SAEM PULSE
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SPOTLIGHT

LIGHTING THE WAY FOR ACADEMIC EM

An Interview with
Brian J. Zink, MD

RAMS
SAEM Residents and Medical Students

TACKLING YOUR STUDENT LOANS

page 24

Leading the advancement of emergency care through education and research, advocacy, and professional development in academic emergency medicine.

SAEM STAFF

HIGHLIGHTS

Article titles appearing in red font in the table of contents have been identified as potentially being of particular interest to emergency medicine residents and medical students.

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Happy New Year From SAEM!

A special "President's Comments" from Dr. Amy Kaji, SAEM President

Amy Kaji, MD, PhD
Harbor-UCLA Medical Center
2021–2022 President, SAEM

2021: A Year of Steadfast Growth and Strength

Record-Setting Membership and Revenues

Despite continued COVID-19 surges and challenges throughout the year, SAEM can look back upon 2021 as one of steadfast growth and strength. First, SAEM hit an all-time high in membership numbers of 8,022. In 2012, we were an organization of 5,542 and our membership has increased every subsequent year. However, the growth that we experienced from 2020 is the steepest yet. Membership revenues have been critical in our full financial recovery from the COVID losses. SAEM now has a $7 million operating budget, while SAEM's subsidiaries continue in their financial growth: the SAEM Foundation hit $12 million, and the Association of Academic Chairs in Emergency Medicine (AACEM) is $1 million strong.

Diverse Perspectives Inspire Growth

It is not just the financial stability and the growth in numbers that have been inspirational. The growth also reflects a wider breadth of members from medical students to residents [through SAEM Residents and Medical Students (RAMS)], fellows, junior and senior faculty, chairs, pharmacists, and emergency department administrators [through the Academy of Administrators in Academic Emergency Medicine (AAAEM)]. The diversity has provided fertile ground for the discussion of novel ideas and historical perspectives while working through the complex issues that face our specialty at this time. The exchange of ideas across our membership spectrum has facilitated progress towards solving the challenges with workforce, the dearth of emergency research funding, nursing staff shortages, pandemic burnout, mental health, problematic ED boarding, etc. To this end, in 2021, SAEM released numerous position statements on issues such as vaccine mandates, the EM workforce, the emergency medicine common program requirements, and

continued on Page 4

continued from Page 3

overcoming barriers to the promotion of women and underrepresented in medicine (URiM) faculty in academic emergency medicine.

New Educational and Leadership Initiatives

The inaugural session of the Advanced Research Methodology Evaluation and Design in Medical Education (ARMED MedEd) course took place in February via Zoom. The course supports EM education researcher development and advances the science of emergency medicine education. An innovative, collaborative mentorship program paired each participant with a personal mentor and groups three of these dyads together into a "mentor family." In addition, applications are presently being accepted for a new educational course, to launch at SAEM22, which addresses the relative dearth of educational opportunities for faculty members who are four to five years out post-residency completion: the Emerging Leader Development Program (eLEAD) is a prime example of SAEM and AACEM working collaboratively to meet member needs.

Connecting Members Online

When the pandemic prohibited the ability to meet in person, SAEM strengthened its virtual presence. For the first time, the SAEM Annual Meeting in May 2021 was fully virtual, and SAEM facilitated two four-day virtual residency and fellowship fairs.

In the last year, SAEM also created a new website, hosted over 9,000 attendees on dozens of webinars, and logged thousands of views on YouTube. SAEM reached 10,200 followers on Facebook, 14,100 followers on Twitter, and 5,900 followers on LinkedIn. The virtual connection to others who were experiencing similar challenges eased the sense of isolation and buttressed community closeness among our members.

A Banner Year for Research Grants

SAEM also had a banner year for research grants. During a time of cuts to federal research funding, SAEM was able to award close to $700,000 to the 2021 cycle of research and education grants. As a result of our financial growth and resilience through the pandemic, SAEM was able to announce new funding opportunities for emerging infectious disease and preparedness ($100,000) and a COVID-19 education project grant ($25,000), and two research projects for $50,000 to specifically study COVID-19.

SAEM Staff Growth and Development

SAEM membership growth has called for a greater number of SAEM staff to coordinate all our meetings, webinars, academy interactions, retreats, strategic planning sessions, etc. Consistent with our strong belief that diversity, equity, and inclusion are the fundamental building blocks of any organization, Megan Schagrin, SAEM CEO, has facilitated the diverse staff expansion of six new hires while maintaining a family feel among those working tirelessly for our members. Of note is that during their tenure at SAEM, several of our staff have received advanced degrees to further their own professional development. This reflects the SAEM philosophy of fostering personal and professional growth, across our members and staff.

I look back upon 2021 with gratitude to the SAEM members and staff for providing a place for connection and growth. THANK YOU.

New Publications in 2021!

- Guidelines for Reasonable and Appropriate Care in the Emergency Department (GRACE): Recurrent, Low-risk Chest Pain in the Emergency Department.
- AEM special issue: (In)Equity in EM
- AEM E&T special issue: Dismantling Racism With the Next Generation of Learners
- Six new RAMS Roadmaps
- The Fellowship Program Guide
- Immigration Advocacy Toolkit
- The Reason for Research

SAEM-Led EM Mental Health Collaborative Launches "Stop the Stigma in EM"

In response to COVID's growing toll on the mental health and well-being of EM physicians and the hesitancy to seek mental health treatment due to stigma in the workplace, a coalition of emergency medicine organizations, led by SAEM, formed an EM Mental Health Collaborative to stimulate education, awareness, advocacy, and policy action related to breaking down barriers to mental health care in EM. In September of 2021, they issued a joint statement regarding the mental health care stigma in emergency medicine and in November of 2021 launched Stop the Stigma EM: A Toolkit for Individuals, Educators, and Institutions — an online "repository" of resources and materials to aid those struggling with mental health issues and assist individual clinicians, emergency medicine educators, EM departments and institutions, and others in breaking down the barriers to mental health care in emergency medicine.

