# VOL. 45 • NUMBER 9 • SEP 22 SGIN Forum Society of General Internal Medicine

**MEDICAL EDUCATION: PART I** 

## BUILDING THE TEAM: RESIDENTS AS CLINICAL COACHES

Margot E. Cohen, MD, MSEd; Caitlin B. Clancy, MD, MSHP; D. Rani Nandiwada, MD, MS; Keith Hamilton, MD; Peter H. Yen, MD

Dr. Cohen (margot.cohen@pennmedicine.upenn.edu) is an assistant professor of clinical medicine in the section of hospital medicine at the Perelman School of Medicine at University of Pennsylvania and the co-director of the Internal Medicine Clerkship for the Department of Medicine. Dr. Clancy (Caitlin.clancy2@pennmedicine.upenn.edu) is an assistant professor of clinical medicine in the division of pulmonary and critical care medicine at the Perelman School of Medicine and is the director of curricular analysis, innovation, and technology for undergraduate medical education, Department of Medicine. Dr. Nandiwada (rani.nandiwada@pennmedicine.upenn.edu) is an associate professor of clinical medicine in the division of general internal medicine at the Perelman School of Medicine and the director of the Internal Medicine Residency Medical Education and Leadership Track. Dr. Hamilton (keith.hamilton@pennmedicine.upenn.edu) is an associate professor of clinical medicine and the division of infectious diseases at the Perelman School of Medicine and the director of undergraduate medical education, Department of Medicine. Dr. Yen (peter.yen@pennmedicine.upenn.edu) is an assistant professor of clinical medicine in the section of hospital medicine at the Perelman School of Medicine and the associate director of coaching for the Department of Medicine in the section

## Introduction

ndividualized coaching that utilizes direct observation is an effective strategy to remediate struggling learners Land facilitate growth of all learners.<sup>1</sup> Coaching utilizes formative assessment and iterative feedback centered around individualized learner goals in order to promote ongoing growth of the trainee. While coaching is gaining interest and attention within the realm of medical education, training in coaching theory and techniques is often limited and focused primarily on faculty educators and remediation of trainees rather than being approached as a universal strategy.<sup>2</sup> Moreover, while best practice dictates separation of evaluator and coach roles, this distinction is difficult in practice. Given the growing role of coaching as a key facet of medical education, it is important that residents, particularly those pursuing medical education careers, have improved knowledge of and comfort with effective coaching techniques.

In internal medicine, dedicated resident teaching rotations provide exposure to medical education theory and opportunities to develop teaching skills. Few curricula have addressed dedicated clinical coaching training for residents and, to the authors' knowledge, none describe dedicated experiential coaching and direct observation training for internal medicine residents to prepare them for careers in medical education.<sup>3</sup> With this in mind, we redesigned an existing internal medicine senior resident teaching rotation to achieve three parallel aims:

- 1. improve senior resident familiarity and comfort with core principles of coaching in medical education;
- 2. provide opportunities for resident development of skills in coaching through direct observation;
- 3. increase non-evaluative feedback opportunities for internal medicine clerkship students.

## Intervention

In July 2020, the authors redesigned a two-week internal medicine resident teaching elective at a single large, urban academic institution. Senior internal medicine and medicine-pediatrics residents are invited to participate in continued on page 12

#### CONTENTS

1.	Medical Education: Part I1
2.	From the Editor2
3.	President's Column3
4.	From the Society4
5.	Leadership and Healthcare Administration5
6.	Best Practices6
7.	Medical Education: Part II7
8.	Morning Report8

#### **SOCIETY OF GENERAL INTERNAL MEDICINE**

#### OFFICERS

President

LeRoi S. Hicks, MD, MPH, FACP | Wilmington, DE LeHicks@ChristianaCare.org

#### **President-Elect**

Martha S. Gerrity, MD, MPH, PhD, FACP | Portland, OR Martha.Gerrity@va.gov

#### **Past-President**

Monica L. Lypson, MD, MHPE | New York, NY mll2215@cumc.columbia.edu

#### Treasurer

Patrick G. O'Connor, MD, MPH, MACP | New Haven, CT patrick.oconnor@yale.edu

#### Secretary

Gail Daumit, MD, MHS | Chevy Chase, MD gdaumit@jhmi.edu

#### Secretary-Elect

Arleen F. Brown, MD, PhD, FACP | Los Angeles, CA abrown@mednet.ucla.edu

#### **COUNCIL MEMBERS**

Vineet Chopra, MD, MSc | Ann Arbor, MI vineetc@med.umich.edu Marshall Fleurant, MD | Atlanta, GA docfleurant@gmail.com Cristina M. Gonzalez, MD, Med | Bronx, NY crgonzal@montefiore.org Margaret Lo, MD | Gainesville, FL margaret.lo@medicine.ufl.edu Brita Roy, MD, MPH, MHS | New Haven, CT brita.roy@yale.edu Eleanor (Bimla) Schwarz, MD, MS | Sacramento, CA ebschwarz@ucdavis.edu

#### **EX-OFFICIO COUNCIL MEMBERS**

Chair of the Board of Regional Leaders Thomas Radomski, MD | Pittsburgh, PA radomskitr@upmc.edu

Co-Editor, Journal of General Internal Medicine Steven M. Asch, MD, MPH | Palo Alto, CA sasch@stanford.edu

#### Editor, SGIM Forum Tiffany I. Leung, MD, MPH, FACP | Maastricht, NL Editor.SocietyGIMForum@gmail.com

ACLGIM President Mark A. Earnest, MD, PhD | Aurora, CO mark.earnest@cuanschutz.edu

Deputy Chief Executive Officer Kay Ovington, CAE | Alexandria, VA ovingtonk@sgim.org

Chief Executive Officer Eric B. Bass, MD, MPH, FACP | Alexandria, VA basse@sgim.org

Director of Communications and Publications Francine Jetton, MA, CAE | Alexandria, VA jettonf@sgim.org

## FROM THE EDITOR

## SEA, SKY, AND THE SPACES BETWEEN AND BEYOND

Tiffany I. Leung, MD, MPH, FACP, FAMIA, Editor in Chief, SGIM Forum

e don't spend nearly as much time in nature or even simply outdoors-as we should. During summer break, in a moment of child-like curiosity, I found joy in the simplicity of watching the stereotyped locomotion of a caterpillar across a rock, moving from flat line, pulling its backside forward to make an omega shape of its body, then extending its front end forward into flat line again, having successfully advanced itself a half-centimeter forward at a time. This tiny life moved onward against the backdrop of a gentle creek of cool water, runoff from a nearby mountain. During another part of summer break, I spent long-overdue time on an out-of-country family vacation. A black flag next to the oceanside signaled dangerous waters as the rhythmic smashing of ocean waves against the pebbly beach were both a source of wonder and fear.

Shinrin-yoku (literally translated from Japanese as forest bathing) involves "bathing in the forest atmosphere, or taking in the forest through our senses."<sup>1</sup> Taking a walk in a natural rather than an urban environment seems to offer affective benefits, such as decreased anxiety, rumination, and negative affect, and preservation of positive affect.<sup>2</sup> Even just looking at photos of natural rather than urban landscapes seems to offer some positive emotional influence.<sup>3</sup> A correlation has also been observed between municipalities with larger proportions of green space (e.g., grass, forests, or parks) and reduced suicide mortality in those municipalities compared to those with less green space.<sup>4</sup> The posited mechanism for these various benefits is that the experience of nature activates the parasympathetic nervous system in ways that reduce stress and autonomic arousal.<sup>2</sup> Getting a regular Nature Rx<sup>5</sup> certainly seems like a prescription worth taking when our work lives as general internists and trainees have overflowing agendas to address.

