At Crozer-Keystone, our team of talented, respected and award-winning physicians are a big reason why we have been — and will continue to be — Delaware County’s leading healthcare provider. We thank our physicians for their dedication to their profession and, more importantly, for their commitment to the men, women and children they care for every day.
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The election of Donald Trump has caused some tension in many homes across America. News operations even made suggestions on how to deal with politics at the Thanksgiving dinner table. Daniel Post Senning, an etiquette expert from the Emily Post Institute, told CNN that one obvious way to handle the problem, is to stick to nonthreatening conversations. Senning calls them “Tier 1” topics, such as pop culture, sports, the weather, the food, and family matters.

He says “Tier 2” topics are the ones that can turn a meal into a food fight. They include religion, sex and of course, politics. “Those are important discussions to have,” Senning says. “But they are controversial and require a level of discretion, care and tact to navigate. You have to think about your audience and the potential impact of those discussions.”

Which brings me to our very own Thanksgiving dinner-related concern in this issue of Philadelphia Medicine: maintenance of certification (MOC). This touchy issue involves members of our own PCMS family who have differing and strongly held views on this important topic.

Dr. Richard Baron, a distinguished PCMS member, currently heads the American Board of Internal Medicine (ABIM). It’s one of the toughest jobs in American medicine right now. There has been a groundswell of criticism over the physician MOC process that the ABIM administers, and which Dr. Baron and a colleague very recently addressed in an NEJM perspective article. Three leading physicians — including two from our area — Dr. Charles Cutler, current president of the Pennsylvania Medical Association (PAMED), and Dr. Scott Shapiro, immediate past president of PAMED — have written critical commentaries on the ABIM and MOC for this issue of Philadelphia Medicine.

While these criticisms are important for a more complete understanding of the physician recertification controversy, we recognize that they may not tell the whole story. Thus we have urged Dr. Baron to provide us for publication a detailed response to these three op/ed pieces. Presently he has provided us with a brief response which is published at the end of this section. We look forward to publishing in a future edition a more complete response if it is provided, along with any valuable comments from our readers. We want Philadelphia Medicine to be a forum where relevant and often controversial issues are discussed fully and factually with, as Senning would say, discretion, care and tact.

The ABIM is not the only thing on our dinner plate in this issue. We examine whether soda taxes that are bubbling up across the country, following Philadelphia’s lead, will help arrest the nation’s diabetes epidemic.
Two medical students debate whether drug companies are charging too much for the drugs they develop. We also look back at one of the most frightening health crises in Philadelphia history – the 1976 outbreak of Legionnaires Disease.

And we announce an exciting new opportunity for PCMS members to have a direct impact on the wellbeing of medical students – the recently initiated PCMS Foundation.

We hope you find this issue of Philadelphia Medicine informative. It is part of PCMS’s continuing effort to be an advocate for our members. You can stay current on the issues we are following, by going to our website at www.philamedsoc.org.

We welcome your comments and appreciate your membership. For those of you who are not members, we urge you to join us. You won’t regret it.

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The maintenance of certification (MOC) is an issue which practicing physicians must face in their future. It is often tied to criteria that dictate a physician’s ability to practice. Preparation is often costly in both time and money and there is much debate on the relevance of MOC in determining a physician’s ability.

The MOC and the issuing boards themselves have come under much criticism, not only from physicians, but also from many institutions and entities involved in medical education and patient care. The House of Delegates of the Pennsylvania Medical Society (see enclosed article) and the interim meeting of the American Medical Association approved resolutions that call for an evaluation of the American Board of Internal Medicine’s (ABIM’s) stature in recertification.

Philadelphia Medicine is presenting three opinions on this matter from outspoken critics of ABIM: Dr. Charles Cutler, current president of the Pennsylvania Medical Society; Dr. Scott Shapiro, immediate past president of the Pennsylvania Medical Society, who spearheaded a Pennsylvania delegation resolution on the matter at the AMA; and Dr. Westby Fisher, a longtime critic of ABIM. Their commentaries are their personal opinions, not those of any organizations they represent.

We asked Dr. Richard Baron, president and chief executive officer of ABIM, a member of PCMS for almost 30 years, and recipient of the 2010 PCMS Practitioner of the Year Award, to respond to the criticisms. He respectfully declined. He has given us a statement outlining the reasons for declining to comment at this time. We have presented that statement after the above-mentioned commentaries.
A Message to the ABIM: Reign in Spending and Stop Turning Staff into Millionaires

Charles Cutler, MD, MACP
Internal Medicine
President of the
Pennsylvania Medical Society

These comments are
his personal opinions,
not those of PAMED.

In 1936 when the American Board of Internal Medicine (ABIM) was established, I think it is safe to assume that no one imagined the organization would one day be a business that turns some physician-colleagues and some lesser trained staff into millionaires. But that is what has happened. And the ABIM is not alone. At the American Board of Pediatrics, the president was paid over a million dollars a year. He retired and two years later he returned with a compensation package of $793,000 for an 8-hour work week (as reported on tax form 990). That’s an amount in excess of $2,000 an hour!

It’s not much different at the American Board of Family Medicine (ABFM) where the president in addition to earning over $800,000 a year enjoys first class travel for himself and a companion. I often wonder why a person earning in excess of $800,000 a year can’t reach into his own pocket and cover the cost of upgrading an airfare to first class.

I think it is safe to assume the founders of the ABIM never imagined the ABIM-Foundation (ABIM-F) would speculate in real estate by purchasing one of the most expensive per square foot residential condominiums in the city of Philadelphia. A $2.3 million investment in the condo and shares in a chauffeur driven limousine sadly resulted in a cash loss of approximately $600,000 and possible additional losses of nearly $200,000 in real estate sales and transfer fees. A rough estimate is that $800,000 of the diplomates’ money was lost in real estate speculation by the ABIM Foundation’s leaders.

Finally it is safe to assume that the doctors who established the ABIM never imagined a transfer of more than $50 million of the diplomates’ fees to a Foundation where as much as $500,000 a year is spent on conferences often held at lavish resorts. One might assume the board members on a foundation would donate their time for a charitable purpose. But not so with the ABIM-F. Board members are paid and paid well. Many ABIM board members end their term and then are moved over to the ABIM-F to serve and continue to earn additional income.

It is time, in my view, to insist on the following common sense reforms at the ABIM. Other certifying boards with similar spending patterns should be included.

• Reign in the wild spending.
• Stop turning staff into millionaires; get salaries in line with the market. Stop relying on consultants who feed into higher and higher salaries.
• Eliminate the retreats, the resorts, and the plush accommodations. Require coach travel.
• Close the ABIM-Foundation. Return the money to diplomates.
• Insist that charitable donations are made from the ABIM directors’ own pockets not from diplomates’ fees.
• Ban real estate ventures.
• Establish a basic benefits package in line with community standard. Eliminate deferred compensation. Investigate an internet report that the ABIM’s retirement contribution is 18% while the industry standard is 5%.
• End mission creep and return to the original role of the ABIM (i.e. set standard for a medical specialty specialty).

At a time when practicing physicians face lower reimbursement and ever-rising overhead, the ABIM would do well to show fiscal restraint.

There has never been a time in medicine where the pressures that affect our practices have been greater. Ever-changing government regulation, cumbersome electronic medical record documentation systems, and dramatically changing reimbursement paradigms are only a few of the obtrusive outside distractions that take away from time with patients and erode physician professional satisfaction.

For many physicians, the frustration these outside factors cause pale in comparison to the anger they have from the problem within our medical “family” with medical boards like the ABIM who continue to amass obscene cash reserves on the backs of America’s doctors. While some are fortunate to have MOC processes that work, many more of us are burdened with a costly, punitive process that gives the illusion of evaluating physician competence with a recertification test that bears little resemblance to the skills needed to deliver high quality medical care.

The stories of the testing Board member salaries, benefits, trips, condos, limos are so over the top they have made it repeatedly to the pages of Newsweek and The New York Times. The ABIM continues to patronize us with meaningless blog postings that serve to further cement the opinion position and public statement of no confidence in the leadership of the ABIM issued by the Pennsylvania Medical Society earlier this year and subsequently adopted and signed by numerous other physician organizations across the country. The ABIM board members have failed as leaders.

