acted as a speechwriter for Richard Nixon and Gerald Ford, commented on Obamacare shortly after its passage. In essence he stated that the two plans were almost identical except for the fact that Nixon's plan assured the individual that the government would pay any balance of premiums to private health insurers that they could not afford. Obamacare instead created more government options.

I suspect had President Nixon's plan gone into effect the bill for the government to subsidize the individuals/family for their benefit premiums would have surely created a fiscal nightmare. Remember, this was designed to supplement premiums with private health insurance. Now that the individual mandate with Obamacare has been repealed, it would seem that more people will apply for public options. I suspect that this will shortly become too onerous a burden for the individual taxpayer.

Medicare for all? Sounds great. It also sounds financially undoable. As we as a country, explore the possibility of a national healthcare program, we must define our expectations, implement a fair and reasonable method of payment, and demand that our political parties work in the interest of both patient and provider.

Good luck.

ESTABLISHING A STUDENT RUN CLINIC *(continued from page 15)*

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Cholecalciferol Supplementation for Major Depressive Disorder *(continued from page 19)*

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POMPAC is POMA's political action committee and the political voice of the osteopathic profession in Pennsylvania.

What does POMPAC do?

POMPAC takes in monetary donations from DOs across the state and contributes those funds to targeted state candidates for public office.

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Contributing to POMPAC is simple. There is an online option and a paper option to make regular contributions or a one-time contribution. Please note, contributions are not tax deductible.

Have questions?

Please contact asandusky@poma.org or call (717) 939-9318 x111.

CME Quiz

Name _____

AOA # _____

1. Medical students are more likely to practice osteopathic manipulative treatment when they have more experience.
   True False

2. Confidence in osteopathic manipulative medicine, as well as the osteopathic principles and practices, can improve with firsthand knowledge and practice.
   True False

3. Participation in student-run clinic in osteopathic manipulative medicine would cause a decrease of interest in the practice of osteopathic manipulative treatment.
   True False

4. Vitamin D3 serum levels have been correlated with severity of depressive symptoms.
   True False

5. Vitamin D3 as a monotherapy has been proven efficacious in the treatment of major depressive disorder.
   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; 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.*

Answers to Last Issue's CME Quiz

1. b
2. b
3. d
4. d

(Questions appeared in the June 2019 Journal.*)*

What's on Your Mind??

Mark Abraham, DO, JD, editor of POMA Journal is seeking input from **YOU!**

The Winter 2019 issue will be a follow-up to this issue featuring solutions to the healthcare crisis. Whether it's addressing the enormous cost of healthcare, access to care, insurance, pharma, government, etc. — put your thoughts on paper and send them to us!

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