Flashback 40

Starling Curves
Kurt Kroenke, MD

Dr. Kroenke (kkroenke@regenstrief.org) is a professor of medicine, Division of General Internal Medicine and Geriatrics, Indiana University, Regenstrief Institute, and VA HSR&D Center for Health Information and Communication.

The following is an article that appeared in the February 2002 issue of the Forum.

I was one of those students who was not particularly interested in the basic science courses in medical school, but instead was eager to get on to more direct patient care and clinical experiences. For example, if you were to ask me now about even the basics of the Krebs cycle, I would fail, having not drawn upon this biochemical pathway for some decades. However, one concept that I have found to be of recurring value is the Starling curve. Strictly speaking, this is the physiological principle that increased filling of the heart leads to increased cardiac output but, after a critical volume is reached, decompensation occurs and output declines. The Starling curve, however, transcends medicine. What is true of the heart applies to many other things in life. Mies van de Rohe coined a tenet of modern architecture—“less is more”. The Starling curve describes a critical threshold where this rule is reversed, and “more is less”.

One Too Many Syndrome

The irony of the Starling curve is that there is a very fine line distinguishing optimal filling pressure from diastolic dysfunction. A busy waiting room characterizes a successful practice. Multiple grants define a fully funded investigator. Numerous and interesting patients are required to provide a valuable learning experience for residents and students. There comes a point, however, when there are one too many patients scheduled, one too many projects, one too many admissions; or, one too many unwritten papers, one too many committee meetings, one too many hats to wear. In short, the proverbial straw that breaks the camel’s back. Most of us have played the children’s game of stacking blocks, anxiously continued on page 10
Play It Again, Sam!

Joseph Conigliaro, MD, MPH

Editor in Chief, SGIM Forum

I was always a sucker for a sequel. I couldn’t wait for the next Star Wars installment or the next Godfather movie. Was Luke going to turn to the dark side? Was the Corleone family ever going to go “legit”? I couldn’t wait to find out. But let’s be honest, nothing beats the original. There is something about the original version or edition of a movie franchise that introduces us to a new world, character, or experience that is interesting or exciting. That’s when you get to know the characters, setting, or a “galaxy far far away” for the first time. As part of SGIM’s 40th-anniversary efforts, this month’s Forum introduces “Flashback 40,” a new feature in which we search the Forum vaults and dust off old (historic) articles written during the last 40 years and either ask the author or other SGIM member to write an update or follow up. The criteria include whether or not the piece covered an issue of historic significance; discussed a recurring problem concerning health care relevant to SGIM; or was simply a great read by one of our talented members.

Generalist superstar Kurt Kroenke, the source of this month’s Flashback 40, presciently wrote about provider burnout well before it became a “thing.” Kurt served as SGIM president from 2002-2003. He is best known for his work in introducing the concept of primary care providers screening and treating depression in their practices. His follow-up sums up where we have gone in the area of provider burnout and where we must still go.

I ask those of you who have written Forum articles to dig up your old manuscripts and look at them through 2017 eyes. Was it innovative then? Is it relevant now? What have we learned and what are we still doing wrong? Everyone else, if you remember a Forum piece that stands out in your mind ask yourself whether or not it’s worth a sequel. E-mail the reference or copy of the original article to me (editor.sgimforum2017@gmail.com) and suggest someone (its original author or another individual) to write the follow up.

Of course, SGIM is more than learning from the past. We have lots of new and innovative articles in this issue that are sure to become Forum classics: Controversies about medication interactions when you order the flu vaccine; reflections on dealing with chronic pain and addictions; and a practical approach to peer mentoring. In addition, President Tom Gallagher reminds us that perfection can be the enemy of good or at least self-improvement. Finally, the ever-popular Morning Report feature deals with cations and tongues.
Towards Continuous Personal and Organizational Improvement
Thomas H. Gallagher, MD, President, SGIM

Adopting a model of continuous improvement is relevant not just for individuals but also for organizations, and SGIM is already taking steps in this direction. There are critical questions the Society needs to answer about its current state—what is SGIM like when it is at its best, and what is SGIM like when it is at its worst?

My Forum column last month addressed an important element of medical culture, namely how our focus on being “strong” as physicians can make it difficult to get help for the emotional distress that often accompanies involvement in medical error. I argued that this, in fact, a false culture of strength, and that our lack of self-awareness and unwillingness to accept help are important contributors to the issues of burnout that were spotlighted at the 2017 Annual Meeting. I also suggested that deepening our understanding of medical cultures is important to us, both individually and collectively, as we seek to increase our effectiveness.

In this column, I explore a related, but distinct, dimension of medical culture—how our focus on perfectionism has the paradoxical effect of inhibiting our willingness to seek meaningful feedback on our individual and organizational performance and adopt a culture of continuous improvement.