But here is the good news…physician leadership across the country on this issue is united in an unprecedented way against boards like the ABIM... and our leadership will not fail. The momentum for the aggressive national game plan is being driven by physician leaders within the Philadelphia County Medical Society and the Pennsylvania Medical Society. Pennsylvania physician leaders were directly responsible for the AMA announcement earlier this year of a policy and position change that now condemns the MOC and recertification practices of the ABIM and many of the other boards that “got it wrong.”

At the Interim AMA meeting in November our efforts drove the AMA to ask the ABIM to, for the first time, open their books for a complete financial audit by any physician stakeholder. Your PCMS and our PAMED are well on our way with a well-planned, comprehensive, and aggressive strategic plan. We met multiple times with ABIM leadership. We offered to work with them to rapidly move the ABIM with a plan that works for physicians. While they declined to explore our plan, there should be no doubt – PAMED has engaged physician leaders throughout the AMA and across the country. Our aggressive plan will end with the elimination of the current meaningless MOC process while establishing a new stakeholder board with real practicing physicians focused solely on the importance of relevant, unobtrusive, physician self-directed lifelong learning.

I am proud to have had the opportunity to work on solving these and other issues over the past year as president of PAMED along with the talented leadership team on the board of PCMS. I am confident that if we maintain this more visible, more aggressive and much more strategic approach to advocacy that our PAMED and PCMS will continue to realize successful advocacy efforts on many more of our issues, like never before, for the patients and physicians of Pennsylvania.
Imagine graduating from college at the top of your class, working for 10 years at your job, and then having to pay your college $2000 every 10 years so you can retake a final examination to prove to the public that you can keep your job.

This is precisely what U.S. physicians are forced to do, thanks to years of carefully orchestrated regulations imposed by the tax-exempt 501(c)(3) corporation, the American Board of Internal Medicine (ABIM).

In 1989, the ABIM secretly created a shadow organization for itself, the American Board of Internal Medicine Foundation, and funneled $76 million of practicing physician test fees piecemeal from 1990 to 2007 to fund its excessive salaries, first-class and spousal travel fees, five-star hotel meeting locations, and the purchase of a $2.3 million condominium with a chauffeur-driven town car in downtown Philadelphia.

At the same time, the ABIM eliminated its lifelong board-certification credential, and replaced it with a time-limited one called “Maintenance of Certification” (MOC) that assurred continued fee payments to the board every 10 years. Practicing physicians, too busy doing the real work of patient care, thought little of this change until they started losing their ability to practice medicine because of it.

Many independent, peer-reviewed studies (including one conducted by the ABIM itself) have confirmed the inability of the ABIM’s MOC credential to improve patient care quality or safety, yet its program costs the average U.S. physician over $23,000 in fees and lost time from work every 10 years. ABIM lobbied Congress from at least 2009-2015, and never documented this on tax forms in violation of their tax-exempt status.

Also, the ABIM employed Ariel Benjamin Mannes as director of test security in 2008. Mr. Mannes, who directed investigations of unsuspecting physicians that led to sanctions and lawsuits against them, carries two felony convictions. He has unfettered access to diplomates’ personal information and still serves as an employee for ABIM in this capacity.

Finally, with enrollment in MOC, the ABIM forces diplomates to sign electronic legal agreements that allow “research” to be conducted on physicians and their patients without informed consent or Institutional Review Board oversight.

Despite the additional revenue from MOC, the ABIM remains over $50 million in debt, while its diplomate-funded ABIM Foundation enjoys a $77 million balance sheet, $6.5 million of which was moved offshore to the Cayman Islands in 2014 for “investments.”

The title “Doctor of Medicine” demands significant moral imperatives to maintain the respect and trust of patients. As such, the responsibility for our ongoing education and our patients’ best care rests squarely on our shoulders. This is why physicians have always committed to continuing medical education throughout our lifetime and why state medical societies require documentation of this education to remain licensed. The ABIM’s superfluous and costly time-limited “board certification” credential created to inure...
its staff and political aspirations, demands investigation by the Internal Revenue Service, Federal Trade Commission, and the Department of Justice, to assure U.S. physicians have the right to work and care for patients in a system based on integrity, not greed.

Dr. Fisher’s blog address:


3 American Board of Internal Medicine IRS Form 990 2011. Schedule J, Page 3.


10 American Board of Internal Medicine 2013 IRS Form 990. Page 3 and Page 10.


16 American Board of Internal Medicine IRS Form 990 2014. See Page 1, line 22.

17 American Board of Internal Medicine Foundation IRS Form 990 2014. See Page 1 Line 22.

18 ABIM Foundation IRS Form 990. 2014. See Pages 52-84.

Point of View... A Broken System – the American Board of Internal Medicine

We thank the Philadelphia County Medical Society for reaching out to ABIM with the opportunity to submit an article about MOC. We respectfully decline at this time, as we do not feel that this format appropriately presents the variety of viewpoints about MOC.

ABIM is very much open to a dialogue about how we can improve our program, and we have engaged tens of thousands of physicians in that effort. MOC is an important way for physicians and their patients to know that they are staying current, providing a path for physicians to continually update their practice.

ABIM remains committed to assuring that internists and internal medicine subspecialists — and their patients — have access to a high value, meaningful credential over the course of their career.

Continued on page 10

A Response from ABIM...

Richard J. Baron, MD, MACP
President and Chief Executive Officer, ABIM and ABIM Foundation
Following Donald Trump’s election as president and action by the AMA House of Delegates on the future of health care in the United States, AMA President Andrew W. Gurman, MD, released the following statement on November 16:

The AMA House of Delegates, reflecting more than 170 state and specialty medical societies from across the country, today reaffirmed its commitment to health care reform that improves access to care for all patients.

Using a comprehensive policy framework that has been refined over the past two decades, the AMA will actively engage the incoming Trump Administration and Congress in discussions on the future direction of health care. The AMA remains committed to improving health insurance coverage so that patients receive timely, high quality care, preventive services, medications and other necessary treatments.

A core principle is that any new reform proposal should not cause individuals currently covered to become uninsured. We will also advance recommendations to support the delivery of high quality patient care. Policymakers have a notable opportunity to also reduce excessive regulatory burdens that diminish physicians’ time devoted to patient care and increase costs.

Health care reform is a journey involving many complex issues and challenges, and the AMA is committed to working with federal and state policymakers to advance reforms to improve the health of the nation.

The policy framework referenced in Dr Gurman’s statement can be accessed at https://www.ama-assn.org/sites/default/files/media-browser/public/washington/ama-vision-on-health-reform.pdf, and a slide deck providing more detail on the MACRA final rule is also available at https://www.ama-assn.org/sites/default/files/media-browser/specialty%20group/washington/macra-final-rule-slides.pptx on our AMA’s website.
The 2016 House of Delegates (HOD) Conference and Educational Conference was held on the weekend of October 21-23 in Hershey, Pennsylvania. The delegate conference deals with policy concerning public health, quality of patient care, medical education and reimbursement.

This year’s conference was historic because it will directly affect the practice of medicine and medical education.

A special “Committee of the Whole” was called to address the important issue of Clinically Integrated Networks (CIN). Discussions and educational sessions were held throughout the conference to explain the intent of the Pennsylvania Medical Society. At a special session on Sunday morning, the House of Delegates voted with majority approval for this landmark resolution along with a management services organization and to allocate up to $15 million to support this landmark Practice Options Initiative.

To learn more about the Practice Options Initiative, contact Mr. Dennis Olmstead, Senior Advisor of Health Economics and Policy at the Pennsylvania Medical Society, through the website KnowledgeCenter@pamedsoc.org or 855-PAMED4U (855-726-3348).

The Maintenance of Certification (MOC) was also an issue of major importance at the conference. The Pennsylvania Medical Society initiated the national vanguard to pursue a more efficient and less burdensome time and cost process for certification through the American Board of Internal Medicine (ABIM). Resolutions were passed to petition the American Medical Association to ask for analysis of the finances of ABIM. This was further supported through a similar resolution at the interim meeting of the AMA in November. Additional resolutions were adopted at the House of Delegates acknowledging alternate specialty boards for the maintenance of certification. See www.pamedsoc.org/MOC.

The national opioid crisis was addressed via resolutions whereby PAMED will work with statewide organizations and counties for the increased delivery of Naloxone and to assist patients with addiction treatment. See www.pamedsoc.org/OpioidInfo.

