Spring in western Pennsylvania—with its tentative foliage and water trickling down hillsides, just as Frank Lloyd Wright intended—is supposed to answer the call of a capricious marmot named Phil, whom you may recognize from the movies or from your vegetable garden if you’ve ever had trouble cultivating lettuce. Groundhog Day 2018 arrived with clear, blustery skies and enough sunlight to scare our hero back into hiding. The goddess stood silently for a moment surveying the scene at Gobbler’s Nob, gave a nod in Phil’s direction, and decided to start early.

According to E.E. Cummings, “the world is puddle-wonderful” in spring. In Pittsburgh—where the collective mood is rapidly cycling between thaw and freeze, thaw and freeze—the puddles can’t be trusted. Their mirrored faces belie calamities: potholes large enough to swallow my Hyundai.

On the wards, little *Ixodes scapularis*—purveyor of artisanal spirochetes—is already sending us cases of Lyme disease.

During an unrelated admission, I met a man named Mr. C., a veteran of the Second World War, who gave new meaning to the term “family history.”

“My grandfather was a slave,” he said, touching the white stubble on his face. “Came away with 2 mules and 200 acres when he was freed.”

Mr. C. left Alabama with his mother in 1930. He played the trumpet in high school, landed in Iwo Jima towards the end of the war, and became the first African-American master plumber in Pittsburgh.

I loosened my tie and leaned back in my chair, my limbs feeling suddenly heavy. Mr. C. went on, stopping to rest only after he’d put all six of his kids through college. I grew up swaddled in privilege, and I’m just hoping to get my five-year-old through another year of preschool.

Isla was born on Valentine’s Day, a coincidence that was supposed to deliver my wife and me from the holiday’s tedious expectations. Instead, with two girls in preschool, the night of February 13th has become a jubilee of aggravation. I begin the festivities by hastily—and improperly—assembling Valentines. Later, my wife steps in to correct my mistakes while I drive a cookie cutter into rock-hard rice crispy treats. By the end of the night, both of my palms are bleeding.

This year, Valentine’s Day and Ash Wednesday coincided. It’s been a while since I took the time to have my forehead encrusted with the remains of cremated palms, but I still get that warm, guilty feeling when I see all the “good” Catholics who did.

This Ash Valentine’s Day—in addition to feeling lapsed-Catholic guilt and attending on the wards—I was on the spot in our division’s “Clinical Reasoning Conference,” which features one anxious faculty member struggling to resolve a complicated case presentation while his colleagues and learners enjoy a hot lunch. Like the contestants on *Press Your Luck* who chant “no whammy, no whammy, no whammy,” I was reciting “no rashes, no rashes, no rashes” right up until the chief complaint was given.

When they got to the physical exam and displayed a picture of the rash, it didn’t really look like anything.
FROM THE EDITOR

LEADERSHIP, COGNITIVE CARE, AND RAPID RESPONSE TO DISASTER: IT’S WHAT WE DO

Joseph Conigliaro, MD, MPH, Editor in Chief, SGIM Forum

A few weeks before the SGIM2018 National Meeting, I received a paper copy of the program in the mail and reviewed the many offerings and activities awaiting me in Denver. The Program and the subsequent meeting was the culmination of vision, hard work, and execution. This issue of *Forum* comes on the heels of that meeting. Although our official “Meeting”-themed issue comes out this summer, I see no reason to wait until then to bask in the meeting glory just a little bit. What amazes me about the National Meeting is the ability of the Program Committee to take a concept or theme for the meeting and, over the course of the year, put together the symphony that we experienced last month. Kudos to Dr. Lipika Samal and Dr. Saul Blecker and to the entire Program Committee for a job well done.

This is a special issue of *Forum* as it is Dr. Giselle Corbie-Smith’s first issue as President of SGIM. With that goes a special thanks to outgoing president Dr. Tom Gallagher for a great year of leadership and insightful columns. Tom used his background in quality and patient safety to infuse related principles, such as communication and transparency, in his approach to leadership and his *Forum* columns. Likewise, Giselle introduces her framework in her first *Forum* column to move our Society forward in the year ahead. As one of her duties as President of SGIM, Giselle introduces her vision and her theme for the SGIM2019 meeting.

This issue of *Forum* also discusses in several articles the concept of internists as cognitive specialists. Richard Kravitz asked the question of whether the cognitive specialists was dead in 2008 and answers it 10 years later in Flashback40. John Goodson brings us up to date on SGIM’s role in the Cognitive Care Alliance, and how it is working to influence how the cognitive work that we do can be fairly compensated.

The issue rounds out nicely with a piece from Dr. Meredith Niess and her colleagues who, in the face of a natural disaster, mobilized a response to help victims from the Puerto Rican community affected by Hurricane
OUT OF CHAOS COMES OPPORTUNITY: MOVING SGIM FORWARD IN TURBULENT TIMES

Giselle Corbie-Smith, MD, MSc, President, SGIM

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Academic medicine. . . faces a turbulent environment and (we) need to consider our strategy. How should SGIM respond to a VUCA world? How should we prepare as an organization in this “new normal” environment? The theme of our 2019 annual meeting—“Courage to Lead: Equity, Engagement, and Advocacy in Turbulent Times”—will give us the opportunity to think about and respond to the issues academic generalists face in a volatile, uncertain, complex, and ambiguous environment.

We live in a turbulent world characterized by social, economic, technological, and environmental change, occurring at seemingly lightning speed. Some might argue that the current chaos is not all that different than chaotic times of the past while others might consider this to be the “new normal”. Regardless, the pace and scope of change has garnered an acronym in the business sector—VUCA: Volatile, Uncertain, Complex, and Ambiguous. The term was initially coined by the US Army War College in the early 1990s as we emerged from the Cold War, and gained traction in the business community after the 2008-2009 global financial crisis.1-3 Today, VUCA concepts are shaping strategic planning in a variety of contexts ranging from large multi-national businesses to small local enterprises, and from for-profit to not-for-profit organizations.