In this issue of SGIM *Forum*, LeRoi Hicks, SGIM President, and Eric Bass, SGIM CEO, share important SGIM considerations regarding organizational priorities for the coming year, with special focus in the President's column relating to the legality of abortion in each U.S. state and that impact on future SGIM meeting plans. Margot Cohen and colleagues write about their experiences of training residents as coaches of clerkship students continued on page 13

## ON NATIONAL MEETINGS IN STATES RESTRICTING ABORTION RIGHTS

LeRoi S. Hicks, MD, MPH, FACP, President, SGIM

"I am unsure how to respond to the numerous states that have enacted policies counter to our organizational mission to support improved human health and well-being. Between legislative efforts to prohibit equitable access to care for the LGBTQ+ community and the devastating effects of the Supreme Court's decision to overturn Roe v. Wade, there are many states in which our members find it objectionable to hold annual meetings. I am concerned that some society members feel our continued presence in these states for meetings may signal indifference to the effects their policies have on our patient populations and on the rights of the physicians we represent."



**G** Florida, Florida, Florida.... it's all about Florida for these two." Susan, then my fiancé, and I sat there bleary-eyed as we watched the late Tim Russert describe the importance of the pending election recount in Florida in early November 2000. The nation waited on edge to hear

which presidential candidate would win the Electoral College. Over the last two decades, Susan and I would frequently look at each other and laugh as we said "Florida, Florida, Florida" each time there was a new story about a bizarre event or upon hearing a funny anecdote about a Florida resident.

Days before writing this column, I found myself thinking back to those three words as I read postings on SGIM connect. One of our members from New England posted what seems a reasonable question-should our leadership consider withdrawing from Florida as a host site for the annual meeting given its restrictions on reproductive care? That member pointed to SGIM previously holding annual meetings in states whose legislative bodies had recently enacted polices clearly counter to our values and stated that at the time the conference was too near to the actual date to pull out. However, we now have an opportunity to consider relocating our planned 2025 annual meeting in Hollywood, Florida. As is usually the case when an issue of importance is raised through an electronic listserv, replies were generated immediately by a few SGIM members and listserv participants. Respondents ranging from assiscontinued on page 14

#### SGIM Forum

Editor In Chief	Managing Editor	Past Editor In Chief
Tiffany I. Leung, MD, MPH, FACP, FAMIA	Frank Darmstadt	Joseph A. Conigliaro, MD, MPH
Editor.SocietyGIMForum@gmail.com	frank.darmstadt@ymail.com	jconigliaro2010@gmail.com
Editorial Board		
Yousaf Ali, MD, MS	Shanu Gupta, MD, FACP	Susana Morales, MD
Yousaf_Ali@URMC.Rochester.edu	shanugupta@usf.edu	srm2001@med.cornell.edu
Seki Balogun, MD, FACP	Tracey L. Henry, MD, MPH, MS	Shobha L. Rao, MD
sab2s@virginia.edu	tlhenry@emory.edu	shobha_rao@rush.edu
Lauren Block, MD, MPH	Christopher D. Jackson, MD, FSSCI	Jorge A. Rodriguez, MD
lblock2@northwell.edu	cjacks67@uthsc.edu	jarodriguez1@partners.org
Alfred Burger, MD, MS	Shivani Jani, MD	Gaetan Sgro, MD
aburger.md@gmail.com	sjjani@usf.edu	gaetan.sgro@va.gov
Ricardo Correa, MD, EdD, FACP	Francine Jetton, MA, CAE	Elisa Sottile, MD, FACP
riccorrea20@hotmail.com	jettonf@sgim.org	Elisa.Sottile@jax.ufl.edu
Michele Fang, MD	Eric Kutscher, MD	David Walsh, MD
michele.fang@uphs.upenn.edu	eric.kutscher@nyulangone.org	dawalsh@augusta.edu
Maria Gaby Frank, MD, FACP	Megan McNamara, MD, MS	
maria.frank@dhha.org	Megan.Mcnamara@va.gov	
Kittu Jindal Garg, MD	Somnath Mookherjee, MD	
jindal.kittu@gmail.com	smookh@u.washington.edu	

The SGIM Forum, the official newsletter of the Society of General Internal Medicine, is a monthly publication that offers articles, essays, thought-pieces, and editorials that reflect on healthcare trends, report on Society activities, and air important issues in general internal medicine and the healthcare system at large. The mission of the Forum is to inspire, inform, and connect—both SGIM members and those interested in general internal medicine (clinical care, medical education, research, and health policy). Unless specifically noted, the views expressed in the *Forum* do not represent the official position of SGIM. Articles are selected or solicited based on topical interest, clarity of writing, and potential to engage the readership. The Editorial staff welcomes suggestions from the readership. Readers may contact the Editor, Managing Editor, or Associate Editors with comments, ideas, controversies, or potential articles. This news magazine is published by Springer. The SGIM *Forum* template was created by Howard Petlack.

## Q & A WITH SGIM'S CEO AND PRESIDENT ABOUT OUR PRIORITIES FOR 2022-23

Eric B. Bass, MD, MPH; LeRoi S. Hicks, MD, MPH

Dr. Bass (basse@sgim.org) is the CEO of SGIM. Dr. Hicks (lehicks@christianacare.org) is the President of SGIM.

## EB: How did the SGIM Council prepare for the June strategic planning retreat this year?

H: As in previous years, we asked SGIM's committees and commissions to submit plans for addressing their top three priorities for the coming year. We asked the committees and commissions to give special attention to how they can help create a more diverse, equitable and inclusive professional home for our members and integrate anti-racism work on the policies, procedures, and structures that perpetuate historical and ongoing injustices. We also asked the committees and commissions to consider how they could contribute to growth of our learning management system, GIMLearn.<sup>1</sup>

The Council prepared for the retreat by conducting an analysis of strengths, weaknesses, opportunities, and threats (SWOT) related to our main organizational goals:

- foster the development of general internal medicine (GIM) leaders in academic and other settings;
- 2) promote scholarship in person-centered and population-oriented approaches to improving health;
- 3) advocate for our vision of a just health system that brings optimal health for all people; and
- 4) ensure organizational health including a thriving SGIM staff.

As part of that SWOT analysis, we examined how our commitments relate to the goals. We also surveyed Council members about activities and services they believe offer highest value to members.

## EB: What did you learn from performing a SWOT analysis of SGIM's goals?

LH: SGIM has many activities that address the goal of promoting scholarship in person-centered and population-oriented approaches to improving health. In addition to national and regional meetings where innovative scholarship is presented, JGIM is a core strength that has a central role in addressing this goal. A relative weakness is that we need more activities focused on research methods and training. The corresponding threat is that members can go elsewhere to meet this need, but we see opportunities to advance this goal by strengthening partnerships with other organizations, such as the Veterans Affairs, with whom we've launched a new curriculum on partnered research.<sup>2</sup> To foster development of GIM leaders in academic and other settings, we have strong career development programs that capitalize on the expertise of experienced leaders in the Society. One weakness is that we need a better way to identify and engage emerging leaders. The biggest threat relates to the competing demands on members, especially those from under-represented in medicine groups. We see an opportunity to address the weakness by engaging our regional leaders in programs developed by our Association of Chiefs and Leaders in General Internal Medicine (ACLGIM).

The greatest strength for achieving our goal of ensuring organizational health stems from the members and staff who believe in SGIM's mission and core values. However, we need to invest more in supporting the professional development of our staff and do more to engage former leaders and diversify revenue. We are making progress on the latter through the Forging Our Future Program that was launched in 2020.<sup>3</sup> In the coming year, we will be working with the Annual Meeting Program Committee and other groups to develop new opportunities for engaging past presidents and other members who held leadership positions in the past.