Other significant issues addressed by resolutions were:

**Reimbursement**

- Advocacy for standardization and transparency by insurers for observation status
- Standardizing the development of clinical pathways
- Ending retrospective payment denial of medically appropriate testing and procedures
  
  See pamedsoc.org/Advocacy

**Public Health**

- Opposing tobacco usage in Pennsylvania
- Opposing legislative interference with facilities giving standard of care reproductive services for women
- Exploring the health effects and limiting future fracking
- Eliminating the barriers for the use of sunscreen in schools
Promoting Teen Health Week (Jan 9-13, 2017). This resolution was also unanimously adopted at the interim meeting of the American Medical Association.

**Physician advocacy**

Preserve written prescriptions and oppose mandates requiring all prescriptions in Pennsylvania be done electronically

Ensure fair treatment of physicians cleared of wrongdoing by the state licensing

**Annual Education Conference (AEC)**

Up to 10 credits of CME were made available to the more than 200 physicians participating in the several sessions of the educational conference. Child abuse recognition and reporting training course, necessary for license renewal, was available online and may be accessed at www.pamedsoc.org/childabusecme.

**Medical Student/Resident Participation**

Medical students across the state actively participated in the Annual House of Delegate and Educational Conferences. An innovative Health Care Topics Debate was conducted which focused on the issues of opioids, marijuana and public funding.

18 residents presented vital topics at the annual poster contest. See www.pamedsoc.org/PosterContest.

*Article is from the staff of the Pennsylvania Medical Society and Michael A. DellaVecchia, MD, PhD, immediate past president of the Philadelphia County Medical Society*
Every state is facing the opioid crisis. “We all want our doctors to prescribe appropriately and prevent abuse. The difficulty for physicians is that they are the ones who are responsible for treating patients but also the ones who can help alleviate the fall out of addiction. Some doctors need help understanding the guidelines and others need remediation when they are inappropriately prescribing,” said Marcia Lammando, RN, BSN, MHSA, program director of LifeGuard.

That’s why LifeGuard, in collaboration with the University of Pennsylvania’s Pain Management Institute, introduced an interactive assessment and education program for physicians experiencing difficulties with controlled substance and opioid prescribing. Core competencies will be highlighted as well as in-depth controlled substances education with a focus on opioid prescribing. LifeGuard, a nationally recognized clinical assessment program for physicians, operates under The Foundation of the Pennsylvania Medical Society.

“You will be able to deploy what you learn in this course in your practice,” said Philadelphia Physician Michael Ashburn, MD, MPH, Professor of Anesthesiology and Critical Care Director, Pain Medicine, Penn Pain Medicine Center. “This course is intended to provide practicing clinicians with rich information regarding best practices related to the use of opioids to treat chronic non-cancer pain. Our goal is that physicians will clearly understand when and how to use opioids, such that they have the knowledge and skills to properly care for this patient population.”

Course material will include best practices as defined by both the CDC clinical practice guidelines as well as the relevant Pennsylvania state clinical practice guidelines. Dr Ashburn said the program will also cover state-specific education related to controlled substance and opioid prescribing guidelines and registries.

“The use of standardized patients will allow students to practice their skills related to patient education and management, especially with regard to the management of complex patients and situations.” The course is co-directed by Dr. Martin Cheatle, a pain psychologist with extensive experience in the evaluation and treatment of addiction.

“We plan on working hard to make sure students understand how to screen patients for substance use disorder. In addition, students will be able to improve their skills on best practices with regard to patient referral for substance use disorder treatment,” Dr. Ashburn said.
The innovative Controlled Substance and Opioid Prescribing Educational Program includes case-based discussions completed in a small group format. “Most importantly, we will assess personal prescribing habits through chart review and we follow up with a post-education knowledge assessment,” said Heather Wilson, MSW, CFRE, executive director, Foundation of the Pennsylvania Medical Society.

Through the use of interactive methods, the program will assess the physician’s knowledge gained by participation in the program. This program differentiates itself from other didactic prescribing programs through targeted instruction focused on the physician’s prescribing habits.

Ongoing monitoring of a physician’s prescribing practices can be offered by LifeGuard for a specified period of time in an effort to measure compliance with guidelines and evaluate educational outcomes, when applicable or requested.

This program will offer 25.5 AMA PRA Category 1 Credits™ and courses for the remainder of this year are offered in Philadelphia. Dates are available by request.

Dr. Ashburn noted that LifeGuard is on the cusp of introducing two new programs to not only assess physician’s medical knowledge and practice patterns, but also to provide significant education addressing these identified deficiencies and gaps.

If you would like to learn more details, please contact Marcia Lammando, RN, BSN, MHSA, Program Director of LifeGuard®, at mlammando@lifeguardprogram.com or 717-909-2590.

Please visit www.LifeGuardProgram.com for even more information.
Hugh Laurie is one of those people on television who pretends to be a doctor. The English actor made a good living as the lead on the Fox TV series, “House MD.” He admits that his knowledge of medicine doesn’t extend much beyond the scripts he gets, but that didn’t keep him from speaking on “Late Night with Stephen Colbert” about a health issue close to his heart.

On the night of the third and final presidential debate between Hillary Clinton and Donald Trump, Laurie told Colbert that the debate made it clear that Americans are concerned about the wrong enemy. “The American voter is not going to be killed by ISIS,” he said. “You are going to be killed by diabetes…. If ISIS were halfway decent at their job they would be opening a chain of donut shops.”

Even real doctors would have to agree with Laurie that an unhealthy stretch of the road to obesity and many diabetes cases is paved with sugar.

Some cities have followed Philadelphia in the belief that one way to attack this growing epidemic is to make it more expensive for people to buy sugary soft drinks. On election day, San Francisco, Oakland and Albany, California, along with Boulder, Colorado, voted to slap a tax on such drinks. Two days later, Cook County, Illinois, which includes the city of Chicago, passed a soda tax.

Howard Wolfson, senior advisor to Michael Bloomberg, was elated over the votes. “My guess is that there will be an explosion of cities…across the country that will pursue a soda tax. This is an issue whose time has come.”

Bloomberg, the billionaire and former mayor of New York City, pumped more than $18 million into the soda tax campaigns in San Francisco and Oakland, to counter the American Beverage Association’s (ABA’s) $20 million effort – which was a big jump from the $10 million the ABA spent in its unsuccessful bid to kill the Philadelphia tax.

The ABA, by the way, has not given up on Philadelphia. It has taken the city to court, to try to prevent the tax from taking effect on January 1. The city’s one-and-a-half cents per ounce tax on sugary and sugar-substitute drinks would be paid by the distributors. If those businesses pass the tax bill on to consumers, it would add about 25 cents to the cost of a 16 ounce can of soda.

Philadelphia health commissioner Dr. Thomas Farley told Philadelphia Medicine that the city’s tax on soft drinks “provides people with an incentive to switch from sugary drinks, which are the biggest contributor to the obesity epidemic. We’re not forcing anybody to do anything. People can continue to drink sugary drinks if they want, but the tax gives them a good financial reason to cut down or eliminate them.”

The early results on whether such taxes actually cut the purchase of sugary drinks are inconclusive. Recent data from Berkeley, California, which passed a soda tax in 2014, showed a 20% drop in the purchase of the taxed drinks. Mexico passed a similar soda levy in the same year, and saw an initial decline of 6% in soft drink purchases, but new data from that country appear to show soda buying on the rebound.

The ABA has put all its weight behind an effort to blunt the soda tax trend. Supported by the U.S.’s 100-billion-dollar soft drink industry, it has conducted its own studies on the health effects of sugary drinks. According to researchers from the University of California, San Francisco, the ABA studies have come up with markedly different results than those conducted by independent research.

The university reviewed about 60 rigorous studies published between 2001 and 2016 that looked at the relationship between soft drinks and obesity and diabetes. The studies led by independent researchers showed a clear link between soda consumption and obesity. But 26 of the studies did not report such a link. They were all conducted by researchers with financial ties to the beverage industry.

Dean Schillinger, who is the lead author of the report and chief of the University of California, San Francisco, division of general internal medicine of San Francisco General Hospital, said, “if you look at just the independent studies, it becomes increasingly clear that these drinks are associated with diabetes and obesity.”
But does a soda tax actually help reduce obesity and diabetes?