Academic medicine is no different than other professions; we face a turbulent environment and need to consider our strategy. How should SGIM respond to a VUCA world? How should we prepare ourselves as an organization in this “new normal” environment? I am excited to announce that the theme of our 2019 annual meeting will be “Courage to Lead: Equity, Engagement, and Advocacy in Turbulent Times,” and will give us the opportunity to think about and respond to the issues academic generalists face in a volatile, uncertain, complex, and ambiguous environment.

Leadership in a VUCA environment is complex. How do we as a profession capitalize on the turbulence in our environment? How do we set a course and use the collective strength and influence of our organization and continued on page 10
Looking back at my 2008 Forum article on “The Death of the Cognitive Specialist?,” it turns out I was right about a few things, wrong about several, and naive about at least one.

Now, as then, cognitive services are undervalued by payers and by society. You can see this in both the continued skewing of fee-for-service reimbursement toward procedures and the enduring popularity of radiology, ophthalmology, dermatology, and the surgical subspecialties among medical students. When it comes to specialty choice, the issues of lifestyle, prestige, and perceived control do matter. But so does money, and the pay gap between the cognitive and procedural specialties is a persistent barrier to achieving a healthy specialty distribution in the United States.

Now, as then, the central task of medicine remains to help patients and their families make good decisions about health care. Over the last 10 years, the available treatment options, the volume of medical information, and the ease with which that information can be accessed has increased dramatically. Yet, it remains as difficult as ever to distill data into knowledge and to temper knowledge with the combination of experience and discernment we call wisdom.

Now, as then, concierge medicine remains a window into what patients genuinely value: time, attention, caring,
blockage might not be any better than just continuing to take his medicine. He needs someone to explain it to him.

Or does he? Medical information is everywhere: in newspapers, on television programs, on the Internet, and as part of those ubiquitous direct-to-consumer drug advertisements. However, there is a distinction between data, information, knowledge, and wisdom. Data and information are raw facts and simple relations. Normal oxygen saturation on room air exceeds 95%. Pulmonary embolism is often associated with decreased oxygen saturation. Knowledge is the understanding of patterns. A post-operative patient with dyspnea, tachypnea, tachycardia, diminished oxygen saturation, and a normal chest X-ray has a pulmonary embolism until proved otherwise. Wisdom involves understanding principles and making good decisions in the face of uncertainty. We need to start heparin in this individual pending a diagnosis, but aim for an aPTT at the low end of the therapeutic range because of the patient’s history of GI bleeding. In medicine, making good decisions requires integrating clinical data, medical knowledge, and patient values. The practitioners of this art are cognitive specialists. Some might call them doctors.

Do we still need this kind of doctor? The physician as information broker begins to seem quaint when web-based search engines advance to the point where they can instantly retrieve individualized health information tailored to the needs and prior search history of the patient. (This reality is closer than we realize, as portrayed in the fascinating book Search by John Batelle.) Nevertheless, there is a lot of junk out there, and patients need help separating the informational grain from the chafe. Besides, many critical medical decisions do not permit the luxury of surfing endlessly through Internet sites of dubious provenance; answers are needed in minutes or hours, not days or weeks. And let us not forget that large numbers of Americans lack the computer access, navigation skills, and health literacy needed to take advantage of the Internet information cornucopia. Electronic wizardry will not solve their problems. They too need a doctor.

One way to assess demand for a product or service is to look at what people actually do when they have the money. The rise of “concierge care” seems instructive. Relatively well-heeled patients, like Ilse Kaplan, profiled in a 2005 New York Times feature, are more than willing to pay for the personal attention and clinical wisdom a good “cognitivist” can dispense. The problem with this model is that access is currently limited to the top 5% or 10% of the income distribution. Concierge care will do nothing to narrow income-related health disparities and could make them worse. Nevertheless, I believe the popularity of concierge care signals pent-up demand for the kind of personal care, decision support, and quality control that is currently available only on retainer.

As for the future, there are three possible scenarios. In the first, the cognitive specialist fades away as primary care is taken over by physician extenders, chronic conditions are managed by nurses, and diagnostic consultation becomes a subspecialty of radiology. In the second, general internists and other cognitive specialists recede into specialized niches like concierge care, hospital-ism, and second-opinion services. Niche seeking is nothing new in medicine; witness cosmetic dermatology and psychoanalysis. For internists, however, it would represent a full-on retreat not only from the Oslerian ideal but from the aspiration to be comprehensive doctors for adults. Only the third alternative offers some reserve of hope. In this scenario, cognitive specialists (with general internists in the lead) develop new practice models such as the patient-centered medical home and restructure clinical training to emphasize information retrieval, interpretation, and communication. I don’t mean just adding a few lectures on medical informatics to the medical curriculum. I mean radically reengineering GIM training so that general internists emerge as the undisputed experts in helping patients “get it right.”

The death of the cognitive specialist? The prognosis is guarded. But if we can reinvent ourselves as masters of clinical strategy, mavens of the medical Internet, and leaders of teams and systems—in short as the quintessential brokers of medical knowledge and wisdom—rumors of our demise might be premature.

and respect. We should not be so surprised by this; these are the fundamental ingredients of doctoring. To its critics, concierge medicine is expensive, difficult-to-scale, and fundamentally unjust. Yet, development of broadly generalizable practice models that promote population health, improve the patient experience, contain costs, and support clinician well-being has been slow. Finding creative ways to support primary care (narrowly) and the cognitive specialties (more broadly) is at least as deserving of a “moonshot” as another war on cancer. But it is hard to build support for this in Congress.