To advocate for our vision of a just health system that brings optimal health for all people, we have benefitted from many strong long-standing relationships, and we have continued to strengthen our relationships with other organizations.<sup>4</sup> A weakness is that we must work within organizational resource and individual time constraints. To meet the threats from changing political winds and economic conditions, we need to engage rising stars as well as members in high places in other organizations.

## EB: What activities and services do Council members view as having greatest value to members?

LH: When we surveyed Council members in May 2022, 100% indicated that networking had high value to members. More than 50% of Council members also rated several other activities or services as having high value to members, including: regional and national meetings, opportunities to present one's work, opportunities to demonstrate leadership, awards demonstrating recognition in the field, mentorship, GIM-focused publications, *continued on page 15* 

## PHYSICIAN AMBASSADORS: AN INNOVATIVE APPROACH TO SUPPORT NEWLY HIRED ACADEMIC FACULTY

Hussain Khawaja, MD; Sarita Warrier, MD; Rebekah Gardner, MD

Dr. Khawaja (hussain\_khawaja@brown.edu) is assistant professor of medicine. Dr. Warrier (sarita\_warrier@brown.edu) is associate professor of medicine. Dr. Gardner (rebekah\_gardner@brown.edu) is associate professor of medicine. All are at The Warren Alpert Medical School of Brown University.

Physician turnover is expensive, disruptive, and demoralizing.<sup>1, 2</sup> One way to counter physician turnover is through better support of newly hired physicians. Many practices have an onboarding process, run by human resources, which focuses on logistics, such as credentialing and benefits enrollment. Other practices, particularly in academic centers, have mentorship programs that can foster career advancement and scholarship. While these approaches may focus on immediate needs (in the case of onboarding) or longer-term needs (in the case of mentoring), neither are designed to support physicians through the first few months of a new position. This initial period can be overwhelming, with a potential for low morale and reduced productivity.

Few published models exist for onboarding clinicians.<sup>3-5</sup> Recognizing the opportunity for improved support, we created a framework to help new faculty at an academic medical center feel prepared to start clinical work, supported by their respective divisions, and connected to a colleague who could act as a point person for questions and assistance. The model, called the *Physician Ambassador Program*, was piloted in a division of general internal medicine (DGIM). We describe the program, its impact, and key lessons learned for other academic generalists seeking to start similar programs.

## **Program Description**

We initially implemented the Physician Ambassador Program in 2016. The DGIM division director assigned a faculty member to lead the program and allocated administrative support. The program leader and the physician ambassadors each received extra continuing medical education (CME) funds to acknowledge the time required to participate and the importance of the program to the division. At the completion of each program cycle, the program leader collected feedback from ambassadors and new hires; the leader met annually with the division director to review the prior year's program and to make changes for the coming year. Each program cycle started when an offer letter was signed and ran until six months after a new faculty's start date. First, the new hire was paired with an existing faculty member, based on the individual's role and academic or administrative interests. Second, the ambassadors received an orientation to explain the program's purpose, time commitment, and tasks. Third, ambassadors reached out to their assigned new hires prior to their start dates to introduce themselves and to describe the program. Throughout the six-month period, the program leader sent separate e-mails to ambassadors and new hires to remind them to meet regularly and to elicit concerns (see Table).

## **Program Goals**

At its core, the Physician Ambassador Program was designed to help new faculty feel comfortable and supported in their new position. It complemented an existing onboarding program run by human resources that focused on tasks such as state medical licensure and compliance training. A key component of the program was ensuring new hires had a specific colleague to act as a point person for questions and concerns. To facilitate these exchanges, ambassadors met with their new hires at set intervals, in addition to ad hoc communication. The purpose of these meetings was 1) to provide a predictable venue for questions, 2) to ensure division-specific priorities were transmitted uniformly, and 3) to allow new hires time to discuss the challenges of starting a new job. Ambassadors were provided with a list of optional additional discussion topics. The ambassador position was not intended to be that of a mentor, although it has evolved into a mentoring role for some pairs.

## **Program Assessment**

We collaborated with human resources to conduct an assessment after the program's first three years. An anonymous survey was administered in February 2019 continued on page 10

## DEVELOPING EFFECTIVE BEHAVIORAL RECOMMENDATIONS TO ADDRESS VACCINE HESITANCY IN MINORITY COMMUNITIES

Medha Reddy, BA; Mill Etienne, MD, MPH, FAAN, FAES

Ms. Reddy (mreddy3@student.nymc.edu) is a third-year medical student at New York Medical College School of Medicine. Dr. Etienne (Mill\_Etienne@nymc.edu) currently serves as the vice chancellor for diversity and inclusion, associate dean for student affairs, and associate professor of neurology and medicine at New York Medical College School of Medicine.

he COVID-19 pandemic has disproportionately burdened minority communities.<sup>1</sup> Despite this, the rates of vaccine hesitancy among African-American (41.6%, 95% CI:34.4-48.9%) and Hispanic (30.2%, 95% CI:23.2 -37.7%) adults are notably higher than that of American adults overall (26.3%, 95%) CI:17.3-36.4%).<sup>1</sup> A recent study found that major predictors of vaccine hesitancy in African Americans and Hispanics included medical mistrust, history of racial discrimination, exposure to misinformation, and concerns about the vaccine's safety.<sup>1</sup> Though, overall, rates of COVID-19 infection are notably lower than they were at the peak of the pandemic, physicians must remain prepared to discuss COVID-19 vaccination with patients from a diverse array of backgrounds to ensure that this trend prevails in all communities, especially those historically marginalized by the medical profession.<sup>1</sup>

While public health campaigns have attempted to address these concerns through awareness campaigns and expanded collaborations with trusted community organizations, physician willingness and preparedness to discuss the vaccine in their clinical practice is needed to truly make strides on the deep roots of mistrust planted by the medical community's injustices against minorities.<sup>2</sup> In response, we utilized the following core principles of behavioral economics to develop a novel approach to vaccine hesitancy to offer physicians more specific recommendations on how to broach this important conversation, particularly in patients from communities that have been historically marginalized by medicine.

1. Emphasize Patient Autonomy: Though behavioral economics contends that public health programs should adopt "opt-out" vaccination schemes, the discipline's principles suggest that, at the level of the individual physician, using presumptive language to establish vaccination as the default (i.e., "At the end of this visit, I will administer your COVID-19 vaccine") may create an apparent loss of patient autonomy in both whether to get vaccinated and where to receive the vaccination.<sup>3, 4</sup> This regression to the paternalistic model of medicine risks reinforcing medical mistrust.<sup>5</sup>

- 2. Prime patients to feel welcome to talk about race: Prior to providing educational counseling about the vaccine, it is critical that physicians reinforce that past injustices and racism are justified reasons for mistrust.<sup>4</sup> In a late 2020 nationally representative survey on vaccine hesitancy in the African-American community, a participant encapsulated the importance of this by stating, "[We need to hear] 'We understand why you're apprehensive, we understand that these things have happened in the past to your communities and other communities. What we want to show you now is you will be able to get the vaccine for free, and in addition, you will have access to any follow-up care you might need...' "<sup>4</sup>
- 3. Leverage social forces: Findings on prosocial forces and the positive framing suggest it may be beneficial to point out the reduced risk of transmitting COVID-19 to members of the patient's support system.<sup>2, 3</sup> However, physicians should also avoid drawing attention to how their choice to get vaccinated may be perceived by members of their support network, as patients may fear ostracization and isolation from their support network if a majority of this group is also unvaccinated.<sup>3</sup> If this concern is raised, physicians should maintain positive messaging by identifying specific community outreach initiatives that are gradually shifting attitudes towards vaccination in the region, the overall high rates of vaccination in the country and world, and the protections vaccination would confer to the members of the patient's support system (i.e., "There have been over 500 million doses of the vaccine given in the United States so far with minimal side effects"; "Getting vaccinated will protect both you and your loved ones").<sup>2,4</sup>

continued on page 11

## THE HEALTHCARE PARADOX: OUR QUEST TO HEAL CLIMATE-RELATED DISEASE

Stacie R. Schmidt, MD

Dr. Schmidt (srschmi@emory.edu) is an associate professor of internal medicine at Emory University School of Medicine.