“The research on that is really a mixed bag,” Montgomery County endocrinologist Michael Cooperman told Philadelphia Medicine. Dr. Cooperman is also a fellow at the American Association of Clinical Endocrinologists. “There’s no data to support that there’s actual weight loss in these individuals. There’s some data that appears to show that people who stop drinking soda get their carbs in other ways. At the moment it’s a good way to raise taxes and have a health benefit as a cover.”

Dr. Cooperman added that it’s important for people with type 2 diabetes or pre-diabetes to cut out things like sugary soft drinks, but that such a move is only one part of a total program that must include a diet that cuts carbohydrates and is rich in fresh vegetables. Such patients should also take part in a daily exercise routine.

Medicare believes so strongly in the importance of diet and exercise for type 2 diabetics, that in 2018 it will start paying for programs that will help millions of older Americans develop regimens to cut the risk of the disease.

A pilot program conducted by Medicare showed promising results. In that experiment, which started in 2013, Medicare gave money to YMCAs and other nonprofits in eight states to work with older Americans who had pre-diabetes. Participants went to group meetings with a lifestyle coach. The coach taught them how to improve their diets, increase their physical activity, and change behavior in other ways to help them reach a healthy weight.

Dr. Cooperman said his goal for his patients is to get their blood sugars under control through a comprehensive program of diet and exercise. He recommends, among other things, a low-carb diet. “Carbs tend to be the major insulting dietary factor for people with diabetes. Bread, pasta, rice, potatoes – all starches – convert into glucose – sugar – that tends to turn into fat, and to weight gain.”

If a patient does everything right, Dr. Cooperman said, there are hopeful signs in research that such moves could help prevent that person from going on insulin for a significant period of time. “We do know that through these lifestyle changes we can delay the onset of insulin for 50% or more of our patients. It’s not totally clear how long of a delay. It may deter insulin altogether, but right now, we don’t have long-term data to support that.”

People with type 1 diabetes and many with type 2 diabetes will always need to take insulin on a regular basis. Which brings us to another issue – the cost of insulin. Seventy-five years after the original insulin patent expired – a time when the price of such drugs is supposed to go down – some insulin products are continuing to cost more.

Critics argue that the costs have gone up because some drug companies have made incremental improvements to insulin products just to generate new patents and higher profits. There have been some substantial improvements to insulin – most notably, replacing insulin derived from animals with a genetically engineered human version with fewer side effects. But many of the latest generation of insulin therapies have sparked debate over whether they are truly worth the cost.

Dr. David Nathan, a Harvard Medical School professor, told the Washington Post, “I don’t think it takes a cynic such as myself to see most of these drugs are being developed to preserve patent protection. The truth is they are marginally different, and the clinical benefits of them over the older drugs have been zero.”

Dr. Cooperman agrees. “These newer drugs are quite expensive, and they have never been shown to prevent complications or save lives better than the old insulins. Many of our patients cannot afford the insulin that is out there. It’s a major issue. I agree with Dr. Nathan. And it is a clinical problem. And an obstacle in getting our patients under control.”

Dr. Cooperman, who has treated patients with diabetes for more than 40 years, tries to give those who have problems paying for the drug, less expensive insulin with the understanding that it may require more injections or different timing.

He added, “We’ve made great strides in treating diabetes over the past 20 years. Patients are not dying from heart attacks as they had in the past. There’s less renal disease.” He said part of the reason is better treatment of blood sugars, and a recognition that diabetes is a multi-symptom disease that can involve hypertension, cholesterol and smoking.

But he said the disease is still increasing in frequency. “The number of patients with diabetes increases at about 2,000 a day in the U.S. We need to do a better job of treating obesity. And the cost of insulin is an obstacle.”
Since its inception in 1849, the Philadelphia County Medical Society (PCMS) has been a stalwart for excellence in the practice of medicine and medical education. Its mission has been and continues to be, to advocate for physicians and their patients, and to promote the profession. PCMS believes that this is best done by nurturing those in the early stages of their medical career, and by promoting works in public health.

This year, PCMS has embarked on an exciting new path, by establishing its own domestic nonprofit foundation — the Philadelphia County Medical Society Foundation. The foundation was created to foster charitable works and fund scholarships for medical students from Philadelphia.

The foundation was established through an initial PCMS loan of $15,000. The foundation consulted Marla Conley, Esq., an expert in non-profit organizations, to help in both its legal establishment, and its state and IRS compliances. A board of directors composed of PCMS members is working gratis for the foundation. Everyone on the board has also made a significant financial contribution to the foundation. PCMS staff members Mark Austerberry and Eileen Ryan are assisting the foundation.

The PCMS Foundation is helping to make charity a new legacy for the Philadelphia County Medical Society. The foundation is urging PCMS members to make outright contributions and gifts in kind. We are calling on our members to give generously, in order to help medical students in our county, and to support PCMS’s commitment to continue our 167-year history of medical excellence.

Cash contributions may be sent to:
The Foundation
Philadelphia County Medical Society
2100 Spring Garden St.
Philadelphia PA 19103

If you are considering a gift in kind – such as stocks, collections, property, and bequeaths, kindly call:
Michael A. DellaVecchia MD PhD
Past President, Philadelphia County Medical Society
215-563-5343 ext. 103

Please note that, as a newly formed organization, the PCMS Foundation has not yet received IRS confirmation of its tax-exempt, public charity status, although the PCMS Foundation will apply to the IRS for recognition of such status. If the PCMS Foundation’s application to the IRS is approved (and the Foundation’s legal advisors are not aware of any reason why the application should not ultimately be so approved), all donations the PCMS Foundation receives during the pendency of its application will be deductible for federal income tax purposes as charitable contributions to the fullest extent permitted by law.

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Just 12 years after becoming the birthplace of American Democracy, Philadelphia also earned the moniker of the birthplace of American medicine. In early 1787, two dozen prominent Philadelphia physicians gathered “to advance the science of medicine and to thereby lessen human misery.” They played a central role in the history of American medicine by creating what has become the oldest professional medical association in the country — the College of Physicians of Philadelphia.

Since its founding, the college has been recognized for pioneering public health initiatives, contributing to medical research and education, and engaging leading American physicians and surgeons. Among the virtually endless list of noteworthy fellows and associates of the college are founder Benjamin Rush (1746-1813), a signer of the Declaration of Independence; surgeon Samuel D. Gross (1805-1864), author of the 19th century’s foremost manual of surgery; S. Weir Mitchell (1829-1914), one of the most important neurologists in American medical history; and former Surgeon General C. Everett Koop (1916-2013).

In 1793, 15 years after the institution of the college, Philadelphia was literally decimated by what could only be described then as a “malignant and contagious fever.” The fever, now known as yellow fever, was responsible for more than 5,000 deaths in the city between August and November of that year. On August 26, 1793, the college published a list of 11 guidelines to help prevent spread throughout the city. The steps included avoiding intercourse (fraternizing) with infected people, and keeping the streets as clean as possible.

Almost 225 years later, the college’s mission has evolved into “advancing the cause of health while upholding the ideals and heritage of medicine.” This mission is fulfilled today through its unique collections, engaging exhibitions, transformative youth programming, and strategic health outreach. In May 2016, for example, the college invited the public to attend an expert Q & A with Scott Weaver, MD, a virologist and vector biologist, and one of its current fellows, vaccinologist Paul Offit, MD. The topic? The Zika Virus, a very modern public health concern sparked by the aedes aegypti mosquito – the same species responsible for the devastating yellow fever epidemic of 1793. The mission statement of the institution may have changed over the centuries, but its public outreach and attention to contemporary challenges in medicine remain visionary and impactful.