My 2008 Forum article got certain things wrong. For example, I stated that “screening for prostate cancer in an 80-year-old man, breast cancer in a 35-year-old woman, and lung cancer in almost anyone will almost surely do more harm than good.” The lung cancer example didn’t age well: low dose CT scanning has made early detection of lung cancer in high risk individuals a reasonable pursuit. The provisional nature of clinical science is a humbling reality, but it’s consistent with my sense that the best clinicians walk a careful line between medical skepticism and enthusiasm, demanding evidence but also entertaining the possibility that breaking with convention might, under the right circumstances now or in the future, produce better results for patients.

As for naiveté, my suggestion that diagnostic medicine might—if we’re not careful—be ceded to radiologists now seems quaint. Given the pace of technological progress (the first iPhone was sold in June 2007?), the more likely scenario is that radiologists themselves will be replaced—by artificial intelligence. If I were a radiologist, I’d be worried. I’d also start looking for ways imaging specialists could add value to patient care with
A 19-year-old man with a family history of familial adenomatous polyposis (FAP) was admitted for evaluation and management of potassium 2.5 and hypertension from GI clinic. The patient was asymptomatic and was going in for routine follow up. He did not have any nausea, vomiting, palpitations, diarrhea, or lightheadedness. The patient denied headache, blurry vision, hematuria, chest pain, or shortness of breath. The patient stated he had “borderline hypertension” about a year ago, but no medications were prescribed.

Hypokalemia is defined as a condition in which the serum potassium level is less than 3.5 mEq/L (3.5 mmol/L). Diuretics and gastrointestinal disorders are by far the most common causes of hypokalemia1. However, measurement of urine potassium establishes the pathophysiologic mechanism behind hypokalemia and, thus, aids in formulating the differential diagnosis. A serum magnesium assay is also important in the differential diagnosis, as well as in therapy, and is therefore performed as a first-line test as magnesium deficiency exacerbates potassium wasting by increasing distal potassium secretion2.

The patient’s medical history is otherwise unremarkable. He has had multiple colonoscopies that did not show any polyps. His mother and maternal grandfather have familial adenomatous polyposis syndrome. He denies use of prescription drugs or illicit drugs and drinks on average less than a beer a week. He is an engineering student.

On physical exam, his vitals were BP 160/84, equal on both arms, pulse 57, Temp 36.8°C, R 15, Weight 67.1 kg, SpO2 100%, BMI 26.22. He was awake and alert in NAD. He had chronic benign cysts on scalp. His conjunctivae were clear and there was no papilledema. Lungs were clear. Heart was regular rate and rhythm, without S4. Abdomen was soft, nontender without masses or bruit. The patient had no peripheral edema, and he had no deficits neurologically or psychologically.

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The patient’s potassium was repeated and found to be 2.4, magnesium 1.7. The patient also had U waves on EKG.

In evaluating a young healthy individual with hypertension and hypokalemia with a normal diet on no medications, secondary causes of hypertension must be considered. The patient’s hypertension and hypokalemia were concerning for primary hyperaldosteronism. However, it is important to rule out other etiologies on the differential including pheochromocytoma, functional adenoma, and renal artery stenosis.

Serum renin, aldosterone, plasma metanephrines, plasma normetanephrines, ACTH and cortisol levels were ordered. The patient’s potassium and magnesium were aggressively repleted. More than 300 meq of potassium were required to slowly bring the potassium level up to 3.6 by hospital day number two. The patient’s aldosterone was 72.9 ng/dL (upright 4.0-31.0 ng/dL, supine ≤16.0 ng/dL, unspecified ≤31.0 ng/dL). Direct renin 11.1 (2.5-45.7 pg/mL) making the aldosterone renin calculation 6.6. Plasma metanephrines and normetanephrines were normal. AM cortisol and ACTH were normal.

Normal serum levels of aldosterone are dependent on the sodium intake and whether the patient is upright or supine. High sodium intake will tend to suppress serum aldosterone, whereas low sodium intake will elevate serum aldosterone. The reference intervals for serum aldosterone are based on normal sodium intake. An Aldosterone/Direct Renin Activity Ratio of greater than 3.7 is suggestive of hyperaldosteronism.

Given that cortisol levels were suppressible, pheochromocytoma and functional adenoma were much less likely.

The patient’s urine potassium was 24.7 (indicating range). Low urine potassium (<20 mEq/L) suggests gastrointestinal loss (eg diarrhea or laxative use), poor intake, TPN contents, or a shift of extracellular potassium into intracellular space (with insulin and/or excessive bicarbonate suplements). High urine potassium (<40 mEq/L) suggests renal loss such as from diuretics. Our patient’s urine potassium was in the indeterminant range. In these cases, calculation of the transtubular potassium gradient (TTKG) can be useful. The use of the transtubular potassium gradient (TTKG) was developed to account for the potentially confounding effect of urine concentration on the interpretation of the urine potassium concentration. The TTKG is equal to (urine potassium x serum osmo- continued on page 14

** The comments in italics are those of the discussant.
THE COGNITIVE CARE ALLIANCE: SGIM’S LEADERSHIP WITH PHYSICIAN PAYMENT REFORM

John D. Goodson, MD, Chair, Cognitive Care Alliance

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The Society of General Internal Medicine (SGIM) maintains a unique position among professional societies. In particular, we have spearheaded efforts to reform the Medicare Physician Fee Schedule (PFS) to achieve payment parity between proceduralists and cognates. All payment models based on the PFS depend on the existing pricing structure for physician services, even those enterprises who choose to participate in Alternative Payment Models (APMs) or practices that choose to remain in a fee-for-service arrangement and report quality information as required by the Merit-based Incentive Payment System (MIPS). In many salary models, productivity is calculated from the services submitted for billing. Even when compensation is unhooked from productivity, practice revenue and the revenue available for compensation depends on the service codes billed. Furthermore, there is an internal dynamic. Within large enterprises, the limited ability to generate revenue from purely cognitive services, no matter how intense, creates an environment where the non-proceduralists remain in a position of dependency.