C limate change impacts care access and contributes to worse health among vulnerable populations. While the SGIM *Forum's* March 2021 issue was devoted to climate change and health, one issue remains unaddressed—the fact that health care is responsible for more than 8% of our nation's total carbon emissions.<sup>1</sup> These emissions contribute to exacerbations of the very health issues and disparities we as generalists aim to solve. Thus, it is imperative that within our own profession, we take necessary steps to reduce the carbon footprint of our health systems.

### The Health Sector's Impact on Climate Change

In 2012, U.S. hospitals ranked second in use of fuels, among all commercial U.S. buildings.<sup>2</sup> The U.S. healthcare sector (including computer usage, use of operating and procedure rooms throughout the night, air conditioning, and transportation to provide supplies) accounts for 25% of global healthcare emissions.<sup>1</sup> This is due not only to direct emissions caused by operations within health systems but also the result of purchases made for heating and cooling these facilities and the fact that the healthcare supply chain relies heavily on goods transported from other regions of the United States. Importantly, the National Wildlife Federation's National Report Card on Environmental Performance and Sustainability in Higher Education found that transportation is a significant cause of carbon emissions around university campuses and academic health centers, creating a major impetus to "reduce congestion and pollution associated with travel" as a means of "improving community relations and air quality."3

## A Negative Cycle that Could Worsen Health Disparities

The healthcare sector is negatively affected by the very climate changes that result from these emissions, causing a vicious negative feedback cycle. Natural disasters such as hurricanes, tornadoes, and flooding result in power outages, infrastructure damage, medical supply shortages, and evacuations within health systems, thereby limiting access to and provision of healthcare services within the very communities affected by these catastrophes. What's more, these financial losses are often translated into higher costs for payers and patients.<sup>2</sup>

The effects of climate change accentuate racial, ethnic, and socioeconomic gaps in access to and quality of treatment. Although poor individuals and minorities are disproportionately vulnerable to the health effects of climate change, they contribute the least to greenhouse gas emissions. When compared to non-Hispanic Whites, African Americans are 52% more likely to live in places at risk for heat-related dangers, non-Hispanic Asians are 32% more likely, and Hispanics 21% more likely.<sup>2</sup> This approximates disparities noted during the COVID-19 pandemic and highlights how changes to existing infrastructure and policies are necessary to mitigate the health disparities that occur during public health emergencies.

## Addressing Air Pollution Caused by Transportation of Supplies (and Patients) through Health Systems

Health inequities are also caused by environmental injustices. For example, highway air pollution is higher in communities of color, due to our nation's history of erecting highway systems that disrupt and invade communities of color.<sup>4</sup> Given our heavy use of transportation to provide supplies and transport patients, health systems should consider how their employees, patients, and visitors travel to healthcare sites. Use of electric fleets could be considered; in fact, the University of Georgia has secured grants to electrify much of their bus fleet. Collaboration between fleet managers of health systems may promote sharing of best practices. Additionally, higher education institutions often have endowments for future construction of buildings; those in charge of endowment projects might assist with the implementation of Sustainable Charging Systems on campus.

### Changes to Local Health System Infrastructure

Local hospitals could address innovative changes internally, which would foster their own resilience amidst climate-related events affecting patient populations, and return on investment in the form of downstream financial savings. Some medical centers, for example, have installed solar panels on their hospital roofs to serve as an on-site generator during climate-related power outages *continued on page 15* 

## PSYCHOGENIC NON-EPILEPTIC SEIZURES: FORMULATING A DIFFERENTIAL DIAGNOSIS

Phillip M. Johansen, BS; Denis Babici, MD; Karan Rajalingam, BS; Marc A. Swerdloff, MD

Mr. Johansen (pjohansen2019@health.fau.edu) is a fourth-year medical student at the Charles E. Schmidt College of Medicine at Florida Atlantic University. Dr. Babici (dbabici@health.fau.edu) is a second-year neurology resident at the Charles E. Schmidt College of Medicine at Florida Atlantic University. Mr. Rajalingam (krajalingam2020@health.fau.edu) is a third-year medical student at the Charles E. Schmidt College of Medicine at Florida Atlantic University. Dr. Swerdloff (Mswerdloff@baptisthealth.net) is attending neurologist at the Marcus Neuroscience Institute at Boca Raton Regional Hospital and Clinical Affiliate Associate Professor at the Charles E. Schmidt College of Medicine at Florida Atlantic University.

## **Case Presentation**

32-year-old female with generalized anxiety and major depressive disorder presented to the emergency department after multiple witnessed seizure episodes. Upon arrival, she was hemodynamically stable and afebrile, with vital signs within normal limits. Initial laboratory tests were unremarkable. Physical examination revealed an unresponsive, well-nourished female with her eyes closed, jaw clenched, and arms and legs rigidly extended at 30 degrees to the horizontal. She received lorazepam, levetiracetam, and diphenhydramine which relaxed her jaw and extremities and ended the event. Twenty minutes later, she suddenly extended her arms and legs again, resembling a dystonic episode. This episode was terminated with the same medications. A computed tomography (CT) and magnetic resonance imaging (MRI) of the head were unremarkable. Electroencephalography (EEG) was negative for epileptiform discharges.

When able to speak, she denied a personal or family history of seizures, head trauma, or drug use. She denied a history of autoimmune, vascular, or neoplastic disease. She was on no home medications. She revealed that two days ago while at talk therapy, she disclosed an episode of prior sexual abuse, which was emotionally painful. In the ensuing hours, she experienced intermittent eyelid twitching followed by shaking of the lower extremities. Over the next day, the leg shaking increased in intensity and spread to the arms, prompting her to seek medical attention.

Over the course of her three-day hospitalization, she had multiple episodes, each one associated with a different rigid posture. These were captured on continuous video EEG and revealed no epileptiform discharges. Repeat laboratory testing was normal. She was diagnosed with PNES and was discharged home to be followed by psychiatry and neurology.

## Discussion

The aim of the present report is to highlight the difficulties in formulating a differential diagnosis for PNES and discuss the psychiatric and neurological aspects of its treatment. The exact number of people suffering with PNES is unknown due to the difficulty in establishing a diagnosis. The differential diagnosis is varied and includes neurophysiological disorders (e.g., epilepsy), movement disorders (e.g., acute dystonia and tic disorders), cardiovascular disorders (e.g., vasovagal syncope), and psychiatric disorders (e.g., PNES or schizophrenia). Affected patients are at an increased risk of iatrogenic harm (see below).