Coming to SAEM in 2022!

A Return to In-Person Education and Networking

SAEM will hold its first live annual meeting since 2019 when the Society gathers May 10–13, 2022, in New Orleans for SAEM22! So much has changed in the two years we've been apart, but one important thing remains: the SAEM Annual Meeting is still the premier forum for the presentation of original education and research in academic emergency medicine and is renowned for the expansive networking events and career development opportunities offered. Visit the SAEM22 website for more of what's in store for you at the 2022 SAEM Annual Meeting.

Introducing the ARMED MedEd Pilot Training Grant

Applications open in May 2022 for the new ARMED MedEd Pilot Grant intended to provide funding to support the development of an education scientist in emergency medicine. The ARMED MedEd Pilot Training Grant is designed to develop fundamental skills necessary to succeed as an education research scientist and to successfully compete for subsequent funding.

Introducing the SAEM Medical Education Initiative Task Force

Throughout 2022, SAEM will continue to build a new medical education course to engage individuals who self-identify as educators by providing an innovative faculty development tool that addresses core principles of medical education.

eLead to Launch in May 2022

At the SAEM Annual Meeting in May 2022 SAEM will launch the Emerging Leader Development Program (eLEAD), a new, year-long course designed to provide emerging leaders in academic emergency medicine with a structured, longitudinal experience to develop foundational leadership skills, cultivate a meaningful career network, and build a bridge to countless opportunities in their field.

Congratulations ARMED MedEd Class of 2022!

The inaugural Advanced Research Methodology and Design in Medical Education (ARMED MedEd) class will graduate in May 2022 at SAEM22 in New Orleans. The course, which kicked off in virtually in February 2021, builds upon the fundamental knowledge and skills of health professions education researchers and equips them to design a high-quality medical education research project and grant proposal.

Announcing Fellow Awards in Critical Care, EMS, Pediatrics, Toxicology

Four new awards will be presented at SAEM22 in New Orleans to fellows who have demonstrated outstanding scholarly contributions to critical care, EMS, pediatrics, and toxicology through research, education, advocacy, or implementation science.

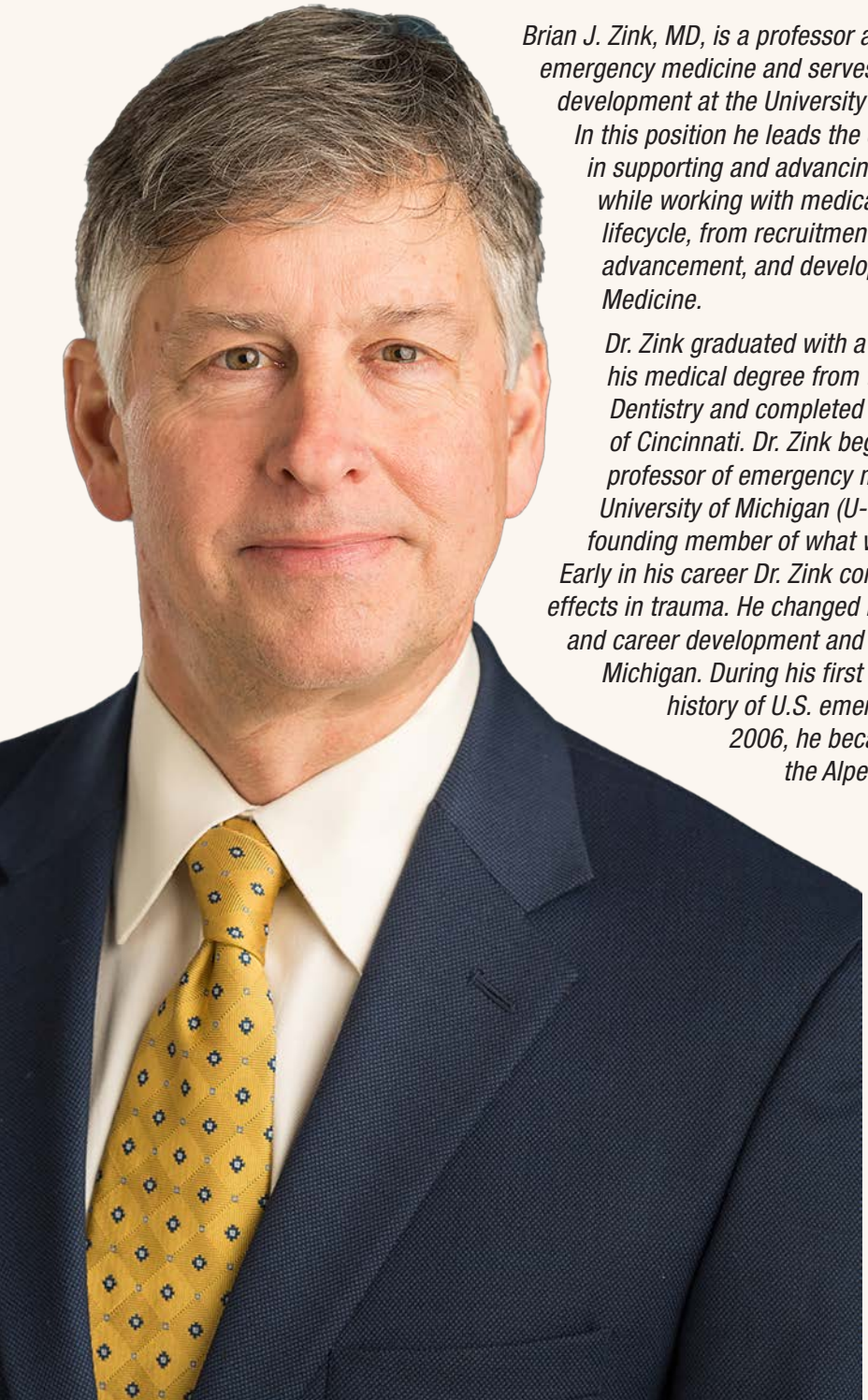
Two New Medical Student Ambassador Scholarships