Dr. Michael Myers recently published an article in Psychology Today entitled “The Tyranny of Perfectionism” which notes that perfectionism in physicians “is truly a double-edged sword. Striving for excellence and precision enables applicants to get into medical school, prestigious residency programs, and the ‘right job’ upon graduation. Furthermore, this trait over time helps doctors in keeping on top of their game. On the negative side is the inevitable losses and failures of any physician in today’s medical world are very tough for perfectionistic doctors.”

I would argue that the tyranny of perfectionism extends to interfering with seeking the feedback we all need to improve. As a trainee, answering the question “how am I doing?” is relatively straightforward. Medical students, residents, and fellows are provided a steady stream of formal and informal feedback. Once you finish training, the feedback abruptly slows. Faculty may have annual reviews, but the value of this feedback in charting a course forward is often limited. I am a physician-scientist, which meant the metrics for success were in some ways clearer—am I publishing enough papers and getting enough grants? But, as my career progressed, judging my progress based on papers and grants seemed hollow.

I ultimately concluded that I was asking the wrong question. The issue is not “how am I doing?” but rather “am I positioned for continuous improvement?” My background in patient safety suggested that the first step was ensuring I had an accurate understanding of the current state. Around this time, I was also interested in undertaking more formal leadership responsibilities. Several of my trusted senior colleagues suggested that working closely with a leadership coach could be helpful.

In advance of our second meeting, the coach sent me the results of a battery of personality tests. The coach began by asking me for the names of several people with whom I had worked closely so he could interview them each for an hour. This should have been my first clue that it was time to buckle my seatbelt. The interviews were not only going to simply explore what I did well and where there were opportunities for improvement but also to focus on “what’s Tom like when he’s at his best?” and “what’s Tom like when he’s at his worst?” And, to add insult to injury, the coach put me through a battery of personality tests.

My journey of continuous self-improvement had begun!

The coach began by asking me for the names of several people with whom I had worked closely so he could interview them each for an hour. This should have been my first clue that it was time to buckle my seatbelt. The interviews were not only going to simply explore what I did well and where there were opportunities for improvement but also to focus on “what’s Tom like when he’s at his best?” and “what’s Tom like when he’s at his worst?” And, to add insult to injury, the coach put me through a battery of personality tests.

In advance of our second meeting, the coach sent me the results of a battery of personality tests.
Encouraging patients to receive an annual influenza vaccine is the best way to protect against influenza and its consequences, such as an increase in number of doctor visits, missed days of work, flu-related hospitalizations, and death. Even with the well-known benefits of the influenza vaccine, only 43.6 percent of adults in the United States were vaccinated in 2015.

However, prior to receiving the influenza vaccine, many patients, and even some influenza consent forms used in outpatient settings, ask questions related to the use of chronic medications such as warfarin, theophylline, and phenytoin. As a result of these inquiries, patients and providers who are taking and/or prescribing these medications may question if it is safe to receive and/or administer an influenza vaccine.

While it is necessary to ensure the safe use of the influenza vaccine including the potential impact it may have on other important medications, rarely do patients need to avoid the influenza vaccine due to medication interactions. This article aims to review the evidence surrounding these perceived influenza-medication interactions.

Influenza Vaccine and Warfarin
An interaction between the influenza vaccine and warfarin was first described in the 1980s when an 81-year-old patient developed a gastrointestinal bleed ten days following the influenza vaccination while on chronic warfarin. Since that time, there have been multiple studies, with various results, aimed to determine if the influenza vaccine increases the risk of bleeding. The CHEST anticoagulation guidelines reflect these various findings, classifying the influenza vaccine as an agent that both inhibits and potentiates warfarin’s effect depending on the publication year. The most current CHEST anticoagulation guidelines do not include the influenza vaccine as a problematic medication. Kuo and colleagues reviewed seven different studies of varying methodology which makes it difficult for the researcher to compare outcome data. Regardless, six of the seven studies found no significant difference in bleeding risk and anticoagulant effects among patients who received the influenza immunization compared to those who did not. In the single study that found a significant difference, patients who had been on stable anticoagulation for three months were monitored 5-7 days before the immunization and again 7-10 days after. The study group had a mean increase in INR of 0.56 from baseline which was statistically significant, and two of these patients had a mild bleeding event. Current CHEST guidelines do not recommend warfarin dosing adjustments for an individual INR reading with a change of less than 0.5 in patients who have previously been stable on warfarin. Therefore, while this study did see an increase in INR with the influenza vaccine, this change was not clinically significant in the majority of patients. Based on the evidence, it is not necessary to screen patients of warfarin use prior to administering the influenza vaccine nor should warfarin use constitute a reason to avoid the influenza vaccine.