Other aspects of the college have similarly evolved with time. Established in 1788, the college library was Philadelphia’s central medical library for more than 150 years, serving its medical schools, hospitals, physicians, and other health professionals. Today, it is an independent research library devoted to the history of medicine—from the Renaissance through the Enlightenment to the modern period—that serves hundreds of scholars, health professionals, students, and popular writers each year. Due to the college’s significant history and illustrious fellowship, the collections provide an extraordinary cache of one-of-a-kind and unique items, including:

- More than 12,000 rare books, including approximately 411 books printed during the first 50 years of the printing press in the west.
- One of the world’s best copies of William Harvey’s De Motu Cordis [On the Motion of the Heart] (1628) which first described the circulation of the blood.
- Two copies of De Humani Corporis Fabrica [On the Fabric of the Human Body] (1543) by Andreas Vesalius, which was responsible for the later development of both modern anatomy and modern medical illustration.
- The founding book of modern pathology, De Sedibus et Causis Morborum [On the Seats and Causes of Disease] by Giambattista Morgagni, published in Venice in 1761; it was presented by the author to visiting Philadelphia physician John Morgan, who later donated it to the college.
- A significant collection of personal papers from leading Philadelphia physicians, including former fellow, Civil War surgeon, and neurologist S. Weir Mitchell.
- The collections of the Children’s Hospital of Philadelphia and Children’s Seashore House, which document the beginnings of pediatrics as a specialization.
The college library, now known as the Historical Medical Library, also contributes an integral part of the college's widely known Mütter Museum exhibitions. The Mütter Museum of The College of Physicians of Philadelphia is one of the oldest medical museums in the country and houses one of the greatest collections of 18th and 19th century medical teaching specimens. College Fellow Thomas Dent Mütter (1841-1856) bequeathed his collection of medical specimens and artifacts to the college in 1858. His donation stipulated that the college had to hire a curator, maintain and expand the collection, fund annual lectures, and erect a brick building to house the collection. The college has held true to its promise to this day.

The stately National Historic Landmark building on South 22nd Street, designed by renowned architects Emlyn L. Stewardson and Walter Cope, has been home to the college since 1909. The purpose-built space allowed the college to mature from an organization primarily dedicated to medical professionals, to a significant cultural institution and public health resource.

During the Civil War, many college fellows served as military surgeons. Although no battles were fought in Philadelphia, it played a vital and central role in providing medical and respite services to sick and wounded soldiers, and college fellows led the charge in rapidly establishing military and general hospitals through the city.

The 18th and 19th centuries marked the transformation of the medical field from trade to profession, and while the hospitals of this era have been demolished or drastically renovated, the college remains as one of the last physical representations of the medical field during this time period. S. Weir Mitchell's goal was to honor the fellows who served in the Civil War with a plaque, which can be seen today at the college on the wall outside the library stacks. In 2013, the museum opened a special exhibition, Broken Bodies, Suffering Spirits: Injury, Death, and Healing in Civil War Philadelphia. The exhibition transcends the basic facts and figures of the war — and the typical focus on gory details of battlefield surgeries — with an intimate and personalized view of the experiences of soldiers, physicians, nurses, and family members.

Today, the college reaches an extremely diverse international and regional audience through the unique collections of the Mütter Museum and Historical Medical Library; the youth and young adult programming and public health information provided through the Center for Education and Public Initiatives; and invaluable health resources like HistoryofVaccines.org. The college has gradually and successfully become transformed from a meeting place and medical library to a medically-orientated scientific, cultural and social organization. The illustrious Fellowship of the College remains the foundation for all of its accomplishments.

More than 1,000 practicing and retired physicians, medical professionals, and distinguished members of the community comprise the college's current fellowship, a professional association that facilitates discussion, and discovery, and collaboration. Each year approximately 30 new fellows are inducted into the historical institution. Fellows of the college serve as advisors for staff, mentors for youth programming, ambassadors for the institution, and provide both education and inspiration to the public, through a rigorous annual series of lectures and events.

Fellows have also contributed to the institution in other ways, including through continual donations to the museum and library collections. Much of the collections reflect the interest and involvement of college fellows and Philadelphia physicians in national and international affairs, and a significant portion of these items can be accessed nowhere else.

One of the most recently notable of these was the gift of Albert Einstein’s brain slides to the museum from college fellow and neuropathologist, Lucy Rorke-Adams, MD. Other notable items include:

- Dr. Benjamin Rush’s medicine chest.
- The unique skull collection of Josef Hyrtl.
- A full-scale model of the first successful heart-lung machine, designed and used in Philadelphia.
- The conjoined livers and plaster cast of the torsos of “Siamese Twins” Chang and Eng, received after their autopsy was performed at the college.

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The college's museum and library collections attract hundreds of thousands of public visitors a year through the grand marble rotunda and into its original cabinet-style setting. They provide a particular insight into human biology and the history of medicine and medical education. However, the college's reach is much, much further, in terms of audience size and in geographic appeal.

Stunning photography, 360-degree rotation, and captivating information engage visitors in the museum's new, interactive digital exhibition, *Memento Mütter*, launched in March 2016. The online experience allows the college to broaden its reach, and thus its impact. Medical students, historians, educators, and interested laypersons can virtually explore historical medical instruments and specimens in extreme close-up, and so gain a deeper understanding of the medical and scientific challenges that the college's fellowship and their physician colleagues faced throughout history. The Historical Medical Library is embarking on an ambitious project to digitize its collections and to bring more medical historical artifacts to an enormous global audience. This is concurrent to taking the lead with a significant inter-library Medical Heritage Library digitization project with other prominent institutions, including The New York Academy of Medicine, Harvard University, and the Wellcome Library.

Now almost half a million people interact with the College of Physicians of Philadelphia every month in some way. School groups and curious visitors learn through the museum's private and group tours. Public health professionals and students network with fellows and other experts at evening lectures and additional programming. Young people are inspired to pursue STEM careers through outreach and specialized internships. Over 100,000 people, young and old alike, follow the college's programming through social media.

Most of the college's audience though, some 350,000 people per month from 200 different countries, learn about medicine and public health through the college's website, HistoryofVaccines.org. Supported by an advisory board of fellows and respected experts, the site is recommended and linked to by global organizations, including the American Academy of Pediatrics, the American College of Preventive Medicine, the U.S. Centers for Disease Control and Prevention, the European Centre for Disease Prevention and Control, GAVI, the International AIDS Vaccine Initiative, the National Foundation for Infectious Diseases, the National Science Teachers Association, PATH, the U.S. Military Vaccine Agency, the U.K. Department of Health, the U.K. National Health Service, WHO, more than 40 state and local health departments and immunization coalitions, and many reputable science and medicine blogs.

The popularity, reach, and impact of HistoryofVaccines.org is set to expand even further after the college recently received significant funding to translate the project into more languages, including Arabic and Urdu.

What solidifies the college's 21st century existence though, is more than its impressive digital, global presence. It's the college's efforts to inspire and assist the physicians, and potential fellows, of tomorrow. In response to the increasing engagement of teens viewing its collections, the college spent the past 10 years building an educational platform, including the creation of the Center for Education and Public Initiatives. CEPI's out-of-school-time programming targets youth from low income families, youth of color, first generation college students, and LGBT youth.

CEPI programs engage students in science and medicine using the fascinating and unique collections of the college's museum and library, as well as curriculum that meets Pennsylvania standards in a variety of subject areas. Now in its sixth year and fourth cohort of students, the Karabots Junior Fellows Program is an intensive three-year college and health care career preparatory program that targets students of color and first generation college students; to date 100% of our students have graduated high school. All of the inaugural cohort of students continued on to college. Almost 9 out of 10 students are attending a four-year college. And 12.5% attended the Community College of Philadelphia and are all currently working in a health care setting; 95% of students who attended four-year colleges are still enrolled and on track to graduate in 2016. Also in its sixth year, the Teva Pharmaceuticals Internship Program focuses on developing resiliency and coping skills, particularly in response to neighborhood violence.

Out4STEM provides programming for a diverse audience, including LGBT youth and adults; medical, public and community health professionals; and counselors and educators, that address health issues facing LGBT individuals. As a result of the program, youth participants have secured medical research internships important to their career path, obtained pre-professional certificates (in phlebotomy, HIV testing, etc.), and have become active in other college youth programming.

The College of Physicians of Philadelphia and its Fellowship has expanded significantly since those 24 physicians met together in private in early 1787, and so has its impact. From inspiring underrepresented demographics to pursue careers in medicine, to providing historical context for medical humanities to a global audience, the college now offers a unique opportunity for current fellows to engage with communities in Philadelphia and beyond.
1976 was a busy and difficult year for the Division of Disease Control of the Philadelphia Department of Public Health (PDPH). It was my second year in the Health Department as the chief of that division. The year began with a major measles epidemic involving school children throughout Philadelphia (1,514 cases were reported). The PDPH responded by conducting immunizations in every school in the city. The outbreak ended when schools closed in June for summer vacation.