PNES are seizure-like events characterized by behaviors, movements, sensations, or states of awareness that lack an organic, neurobiological pathology. PNES are thought to be somatic manifestations of underlying psychological unrest,<sup>1</sup> with most patients reporting a history of early psychological trauma, such as sexual abuse.<sup>2</sup> The typical PNES semiology is characterized by transient signs of altered consciousness with shaking movements, resembling epileptic seizures. PNES attacks tend to be asymmetrical and asynchronous, have a longer duration, non-stereotyped movements, and may respond to bystander intervention. Pelvic thrusting and back arching have been observed frequently in PNES; however, it may be seen in epileptic seizures. Side-to-side head and body movements with eye and mouth closure are more likely observed with PNES. Epileptic seizures more commonly manifest lateral tongue biting and urinary incontinence. Preserved awareness during an ictus usually associated with loss of consciousness, such as bilateral extremity involvement, is concerning for PNES. Retained ability to visually track with their eyes, fend off or protest painful stimuli, or recall the event afterwards continued on page 9

and lack of post-ictal confusion are factors in favor of PNES.<sup>3</sup> The teddy bear sign, where an adult patient keeps a stuffed animal in the hospital bed, may also be seen in PNES. (See Table)

PNES, in addition to resembling epileptic seizures, may mimic acute dystonia as in our case. These patients often suffer from psychiatric comorbidities and are exposed to dystonia causing anti-psychotic agents. Vasovagal syncope is considered when patients lose consciousness, but it is usually preceded by nausea, gradual constriction and loss of vision, and shorter ictal duration than PNES.<sup>3</sup>

Use of continuous video recording is helpful to analyze and capture the episodes reported by the patient and observers. Video EEG is used to support a PNES diagnosis if no epileptiform features are seen. When multiple seizure types are reported, each type should be captured on video EEG since PNES is comorbid in up to 30% of epileptic patients. When video EEG is not available, the presence of features noted in the table will help diagnose PNES. Surface recording may not always record deep sulcal epileptic foci, so the overall features of the events are important to support a diagnosis.

In our patient, acute dystonia was suspected while observing the posture of her limbs, trismus, and psychiatric comorbidity. Supporting this, her symptoms improved after administration of diphenhydramine. A recurrent spell that was dissimilar to the first spell (non-stereotypy) changed our diagnosis to PNES.

Patients with PNES are difficult to diagnose and manage. Their condition may be misdiagnosed or attributed to other etiologies. Multiple treating physicians may offer different diagnoses to the same patient.<sup>1</sup> This increases iatrogenic harm from polypharmacy, emergency treatment

	Epileptic Seizures	Psychogenic Non-Epileptic Seizures (PNES)
Duration	Short (<5 minutes)	Longer (up to 20 minutes), fluctuating and inconsistent
Ocular Activity	Partially open, "rolled back"	Variable: eye closure, eyes open and able to track motion
Head Movement	Minimal	Side-to-side motion, mouth closure
Body Movement	* Tonic-clonic motor activity, focal limb movements, automatisms	Asymmetric, asynchronous, pelvic thrusting, back arching, bilateral limb movements
Consciousness	Unconscious, prolonged post-ictal period	Preserved awareness, respond to painful stimuli, minimal post-ictal confusion
Other	Loss of continence, tongue biting	Teddy-bear sign

### Semiology of Epileptic v. Non-Epileptic Seizures

\* Depending on seizure type and location

leading to intubation, and hospital admissions.<sup>4</sup> A benzodiazepine is frequently used to break PNES events. However, their overuse increases the risk of respiratory depression and withdrawal seizures upon discontinuation. Unlike patients with epileptic seizures, patients with PNES usually protect their airways, avoiding unnecessary intubation that increases risk of pulmonary infection and injury to the upper airway.

There are no established treatment guidelines for PNES. Treatment should focus on psychiatric comorbidities and minimize the use of anticonvulsants unless comorbid epilepsy is present. Once the diagnosis is made, it should be explained with great care to the patient. Avoid multiple anticonvulsants to reduce PNES events unless they are used for mood stabilization or other psychiatric reasons. Cognitive behavioral therapy is a first-line therapy, but evidence of its efficacy is lacking.<sup>2</sup>

## Conclusion

PNES is a challenging diagnosis but should be considered in a patient with intractable seizures. It will guide future treatment options with the goal to decrease hospitalization and iatrogenic injury.

#### References

- Asadi-Pooya AA. Psychogenic nonepileptic seizures: a concise review. *Neurol Sci.* 2017;38(6):935-940. doi:10.1007/s10072-017-2887-8.
- Bodde NM, Brooks JL, Baker GA, et al. Psychogenic non-epileptic seizures—definition, etiology, treatment and prognostic issues: a critical review. *Seizure*. 2009;18(8):543-553. doi:10.1016/j. seizure.2009.06.006.
- 3. Parra J, Iriarte J, Kanner AM. Are we overusing the diagnosis of psychogenic non-epileptic events? *Seizure*. 1999;8(4):223-227. doi:10.1053/seiz.1999.0285.
- Asadi-Pooya AA, Emami M, Ashjazadeh N, et al. Reasons for uncontrolled seizures in adults; the impact of pseudointractability. *Seizure*. 2013;22(4):271-274. doi:10.1016/j.seizure.2013.01. 010.

SGIM

to all physicians in the Department of Medicine hired in the preceding two years. The survey asked the extent to which physicians agreed with the following: I felt prepared to start as a new attending physician, I felt supported by my division during the first six months of my job, the first six months went smoothly, and the onboarding process works well. Physicians were also asked if there was a specific physician assigned to help them transition to their new position.

We used descriptive statistics to determine the proportion of respondents who "agreed" or "strongly agreed" with each of the statements. To compare the experience of faculty who had participated in the Physician Ambassador Program to those who had not, we compared respondents within DGIM to those in other divisions (non-DGIM) because only DGIM faculty had access to the program at the time of the survey.

Thirty of 63 physicians responded to the survey, for a response rate of 48%. About half the respondents were from DGIM (47%). Most respondents agreed that they felt prepared to start as a new attending physician (90%) and that the first six months went smoothly (93%). All agreed they felt supported by their division. No differences were noted between DGIM and non-DGIM respondents for those questions. A smaller proportion overall agreed the onboarding process works well (70%), with 79% of DGIM faculty in agreement versus 63% of non-DG-IM faculty (p=0.34). A significantly higher proportion of DGIM faculty responded "yes" that there was a specific physician from their division assigned to help them transition to their new position compared to non-DGIM faculty (79% versus 38%, p=0.02).

#### **Reflections on the Program**

From the initial pilot in 2016 to the present, the Physician Ambassador Program has helped newly hired DGIM faculty feel connected and

#### **Physician Ambassador Program Components**

- Ambassadors participate in an orientation and are paired with new hires with similar roles and interests.
- Ambassadors reach out to their new hires, prior to their start, to welcome them, describe the ambassador role, field any questions, and set up times to meet during their first month.
- Ambassadors meet with their new hires on their first day to show them around, take them to lunch with colleagues (reimbursed by the division), and answer questions.
- Ambassadors check in via text or email or meet in person with their new hires at least weekly for the first month, spacing interactions out as appropriate for the ensuing five months.
- New hires reach out as needed to their ambassadors in between scheduled check-ins.
- Ambassadors review a list of optional topics with their new hires to prompt additional discussion.
- Ambassadors and new hires provide structured feedback to the program leader at the end of the six-month period to inform changes to the program.

supported. Four components have contributed to the program's ongoing success: 1) setting clear expectations for ambassadors while also allowing flexibility, 2) allocating funds to ambassadors in the form of additional CME expenditures, 3) providing administrative support to the program, and 4) using a structured process for eliciting feedback to allow for continual refinement of the program.

Program leaders have made several changes based on feedback and division priorities. For example, ambassadors and new hires now meet more frequently during the initial month of employment, and ambassadors proactively reach out to their assigned new faculty at defined intervals. Additionally, we have prioritized matching ambassadors who work at the same clinical site that facilitates informal, frequent meetings and allows for more practice-related questions.

The program has also experienced some challenges. Although ambassadors receive additional CME funds, participation still requires time and consistent availability. Additionally, we have not always been successful in communicating the distinction between the goals of the Physician Ambassador Program and those of the human resources onboarding process—any confusion between them might negatively affect new hires' expectations of their ambassador. Finally, given the limitations of the survey data to distinguish between DGIM and non-DGIM faculty, we recognize the need for an evaluation approach that incorporates mixed methods.