Influenza Vaccine and Theophylline
It has been hypothesized that the influenza vaccine decreases theophylline clearance through the suppression of microsomal enzymes or through a mediator such as interferon. This hypothesis was first made after theophylline levels increased were seen following the administration of older variations of the influenza vaccine. While there have been a number of studies since this initial hypothesis (the majority concluding theophylline levels are unchanged after immunization) there are relatively few current studies addressing the potential interaction between the influenza vaccine and warfarin—two of the most current articles date back into the 1980s. In one such study, Hannan and colleagues administered theophylline to 16 healthy patients and subsequently drew blood levels at 15, 30, 45 minutes, and at 1, 2, 3, 4, 6, 8, 12, and 24-hour time intervals. After the initial blood draw period, patients were administered the whole virus influenza vaccine and repeated blood work as outlined above on days 2 and 6 after vaccine administration. Pharmacokinetic data demonstrated there were no significant changes in half-life, maximum concentration (Cmax), area under the curve (AUC), or clearance, indicating it was unlikely that there would be increased risk of theophylline toxicity after the influenza vaccine administration. In a subsequent study, six healthy young adult individuals were given a five-day course of theophylline in two cycles. The influenza vaccine was administered on the fourth day of the second five-day cycle. Plasma theophylline concentrations were measured on days 4 and 5 of both cycles: No changes in trough, Cmax, time to peak concentration, or AUC were seen. With the modernization...
A 61-year-old woman with a history of hypertension, recurrent Clostridium difficile infection, alcohol abuse in remission, and chronic hypomagnesemia presented with concern for seizure-like activity following two days of watery diarrhea. She reported acute bilateral hand cramping and feet tingling followed by a witnessed episode of a “full body cramp.” This episode was complicated by a tongue laceration but no loss of consciousness, bowel, or bladder incontinence. Immediately afterwards, the patient had normal mentation.

At this point, it is important to further dissect what the lay observer meant by “full body cramp.” It is important to obtain a detailed, accurate description of witnessed events such as type of motor activity, preceding symptoms, and associated events or complications in order to differentiate seizure and syncope. Tongue laceration is “classic” for seizures, though this patient lacks bowel or bladder incontinence. Her absence of a post-ictal state is also a crucial piece of history, which leads us to expand our differential beyond “seizure.” Her pre-test probability of a seizure is reasonable given her history of alcohol abuse. We should also consider hypoglycemia or intracranial pathology as etiology for a seizure. However, we should maintain a broad differential as convulsive syncope may be confused for a seizure. The two clinical findings that are the most helpful in differentiating a seizure versus syncope are disorientation with a positive LR of 5.4 and tongue biting with a positive LR of 7.3.

Proceeding with initial triage and evaluation, including laboratory studies, is prudent. In the emergency room, she was hemodynamically stable. Blood glucose was 170mg/dL. A head CT showed no intracranial abnormalities. However, she was found to have dramatic electrolyte abnormalities, with magnesium 0.3mg/dL (reference range 1.8-2.5mg/dL), potassium 3.0 mmol/L (reference range 3.4-5.0 mmol/L) and ionized calcium 0.69 mmol/L (reference range 1.14-1.32 mmol/L). Clostridium difficile stool toxin was also positive.

Her dramatic electrolyte abnormalities now raise the question of tetany versus seizure.

Aggressive electrolyte repletion was initiated. She received 6g of intravenous magnesium with an improvement from 0.3mg/dL to 1mg/dL, 6g of calcium gluconate with improvement in ionized calcium from 0.6 to 0.9, and 30mEq of potassium with improvement from 3 mmol/L to 3.5 mmol/L. She stabilized without further episodes of abnormal neuromuscular activity.

At this point, we should be asking two questions: One, why has this patient had chronic hypomagnesemia? Two, why are her magnesium and calcium levels so dramatically low at this time? Recall from basic science that hypomagnesemia is caused by gastrointestinal or renal losses. We need to clarify her history of alcohol abuse and intake, even though it was initially reported that she had gained sobriety. Her recurrent Clostridium difficile infection also comes into play. Given her concurrent hypocalcemia, the parathyroid axis needs to be evaluated. Suggestive diuretic or laxative abuse can also have significant effects on electrolyte levels.

Her PTH level was 44pg/mL (reference range 15-65 pg/mL), and vitamin D was 12.1 ng/mL (reference range 30-80ng/mL). Medications were reviewed, and the patient was not on any diuretics or proton pump inhibitors. With on ongoing question-
Many GIM faculty members are in a unique position in academics as they strive to build careers as clinician educators. Educational scholarship opportunities can, at times, be less easily identified and pursued than more traditional scholarly work in basic science or clinical research. Mentoring has a long tradition in supporting the scholarship needed to build and advance careers in academics; having access to high quality mentorship is consistently cited as a critical factor in developing a career. Peer mentoring has been proven to be an effective and efficient means of providing mentorship to clinician educators, especially in regards to their scholarly productivity.

Five years ago, a group of peers and I within our growing division decided to seek solutions to a perceived lack of available mentors in our chosen career paths. At the time, there were no formal mentoring programs within the division, the department, or the institution. At the University of Nebraska Medical Center, we are free from the traditional “up or out” promotion and tenure system; this relieves a great deal of pressure. However, when scholarly efforts compete for time with immediately pressing clinical and educational demands, many faculty find navigating these priorities difficult. Our group shared a desire to actively grow and shape our careers with a focus on educational scholarship, and sought to build our skills in doing so.