Four medical students selected to serve as medical student ambassadors (MSAs) at SAEM22 will be the recipients of new MSA scholarships: two for students belonging to URiM groups and two for students with a financial need creating a barrier to participation in SAEM22. These scholarships will support the selected recipients to attend SAEM22 through a $700 stipend.

SPOTLIGHT

LIGHTING THE WAY FOR ACADEMIC EM

An interview with Dr. Brian Zink, author of "Anyone, Anything, Anytime — A History of Emergency Medicine"



Brian J. Zink, MD, is a professor and senior associate chair in the department of emergency medicine and serves as senior associate dean for faculty and faculty development at the University of Michigan Medical School in Ann Arbor, Michigan. In this position he leads the office of faculty affairs and faculty development in supporting and advancing the career progression of individual faculty, while working with medical school departments on all aspects of the faculty lifecycle, from recruitment through retirement. Dr. Zink oversees the promotion, advancement, and development of over 3,000 faculty members in Michigan Medicine.

Dr. Zink graduated with a BS in biology from Allegheny College. He earned his medical degree from the University of Rochester School of Medicine and Dentistry and completed residency in emergency medicine at the University of Cincinnati. Dr. Zink began his academic career in 1988 as an assistant professor of emergency medicine at Albany Medical College. He joined the University of Michigan (U-M) faculty in 1992 as an assistant professor and founding member of what would become the department of emergency medicine. Early in his career Dr. Zink completed funded research in brain injury and alcohol effects in trauma. He changed his career path in 1999 to focus on medical education and career development and became the associate dean for student programs at Michigan. During his first stint at the U-M, he wrote the first comprehensive history of U.S. emergency medicine, "Anyone, Anything, Anytime." In 2006, he became the inaugural chair of emergency medicine at the Alpert Medical School of Brown University and chief of

> "Showing up, being engaged, and willing to do the work of committees is the way to advance in SAEM or any volunteer national organizational service."

Dr. Zink is the author of "Anyone, Anything, Anytime — A History of Emergency Medicine."

Father–daughter emergency physicians! Dr. Zink with his daughter, Korie.

emergency medicine at Rhode Island Hospital. During his tenure there, the faculty doubled in size and research output. Dr. Zink returned to U-M in 2018 as a professor of emergency medicine and in 2019 moved into the senior associate dean for faculty role.

Dr. Zink presently serves as the president of the SAEM Foundation (SAEMF) Board of Trustees. He is a past president of the Society for Academic Emergency Medicine (SAEM) (2000-2001) and the Association of Academic Chairs of Emergency Medicine (AACEM) (2012-2013). In 2013 he founded the AACEM Chair Development Program and continues to serve as codirector of the program, which has trained over 130 aspiring and current chairs of emergency medicine.

Dr. Zink has won many awards for his academic work and leadership in emergency medicine over his 33-year career, including the Hal Jayne Academic Excellence Award and the John Marx Leadership Award from SAEM, the Distinguished Service Award from AACEM, the Outstanding Contribution in Education Award from the American College of Emergency Physicians, and the Dean's Award for Advancement of Women Faculty from the Alpert Medical School.

What inspired you to pursue academic emergency medicine (EM)?

I entered residency intending to go back to Western New York and work in a community hospital emergency department (ED). But the faculty at the University of Cincinnati were so enthusiastic about advancing research in emergency medicine (EM) that I was pulled into the lab and that whole world opened for me. I had always been interested in alcohol effects on physiology and mentors like Bill Barsan, Jerris Hedges, and Steve Dronen allowed me to run experiments that included alcohol in their shock resuscitation work. Along with other EM faculty like Mel Otten and Xan Trott, they were great teachers, and I wanted to be like them. Richard Levy, as the chair, created an amazing academic environment. From there, no looking back — I was hooked on the academic side of EM.

How has SAEM supported you throughout the phases of your career?

Seeing tragedy and death on a regular basis is arduous. There I have been to every SAEM (formerly the University Association for Emergency Medicine) annual meeting since 1986, when I presented my first oral scientific abstract. Interacting with what was then a small club of academic EM faculty and residents inspired me to keep doing academic work to help put EM on the map as a legitimate academic specialty. SAEM was always the place to recharge my academic batteries, share ideas, and make new friends. It is the relationships that developed over the years from my engagement in SAEM that I treasure the most. I have the uncommon perspective of having a daughter, Korie, who has completed EM residency and is entering academic EM. Observing how she has also already been positively impacted by SAEM has been especially satisfying.

What have your leadership roles within SAEM and SAEMF taught you?