Although the survey data have shortcomings, feedback from participants-both ambassadors and new hires—has been consistently positive. We recommend other institutions consider piloting a similar program. Some practices may wish to extend the program beyond six months and use it as a platform for establishing mentoring relationships. Future implementation efforts would be strengthened by incorporating a formal assessment strategy and measuring outcomes, such as physician well-being, extent of participation in education and research, clinical productivity, and turnover.

### References

 Atkinson W, et al. The impact on revenue of physician turnover: An assessment model and experience in a large healthcare center. J Med Pract Manage. 2006;21(6):351-5.

continued on page 11

- 2. Helfrich CD, et al. The facilitators and barriers associated with implementation of a patient-centered medical home in VHA. *Implementation Sci.* 2016;24(11):24.
- 3. Ziegler A. Development of an advanced practice provider onboarding structure. *USF Scholarship: A Digital*

*Repository.* https://repository. usfca.edu/cgi/viewcontent. cgi?article=1133&context=dnp. Published May 17, 2018. Accessed August 15, 2022.

4. Langley TM, et al. A comprehensive onboarding and orientation plan for neurocritical care advanced practice providers. *J Neurosci Nurs*. 2018;50(3):157-160.

 Cuaron JJ, et al. From orientation to onboarding: A survey-based departmental improvement program for new radiation oncology faculty physicians. JCO Oncol Pract. 2020;16(4):e395-e404.

SGIM

## BEST PRACTICES (continued from page 6)

- 4. Maintain a positive message frame: Positive message frames that emphasize benefits of a behavior have consistently been found to be more effective than negative ones, which highlight the negative consequences which may be avoided.<sup>2</sup> If misperceptions are presented, physicians should avoid directly countering the misperceptions, as this deepens a patient's conviction in misperceptions and further decreases their intent to be vaccinated.5 Instead, physicians should appeal to patient's prosocial tendencies (see item 5), then reiterate previously discussed factual information or offer entirely novel information (i.e., "To bring an end to the pandemic, it's important that everyone does their part by getting vaccinated."; "COVID-19 vaccine reduces your risk of infection by 70-95% and reduce your risk of severe illness by 95%"; "There have been extensive studies to date that have verified the vaccine's safety.").2,5
- 5. Enhance active choice: Once physicians explore the benefits of vaccination with their patients and feels confident that their patients have been adequately primed to make a decision, they should present the patient with a choice to receive the vaccine or to continue discussing their

concerns at a follow up appointment.<sup>3</sup> Establishing this dichotomous choice framework validates the concerns the patient entered the appointment with, underscores patient autonomy, and encourages longitudinal reflection upon this important decision.

The COVID-19 pandemic only exacerbated the long-standing health disparities affecting Americans from minority communities. By supplementing current public health endeavors with physician level strategies to address vaccine hesitancy in minority communities, we can begin tackling this systemic issue at the grassroots level. Our application of the core tenets of behavioral economics to vaccine hesitancy in minority communities provides physicians with a more concrete framework of how to broach the topic of vaccination with their patients. This novel approach to vaccine hesitancy equips physicians with the tools not only to help mitigate the health disparities associated with COVID-19 but also, more broadly, to initiate a dialogue to repair the relationship between the medical community and the populations it has historically committed injustices against.

## References

1. Khubchandani J, Macias Y. Covid-19 vaccination hesitancy in Hispanics and AfricanAmericans: A review and recommendations for practice. *Brain Behav Immun Health*. 2021 Aug;15:100277. doi: 10.1016/j. bbih.2021.100277. Epub 2021 May 21.

- Finney Rutten LJ, Zhu X, Leppin AL, et al. Evidence-based strategies for clinical organizations to address COVID-19 vaccine hesitancy. *Mayo Clinic Proceedings*. 2021;96(3):699-707. doi:10.1016/j.
- Jenssen BP, Buttenheim AM, Fiks AG. Using behavioral economics to encourage parent behavior change: Opportunities to improve clinical effectiveness. *Acad Pediatr.* 2019;19(1):4-10. doi:10.1016/j.acap.2018.08.010.
- 4. Bogart L, Dong L, Gandi P, et al. What contributes to COVID-19 vaccine hesitancy in black communities, and how can it be addressed? *Rand Corporation Res Rep.* 2021. doi:10.7249/rra1110-1.
- Madad S, Jetelina K. Positive impact of COVID19 vaccines at the individual and population level. *Belfer Center for Sci* and Int Affairs. https://www. belfercenter.org/publication/positive-impact-covid19-vaccines-individual-and-population-level. Published May 20, 2021. Accessed August 15, 2022.

SGIM

the teaching rotation. One resident enrolls in the rotation each two-week block. All residents in the internal medicine residency medical education leadership track are required to participate in this rotation during their senior year—it is an optional elective for other senior medical residents. Resident participants are responsible for teaching medical students on their six-week inpatient internal medicine core clerkship. Notably, residents on the teaching rotation do not have a role in evaluation of these students.

At the start of the teaching rotation, residents watch a one-hour didactic video covering core principles of coaching including guidance on effective direct observation, student-driven goal setting, collaborative action plan development, and types of learner deficits. Didactic material was developed by our institution's core undergraduate medical education coaching faculty and was specifically adapted for resident coaches. Residents also receive training on use of an electronic QR-based feedback tool to facilitate coaching best practices including SMART (Specific, Measurable, Achievable, Realistic, Timely) goal-setting, targeted feedback, and concrete action plan development. The tool serves as a framework for synchronous verbal feedback or asynchronous written feedback. Observations and feedback can be tracked electronically by students and clerkship administrators through the tool but are not used for evaluative purposes.

During the rotation, residents coach three clerkship students daily during scheduled direct observations of pre-rounding patient encounters and subsequent patient presentations. Oral presentation observations occur in two formats: either one-on-one, real-time observation of student presentations on rounds or observation of student presentations in one-hour long, virtual small-group meetings. With the aid of the relevant QR-based feedback tool, the student-coach pair develop an individu-

## **Resident Teaching Rotation Evaluation Results**

Resident Survey Respondents (11/16, 69%)	Agreed or Strongly Agreed (n, %)
After completing the pre-rotation training, I had a better understanding of coaching and direct observation fundamentals	10 (90%)
I felt the workload was appropriate for a teaching rotation	8 (73%)
I felt after completing this rotation, my skills as a medical educator improved	11 (100%)

alized goal prior to each session and a concrete action plan at the conclusion of each session, along with specific actionable feedback provided by the resident coach. Residents have virtual bi-weekly office hours to discuss relevant student cases and coaching strategies with coaching faculty. Finally, residents lead casebased didactic sessions and small group chalk talk sessions to support a diverse portfolio of teaching skills.

### Results

From July 2020-March 2021, 16 residents completed the teaching rotation, coaching 139 internal medicine clerkship students. Sixty-nine percent (11/16) of residents completed the post-course evaluation (see Table). Residents felt that completing the pre-rotation training led to a better understanding of coaching and direct observation fundamentals. Most residents strongly agreed that the workload was appropriate for a teaching rotation. All residents agreed or strongly agreed that after completing this rotation, their skills as a medical educator improved.

The clerkship post-course evaluation response rate was 88% (123/139), although not all students completed all items. Seventy-nine percent (93/118) of students reported that explicitly setting goals for direct observation improved the feedback they received and 79% (90/114) felt setting a specific action plan for improvement was helpful.

## Discussion

We adapted a pre-existing two-week senior resident teaching rotation to

successfully prepare resident educators to become coaches by providing in-person, non-evaluative coaching for student learners. Importantly, this rotation provides built-in direct clinical observation to enhance coaching efficacy, which is uncommon in existing academic coaching programs where the majority of coaches do not directly observe their trainees.<sup>2</sup> The rotation was perceived to be an appropriate workload for resident trainees, while improving resident understanding and comfort with core coaching principles through didactic and direct experiential training.