All were junior faculty in traditional clinician-educator roles, nearly all with little “protected time” for scholarly activity. Our goal, as outlined in our charter, developed over the first few meetings: To facilitate the professional growth and development of early-career GIM Clinician-Educator faculty who have an interest in educational research and application of educational principles. We also chose a name to reflect the path we set out upon together: Internal Medicine Mentoring Peers in an Academic Career Track, or IMMPACT. Along the way, we have learned a number of key lessons that have sustained and strengthened our group. I hope that sharing our experiences will help others seeking to develop or grow their own groups.

First, we built our group around a commonality; in our case, a shared interest in educational research and a focus on scholarly productivity. However, a group could be built around any affinity: early career faculty, research faculty, late career faculty considering transition to retirement, gender—any alliance will aid in the group’s formation and cohesion. The shared aspect serves as the starting point for building bonds which will (hopefully) naturally occur over time.

At our first meetings, we were explicit in establishing our common goals, and dedicated a few meetings to write and revise a charter with the intent to revisit the charter periodically (annually has so far worked well for us). What is the purpose of your group? How long do you plan to keep the group together? It may work well to ask members to commit to a peer-mentoring group for only one year; helping them avoid an open-ended commitment may increase their willingness to participate in something new.

Committing to frequent meetings especially early in the group’s development was a key strategy for IMMPACT. This helped the group build momentum and a sense of cohesion. Capitalize on the excitement generated by creating something new. Use the first 2-3 meetings to draw up and revise the group’s charter until all agree. Taking time to get the charter right will help ensure that all members are traveling in the same direction. This avoids miscommunication and can head off disappointment or frustration by ensuring that all members took part in directing the group’s chosen path.

An important aspect of our peer group has been the explicit plan not to involve direct supervisors/leaders. I recommend inviting these leaders only if you have questions they are best suited to answer and if the
Pain, You Are Hurting Me
Reverend Robin Rose, RN, BSN

Rev. Rose (upperroom2222@aol.com) is the Health Care Administrator at Sheridan Correctional Center, Illinois Department of Corrections. She is also the head of the mission program for Eagle Rock Christian Center.

In my early 30s, I was diagnosed with fibromyalgia. I remember thinking at that time “I am not going to let this stop me!” I continued my regular workout routine, improved my eating habits, and was able to live a relatively pain free life.

With fibromyalgia, a physical or emotional stressor can enact a catapault of reactions and, as a result, the entire body will react in severe pain. For me, that stressor was a car accident. I was rear-ended and pushed into the car in front of me. At the time, I didn’t think I was injured and proceeded to work. The pain started the next day, and continued to worsen over the next few weeks. After exercise, diet, and rest failed, I sought medical attention. I was sent to a pain clinic and told that I needed to take time off from work to let the pain settle down, which ended up being four weeks. They started me on citalopram and I was also taking tramadol for breakthrough pain. I was finding it easier to function, but I felt dead spiritually and emotionally. I was more forgetful and irritable with people and started to lose my balance. I decided to stop the citalopram on my own—the withdrawal made me an emotional basket case; I didn’t want anything to do with my loved ones. I was angry because I felt no one understood what I was going through. I was going to quit my church and job and pick up and move.

The pain waxed and waned for a while. Kneeling or squatting were impossible, particularly during worship. I had lost strength in my hands—twisting lids off of a jar or container became difficult. Other activities, such as tying my shoes or making my bed, were excruciating. Every morning I awoke to pain and every night I went to sleep in pain. It was difficult some days to fight off depression and hopelessness. It had been two years since the accident.

Pain was consuming my thoughts and suffocating my spirit. I awoke one morning saying “Pain, you are hurting me.” It was as if the pain was a being, causing hurt in my life. It was then I decided it was time to try another pain clinic. This one put me through many of the same tests I had from the first pain clinic. The team found six bulging discs in my cervical spine and a torn disc in my lumbos spine. The doctor recommended pregabalin. I shared with the doctor my experience with citalopram and my fear of those things happening again, but finally agreed to take it the medicine. I was thrilled with the results! The clinic wanted me off tramadol, the only medication that really helped me with minimal side effects, and I was willing to try. The clinic required me to do periodic drug tests called drops. I signed papers promising that I would not seek pain medication from another doctor and others stating I understood that it could drop test me any time. If any drug was found in my system that was not prescribed to me for a legitimate reason and if I didn’t inform the staff of medication from another doctor I could be removed from the clinic. During my treatment, I had dental work after which I needed to take hydrocodone. I called and informed the clinic of the new medication. At the next appointment with the pain clinic, I was “dropped.” When I was questioned about the hydrocodone in my system, I told them about the phone call where I had informed them about the dental appointment. The pain appointment ended with a lecture shaming me for taking hydrocodone and the importance of not abusing the program. I was required to sign more papers stating I would not abuse drugs. I was humiliated—I was not seeking drugs, I was seeking relief.