What I learned early on is that showing up, being engaged, and willing to do the work of committees is the way to advance in SAEM or any volunteer national organizational service. I was usually not the wisest or most senior person on a committee or board, but when I took on a role I did commit to doing the best I could to advance the organization. It's better to be a reliable worker bee, especially when you start out, than a brilliant idea-generator who doesn't do much. From my SAEM and AACEM president roles, I learned that leading change in an organization

continued on Page 8

Family keeps everything in perspective for Dr. Zink.

continued from Page 7

can be challenging but pursuing a vision that the majority of members share makes it worth it in the long run.

Do you have any pearls to share with those who are just beginning their journey in academic emergency medicine?

I have advice that may seem somewhat contradictory. First, in the very broad field of academic emergency medicine, find what you are passionate about and where you can make a real contribution, and then focus on that area and become an expert. Second, if you lose passion for your focus area, don't be afraid to explore a new opportunity or try out a new role. Sometimes the opportunity will be more serendipity than sought after, but don't automatically reject those things that might not be planned. Trying on a new hat can be invigorating. All careers have phases. I have had four distinctly different and satisfying phases of my career and wouldn't change a thing as I look back.

You've been a longtime donor to the SAEM Foundation (SAEMF) and have recently shared that you intend to continue your giving through a Legacy Society gift. Is there an important moment, person, or special occasion that influenced your decision to make this thoughtful gift?

I am inspired to give to support academic EM by the founders of the specialty who spent a lot of their own money and a huge amount of time as they traveled around the country fighting what was truly a battle to create a board-certified specialty of emergency medicine. They created the field in which all of us can flourish. SAEMF has been the primary focus of my philanthropic giving for three decades. Like many, I started with small annual contributions which increased as my income grew. Now with kids through college and looking at the longer term and a having a bigger impact, I have finalized the documents to become an SAEMF Legacy Society donor. Personally, my wife Dana and I feel this is an important step we I can take to safeguard the future for this organization that's meant so much to me over the years. Maybe some of you will also consider joining us in this decision — it's not very complicated to do, and SAEMF staff can help you through the steps. Best yet, every planned gift today, no matter the amount, will make a huge difference in SAEMF's ability to navigate the challenges that will be faced by tomorrow's EM researchers and educators — just as it has done so well for my generation.

> "We are lighting the way for academic EM and lighting a fire under those who want to advance emergency care through research and education."

Dr. ZInk's grandchildren, Lochlain and Aviana, born nine days apart in November 2020

A favorite pastime of Dr. Zink's — fly-fishing in Wyoming.

What do you believe are the biggest challenges SAEM/SAEMF and academic emergency medicine face moving forward?

The biggest challenge in my view is creating a durable and diverse pipeline for bright and talented physicians to enter academic EM. We need physician-scientists who are well-supported to build on all the great progress that has been made in diagnosing and treating emergency conditions. That is why SAEMF is so important in supporting the early career researchers in EM who just need that jump start of a funded grant to move their science forward and encourage them at a time when they may be unsure of their futures. We need to be able to pull more trainees in to academic EM and to provide more research training grants for those who decide to do EM research.

How has SAEM grown since your early years of engagement?

It has been a joy to see the marked increase in SAEM membership across all components — faculty, residents, and medical students. Back when I started, it seemed like I knew two-thirds of the people who were walking the halls at our SAEM meetings. I miss that era in terms of knowing more people in the organization, but it is great to see the reach and impact of SAEM as our membership has increased. We are unquestionably the "go to" organization for academic emergency medicine.

What is the first thing that comes to mind when you think of SAEM? SAEMF?

Our early logo in SAEM was a torch, and that's the image that comes to mind when I think of SAEM and SAEMF. We are lighting the way for academic EM and lighting a fire under those who want to advance emergency care through research and education.

Dr. Zink's favored exercise: cross country skiing in Colorado.

Up Close and Personal

Name three people, living or deceased, whom you would invite to your dream dinner party.
Pulitzer Prize-winning poet Theodore Roethke, former U.S. Supreme Court justice Ruth Bader Ginsberg, and Pulitzer Prize, Grammy, Emmy, Tony Award-winning composer, lyricist, and actor Lin-Manuel Miranda.