Our model utilizes coaching principles yet did lack continuity between the learners and coach. Coaching theory suggests that the coach-learner dyad be structured based upon the particular goals of the program. From our experience, short-term coaching relationships may be adequate for standard learners, as opposed to the long-term coaching employed for struggling trainees. This rotation's development was aided by the involvement of dedicated coaching faculty. However, with the exception of bi-weekly office hours, a preexisting coaching practice is not a prerequisite. In fact, this rotation offers a template and transportable content to implement resident-driven coaching at institutions that otherwise cannot support dedicated coaching faculty.

Our curricular adaptations demonstrate a feasible and reproducible framework that not only continued on page 13 incorporates coaching education and experience for residents but also expands capacity to provide formative feedback and coaching for clerkship learners. If coaching theory and techniques become more integrated into daily practice, it may shift the culture of learners towards a more consistent growth mindset. Moving forward, we hope to continue to grow this program with consideration of scaling this approach to non-clerkship learners, customizing observation and feedback to specific learner needs, and developing longitudinal approaches that may help learners in need of additional focused coaching.

### References

- Lovell B. What do we know about coaching in medical education? A literature review. *Med Educ*. 2018;52(4):376-390.
- 2. Wolff M, Hammoud M, Santen S, et al. Coaching in undergraduate medical education: A national survey. *Med Educ Online*. 2020;25(1):1699765.
- 3. Brown LE, Rangachari D, Melia M. Beyond the sandwich: From feedback to clinical coaching for residents as teachers. MedEdPORTAL. 2017 Sep 18;13:10627.

SGIM

## FROM THE EDITOR (continued from page 2)

during an Internal Medicine (IM) and IM-Pediatrics elective. Hussain Khawaja and co-authors describe a physician ambassador program to facilitate new faculty onboarding and retention. Medha Reddy, a third-year medical student, and her mentor offer five tips to overcoming vaccine hesitancy in minoritized populations. Stacie R. Schmidt summarizes the various ways that the healthcare industry contributes to yet can also mitigate its effects on climate change. Finally, Phillip M. Johansen, a fourthyear medical student, and co-authors offer a morning report case study and overview of the challenging diagnosis of psychogenic non-epileptic seizures. As an always impressive breadth of

scope, our general internal medicine community spans advocacy, education, leadership, research, and the intersections and blurred boundaries beyond. I hope we can periodically return to our roots in nature as one of many possible ways to rejuvenate and reenergize our numerous important initiatives and daily work.

## References

- Li Q. 'Forest Bathing' is great for your health. Here's how to do it. *Time*. https://time.com/5259602/ japanese-forest-bathing/. Published May 1, 2018. Accessed August 15, 2022.
- 2. Bratman GN, Daily GC, Levy BJ, et al. The benefits of nature

experience: Improved affect and cognition. *Landscape and Urban Planning*. 2015;138:41-50.

- 3. Ulrich RS. Natural versus urban scenes: Some psychophysiological effects. *Environment and Behavior.* 1981;13(5):523-556.
- Helbich M, de Beurs D, Kwan MP, et al. Natural environments and suicide mortality in the Netherlands: A cross-sectional, ecological study. *Lancet Planet Health*. 2018 Mar;2(3):e134-e139.
- Nature Rx, Part 1. https://www. youtube.com/watch?v=Bf5TgVRGND4. Published August 4, 2015. Accessed August 15, 2022.



Caterpillar Omega

tant to full professor, initially from states like me with legal protection for abortion, were able to express their disappointment at the idea of holding an annual meeting in a state with restrictive abortion law. Each called upon "SGIM leadership" to make clear how we would respond to the issues taking place in states like Florida. One senior member even commented they will likely "vote with [her] feet" and not attend any academic conferences in such states. Sensing the inevitable onslaught of passionate "reply alls" that can occur on listservs, I sought to communicate my gratitude for the issue being raised while clarifying the importance of being considerate of potential unintended consequences that may occur from reflexive action in response to our current political climate. Then I noted a message of great impact. Just as I was preparing this column, I saw for the first time, the reflections of an SGIM member residing in Texas. This member thoughtfully articulated viewpoints she believed were shared among many colleagues in states like Texas and Florida that are restricting access to reproductive care. As I read her post, describing potential feelings of abandonment of our colleagues within these states, I felt a sense of empathy with her. She reminded us that many of our members in these states are working so hard to advocate for equitable care as she described how many of them would feel if we were to pull out of SGIM activities in states. As I read her words, my heart began to hurt. I grew more concerned about the importance of our society's actions as she described that those in the "lion's den" would prefer that we "join them in the fight as opposed to leaving them behind." As she noted the importance of having societies engage in scholarly activity in these states and the impact our collective withdrawal will have on those internists' opportunities for conference engagement and scholarly participation; participation that often

## U.S. States by Abortion Rights Legality as of July 2022<sup>1</sup>

0.5. States by Abortion Rights Legality as of July 2022					
Abortion Category	# of U.S. States	State Abbreviations			
Illegal or Term Restrictions*	21	AL, AR, AZ, ID, FL, GA, KY, LA, MO, MS, ND, OH, OK, SC, SD, TN, TX, UT, WI, WV, WY			
Proposed Legislation or Legal Challenge	9	IN, IA, KS, MI, MT, NC, NE, PA, VA			
Legally Protected Abortion	211	AK, CA, CO, CT, DC, DE, HI, IL, MA, MD, ME, MN, NH, NJ, NM, NV, NY, OR, RI, VT, WA			

<sup>1</sup>Includes District of Columbia

\*Includes legislation banning abortion but temporarily blocked by higher courts

facilitates academic promotion. I remembered how participation in that very first meeting, held within 25 minutes of my office, provided my earliest opportunities to add scholarly work to my own curriculum vitae.

To be honest, I am unsure how to respond to the numerous states that have enacted policies counter to our organizational mission to support improved human health and well-being. Between increasing legislative efforts to prohibit equitable access to care for the LGBTQ+ community and the devastating effects of the Supreme Court's decision to overturn Roe v. Wade, there are many states in which our members find it objectionable to hold annual meetings. I am concerned that a cadre of society members feel that our continued presence in these states for regional or national meetings may signal indifference to the effects their policies have on our patient populations and on the rights of the physicians we represent. On the other hand, some members value the opportunity to have colleagues supporting them as they endure the difficulties of their environment and fear being left behind. As someone who has spent my entire career in Massachusetts and Delaware, I cannot fathom spending my time advocating for high quality and equitable care in states where the legislature is actively working to make those outcomes much more difficult. However, it seems to me that it is easy for those of us to demonstrate righteous indignation at those actions while paying little attention to the effects of our decisions on many of our fellow colleagues.

To guide our decisions, it is important to understand where the United States stands regarding reproductive rights and how states' reproductive policies intersect with the population of SGIM members. As of the writing of this column, more than 20 states have either banned or placed term limitations on abortion and several more states have current legislative efforts to do the same (see table).<sup>1</sup> SGIM currently has 3,143 full members residing in the United States—of these, 1,223 (39%) live within states that restricted access to abortion.

Regarding the concerns articulated by our members on the listserv about future meetings in Florida, I admit I am unsure about what is most appropriate. Is the right answer that we return to the earliest years of our society in which 21 of the first 22 annual meetings were either held in Washington, DC, or California? Is a better answer that we continue to meet in a diverse slate of locations to better meet the international diversity of our membership? Perhaps the right answer is to compromise where we temporarily restrict meetings only to the 10-15 states that most of our members find less objectionable?