It wasn’t long before the deadness returned. I was having terrible memory problems. My kids and friends were frustrated with me because they would tell me something and I would have no recollection of it. This time I decided I was going to ask for help with stopping medication. When I talked to the pain clinic about my concerns, the staff felt the intake needed to be increased. All my education and training in pain control was useless to me. I felt incapable of making decisions about my own plan of care. So I agreed. They increased the pregabalin dose.

Through all of this, I worked a full-time job, was a leader in our church, and participated on its board. When we had guest speakers I was to ensure their comfort. After the increased dose of pregabalin, I remember sitting at church in the front row with a guest speaker. I could not stay awake; my head was falling back and I could feel my mouth open. One of the members sitting behind me handed me a piece of gum and said “here, this will help you stay awake”. I was so embarrassed but had no control. I decided I was not going to increase the medication dose. When I told the doctor at the next visit, it was discovered she misspoke the dosage which meant I was over the daily limit. This was frightening to me, and I decided then and there to stop taking medicine altogether. I left the pain clinic knowing I was never going back. I stopped all medications…again on my own. Not a wise choice, but my thinking was not real good at that point.

This time was even worse; I was having spasms in my legs, restless leg syndrome, insomnia, and had a headache all of the time. The pain in my body was now screaming as a result of no medication and rebound...
Assistant/Associate Professor

The Center for Behavioral Health and Smart Technology invites applications for full-time tenure-track investigators at the rank of Assistant/Associate Professor to join a successful community of health services investigators who collaborate with faculty across the University of Pittsburgh, the University of Pittsburgh Medical Center, Carnegie Mellon University, and the VA. Candidates must have an MD (board-certified) and/or PhD degree with training and experience in two or more of these areas: online-delivered interventions, consumer health technology, social media, biomedical informatics, behavioral economics, comparative-effectiveness trials, and/or implementation science.

Interested individuals should send a statement of interest and CV to:

Bruce L. Rollman, MD, MPH
Director, Center for Behavioral Health and Smart Technology
Division of General Internal Medicine
Suite 600, 230 McKee Place, Pittsburgh, PA 15213 or email: rollmanbl@upmc.edu

Applicants must have U.S. citizenship or permanent resident status.
The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer.
https://www.healthtech.pitt.edu/

---

2017 WINTER SUMMIT

December 3-5, 2017
The Sanctuary at Camelback, Mountain Paradise Valley, AZ
Registration & Hotel Reservations
Open: August 1, 2017
Hotel Reservation Deadline:
November 10, 2017
Registration Deadline:
November 27, 2017

AACLIM
Association of Chiefs & Leaders of General Internal Medicine
www.sgim.org/aclgim-meetings/summit

2018 ACLGIM LEAD PROGRAM

A Leadership Development Program

Apply Today!
Application Period Opens
August 16, 2017
Deadline for Application:
November 16, 2017

AACLIM LEAD
www.aclgim.com

2018 SGIM TEACH CERTIFICATE PROGRAM

Looking to Strengthen Your Teaching Skills?
Application Period Opens
August 16, 2017
Deadline for Application:
November 16, 2017

SGIM
www.sgim.org/go/TEACH
Personalities matter.
The following key lessons have emerged:

- **The power of habits.** Over our careers, all of us develop deeply ingrained habits of thinking and acting. While these habits are often integral to our success in earlier stages of our careers, they can be counterproductive to learning new skills. The fact that taking the next steps in my career involved learning a new set of skills rather than just working harder was encouraging, since it was difficult for me to imagine how working harder could be possible. Yet, changing and learning new habits is more challenging than I imagined, and has required understanding how these habits developed and how they relate to my personality.

- **Personalities matter.** While each of us thinks we are unique, it turns out that there are a relatively limited number of personality types, and understanding both our personalities and the personalities of those we regularly work with can be extremely valuable. My leadership coach is a big fan of the enneagram, which I found especially valuable in highlighting how we behave differently when we are feeling self-confident compared with when we are feeling stressed. Other leadership coaches use “animal types,” derivations from the Myers-Briggs personality assessment. Regardless of which assessment you use, a clear understanding of how your personality functions and how you can interact productively with others is a worthwhile investment.

- **Continuous feedback is critical.** A vital element of a continuous personal improvement mentality is regularly seeking detailed feedback. While it is not practical to get feedback on a regular basis that is as in-depth as what I received through the coaching process, my team has invested in providing each other with annual 360° feedback. Our entire center staff provides detailed feedback to everyone else on the team and also completes a detailed self-assessment. This feedback is anonymized, compiled, and provided back to each individual, who then uses it as the basis for their improvement plan. Without this comprehensive feedback, the improvement process would come to a halt.

- **Sharing your improvement intentions.** Continuous self-improvement is not a private undertaking. A critical element of our team process has been to follow up the feedback by developing focused improvement plans with short-, medium-, and long-term goals, and then for everyone to share their improvement goals with the rest of the team. This sharing step is essential as it helps individuals refine their goals and allows the rest of the team to provide ongoing, real-time feedback. For example, knowing that one of my improvement goals has been to do a better job of sharing my emotions has helped my team provide positive reinforcement when they see a behavior change in this direction and gentle encouragement if they see backsliding.