How Did the Pricing of Cognitive Services Become So Distorted?

In 1989, Congress declared that all Medicare professional payments would be based on a national fee schedule (now called the Medicare PFS) in which payments would be made only for specific services (i.e., that Medicare would not pay for any unrecognized service) and payments for professional services would be made relative to one another. In the model, relativity is based on the “resources” consumed on average, where resources are determined in large part by the “intensity” of the work. (Intensity includes mental stress, consequences, etc.) This has been the system of Medicare payment since 1992. All commercial carriers use the same pricing model. What Medicare does, all others follow.

The Medicare PFS is updated every January 1st. Physicians’ payments are made by multiplying the relative value (listed in the Medicare PFS in relative value units, RVUs) of each service times an annual conversion factor. The MPFS lists thousands of codes that correspond to individual services. Congress empowered the AMA’s Current Procedural Terminology (CPT) committee to define services. The licensing fees from the manual that matches services to CPT codes has become an extraordinary source of revenue for the AMA, estimated to be around $20 million per year!

Certainly, more rational and more patient-centered payment models may evolve over time but the current reality demands immediate action. If there is to be a robust primary care workforce then the compensation for the complex work involved must be substantially improved.

The definition of services and the assignment relative values based on the determinations of work “intensity” has had an enormous effect on physician compensation over the last three decades. Another and even more influential AMA committee, the Relative-Value Update Committee (RUC), “suggests” relative values for all CPT defined services. Since the beginning of the PFS, Medicare has accepted the vast majority of the RUC’s recommendations. In essence, the RUC largely determines what gets paid to every specialty. This committee is dominated by its majority of proceduralists (e.g., plastic surgery, radiology, pathology, several surgical specialties). Currently, there are some 6,500 codes in the CPT manual representing procedural services. There are roughly 50 codes that capture the entire range of cognitive, non-procedural services; these codes account for roughly half of Medicare’s physician payment—more than $45 billion! These codes are also meant to capture all of inpatient care, outpatient care, consultative care, emergency room care, chronic care, and home care.

We in primary care depend on the evaluation and management (E/M) service codes. The failure of these codes to adequately capture and provide relative values appropriate to the intensity of current clinical care has continued on page 13
Most primary care facilities operate at capacity and are therefore unable to respond effectively to a high-volume influx of patients resulting from disaster situations.¹ On September 20, 2017, Hurricane Maria created this type of scenario after it decimated the island of Puerto Rico, including its healthcare infrastructure. A mass displacement of the population began within weeks and continues today, with approximately 14% of the population of Puerto Rico expected to leave by the end of 2019.² Primary care facilities in communities greeting the displaced in the continental United States have since found themselves overwhelmed with new patients and scrambling to figure out how to help.

Fair Haven Community Health Care (FHCHC), a Federally Qualified Health Center in New Haven, Connecticut, was particularly impacted by patient influx following Maria. This was unsurprising for multiple reasons. Because of its large Puerto Rican community, Connecticut was predicted to receive the seventh largest influx of displaced individuals among receiving states, with specific numbers expected to fall between 3,676 and 11,334 in the first year.² Moreover, FHCHC serves one of the largest Puerto Rican neighborhoods in New Haven County, where recent estimates have indicated that Puerto Ricans comprise 24% of the population.³ Finally, the most recent uniform data system (UDS) data for FHCHC indicate that Hispanics make up over 70% of our patient population.

As expected, we began to see significant numbers of new patients from Puerto Rico soon after Maria. Through discussions with staff with ties to Puerto Rico, and survey data, we anticipated significant medical, social, and behavioral health needs. With strong support from senior leadership of the clinic, we formed a multi-disciplinary development team to establish a specialized clinic for our incoming hurricane-displaced population that consisted of internal medicine and pediatric providers, social workers, a behavioral health provider, administrative staff leadership, and nursing leadership. Its task was to create a pilot based on a set of core principles:

1. Rapid Access: displaced individuals seen within a week.
2. “One Stop Shopping”: address in the same visit, the expected high prevalence of social, psychological and medical needs.
3. Team-based care: logistically coordinating patient visits with three different providers mandated high level teamwork: efficient communication and hand-offs, flexibility allowing real-time triage of patients’ needs, and a consistent team to allow for rapid plan, do, study, act (PdSa) cycles.
4. Maintenance of access for existing patients: ensure FHCHC continues to run at full capacity but maintain follow-up and urgent access for all (new and preexisting) patients.

FHCHC was well positioned to rapidly implement the clinic for the displaced Puerto Rican population based on a number of resources:

1. Patient centered medical home: FHCHC has robust behavioral health and social work/care management departments. This well-informed staff committed to further developing their expertise around resources specific to the hurricane-displaced population.
2. Culturally competent care: with our high baseline proportion of Spanish speaking Hispanic patients, we employ a high proportion of bilingual and bicultural staff with consistent access to interpreters.
3. Unequivocal support from clinic leadership: within a week of the hurricane, the profound effect on our large Puerto Rican staff and patient population was clear and our executive management team expressed full commitment to a response to support these groups within our scope. This involved IT support in a needs assessment, clinical logistical support in providing space and staffing for the clinic in short timing, and leadership advocacy at the local, state and national level to raise awareness and resources for the displaced population.
4. Community partnerships: prior to the hurricane FHCHC participated in active partnerships with other community groups and local government officials and leadership. As these organizations and individuals developed their disaster refugee response plans, we
Ms. Morgan is a 56-year-old female with a past medical history of fibromyalgia and osteoarthritis. She has been on long-term opioid therapy for 3 years, after starting oxycodone following a total knee arthroplasty. An attempt to taper opioids was made approximately 1.5 years ago without success. At that time, Ms. Morgan reported struggling with withdrawal symptoms, reduced pain control, and physical and mental stress due to serving as the primary caregiver for her elderly father. Her chronic pain has been further complicated by additional pain from a torn rotator cuff injury 4 months ago. Three months ago, it was mutually agreed upon by Ms. Morgan and her primary care provider (PCP) that tapering opioid medications would be in her best interest. Both Ms. Morgan and her PCP are eager to accomplish this in a way that may maintain pain control, improve functionality, and prevent unwanted effects of opioid withdrawal.