Next came the deadly outbreak of swine influenza at Fort Dix, New Jersey. The disease infected 12 people, killing one of them. Concerns over another swine flu epidemic like the one in 1918-19 that killed millions, led to a nationwide swine influenza immunization program. The PDPH began making plans to immunize everyone in Philadelphia. The program ended in December of that year when the swine influenza virus had ceased to circulate.

It was also the year of the Bicentennial Celebration of the Declaration of Independence. Philadelphia expected to draw more than a million people to the citywide extravaganza. The Bicentennial also lured to the city other big events, such as the International Eucharistic Congress from August 1 to 8, which alone was expected to draw one million Roman Catholics and maybe the Pope. The PDPH was preparing for these gatherings by performing restaurant inspections and organizing emergency medical services.

That year, the Pennsylvania American Legion also decided to hold its annual convention in the City of Brotherly Love, at the Bellevue Stratford Hotel from July 21 to 24. That’s where a mysterious, deadly intruder invaded the city – an acute febrile respiratory illness that struck members of the American Legion.

Legionnaires were infected in Philadelphia, but did not come down with symptoms until they returned home. The commandant of the Pennsylvania American Legion started receiving reports of legionnaires dying of pneumonia who had attended the convention. On August 2, he alerted the Pennsylvania Department of Health (PDOH), the Centers for Disease Control (CDC), and the news media. This was the beginning of the largest epidemic investigation conducted by the CDC up to that time.

Within 24 hours the CDC sent a small army of Epidemic Intelligence Service (EIS) officers to Pennsylvania to conduct case investigations and to collect specimens from reported cases. David Fraser MD, from the Special Pathogens Unit, led the investigation. The organizational structure that soon developed under Dr. Fraser, drew input from William Parkins, DVM, state epidemiologist, and me, representing the PDPH. Leonard Bachman, MD, health secretary for Pennsylvania, and Lewis Polk, MD, health commissioner for the PDPH, dealt with the intense news media coverage. That freed our investigative team to devote our time to finding the cause of the outbreak.

Health Center # 1 at Broad and Lombard became the command center where the investigators would meet and work. The command center coordinated the efforts of hundreds of people throughout Pennsylvania. The group included sanitarians, environmental engineers, case investigators, physicians, nurses, statisticians, and detectives.

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An epidemic does not occur by chance. It requires a unique combination of events that include a harmful agent coming into contact with susceptible hosts in the proper environment. The role of the epidemiologist is to determine why and how the outbreak occurred, by conducting an epidemic investigation using the general principles of epidemiology. For those of you who are interested in learning more details about the outbreak, I refer you to the articles by Fraser, et.al.1 and by Sharrar2. This article will concentrate on the epidemic investigation.

It is also important to have an understanding of the events involved and the place of occurrence. Conventioneers came from all over Pennsylvania. Participants stayed at five major Center City hotels and many other smaller places. During the four days of the convention, 40 official meetings and gatherings took place in 13 different rooms at the Bellevue Stratford, the ball room at the Benjamin Franklin Hotel, a luncheon at the Poor Richards Club, and a parade on Broad Street.

The Bellevue Stratford, nicknamed the “Grand Old Lady of Broad Street,” was an elegant hotel, built in 1904. The building contained the standard lobby and mezzanine floors containing shops, offices, and meeting rooms. There were 725 guest rooms on floors two through 16. There were additional conference rooms and a banquet room on the top floors, and three floors below the lobby, which contained a kitchen, and heating and air conditioning equipment. An incinerator stack, air exhaust fans, and an air conditioner cooling tower were on the roof.

To be counted as a case, the patient had to have had the onset of the illness between July 1 and August 18, and to have had a temperature above 102 degrees, and a cough and a chest X-ray with evidence of pneumonia. To further narrow cases under study, an epidemiologic portion was added to the case definition. The case must have either attended the American Legion Convention or entered the Bellevue Stratford Hotel on or after July 1. Patients with pneumonia who were on Broad Street within one block of the hotel were referred to as “Broad Street pneumonias” and all other reports were considered as citywide cases that were not part of the investigation.

The second biggest problem was that no one knew the exact number of individuals who attended the American Legion Convention, where they stayed, or what they did while in Philadelphia. Consequently, a two-page questionnaire was developed and distributed to 1,002 American Legion posts throughout Pennsylvania. The questionnaire was given to members who attended the convention. They were asked to complete the form and return it to the PDPH. The legionnaires were very cooperative. About 85% of them mailed in the questionnaires, which turned out to be a crucial help in the investigation.

While the data were being collected, two additional questions needed to be answered quickly. The mayor and the news media wanted to know if the epidemic was ongoing and was a citywide threat. A survey of Center City hospitals and emergency rooms was conducted to determine if there were other cases of an illness resembling Legionnaires’ Disease, the name given to the outbreak by the news media.

A random survey of individuals who had stayed at the Bellevue Stratford from July 24 to August 8 was conducted to see if it was an ongoing problem. These surveys suggested that Legionnaires’ Disease was not a citywide problem, and that it appeared to be restricted to a short time period around the American Legion Convention. Furthermore, case investigations had shown that there was no secondary transmission to household members or hospital personnel caring for these patients. We knew very early on that this was not the beginning of the much-feared swine flu epidemic.

Within a few days we had enough data to characterize the cases by the epidemiologic variables of person, place, and time. The epidemic curve of Legionnaires’ Disease had a rapid upswing beginning on July 22 and a rapid decline by August 3, with a small number of cases occurring during the first two weeks of August.

The epidemic curve for the Broad Street pneumonias was very similar, although with far fewer cases, suggesting that these pneumonias may have been part of the outbreak. The incubation period was determined by examining cases of conventioneers who had spent one day in Philadelphia and gone home where they developed their illness. The incubation period for these eight cases ranged from two to nine days with a mean of six days. Since the epidemic curve of Legionnaires’ Disease cases extended for 25 days, and since secondary person-to-person transmission did not occur, these data suggest...
that there was a continuing common source of exposure over a two-week period.

The characterization of the epidemiologic variable of persons was based on the census survey (3,683 completed forms) and on a case control study that was conducted on living cases. Two-hundred-and-two matched controls of conventioneers who were in Philadelphia but did not get sick. The overall attack rate was 4.0%, with the highest attack rates in delegates (6.8%) and family members (6.3%), increasing with age (1.8% in persons < 40 to 7.5% in persons >70 years of age), males (5.4%) greater than females (1.9%), and individuals who stayed at the Bellevue Stratford Hotel (6.5%). However, none of the cases clustered at a site within the hotel.

The case control survey showed that the delegates who became ill were more likely to have spent time in the hotel lobby than well delegates. But none of the 30 full time lobby employees became ill. Ill delegates were more likely to visit hospitality rooms sponsored by delegates running for statewide office. No hospitality room, however, was visited by more than one-third of the cases. Finally, cases were more likely to drink water at the Bellevue Stratford than non-cases. But only 62% of the cases admitted to drinking water in any form.

Extensive environmental investigations of the restaurant and bars that surrounded the hotel were conducted. There were detailed inspections and environmental samplings of all parts of the Bellevue Stratford Hotel, including the kitchens, elevators, and waste disposal and sanitation equipment. Careful attention was paid to the air conditioning system because it represented an efficient mode of transportation for an airborne disease. No environmental factor could be identified that could explain the distribution of cases that occurred.

The outbreak ended on its own with a total of 182 cases of Legionnaires’ Disease, with 29 deaths for a case-fatality ratio of 16%. There were also 39 cases of Broad Street pneumonias. At the end of August, when the CDC epidemiologist returned to the CDC, we were still unable to explain the cause of the outbreak. Because of our inability to explain the outbreak, speculators filled the vacuum with their own pet theories, which included various toxins, sabotage, and germ warfare, to name a few. A Congressional hearing was also held without results.

In January 1977, the CDC announced that they had identified the organism that caused Legionnaires’ Disease. It was isolated using standard techniques for isolating rickettsial organism. The CDC then developed a technique for growing the organism in the laboratory and an antibody test that could be used to diagnose a case. The organism was identified as a bacterium, and named *Legionella pneumophilia*, which translates as an organism that loves the lungs of legionnaires. Thus, five and a half months after the outbreak occurred, epidemiologists finally had a test that could be used to identify a case, which is the first step in conducting an epidemic investigation.

This enabled epidemiologists to establish the following facts:

1.) The organism was isolated from specimens from four cases of Legionnaires’ Disease and one case of Broad Street pneumonia, demonstrating that they were both part of the same epidemic.