Adopting a model of continuous improvement is relevant not only for individuals but also for organizations, and SGIM is already taking steps in this direction. There are critical questions the Society needs to answer about its current state—what is SGIM like when it is at its best, and what is SGIM like when it is at its worst? What are the habits that we have developed that might have contributed to the organization’s success to date but are holding us back from achieving the next level of effectiveness? If we were to analyze the organization’s personality using an enneagram or animal types, what would we find?

We receive some degree of organizational feedback from the regular membership surveys, but these occur infrequently and therefore are not necessarily a good guide to enhancing the organization’s performance. In last month’s Forum, Madeline Sterling and Barbara Turner summarized the information that was gathered from a member feedback exercise at the 2017 Annual Meeting. Many participants emphasized the need for SGIM to develop a host of stronger partnerships, for example with trainees, patients, hospital medicine physicians, and like-minded organizations. Others stressed the key role of continued expansion of the Society’s emphasis on health policy and advocacy. To take our self-assessment to the next level, in the next few months Bob Fletcher will be leading the organization on a more detail journey of reflecting on challenges and opportunities for SGIM going forward. Bob would welcome your feedback on this issue, and can be continued on page 12.
waiting to see if the next block will topple the pyramid, holding our breath because of the tenuous balance. For each of us, the ascent up the slope may be gradual but we find ourselves on a precipitous cliff. While preload accumulates imperceptibly, pulmonary edema has an abrupt onset.

**Signs and Symptoms**

There are clues that the downslope of the curve is approaching or upon us. Irritability is one. For example, resenting the patient we are about to interview or examine, impatience with the learner, frustration about the e-mail avalanche following a day or two of not checking our inbox, a short fuse with our office staff, colleagues, or family.

Feeling overwhelmed is a more advanced symptom. Shifting from one stack of papers on our desk to another, randomly chipping away at unfinished tasks. Forgetting where we put our notes from rounds, or that form we need to complete, or what it was we had started to do. House staff who are on-call can experience this in the waning hours before dawn as they vacillate between finding the x-rays, completing write-ups, starting IVs, or checking up on earlier admissions. Prioritizing becomes more difficult. An orderly sequence of task completion gives way to a desultory pattern of starting and stopping. Or not knowing where to begin. Researchers may experience this in the last days before a grant deadline. That desperate unproductivity.

An even later symptom is ennui. What once provided joy and satisfaction becomes tedious. Attending rounds are a duty. Getting a grant funded is a mixed blessing. Invitations to serve in a leadership capacity feel more like a burden than a privilege. *Burnout* is a term commonly applied to the terminal stages.

There are other signs, such as the following:

- Overscheduling so that you are always 5 to 10 minutes late for the next person waiting to meet with you;
- Interrupting conversations with the person in your office to answer a page or make a quick phone call;
- Promising to review a paper or grant for a colleague but doing so with either an unreasonable delay or a hurried almost token effort;
- Agreeing to one too many invitations for lectures or teaching assignments with the result being old slides, minimal updating, and scanty preparation; and,
- Chronically delinquent in completing student evaluations, in submitting research progress reports, in signing medical records—and needing repeated reminders.

**Etiology**

Why is there a tendency to skate so near the edge? Don’t forget that a large portion of the Starling curve is a good thing. We like to be productive. We want to maximize our potential as physicians, teachers, and investigators. Training is long, life is short, and the time to make substantial contributions seems evanescent. This is true of our personal life as well. Kids grow up too fast. The number of books we desire to read always exceeds our grasp. Additional time for recreation, community involvement, and personal restoration are asymptotic goals, always just beyond our reach. Thus, the Starling curve is not simply optimizing our achievements in one particular sphere but rather maximizing the “area under the curve” in all domains of our life. It is that utopian vision of personal-professional balance.

There are other factors. We hate to say “no.” We are honored to be asked. We know how hard it is for those making the request to find someone else (we have been in their position). We are pressured to say “yes”—by patients, collaborators, department chairs, professional organizations. Being overly busy is worn as a badge of importance. Free time can make that Type A portion of our personality feel guilty or unproductive.

**Prevention**

To reiterate, a large portion of the Starling curve is good. It is that last 10-20% we need to avoid, the extra gasp of air that bursts the balloon. Many of the ways we might avoid the downslope of the curve have already been alluded to. Recognizing the signs and symptoms and understanding the etiology are cornerstones of prevention. I would like to conclude with three other strategies. One is accommodation. The gradual accretion of tasks and responsibilities is better tolerated than sudden overload. Muscles can strengthen over time rather than suffer acute injury. If we must say “yes” to multiple competing demands, sequential acceptance is better than simultaneous acquiescence. A second strategy is substitution. Even with accommodation, only so many balls can be juggled in the air before one is mishandled or dropped entirely. Deciding what to relinquish and when is a lifelong process and a skill that we should impart to all professionals. A third strategy is the ability to accept boundaries. Eternity and infinity are intoxicating concepts. While rationally we understand our temporal and finite nature, we are enticed by the urgings of “one more”. Whenever we have achieved “N” in some important area of our life, it is tempting to desire “N + 1.” Preempting this process of inexhaustible addition demonstrates good stewardship of our Starling curve.