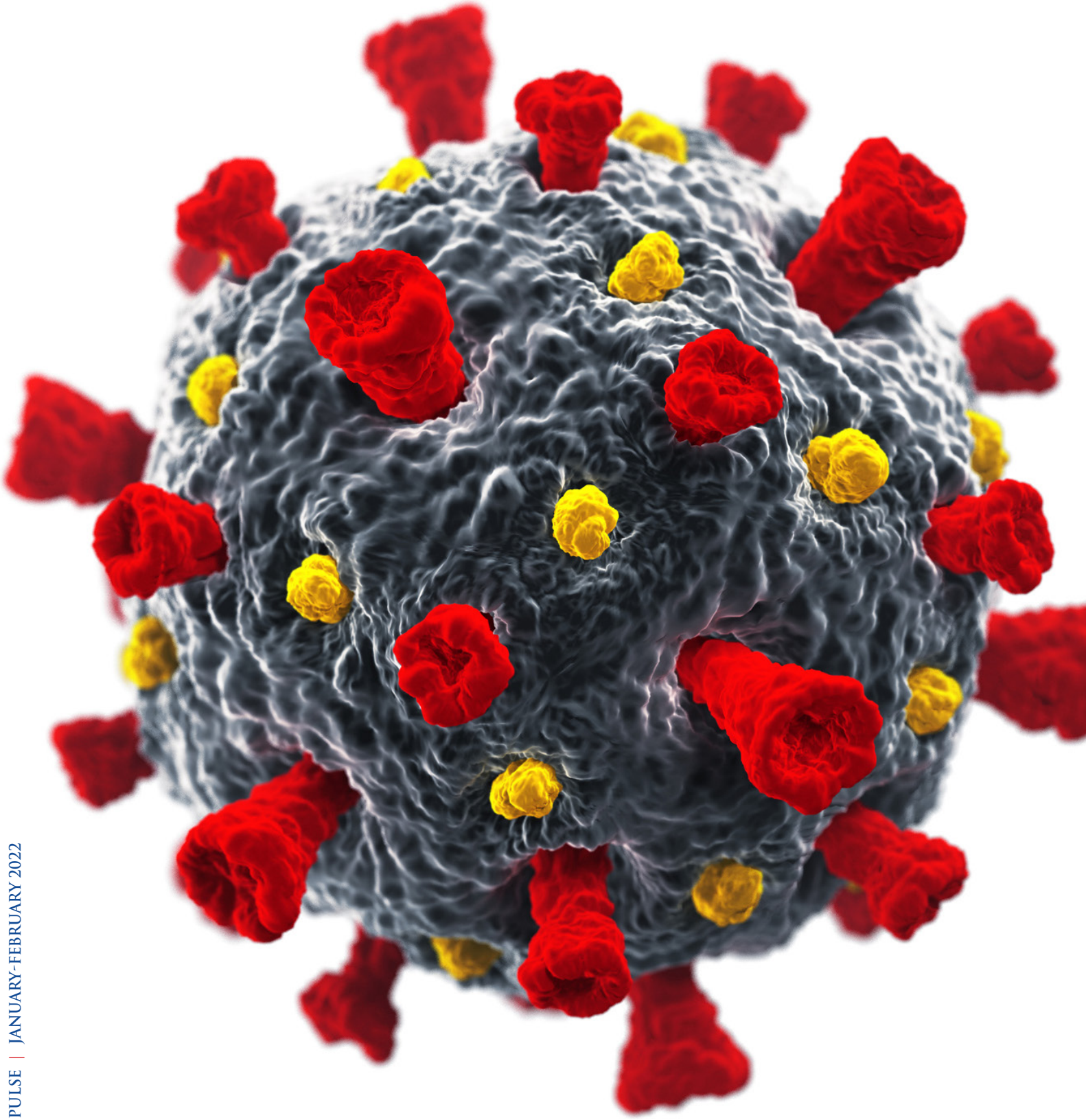
What's the one thing about you few people know?
That although I am not Native American, I grew up on the Seneca Nation reservation in rural Western New York and had an idyllic outdoor boyhood in the hills, streams, and on the Allegheny River in that beautiful area.

What is your guiltiest pleasure (book, movie, music, show, food, etc.)?
I am quite addicted to chocolate. I have secret stashes in choice locations at home and in my office.

When you were a child, what did you aspire to become?
A basketball player (quickly eliminated based on stature and talent), then an English teacher, then a writer, then a doctor.

What is your most prized possession?
Not that you "possess" your grandkids, but we had two pandemic grandchildren born nine days apart in November of 2020, and they are what we prize the most.

CLERKSHIP CORNER



Emergency Medicine Clerkships in the Pandemic Year 2020-2021

By Amy Cutright, MD, on behalf of the SAEM Clerkship Directors in Emergency Medicine academy

Medical education adapted to the necessities of social distancing due to the COVID-19 pandemic quickly. The constraints of virtual environments, shortages of personal protective equipment, and limited options for patient contact forced clerkship directors in emergency medicine to rapidly rethink educational formats and curriculum. While we are all nearly back to normal from an educational perspective, lessons learned from the 2020-2021 academic year will be with us into the future.

> "Nearly all clerkship directors stated that continued but targeted use of virtual formats for specific education activities such as lectures, feedback sessions, and advising would carry forward to future academic years."

The Clerkship Directors in Emergency Medicine (CDEM) Executive Board set up a survey to assess the effects of the pandemic on emergency medicine education. This survey was administered to the CDEM email list during the summer and fall of 2021. We extend a big thanks to all clerkship directors who participated and sent in their experiences!

While the full results of the survey will be published soon, these are the broad take-away points. There were over 45 clerkship directors who responded to the survey. Approximately one-third responded with partial answers and two-thirds with complete answers. The survey respondents include representation from over 20 states including the District of Columbia. Clerkships associated with emergency medicine residency programs comprised nearly 90% of the responses.

Surveys submitted by those with fourth-year clerkships show that nearly all are four weeks long. They are also equally split between required or elective clerkships, with only a few selective clerkships. Numbers of students taking the fourth-year clerkship ranged widely from single digits to over two hundred students per year. Most clerkships were impacted by shortened lengths or fewer clinical shifts. Some clerkships continued to run at normal volume during the pandemic year, and others cited significant decrease in the number of rotating students. Reduction in student volume overwhelmingly affected visiting students the hardest. Many institutions enacted policies that limited the ability to take any visiting students or only students from an approved list of institutions.