It is estimated that approximately 3-4% of the adult population in the United States is on long-term opioid therapy. Opioids are associated with a dose-dependent increased risk of serious harm, and their widespread use has been deemed a public health crisis. In 2016, the Centers for Disease Control and Prevention (CDC) released guidelines addressing opioid use for chronic nonmalignant pain with the intention of assisting clinicians who are treating patients with chronic pain in the outpatient setting. In general, the guidelines stress the use of non-opioid therapies for management of chronic nonmalignant pain, and multimodal and multidisciplinary interventions are encouraged over single modalities. Unfortunately, there is no single preferred combination of non-opioid medications, multidisciplinary interventions, or multimodal approaches to most effectively reduce pain and improve function. This can be frustrating for patients, and overwhelming for PCPs. The number of patients on long-term opioid therapy far exceeds the capacity of the nation’s pain specialists, which leads to the majority of these patients receiving their pain management in the primary care setting.

One area of concern for many PCPs, as detailed in the above case description, is how best to stop opioid pain medications when desired by patients or providers. Abrupt opioid discontinuation in a patient who has been on long-term opioid therapy can result in symptoms of opioid withdrawal, including anxiety, abdominal pain, vomiting, diarrhea, diaphoresis, tremor, and tachycardia. Additionally, many patients may fear that their pain will increase during the opioid taper while others may behave aggressively towards providers or staff in an attempt to maintain their opioid-based pain regimen. PCPs are often faced with the challenge of transitioning patients on long-term opioid therapy to an alternative regimen with inadequate time, training, and evidence to support which methods are the safest and most effective.

At Penn Internal Medicine, PCPs are collaborating with clinical pharmacists to improve prescribing of opioid and adjuvant analgesic medications. Clinical pharmacists are trained as medication experts and are well prepared to assist in optimizing medication regimens for chronic pain management. In our practices, PCPs refer patients on chronic opioid therapy to the clinical pharmacist for assistance in tapering opioid medica-
its members to lead our field? How do we stay focused on our mission and values, but simultaneously have the courage to deploy bold strategies to survive external turbulence and volatility? To this end, I offer concepts as described by Bill George in his 2017 article in *Forbes* in which George’s VUCA 2.0 strategy provides a way for us at SGIM to consider our approach to managing in turbulent times.1 The following is my overview of each concept, and how we might begin applying it in SGIM over the next year:

**Vision:** conceptualized in VUCA 2.0 as the organization’s “true north,” an internal compass and anchor point providing consistent direction in a constantly changing environment. 

**Application in SGIM:** Dr. Eric Bass, our CEO, is coordinating a workgroup to refine our existing Vision and Values document to distill our “true north,” providing a consistent statement of aspiration against which individual members and the organization can consider possibilities, discuss options, evaluate decisions, and make judgments. Keeping the SGIM ship on our “true north” course will afford us the agility to flex and respond to rapidly unfolding situations, guide our organization internally, and effectively manage our resources, external relations and activities.

**Understanding:** a clear understanding of our organization’s capabilities, and the value it brings to SGIM members will enable us to leverage strengths and minimize weaknesses, stay attuned to changes in the healthcare markets, and identify and address “mega issues” that face our profession generally and our members as academic generalists specifically and identify changes as they are occurring. **We must** be open to a diversity of perspectives, look to early adopters to understand trends, and seek sources of data covering a full spectrum of members’ viewpoints (not just those who agree with us) to ensure we truly understand our organization and its role in your work life and in society at large.

**Application in SGIM:** great sources of data reflect the voices of SGIM members through our member and communications surveys. We will leverage the diversity of our members’ perspectives and draw on the multiple points of view and experiences they offer. Over the coming year, we will examine our portfolio of activities and prioritize those programs and products that add value to your work life and capitalize on the strengths of SGIM. Collectively, **we must** learn the future is not as predictable and need to expect the unexpected and continually touch base with our “true north.”

**Courage:** we need the courage to employ non-traditional ways of addressing the challenges facing us in today’s environment. Uncertain times bring opportunities for bold moves and the chance to influence the direction of changes around us, rather than just reacting to those forces. At times, we will be making audacious decisions and going against the grain, and may not always succeed. We must be willing to “fail forward”—innovate, take risks, and incorporate the lessons learned into future approaches. SGIM’s greatest risk as a society lies in not having the courage to make bold moves. This era belongs to the bold; we must seize the chance to innovate.

**Application in SGIM:** our members have always courageously stood for the values that guide our organization in education, research, and care to benefit our patients. However, we also need to harness that courage to take a hard look at our programs and products to make sure what we do as an organization not only meets the needs of our members but also advances the field of general internal medicine.

**Adaptability:** adaptability has not been the strength of academic medicine and may be one of the greatest hurdles SGIM faces. We can no long... continued on page 11

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**FLASHBACK 40 (continued from page 5)**

out actually reading images. (This is not far-fetched. We will need specialists who can help guide the selection of an increasingly complex array of imaging options and integrate imaging results with clinical, laboratory, and genetic information—and with patients’ values and preferences.)

My 2008 piece gushed over the patient-centered medical home (PCMH) and, at least implicitly, over electronic health records. Both, I thought, could help free up cognitive specialists to do what they do best:

- collect patient information through careful history taking, focused physical examination, and judicious use of diagnostic studies;
- distill that information through evidence and experience; and
- communicate conclusions in the spirit of shared decision-making.