2.) The antibody test showed that 90% of conventioneer cases and 64% of Broad Street pneumonia cases from whom adequate serum specimens were available, had evidence of a recent infection with this organism.

3.) Blood specimens from patients with a single day of exposure on July 21, 22, and 23, and from two patients who attended the Eucharistic Congress from August 1 to 8, had evidence of a recent infection, showing that the outbreak occurred over several weeks.

The final steps in an epidemic investigation are to develop a hypothesis that explains the distribution of cases that were observed, test the hypothesis, come to a conclusion, and institute control measures. The hypothesis that developed is that the cooling towers on top of the hotel were contaminated with the *Legionella pneumophilia* organism, and that it became aerosolized and drifted down in front of the hotel infecting legionnaires as they congregated in front of the hotel and other individuals on Broad Street. Although the organism was not isolated from specimens collected from the cooling tower on top of the hotel, other outbreak investigations have demonstrated a relationship between cooling towers and *Legionella pneumophilia*.

This outbreak investigation could not have been done without the leadership and support of the CDC and without the support of other city agencies. Members of the American Legion were also very cooperative because they wanted to know what happened to their friends. The outbreak did have economic consequences for the city. The Bellevue Stratford Hotel was forced to close in late 1976, then reopened in 1986, but quickly closed again. It has since reopened as a luxury hotel called Hyatt at the Bellevue.

Concerns over Legionnaires’ Disease were blamed for the sharp drop in tourism in the city in the summer of 1976, after the outbreak. There were no lines at the Liberty Bell during the investigation.

The outbreak shows that epidemics of acute communicable diseases can still occur and that health departments have to be ever-vigilant, and prepared to act once they occur.

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MED STUDENT POINT OF VIEW...

Why Many Patients Often Cannot Afford to Buy the Drugs They Need

Aleesha Shaik, Third-Year Medical Student at Drexel University College of Medicine

Sovaldi. Daraprim. Isuprel. Nitropress. EpiPen. And now, insulin. These are just a few medications that have brought pharmaceutical companies and their drug pricing practices into the spotlight over the past few years. Daraprim was the most egregious with a price increase by 5,455%; however, the others are no less serious with the widely used EpiPen coming in at a 548% increase.

While drug companies often try to avoid outcry by pairing these with patient assistance programs, the people who get hit the hardest by these increases are those who are uninsured and can't benefit from the programs, or those whose insurance doesn't cover the medication. Furthermore, since Medicare and Medicaid are the nation's largest insurance providers and government programs are not allowed to negotiate with pharmaceutical companies, patients don’t have much of a choice about giving into these prices. At some point, pharmaceutical companies need to be honest with themselves about whether they are following their moral obligations.

What is the moral obligation of a pharmaceutical company?

In order to define the moral obligation of a pharmaceutical company, we must first explore their stated purpose. A cursory perusal of the mission statements and values of several drug companies revealed a couple of common themes: innovation and integrity. These organizations highlight their commitment to producing “innovative therapeutics” in order to improve patient care while purporting to have an “uncompromising ethical stance” where they promise to “behave responsibly, even when nobody’s looking.”

I would argue that such responsibility also encompasses an obligation to provide quality affordable medical care to everyone, not just the wealthy few who can afford an $84,000 price tag, the cost of the complete 12 week regimen of Sovaldi, a hepatitis C drug. Commitment to patient care involves more than just producing therapies to cure diseases. It also involves recognizing the effect that unaffordable medications have on psychosocial health. If a patient doesn’t get a medication that they need, their condition will deteriorate. If a patient does get the medication despite the price, then they may be spending less money on other important things, such as rent, also affecting their overall health. Therefore, if a pharmaceutical company is truly dedicated to patient care, it must realize the domino effect that high drug prices have and make every effort to keep them as low as possible.

How would it hurt society to go against this obligation?

This is no longer a hypothetical situation, but a reality. In 2014, the U.S. spent over $3 trillion (17.5% of our GDP) on national health expenditures. 9.8% of that was spent on prescription drugs. Pharmaceutical companies argue that this is necessary because of the expenses associated with research and development. However, 9 out of 10 of the big pharmaceutical companies spend more money on marketing than on R&D. Johnson & Johnson, for example, spent $17.5 billion on marketing and only $8.2 billion on R&D. In 2012, pharmaceutical companies spent a total of $27 billion dollars on marketing and of that, $24 billion went to advertising to physicians while $3 billion was spent on consumer marketing (with an increase to $5.4 billion in 2015). Putting aside the ethical issues of drug company-sponsored meals for a minute, the US and New Zealand are the only two countries in the world that allow direct-to-consumer advertising, a practice that has the potential to compromise quality medical decision making and one that definitely increases costs for the consumer. A study done in New Zealand showed that when patients specifically asked for a medication, they usually received it. This, in turn, usually results in unnecessarily high costs for the patient as the medications that they ask for...
are expensive brand name drugs that may not be significantly more effective than a cheaper alternative.

Of course, physicians have an additional incentive to give into such patient demands when they are being courted by the drug companies, themselves. Most of us would like to believe that we are still doing what is best for the patient, but can we really be confident in the objectivity of our decisions? And most importantly, what effect is this having on our patients? A recent Consumer Reports study showed that as a result of the increase in medication prices, many patients are resorting to unsafe practices such as not filling a prescription (24%), taking expired medications (17%), and cutting pills in half (16%). Furthermore, when patients do get their medications, they often have to cut expenditures elsewhere, such as not paying other bills, groceries, and entertainment. Ultimately, this also comes back to hurt our economy if people are spending less money, especially since almost 60% of Americans take at least one prescription drug. Thus, fulfilling the obligation to put patient needs first benefits society as a whole.

What exceptions exist to this obligation?

I understand that pharmaceutical companies are a business and profits are what drive people to enter the field and do the innovative work in the first place. Dr. Wayne Riley, immediate past president of the ACP, said it best when he said: “Pharma has a right to make a profit,” however, transparency about the drug pricing practices is also a “moral obligation,” especially as pharma takes advantage of government-funded research. “The American taxpayer has been providing the venture capital to fund their products,” Riley says. “The public deserves to realize a return on that investment in the form of medications they can afford.”

From a business philosophy perspective, Edward Freeman’s stakeholder theory emphasizes two points: that a business’s obligation is to create value (as opposed to simply profit) and that the success of a company is dependent on its intricate relationships between multiple parties: customers, suppliers, employees, communities, and financiers. In order for a business to remain successful long term, all these groups must be satisfied and be allowed to have a voice. When that does not happen, we get the outcry seen after Martin Shkreli’s Daraprim debacle.

While it is understandable that pharma wants to make some profit, it is inexcusable that in 2013, they were tied with banks for the highest average profit margin, 19%, and that the CEO of Mylan made a salary of $25.82 million in 2014 while people struggled to purchase life-saving EpiPens. I don’t know if it’s possible to draw a definitive line for profit margins, salaries, or even drug prices, but at some point we collectively need to hold pharmaceutical companies accountable on behalf of our patients and say enough is enough.

Conclusion

Throughout my medical education, especially now that I have started my clinical years, I have personally witnessed numerous patients overtly informing physicians that they cannot afford to take a certain medication, either because they are uninsured or because it is not covered by their policy, despite the medication being the most effective for their condition. Countless more are probably too embarrassed to confide their financial troubles to their physicians and so just fail to get their prescription filled. When we talk about pharma’s moral obligation, we must also realize that our moral obligation as physicians is inextricably tied to theirs. We are one of the stakeholders, often more powerful ones than our patients. There is much we can do legislatively to terminate unethical, but legal, practices that pharmaceutical companies employ to maximize profits. But first, we must recognize the power of our voices, especially when we stand together. Sitting silently on the side while our patients suffer is no longer an option. 

A Defense of Drug Company Pricing

Jonathan Hunt, Third-Year Medical Student at Lewis Katz School of Medicine at Temple University

My mother asked me some pointed questions when I was a youngster — “Jonathan, why isn’t your bed made?” “Jonathan, why is your finger up your nose again?” “Jonathan, before you start, what do you hope to accomplish during this project/undertaking?” That last one turned out to be a pretty useful one to ask before any big endeavor. My goal in this article is to convince you that Martin Shkreli’s Daraprim (pyrimethamine) price hike, in itself, was not the most morally corrupt thing a pharmaceutical CEO could do. I can already hear the “yeah, right” that just crossed every reader’s mind, but please bear with me for a moment.