To better understand the perspectives of a more representative sample of our members, our organization's CEO and I will be attendcontinued on page 15

■ 14 ■

ing many regional meetings during academic year 2022-23 to hold brief opened discussions with members. At each meeting, we aim to hear members' thoughts about the best ways in which SGIM can be responsive to the limitation of safe reproductive care imposed in so much of the country. During these discussions, we hope that anyone with concerns will be there so that we might hear directly from you. Our goal is to have transparent discussions about what goes into making decisions about our advocacy agenda as well as site selection for our annual meetings. Although I may be unsure of the right answer, I am very clear on what is the wrong thing to do. The wrong thing would be to allow our collective frustrations to underestimate the gravity of decisions such as abandoning conferences in more than half of the United States. I am concerned that reflexively withdrawing from states that enact policies counter to our values places us at risk of negatively impacting nearly

40% of our members who reside in states restricting reproductive rights. To me, that is unjust.

### References

 McCann A, Walker AS, Sasani A, et al. Tracking the states where abortion is now banned. *New York Times*. https://www. nytimes.com/interactive/2022/ us/abortion-laws-roe-v-wade. html. Updated August 9, 2022. Accessed August 15, 2022.

SGIM

## FROM THE SOCIETY (continued from page 4)

career development resources, and national advocacy. We anticipate that the approved committee and commission plans for 2022-23 will build upon the existing strengths of the organization, address some of the weaknesses and threats, and capitalize on opportunities for offering activities and services of high value to our members. We have great confidence in what SGIM can achieve, despite the stress of adapting to the post-COVID world, thanks to the extraordinary energy, creativity, and

mission-driven focus of our committees and commissions—to cultivate innovative educators, researchers, and clinicians in academic general internal medicine, leading the way to better health for everyone!

## References

- 1. Bass EB, Lo MC. Q & A with SGIM's CEO and the chair of the Learning Management System (LMS) Task Force. SGIM Forum. 2021: 44 (5): 4, 10.
- 2. Haggstrom DA, Whittle J, Baker

E, et al. Q & A with SGIM's CEO and leaders of the SGIM– Veterans Affairs (VA) Partnered Research Curriculum. SGIM *Forum*. 2022; 45 (5): 4, 12.

- Bass EB, Gerrity M. In appreciation of participants in SGIM's Forging Our Future program. SGIM Forum. 2022; 45 (3): 4-5.
- 4. Bass EB. Q & A with SGIM's CEO on external relations and rallying against adversity. SGIM *Forum.* 2022; 45 (1): 4-5.

SGIM

## MEDICAL EDUCATION: PART II (continued from page 7)

They also use energy-efficient LEDs, including programmable lights in patient rooms that imitate natural sunshine variation to assist patients in resetting their circadian clocks. Moreover, outdoor walking trails for patients and staff are now manicured with native plants and watered with recycled rainwater in the outdoor spaces.

Sustainable infrastructure changes could also include (1) making the exterior walls of new construction using a high-performance building envelope, with white roofing, in an effort to optimize energy savings; (2) using low-flow plumbing in restrooms, which have been shown to reduce the use of potable water by 34%; (3) ensuring any new or exchanged carpet, tile, and painted walls is constructed of refurbished, salvaged, and/or recyclable/reusable material, to lessen the demand for raw materials; and (4) guaranteeing 15% or more of building materials are manufactured within 500 miles of the location, reducing environmental impacts of excessive transportation (inspired by a billboard seen by the author at SFO, 11-19-2021, touting the airport's commitment to environmental sustainability).

Academic campuses can reduce the urban heat island effect by having solar on every rooftop, and tree canopy covering 30% or more of the campus. One study suggests that tree planting and preservation in large cities can result in milder days and nights, with benefits of greening initiatives leading to as much as  $15^{\circ}$ F(-9°C) of cooling in the summer. When paired with reflective roofing and paving strategies, tree planting and preservation lower the number of deaths from hot weather by more than 20%.<sup>5</sup>

## Collaborations with National Regulatory Bodies

Implementing renewable energy sources within health systems is a complex problem and not something just one healthcare institution can address on their own; it also depends on city and state plans and federal involvement. Although environmental regulations vary by state, national continued on page 16

# SGIN Forum Society of General Internal Medicine

Society of General Internal Medicine 1500 King Street, Suite 303, Alexandria, VA 22314 202-887-5150 (tel) / 202-887-5405 (fax) www.sgim.org

## MEDICAL EDUCATION: PART II (continued from page 15)

commissions or organizations that are involved in health care could lend the pressure needed to support positive environmental changes.

Thus, it is incumbent upon regulating bodies of the healthcare industry to collaborate with the National Highway Traffic Safety Administration, Department of Transportation, and Environmental Protection Agency (EPA) to implement stronger corporate average fuel economy standards. Stronger standards would lower many forms of air pollution, including particulate matter (PM).<sup>1</sup> For example, current EPA standard for annual PM2.5 is 12 µg/ m3; if the standard were lowered to 10 µg/m3, hospitalizations for dementia in the Southeast, particularly vascular dementia most heavily affecting communities of color, could decrease by ~10%.4 The PM created by fossil fuels is estimated to contribute to approximately 13% of U.S. deaths.<sup>4</sup> Other health effects caused by PM include heart attacks, strokes, lung disease, and cancers.<sup>4</sup> Among children, it has been associated with preterm birth, low birthweight, damaged lung growth in children and teens, and cognitive problems.

## A Call to Action by the Joint Commission

To address these issues, the Joint Commission could work to ensure a commitment by health systems towards sustainability and resilience. This should include the requirement of a role within health systems to assess and monitor efficiency of energy usage within their facilities, and to advocate for funding from local, state, and federal sources to address sustainability needs. This is especially important among disproportionate share hospitals and safety-nets caring for vulnerable patient populations, especially those operating in non-Medicaid expanded states where large numbers of patients remain uninsured and are thus encumbered by chronic conditions.

## **Our Professional Privilege**

As we think about the impact of climate change on the patients we serve and strive to address and improve their health through our educational expertise, I urge all SGIM members and advocates to leverage another useful tool we carry within our white coats-the networking opportunities that result from our professional privileges. As generalists who bridge the chasm between vulnerable communities, public health, and policymaking individuals, we must leverage our knowledge of health care's impact on climate change and health, and advocate for policies and multi-sector collaborations that solve this paradox.

## References

 Dzau VJ, Levine R, Barrett G, et al. Decarbonizing the U.S. health sector—A call to action. N Engl J Med. 2021 Dec 2;385(23):2117-2119. doi:10.1056/NEJMp2115675. Epub 2021 Oct 13.

- Salas RN, Friend TH, Bernstein A, et al. Adding a climate lens to health policy in the United States. *Health Affairs*. https://www.healthaffairs.org/ doi/10.1377/hlthaff.2020.01352.
- 3. McIntosh M, Cacciola K, Clermont S, et al. State of the campus environment: A national report card on environmental performance and sustainability in higher education. *National Wildlife Federation*. https:// www.nwf.org/EcoLeaders/ Campus-Ecology-Resource-Center/Reports/State-of-the-Campus-Environment. Accessed August 15, 2022.
- Particle pollution linked to increased hospitalization for dementia in the southeast. *Mothers & Others for Clean Air.* https://www.mothersandothersforcleanair.org/ particle-pollution-linked-to-increased-hospitalization-for-dementia-in-the-southeast/. Published August 24, 2021. Accessed August 15, 2022.
- Stone B. Reducing heat island effect: Tree canopy twice as effective as other strategies. *Vibrant Cities Lab.* https:// www.vibrantcitieslab.com/resources/reducing-heat-island-effect-tree-canopy-twice-as-effective-as-other-strategies/. Published 2017. Accessed August 15, 2022.

SGIM