However, by most early accounts, the empirical relationship between PCMH designation and improved patient care is weak. And EHRs, while improving care in some ways, have slowed clinical work, created a physical barrier between physician and patient, and added to the length of the clinical workday. These problems are solvable, but that will take resources and commitment.

In summary, cognitive medicine in 2018 remains underappreciated, undervalued, and (relatively) underpaid. But the cognitive specialist is still very much alive.

And that is a good thing for patients.
In recent years, engagement has become an essential component of medical education, research, and clinical practice. We have seen some remarkable advances in methods of engaging patients, family members, and research participants, using principles of participatory action research and human-centered design, and placing the user at the center of program and product development. As an organization, how can we prioritize needs and wants of patients and communities we hope to serve in our roles as generalists, even as the healthcare system is changing around us?

Advocacy has been and continues to be a core value and strength we have maintained in our organization; it has anchored our three core missions of clinical practice, research, and education. We have seen recent outstanding innovations in the form of the successful LEAHP program to develop a cadre of outstanding leaders in health policy. Now, we need to look for other opportunities and innovative approaches to ensuring the effectiveness of our advocacy platform. How can we use the full strength of our membership to support advocacy and influence policy implementation locally? Where are opportunities to forge partnerships with other like-minded organizations with similar platforms in advocacy? How can we bridge partisan lines to find areas of synergy, agreement, and convergence in agreed-upon areas?

Turbulent times create opportunities for professional organizations like SGIM to become even stronger and better. I look forward to working with our SGIM national office, Council, committees, commissions, and interest groups to distill our organization’s “true north,” ensure SGIM meets the needs of its members, and advances the field of general medicine by prioritizing programs and products that add value to your work life and find ways to help us become a more agile and adaptable organization. I am honored to serve as your president and look forward to working with you to meet the challenges we face in this “new normal” environment.

References

FROM THE EDITOR (cont. from p 2)

Maria. Their rapid response approach is a model for how communities and health care institutions should be working in the face of such events.

Finally, opiates are again a topic of a Forum article, even after our featured articles in February 2018. Dr. Jennifer Smith and her colleagues describe the role that an interdisciplinary team can play to manage medication use and impact the current epidemic. One thing that I have realized is that one issue is not going to be enough to cover this topic. Look to future Forum issues for more articles and ideas on how SGIM members are approaching this major healthcare epidemic.
tions. The clinical pharmacist is then able to schedule in-person and telephone follow-up to evaluate the patients’ pain management regimen and make recommendations to ensure safe and effective medication utilization. During patient follow-up, clinical pharmacists assess analgesia, activities of daily living, adverse effects, and aberrant drug-related behaviors; recommend appropriate adjustments to prescribing, monitoring, and titrating opioid and non-opioid pain medications; and use motivational interviewing techniques to facilitate the tapering process.

Lessons Learned
In the care of patients like Ms. Morgan, multiple lessons have been learned through the collaboration between PCPs and clinical pharmacists at Penn Internal Medicine. First, the use of a team-based approach to chronic pain management increases the opportunity for face to face time between a provider and patient. This increased time helps a patient better understand the complexity of chronic pain, and the risks and benefits of opioid medications. Team members with experience in motivational interviewing have assisted with management of behavioral issues, such as patient resistance to discontinuing opioids, aberrant behaviors, and management of withdrawal symptoms. It is important that efforts and schedules are coordinated between team members to allow for efficiency in patient care and avoid duplication of efforts. Second, the presence of a clinical pharmacist as a core element of the care team has been especially valuable given their training in the areas of pharmacokinetics, pharmacodynamics, and pharmaoapathetics. Training in these areas has facilitated novel solutions to managing complex situations, including the timing and rate of opioid tapering, initiation of non-opioid pain medications, and management of withdrawal. Third, chronic pain is multidimensional and the approach to managing chronic pain, including tapering opioids, should be individualized and should take into account patient-specific and drug-specific factors. Be mindful that the rate, intensity, and duration of the taper may need to be adjusted according to a patient’s response. The taper does not need to be reversed for a patient experiencing symptoms of withdrawal, but rather can be slowed or paused while continuing to monitor for resolution of symptoms. It is also important to remember that each opioid is available in a limited number of dosage formulations. Once the lowest dosage form of an opioid is reached, one may need to increase the taper rate or transition to an alternative opioid that allows for a more gradual dosage reduction. Lastly, there have been some patients who have required resources outside of the current interprofessional team in the primary care setting, such as physical therapy, psychotherapy, and/or surgical intervention. It is important that PCPs and team members are able to recognize their limitations and when referral to outside sources is warranted to optimize a patient’s pain management.

Returning to Ms. Morgan: At the time of the initial consult, she was taking a total of 90 morphine milligram equivalents (MME)/day. Since then, she has had one office visit with her PCP and biweekly telephone calls with the clinical pharmacist. Together, the PCP and clinical pharmacist effectively tapered Ms. Morgan’s opioid therapy and she is no longer taking opioid medications at this time. A gradual taper of approximately 10% of the original dose every 1-2 weeks was used to minimize withdrawal symptoms. Motivational interviewing and non-opioid adjuvant pain medications were used, including acetaminophen, naproxen, gabapentin and duloxetine. Additionally, q2-adrenergic agonists were trialed to provide symptomatic treatment of increased sympathomimetic activity during the tapering process. This pharmacologic class includes clonidine, guanfacine, lofexadine, and tizanidine, and their use has been well established in the treatment of withdrawal symptoms of opioid-use disorders. Our care model has allowed us to better elucidate which specialty services might best suit her needs, and she is now seeing an orthopedist and a physical therapist to assist with pain management. It is our hope that continued efforts toward multidisciplinary and multimodal models to address chronic nonmalignant pain will help Ms. Morgan and similar patients in the future.

Note: patient’s name has been changed in the above article to protect patient confidentiality.