Starling curves are like snowflakes; there are as many sizes and shapes as there are individuals in the world. Managing our own curve is a highly personal and idiosyncratic process. The only universal characteristic is that every curve has an elbow. Recognizing that juncture and stopping just short is both the greatest challenge and the ultimate reward of our vocation. It is what makes our job a calling.
Starling Curves and Physician Burnout

Kurt Kroenke, MD

Dr. Kroenke (kkroenke@regenstrief.org) is a professor of medicine, Division of General Internal Medicine and Geriatrics, Indiana University, Regenstrief Institute, and VA HSR&D Center for Health Information and Communication.

Dr. Kroenke reflects 15 years later...
PRESIDENT’S COLUMN
continued from page 9

reached at robert_fletcher@hms.harvard.edu.

Council has also moved forward in articulating our commitments and intentions in working with each other for the coming year. These were developed at the June Council retreat, and will guide the work of the Council going forward. I welcome your suggestions for strengthening this list (on right).

Ultimately, embracing a life-long commitment to continuous self-improvement, whether as a person or as an organization, requires rejecting a culture of perfectionism, doggedly pursuing meaningful and actionable feedback about your current performance, developing improvement plans, and sharing these improvement intentions with those around you.

References

Council Commitments for Working Together

Agreed upon June 7, 2017

1. Be prepared—read all materials before meetings/calls
2. Be present—no multi-tasking during meetings
3. Assume positive intent—presuppose others are trying to do the right thing
4. Let go of prior identity within SGIM constituencies
5. Commit to communicating effectively, including:
   a. Be direct (no triangulation)
   b. Be honest and kind with each other
   c. Be willing to listen
   d. Communicate along the way as decisions are being made/keep people in the loop. Share information, even if it’s not popular
   e. Communicate with the membership. Remain open to input from the members
   f. Be collegial/Do not shut down the opinions of others
6. Be willing to step up/volunteer/take on new tasks/follow through
7. Challenge each other
8. Do not personalize things
9. Be solution oriented
10. Support council decisions (even if you did not agree). Work as a unified team.
11. Consider impact when making decisions (on staff, volunteers, and members)
12. Be willing to take on the sacred cows
13. Be each other’s champions
14. Have fun
15. Use ZOOM, including video
16. Keep SGIM’s interest first

CLINICAL UPDATE
continued from page 4

of influenza vaccinations and literature revealing the unlikelihood of increased theophylline levels, theophylline use should not warrant avoidance of the influenza vaccine.

Influenza Vaccine and Phenytoin
The potential interaction between the influenza vaccine and phenytoin has been studied in a limited amount of patients and not extensively since the 1980s. Unfortunately, based on studies, no clear conclusion has been made as these studies have shown an increase, decrease, and no change in phenytoin levels. In a prospective study of 16 elderly patients treated with phenytoin who were administered virion trivalent influenza vaccine, there was a slight nonstatistically significant increase in serum phenytoin levels. When levels were assessed prior to vaccination, seven, and 14 days after administration, mean phenytoin levels of 11.3, 11.9, and 12.1 mcg/mL were seen respectively. In a subsequent study of 16 patients with epilepsy stabilized on phenytoin, no significant increases in serum phenytoin concentrations were seen on days 7 or 14 after the administration of the influenza vaccine. Four patients did experience phenytoin increases ranging from 46-170 percent, and, in two of these patients, changes in phenytoin levels best correlated with the influenza vaccine. Although we see small variances in serum phenytoin levels, it is considered by most to be a minor drug interaction and the benefits of the influenza vaccination in most cases far outweigh the risk of the interaction.

Conclusion
Overall, none of the above potential influenza vaccine-medication interactions should preclude the administration of the influenza vaccine. It may be prudent to monitor INR values soon after the administration of the interaction.

Continued on page 13
fluenza vaccine for patients on warfarin at an increased risk of bleeding. Studies indicate theophylline levels do not need increased monitoring after the administration of the vaccine. It may also be prudent to monitor phenytoin levels in high risk patients on phenytoin within 1-2 weeks of administering the influenza vaccine; however, the evidence is conflicting.

References
disorientation and tongue biting both increase the likelihood of seizure.

- Alcohol abuse is a difficult problem that patients may be uncomfortable discussing; it is important to take a detailed history when you suspect alcohol abuse.
- There is a complex relationship between magnesium, calcium, and PTH that requires repletion of magnesium prior to repletion of calcium.