Approximately two-thirds of the clerkship directors who responded have third-year clerkships. The third-year clerkship length varied with half at two weeks long, one quarter at four weeks long, and the other quarter was

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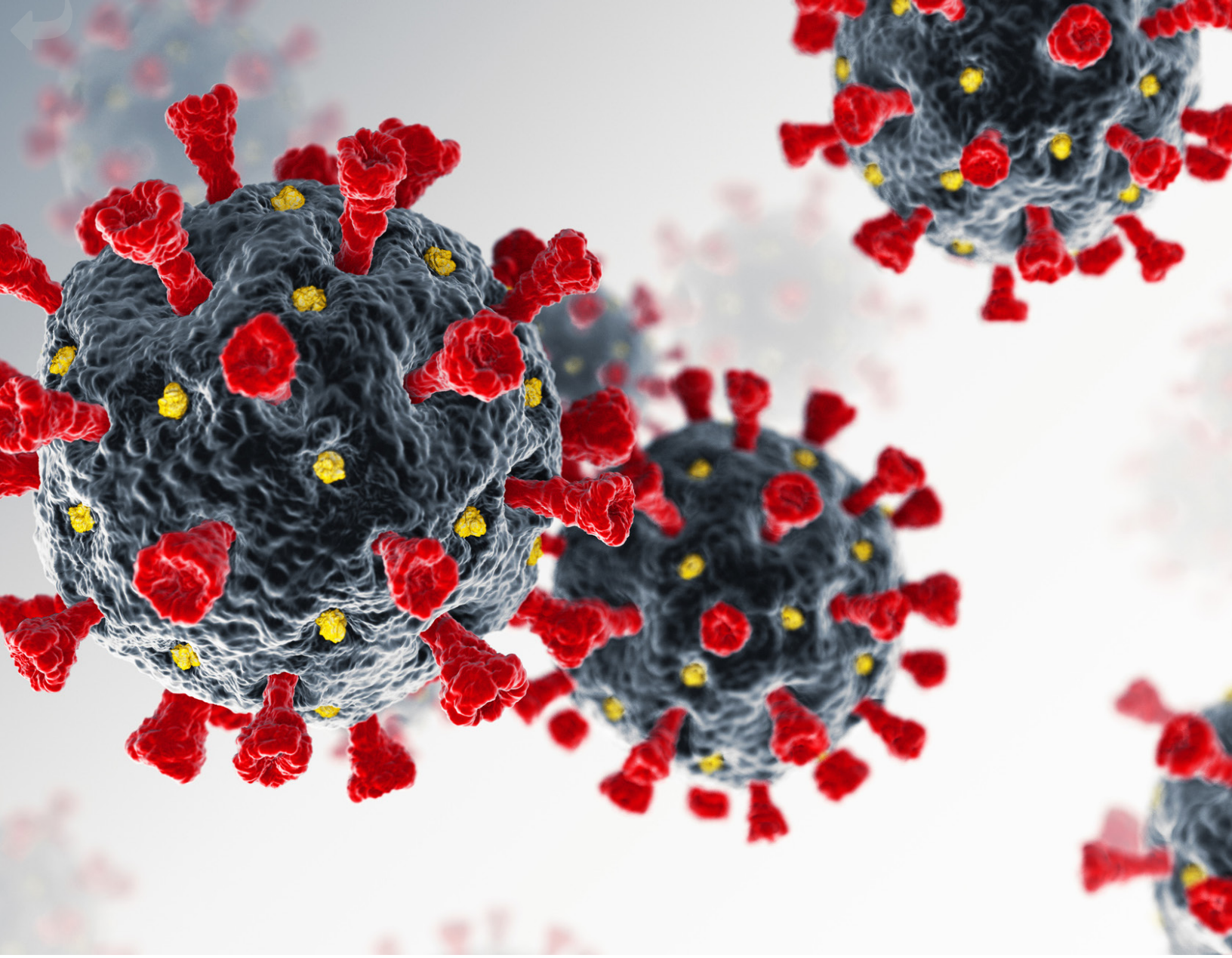

CLERKSHIP CORNER

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a mix of various lengths. Most third-year clerkships were also impacted by shortened clerkship lengths or fewer clinical shifts.

Clinical experiences during the pandemic year suffered more than any other aspect of medical education. Nearly all clerkship directors indicated that patient acuity and patient volume in their emergency department (ED) was either somewhat or significantly decreased. In addition, the variety of and volume of patients seen by students was also somewhat or significantly decreased. In many instances students were not able to assess dyspnea, fever, cough, and other core chief complaints, which limited their exposure to the scope of emergency medicine.

Clerkship educational activities and didactics were converted to a virtual format for most respondents. Some clerkships were able to hold events in person and follow social distancing protocols. A few clerkships cancelled some activities outright with simulation sessions, skills labs, and objective structured clinical examinations the most likely to be cancelled. Only a few clerkships added novel education experiences during the pandemic year. Those that did focused on board review cases or free online medical education resources such as Foundations of Emergency Medicine. Only two respondents offered a virtual clerkship.

Assessment during the pandemic year underwent fewer changes than didactics and clinical exposure. Most clerkships did not change their student assessment methods and only a few eliminated an assessment method or integrated virtual assessment. Likewise, nearly all clerkships kept their grading standards the same, with only a few changing to pass/fail.

Responses to questions about access to vaccination were not completed by all clerkship directors. Those who did respond indicated that most programs included students in Tier 1 designation for vaccination. Most clerkships did not require vaccination for students to participate in educational activities.