What is the moral obligation of a pharmaceutical company?

Shkreli was the CEO of Turing Pharmaceuticals. A CEO’s primary responsibility is to conduct the business in accordance with the owners’ desires, which generally will be to make as much money as possible while conforming to the basic rules of society, both those embodied in law and in ethical custom. Of course, other objectives may exist in the minds of the business owners, but for the sake of simplicity we distinguish profit-seeking corporations from eleemosynary institutions. In 1970, Martin Friedman first defended the theory stating that the moral obligation of a business is to increase its profits, and the following logic is merely a summary and application of his original argument.

How would it hurt society to go against this obligation?

So, Shkreli must act as an agent of his principal, or his corporation’s owners. If we were to accept the assertion that the corporate executive has a moral obligation or social responsibility in his capacity as a businessman, what does this mean? Essentially, this moral obligation implies that the agent must act in some way that is not in the interest of his employers. In Shkreli’s case, moral obligation holds that he is to refrain from increasing the price of a drug in order to contribute to the social objective of patient access to medicine, even though a price increase would be in the best interests of the corporation. In this case, the CEO is effectively spending someone else’s money for a general social interest. By acting in accord with his “social responsibility,” he reduces returns to shareholders, lowers the wages of employees, and raises the price of other products to customers – and thus is spending their money. The shareholders, the employees, and the customers are independently able to spend their own money on a particular “social responsibility” if they wished to do so, but, in this scenario, the CEO is spending their money in a potentially different way than they would have spent it. Therefore, a CEO acting in accord with his or her social responsibility is, in effect, imposing taxes and deciding how the tax proceeds shall be spent.

The process of imposing taxes and making expenditures to foster one’s social objectives is consistent with one of the underlying mechanisms of the political machinery, which typically requires a position of civil servitude. By doing as such, the CEO is acting as a public employee, even though he remains in name an employee of a private enterprise and has not been elected by the stakeholders he may impact. Moreover, such actions involve the acceptance of the socialist view that political mechanisms, not market mechanisms, are the appropriate way to determine the allocation of scarce resources to alternative uses.

When political mechanisms drive a society’s market, the market becomes subject to the political principle of conformity, where the individual must serve the general social interest, regardless of who the interest is dictated by (e.g. church, dictator, majority). In an ideal free market dependent on private property, the political principle of unanimity is at play and all cooperation is voluntary. Consequently, no individual can coerce any other, and there are no social responsibilities in any sense other than the shared responsibilities of individuals. By forcing the market to align with social objectives, we can no longer run an ideal free market.

Currently, political mechanisms and market mechanisms are distinct, and thus society may be defined as a collection of individuals and of the various groups they
voluntarily form. When the political mechanism starts to drive the free market, the market is no longer free. And since the market is theoretically made up of voluntarily formed groups of individuals, would we truly be able to claim that the individual in this market is free?

What exceptions exist to this obligation?
As long as the agent acts in the interests of his principal, the obligation is fulfilled. If a pharmaceutical corporation’s owners were to voluntarily commit to an interest of maintaining low drug prices, the CEO must act in this interest and all stakeholders may interact with this corporation with the knowledge of the potential impact of the aforementioned interest.

Other notable exceptions include eleemosynary institutions, such as a hospital or a school, where the rendering of certain services are explicitly prioritized by all stakeholders above the maximization of profits.

Conclusion
Martin Shkreli was the CEO of Turing Pharmaceuticals in 2015 when the Daraprim price hike was executed. As an agent of his principal, he acted in the interests of the owners of Turing Pharmaceuticals, specifically of profit maximization. If we follow the line of reasoning set by Friedman, Shkreli’s actions as the CEO of Turing Pharmaceuticals cannot reflect on his individual commitment to his social responsibilities, as his responsibility in the corporation is to the shareholders. If one was to argue that the shareholders should then take on the social responsibility of capping drug prices, then the incentive to enter the pharmaceutical industry by founding a corporation or purchasing shares is drastically diminished. If the incentive to enter the industry declines, then basic supply-and-demand economics dictates that the decreased supply would drive drug prices up regardless. So, if Shkreli was not acting out of line in his drug price hikes, where does the real problem lie?

To answer that question, one must understand that the business strategy of Turing Pharmaceuticals was one of obtaining licenses on out-of-patent medicines, which typically have small markets and high expenses for obtaining regulatory approval for generic manufacturing, and price hiking the drug. With closed distribution and no competition, Turing’s price hikes would generate unbelievable profits, at the expense of the customers. This strategy is legal, and thus Shkreli is not to blame. However, laws ideally should reflect the value system of the society. If society is not content with Shkreli’s price hikes, we should instead look at modernizing our pharmaceutical patent laws and FDA regulatory approval pathways for generics, but that is a topic for another debate.
### 2017 Upcoming Events & Programs

**All programs held at PCMS HQs unless noted**

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<td>17 Presidents Installation &amp; Awards Night</td>
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### Health Awareness Calendar

#### JANUARY 2017
- Cervical Health Awareness Month
- National Birth Defects Prevention Month
- National Glaucoma Awareness Month
- National Radon Action Month
- National Stalking Awareness Month
- Thyroid Awareness Month
- National Winter Sports TBI Awareness Month
- National Folic Acid Awareness Week (first full week of January)
- National Drug and Alcohol Facts Week (last week of January)

#### FEBRUARY 2017
- American Heart Month
- AMD/Low Vision Awareness Month
- National Children’s Dental Health Month
- International Prenatal Infection Prevention Month
- African Heritage & Health Week (first week of February)
- Congenital Heart Defect Awareness Week (February 7-14)
- Condom Week (week of Valentine’s Day)
- Eating Disorders Awareness and Screening Week (last week of February)
- National “Wear Red” Day for women’s heart health (February 5)
- Teen Dating Violence Awareness Month
- World Cancer Day (February 4)
- Give Kids a Smile Day (February 5)
- National Donor Day (February 14)

#### MARCH 2017
- National Colorectal Cancer Awareness Month
- National Endometriosis Awareness Month
- National Kidney Month
- Multiple Sclerosis Education Month
  (promoted by the Multiple Sclerosis Foundation and others)
- National Nutrition Month
- Save Your Vision Month
- Sleep Awareness Month (promoted by the National Sleep Foundation)
- Trisomy Awareness Month
- Workplace Eye Wellness Month
- National Athletic Training Month
- Patient Safety Awareness Week (March 13-19)
- National Sleep Awareness Week (March 6-13)
- Brain Awareness Week (March 14-20)
- National Poison Prevention Week (March 15-21)
- Purple Day for Epilepsy Awareness (March 26)
- National Bleeding Disorders Awareness Month
- National Cheerleader Safety Month
- National Stalking Awareness Month
- National Radon Action Month
- National Glaucoma Awareness Month
- National Birth Defects Prevention Month
- National Stalking Awareness Month
- World Tuberculosis Day (March 24)
- Tsunami Preparedness Week (March 27-April 2)
Spend 10 jazz- and blues-filled days and nights in the Greater Reading area! Over 120 scheduled events, plus great shopping and dining in one area, make the 27th annual Boscov’s Berks Jazz Fest your perfect spring getaway.

For tickets, call Ticketmaster toll free at 1-800-745-3000 or visit www.ticketmaster.com to order online.

March 31-April 9, 2017
Reading, PA

Tickets go on sale Saturday, Dec. 3, at 10 a.m.!
The new face of Organ Donation is yours.

Primary care practices can increase the number of registered organ, tissue and cornea donors by more than 8 percent, according to a recent study by the University of Pittsburgh Medical Center.

All you have to do is a brief educational intervention.

That’s why Donate Life Pennsylvania has launched the Physician Advocacy Campaign.

- Training for your entire staff on the basics of organ donation, how to implement use of the registration form and answer patient questions
- Free one-hour CME (and lunch for on-site trainings)
- WebEx training is also available for flexibility
- Free materials such as brochures and posters, plus registration forms and postage-paid return envelopes

Hundreds of primary care physicians are already onboard. Together, you can help save thousands of lives.

Join the Physician Advocacy Campaign today.

Contact Kris Samara at kris@njafp.org, or 609-362-6511, to schedule your office training today!