References
substantially contributed to the compensation disparities for physicians practicing primary care and to the declining numbers of primary care physicians. In addition, the documentation requirements that plague current clinical records arise directly from content stipulations that originated in the beginnings of the current payment schemes, during an era of manila folders and three ring binders. The E/M codes that capture all of our cognitive work have not been refined and updated for decades.

Enter the Cognitive Care Alliance (CCA)
Recognizing a need for collaborative activism, SGIM took the lead in forming the Cognitive Care Alliance in 2015. The Alliance pulled together like-minded representatives from other professional organizations whose members depend on E/M services. The Alliance now includes rheumatology, endocrinology, gastroenterology, hepatology, infectious disease, and hematology. There are almost 100,000 physicians represented. SGIM convened the Alliance and currently holds the group’s chairmanship.

Over the last year, the CCA’s national lobbying efforts have involved several days of advocacy. Last May, we met with Patrick Conway, MD, then director of the Center for Medicare and Medicaid Innovation. SGIM’s Hill Days for both 2017 and 2018 have carried the message that the distortions of the fee schedule must be corrected. The CCA was on the Hill in July, December, and January 2018, meeting with multiple staffers from both chambers and both sides of the aisle. Access for Medicare beneficiaries is non-partisan; shortages touch all districts and all states. In December and January, we met with Jeet Guram, MD, senior advisor to the Medicare administrator, Seema Verma. We have refined and focused our core messages and sent multiple letters to CMS and members of Congress. In September, the CCA participated in a national conference of experts convened at the Brookings Institute in Washington, DC.

The Alliance continues to seek out like-minded professional organizations as well as non-professional organizations. In January, the Alliance met with a representative from Families USA.

A Strategy for Change: Evidence-based Pricing of E/M Services
The CCA believes that physician payment policy should be based on an accurate and reliable evidence-base. We have called on CMS to conduct the research necessary to redefine and appropriately value the E/M codes and correct any distortions in the pricing of physician services. In addition, we believe that as new service codes are developed, new documentation expectations can be created that will foster efficient and effective communication and end much of the drudgery inflicted by the existing EHRs, a major source of clinician exhaustion.

As new payment models are developed, pricing anomalies will have ongoing negative effects. Workforce shortages in primary care and other cognitive specialties will both deprive beneficiaries of needed services and hamper the evolution of efficient and thoughtful health care delivery models. MedPAC has repeatedly pointed out the deficiencies of existing E/M code definitions and valuations. However, getting the necessary research developed, completed and analyzed by CMS will take a sustained effort over many years. Many in Congress are sympathetic to the call for change. The advocacy efforts of SGIM, working in concert with the Alliance and complemented by the advocacy efforts of the other professional societies, has created forward momentum.

Certainly, more rational and more patient centered payment models may evolve over time but the current reality demands immediate action. If there is to be a robust primary care workforce then the compensation for the complex work involved must be substantially improved. Furthermore, any “Medicare for All” option will founder unless the workforce issues are addressed. There is a level of “complexity density” to cognitive work that is not captured by the existing physician payment system. The work of the cognates demands matrix thinking. Procedural work is fundamentally linear. The time has come to recognize these two realities of physician work and appropriately recognize that neither is inherently more important or more valuable.
lality)/(Serum potassium x urine osmolality).

Our patient’s TTKG = 8.
A TTKG of 8 is suggestive of the kidney wasting excessive potassium, and is consistent with primary hyperaldosteronism.

The patient was diagnosed with hyperaldosteronism. The term primary hyperaldosteronism (or primary aldosteronism [PA]) refers to a renin-independent increase in the secretion of aldosterone. This condition is principally a disease of adulthood, with its peak incidence in the fourth to sixth decades of life. More than 90% of cases of PA are due either to an aldosterone-producing adenoma, which accounts for around 35% of cases (30-40%), or to idiopathic hyperaldosteronism, which accounts for around 60% of cases (almost all of which are bilateral). About 1% of patients present with adrenocortical carcinomas that are purely aldosterone-secreting and are usually large at the time of diagnosis; 1% present with familial hyperaldosteronism, and 1% present with an ectopic aldosterone-producing adenoma or carcinoma.

The patient underwent abdomen and pelvis CT followed by MRI which showed a 4.9 cm right retroperitoneal mass superior to the right kidney that was anatomically inseparable from the right adrenal gland. The patient was evaluated by endocrinology who felt that that radiographic differential diagnosis for the adrenal mass included functional adenoma, non-functional adenoma, myelolipoma or “collision tumor” which is a combination of a lipoma and adenoma.

Patients with familial adenomatous polyposis are considered to be at risk for extra-intestinal tissue growth including the development of thyroid and pancreatic cancer, CNS tumors and various benign growths including adrenal adenomas. In one prospective study, patients with FAP were revealed to have a 4 times greater incidence (13%) of adrenal adenomas than expected in the general population (3%). It is notable though that most are considered to be clinically insignificant with most not overproducing hormones.

Endocrinology felt that because the patient was young (<45 years old) and had elevated aldosterone and elevated aldosterone-renin ratio, primary hyperaldosteronism was confirmed and he did not require adrenal vein sampling (as imaging alone will lead to 30% incorrect diagnosis which is more common in with older age—e.g., bilateral hyperplasia and nonfunctional incidentaloma). The patient was started on amiloride 5 mg po daily to help with hypokalemia.

Most antihypertensive meds do affect plasma renin and aldosterone; however, hydralazine, alpha blockers (prazosin, doxazosin, terazosin), and verapamil do not.

The patient was discharged on amiloride and potassium chloride supplementation. He underwent laparoscopic right adrenalectomy five months later with resolution of hypertension and hypokalemia.