Advising students for residency match proved especially challenging. The uncertainty of the virtual format, inability for students to visit potential residencies in person, and applications with only one standardized letter of

Top Challenges of 2020–2021

Clerkship directors cited the following broad categories as their biggest challenges in the pandemic year 2020–2021:

- social distancing restrictions
- student safety and access to personal protective equipment
- shortened rotations/limited shifts
- clinical sites dropping students
- restrictions on students evaluating persons under investigation or similar complaints
- increased importance of a single SLOE
- match advising

> "Responses from the survey showed over and over again the commitment of emergency medicine clerkship directors to providing quality education and our flexibility in the face of adversity."

evaluation (SLOE) created an advising landscape foreign to all of us. Advisors tried to adhere to guidelines and the limited available match data. The recommendation of a rank list of 12 and an increased reliance on local and regional applications proved critical. Overall, advisors felt frustrated by the advising/match process and outcomes for students in some cases.

Open ended responses to inquiries about the biggest challenge from the 2020-2021 academic year ranged widely. Clerkship directors cited the following broad categories as their biggest challenges: social distancing restrictions, student safety and access to personal protective equipment, shortened rotations/limited shifts, clinical sites dropping students, restrictions on students evaluating persons under investigation or similar complaints, increased importance of a single SLOE, and match advising.

Lessons learned from the COVID-19 pandemic have made many of us experts on virtual presentations, lectures, meetings, and interactions. When asked about innovations from the 2020-2021 academic year that will carry forward for their clerkships, the answers were overwhelming in favor of the virtual format. Nearly all clerkship directors stated that continued but targeted use of virtual formats for specific education activities such as lectures, feedback sessions, and advising would carry forward to future academic years.

The pandemic year was a trying experience for all of us. Responses from the survey showed over and over again the commitment of emergency medicine clerkship directors to providing quality education and our flexibility in the face of adversity.

ABOUT THE AUTHORS

Dr. Cutright is an associate professor of emergency medicine (EM) at the University of Nebraska College of Medicine. She serves as the EM clerkship director and oversees the core clerkship year for the College of Medicine, among other roles. She currently serves as the treasurer of the SAEM Clerkship Directors in Emergency Medicine academy.

About CDEM

Clerkship Directors in Emergency Medicine (CDEM) represents the interests of undergraduate medical educators in emergency medicine. It serves as a unified voice for EM clerkship directors and medical student educators and provides a forum for them to communicate, share ideas, and generate solutions to common problems. For more information, visit the CDEM webpage. As an SAEM member, you may now join as many academies* and interest groups as you choose. Just log into your member profile and click on the "Update (+/-) Academies and Interest Groups" button.

Waste, Heat, and Climate Change: More Than the Eye Can See

By Michael Hii and Caitlen Rublee, MD, on behalf of the SAEM Climate Change and Health Interest Group

As clinicians, when we think about waste, it's easy to picture an overflowing garbage bin filled with gloves, plastic tubing, food waste, disposable gowns, and other supplies. Throughout the day and night, carts roll down hospital halls cleaning up trash. Environmental services teams remove and replace bins with empty ones that again become full. These activities occur daily without many of us even thinking about them.

It is much more difficult to picture the entire carbon intensive process involved in the materials used to provide health care services before they end up as trash. For instance, take just one bottle of eye drops used as local anesthetic. Producing the plastic bottle requires harvesting oil to produce the plastics and other materials, then transporting them across the country (or further) in order for a clinician to use a single drop (or two) before disposing of the bottle and the remaining solution. While this practice may allow for a painless exam for the patient, it is not a painless process for our shared environment.

Waste in the Emergency Department

The emergency department certainly is no stranger to waste. One academic emergency department found that its waste exceeded four pounds per patient encounter. Other scholars have detailed an extensive list of opportunities for emergency departments to commit to to reduce emissions. Here in the United States (U.S.), there is a culture that contributes to a sense of security and improved quality of care in using new, single use, disposable items in a health care setting. The intention to ensure top quality care for our patients is admirable; however, there may be an alternative approach.

Once again, we can learn from our colleagues in ophthalmology. A hospital

> "Prioritizing reusable materials and being deliberate about resource utilization are realistic and safe ways to make these reductions and is something that our health systems should explore as a method of reducing costs and waste while investing in patient-centered health outcomes."

system in India maintained equal if not improved outcomes for their cataract surgery patients when compared to hospitals in the United Kingdom and U.S., while producing just 5% of the emissions. The reason came largely with the practice of reusing materials and limiting waste. That same eye drop bottle that was disposed of had sufficient volume remaining to care for several more patients, as did most of the other single use materials from these procedures. Prioritizing reusable materials and being deliberate about resource utilization are realistic and safe ways to make these reductions and is something that our health systems should explore as a method of reducing costs and waste while investing in patient-centered health outcomes. It will become increasingly imperative for clinicians and health systems to address the environmental consequences of clinical practice that extend far beyond a patient's room.

Carbon Emissions and Diseases Downstream: An Eye Example

The health sector also contributes to rising levels of greenhouse gas emissions (8.5% in the U.S.) that then fuel ongoing warming and an increase in demand for climate-sensitive conditions. For instance, July 2021 was Earth's hottest month on record. Rising ambient temperatures have widespread effects, but the impacts on eyes are frequently ignored. An increase in ultraviolent (UV) light exposure can lead to several eye disorders: keratitis, photoconjunctivitis, climatic droplet keratopathy, cataracts, and pterygium. The distribution and prevalence of trachoma, one of the most common cause of blindness, is associated with high temperatures and low rainfall. Similarly, tropical diseases such as Chagas disease and Chikungunya are predicted to expand into more northern regions of North America. These diseases are known to affect the eyelid as well as cause conjunctivitis, retinitis, and even optic neuritis in the case of Chikungunya. If these patients presented to the ED, would you recognize their conditions? What if reduced visual acuity contributed to a fall with another life- or limb-threatening injury? The effects of climate change are not always readily apparent on the track board unless clinicians look for them.