References

BREADTH
continued from page 7

pain. I was beyond depressed and had a hard time concentrating. I suffered deep loneliness and felt as if no one cared or understood my agony. I began to isolate. Somewhere in the middle of all of this I was asked to step down from the church board and that I had already been replaced. It seemed as if I was disposable. All of the feelings of loneliness and judgement were solidified at that time. I was completely alone. I spent a lot of time in prayer and somehow made it past that time.

Slowly, my mind cleared. The pain was still there but I found myself saying the very thing I heard my patients say: “I would rather be in pain than deal with the effects of the drugs.” I knew that I needed to change my diet and get myself to exercise. I decided I was going to go to a doctor who did medical weight loss. This has been the best thing I have done yet for the pain. I am still in pain but it does not consume me any longer. I have lost weight and improved my diet. My mind is clear and I am slowly getting stronger physically. I still pray for the rest of the pain to go, but the most important thing is I have my mind and my spirit back.

So, how do I treat patients now who live with daily chronic pain?:

- I treat them with dignity;
- I listen to what they are telling me; and,
- I am creative; I explore all aspects of the person, diet, and exercise, emotional and spiritual health.

When the body is in pain day in and day out everything suffers—the mind, the soul, and the spirit. As a result, the person is buried in it. If we find a way to unbury him from this misery, then we can discover how to treat the whole person.
group would like to build a specific discussion with the leader present. Keeping the group comprised of peers allows for discussion that could be stunted by the presence of even the most considerate and open-minded leaders. However, ensuring that your leadership is aware of the group is important; even moral support in the form of positive and reinforcing language when speaking of the group or to its members can be very helpful. Our group members are incredibly grateful for the active support and championing from our division leadership.

I often characterize IMMPACT as “organized but not formal”—it is important to set and keep to agendas. Seek agenda items routinely from the membership to maintain group input. Circulate a signup sheet for members to choose a date to bring work of their choice for the group to discuss and review. However, providing a time/space for a “breather” from routine duties is potentially a valuable aspect of the group’s function. Our meetings are during lunch time and members are welcome to bring food, etc.

Foster interpersonal relationships. As the group’s chairperson, I make an effort to publicly congratulate members on successes both personal and professional. Allowing a few minutes at the beginning of the meeting for members to chat will build trust and friendship, important aspects of group mentoring. I always watch for opportunities to highlight the work of members at IMMPACT meetings and beyond.

What is the optimal size for a peer-mentoring group? Too small of a group may be problematic if not all members may be able to attend on a routine basis. Conversely, having too large a group prevents members from getting to know each other well. An appropriate goal based on our experience would be not less than 8, not greater than 12-15 members.

Maintaining a group for five years has enabled us to see those aspects that contribute to ongoing success. Ensure one meeting per year is set aside for review of the group’s charter and for reflection and feedback. Is the group functioning well? Do changes need to be made to membership—are there new colleagues you would like to invite? What has worked best in the group, and how can you build from that success?

Preserve the group’s time as a priority and members will respect it as such. I make a concerted effort to avoid unnecessary or last minute cancellations. However, with the group’s support, I do set aside a meeting occasionally for celebrations. I order a cake & we have a casual gathering instead of a business meeting each year at the “anniversary” of the group’s formation, as a thanks and celebration of the members’ commitment and hard work. The group also periodically seeks out experts to join us as guest speakers; we have one library colleague who has been such a well-regarded speaker she has joined us multiple times. Building networks and connections in this way is valuable for academicians in any field.

Discourage “venting sessions.” Adhering to a set agenda will help this. Having the group of peers provides all members with trusted colleagues for private discussions; encourages a focused effort in the meetings on the agenda and productivity; and makes an effort to keep discussion optimistic and positive, as appropriate. The group’s chairperson serves an important role in setting the tone—avoid complaining in this environment as it can catch like wildfire and derail the meeting.

As mentioned, the size of a peer-mentoring group is an important aspect of the group dynamic. Our group at UNMC has seen such growth and success we have had to create a second-generation group! We have chosen to revel in our advancing age and frequently crack jokes about “JV IMMPACT” or “Freshman IMMPACT” taking on its own charter.

Building and maintaining a group of peers who not only shares my academic interests but also supports one another in our efforts is one of the most meaningful accomplishments of my career. My colleagues share my enthusiasm, as they have noted:

“I’ve presented things that have come out of this group multiple times—I can’t imagine that they would have happened otherwise.”

“This group is new and different and I think in a lot of ways more helpful to young faculty, because it’s approachable.”

“What we’ve done with the peer mentoring is be able to pull ourselves up, advance each other’s careers through mutual accountability, through a shared sense of our collective wellbeing.”

I hope that our successful strategies can serve as a framework for faculty seeking to IMMPACT their own careers, using the support and guidance of the wonderful peers many of us have in GIM.

References
Application Period Opens:
Aug. 1, 2017

Deadline For Application
Nov. 16, 2017

The Face of HIV
CDC recommends HIV screening for all patients ages 13 to 64

The ISSN for SGIM Forum is: Print-ISSN 1940-2899 and eISSN 1940-2902.