Take home points:

1. **In patients with unexplained hypokalemia especially with hypertension, primary aldosteronism should be considered.**
2. **Workup for primary aldosteronism includes plasma renin and aldosterone and abdominal imaging.** While workup in place, use of hydralazine, alpha blockers (prazosin, doxazosin, terazosin), and verapamil can be used for blood pressure control. Potassium sparing diuretics such as triamterine and amiloride can be used.

**References**

were well positioned to work in concert with them with bidirectional referrals.

A number of key lessons came from our initial experience and rapid PDSA cycles. Top among these was the importance of real-time communication between clinic providers to inform care decisions, help establish rapport with our patients, and prevent repetition in the patient interview. Ideally the co-location of nursing staff, a social worker, and behavioral health and medical providers facilitates warm hand-offs. However, back-up communication methods were also employed: A coordinator to relay information as the team members became available (attending physician during resident clinic, a nursing coordinator otherwise), and a clipboard which “follows” the patient through their visit, providing essential data, such as the date of arrival, insurance status, housing situation, and urgent medical needs.

The logistics of scheduling were consistently our largest challenge, and standardized clinic workflows often needed to be adjusted or bypassed as a result. A new workflow for our scheduling/phone staff was created to triage the appropriate population. Staff had to be trained to bypass certain processes around insurance and salary verification to reduce barriers and allow rapid access. Generally behavioral health, social work, and medical providers have their own schedules with automated reminder calls to patients, which was also not practical. Finally, time with each provider varied greatly between patients, which created unusual gaps of downtime and rushes in normal scheduling. We addressed this through a combination of mixing in “regular” patient appointments, staggering medical providers’ schedules and blocking some appointments to effectively lengthen the provided appointment time.

Our experience largely matched our expectations. We noted a higher-than-average social services need frequently including food and housing instability, insurance confusion and lapses, and need for winter clothing. There was a high prevalence of mental health diagnoses, notably PTSD and depression, both pre-existing and hurricane-related. There was also acute and chronic medical complexity complicated by abrupt discontinuation of care without access to prior records. We met a great variety of medical needs including diabetic patients without medications, interrupted cancer treatment, and urgent surgical referrals, with the majority of patients seen for interruption of chronic disease management. Our nurses and behavioral health provider used validated questionnaires to screen for PTSD, anxiety, and depression and made many referrals for the evaluation and treatment of pre-existing and hurricane-related concerns. Eventually, our behavioral health provider created a weekly therapy group for those affected by the hurricane. Perhaps most importantly, our social worker screened and connected the displaced to much needed resources within the community during this first visit to our clinic.

Regarding training, we found that inclusion of residents was not only possible, but also helpful. The new population and rapid development of the new clinic provided learning experiences that were unique. As earlier referenced, having residents see patients also allowed the attending to remain available and thus facilitate warm handoffs and address flow problems. Our residents participated voluntarily when we had the clinic as an extra night session, but it would be equally feasible to have the clinic in place of one of their standard continuity sessions. Residents see fewer patients in a half-day than our clinic attendees, which may make their regular sessions more adaptable to this clinic model.

Looking back on the influx of patients subsequent to hurricane Maria, we feel the model of care we developed was far superior to our standard model. Our standard model would have been overwhelmed by the volume and need, stressing providers and staff and meeting fewer patient needs. Virtually every patient we encountered needed multiple team-member’s services if not all three, especially in the first few months of the crisis. In the unfortunate, if inevitable, situation of a similar disaster and patient influx, we will be pleased and ready to implement it again, and are looking to adapt this model to use with a high risk subpopulation of our existing clinic population.

Acknowledgements: We would like to thank Vivian Acevedo-Rivas and Sofia Morales-Navarro, members of our care management team who have worked tirelessly in the development of this clinic model and ongoing service to the displaced population of Puerto Rico.

References
“Eczematous dermatitis” was as close as I came to an intelligent comment. I looked out over the audience, and noticed several medical students deciding not to ask me for letters of recommendation.

After a sufficiently awkward silence, I was allowed to phone a friend—our most senior hospitalist—who offered “bullous pemphigoid” as if that should have been obvious. Most of us found this odd since the photographic evidence looked neither bullous nor pemphigoid, but my colleague assured us that we were witnessing a prodromal state.

The conference came to a perfunctory conclusion after that, as if someone had just blurted, “He’s dead. Bruce Willis is dead!” midway through *The Sixth Sense*.

All month, I’ve been teaching an elective for fourth-year medical students called, “Narrative, Literature, and the Experience of Illness.” When one of the students remarked that she found some of the selections a bit dreary, I wanted to point out that we were exploring illness, not the satisfaction of health and vitality.

I went home that night and laid down on the floor and let my girls land pile-drivers against my listless body. I’ll admit—grappling with big existential questions on a daily basis can be kind of exhausting. Sometimes, it feels right just to lie there and let a two year-old treat your body like a trampoline.

On top of everything, my wife and I have been house hunting. Our current house is so small we had to divide Isla’s birthday guests between two parties on separate weekends (one bunch of resilient helium balloons; two different cakes). Mainly, we’re looking for a structure large enough to place the two year old’s incessant demands for fruit snacks and “wheely cheese” just out of earshot. That—and we’re looking for some taller trees.

I met a man last month who’d been sent from another hospital to confirm a growing suspicion that he had terminal cancer. I went to his room just before discharge armed with “wish statements” and expecting perhaps a tearful goodbye. Instead, we talked about the native trees of West Virginia; how much he was looking forward to walking among them.

On Tuesday, I signed my service out to a friend and opened the back door to find the temperature was touching 60. The dwarf willow that stretches across our tiny lot was still naked, but I could tell she was thinking about a change. From the patch of dirt that Isla and I had stuffed with tulip bulbs last fall I saw a few tentative shoots beginning to rise. But winter in Pittsburgh is never fully in the rearview until at least mid-May, so I covered the tulips with burlap before stepping back inside to fulfill my promise to write.