Of emission-related health harms, the direct relation to eye diseases is not often discussed, perhaps as ocular conditions are overlooked in comparison to more life-threatening harms or possibly due to lack of understanding and awareness of the connection to climate change. The World Health Organization found that up to 20% of cataracts, the removal of which is one of the most commonly performed procedures worldwide, are a direct result of UV radiation exposure. Globally, cataracts are a leading cause of blindness. It is ironic to think that our practices in medicine to prevent and treat these ocular conditions are, at the same time, contributing to their progression. Similar parallels can be drawn about other practices in the emergency department and hospital, thus emphasizing climate change as a very present public health issue relevant for practicing clinicians.

Next Steps

While systemic changes in practice take time to develop and implement, the timeline for climate action is short and the stakes for health and well-being are high. Fortunately, the U.S. has begun to take steps to transform the current outdated system of care. The National Academy of Medicine launched an Action Collaborative on Decarbonizing the U.S. Health Sector. Most recently, the U.S. was one of 50 countries that committed to develop climate-resilient and low carbon health systems at the United Nations Climate Change Conference in Glasgow. This should only be the beginning.

As communities across the U.S. continue to experience climate-related droughts, massive wildfires, extreme heat or cold spells, sea level rise, inland flooding, and expanding vector distributions, health will be affected directly and indirectly. Though the presentation of these illnesses may be familiar, the underlying causes and treatments may be novel to some. It is important that we are not only aware of this, but also consider how we as clinicians can operationalize ideas and catalyze change within our own systems to address upstream and downstream factors through broader policy initiatives. Sharing ideas, incorporating climate change into work already being done, educating patients and colleagues on the effects of climate change to specific disease processes, implementing evidence-based interventions to address structural racism, and advocating for the most vulnerable populations is climate action. We each can be part of the solution if we choose to be.

ABOUT THE AUTHORS

Michael Hii is a third-year medical student at the Medical College of Wisconsin.

Dr. Caitlin Rublee is an assistant professor in the department of emergency medicine and Institute for Health & Equity at the Medical College of Wisconsin.

CRITICAL CARE

Credentialing of Critical Care Privileges for Emergency Critical Care Physicians

By Peter Hou, MD; Raghu Seethala, MD, MSc; Michael Billington, MD; Annette Ilg, MD; and Imoigele Aisiku, MD, MBA, on behalf of the SAEM Critical Care Interest Group

As divisions of emergency critical care proliferate in academic emergency departments (ED), the governance of critical care credentialling for an emergency physician, who is critical care fellowship trained and hired to work in an intensive care unit (ICU), is important to understand. The reason for understanding the nuances of the hospital credentialling process is for the ED and ICU leadership to anticipate and prevent delays in the credentialling of new hires. The scope of this problem is deeper and beyond the new hires, and it is beyond the scope of this article. As background, and in a few exceptions among academic medical centers (AMC) in the United States, the ED does not "own" or primarily manage an inpatient ICU; hence, the ED does not sign off on the critical care privileges. Historically, intensivists are credentialled by the department that governs the ICU in which the intensivists are hired to work. However, for an emergency critical care physician (ECCP), which other department signs off on the ECCP's critical care privileges? In some AMCs, there is an ICU committee that signs off on the critical care privileges of intensivists, but who gets to sit on the ICU committee? In many AMCs, the governance of critical care credentialling for intensivists remains decentralized.

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As common scenarios: (1) Intensivists working in a medical ICU generally have their critical care privileges signed off by the department of medicine/division of pulmonary critical care medicine (PCCM) leadership or its credentialling designee; (2) Intensivists working in a surgical ICU generally have their critical care privileges signed off by the department of surgery/division of surgical critical care (SCC) or department of anesthesia/division of anesthesia critical care (ACC) leadership or its credentialling designee; (3) Intensivists working in a Neuro ICU generally have their critical care privileges signed off by the department of neurology/division of neuro critical care or department of neurosurgery/division of neuro critical care leadership or its designee; (4) Intensivists working in a mixed ICU generally have their critical care privileges signed off by the leadership or its designee of the department/division that "owns" the mixed ICU.

To share our institutional experience at Brigham and Women's Hospital (BWH), the first ECCP was anesthesia critical care medicine (ACCM) fellowship trained and hired by the ED to work in both the ED and the surgical ICU, and his surgical ICU critical care privileges were initially signed off by the division chief of SCC. After the division chief of SCC left the hospital, this role was transferred to the division chief of ACC. After a new division chief of SCC was hired, this role returned to the division chief of SCC. At the beginning of the pandemic, when COVID-ICUs were created, his admitting privileges for the COVID-ICUs were granted by the ED.

Our second ECCP was ACCM fellowship trained and hired by the ED to work in both the ED and surgical ICU, and his critical care privileges were initially signed off by the vice chair of the department of anesthesia. As he transitioned to work in the thoracic surgery ICU, his critical care privileges were signed off by the division chief of ACC. As he was trained in extracorporeal membrane oxygen (ECMO), his ECMO privileges were signed off by the division chief of ACC. His admitting privileges for the COVID-ICUs were granted by the ED. As he became the thoracic-surgery ICU director, his critical care privileges were also signed off by the division chief of thoracic and cardiac surgery.

Our third ECCP was internal medicine critical care medicine (IM-CCM) and neuro critical care trained and hired by the ED to work in both the ED and the medical ICU, and his critical care privileges were initially signed off by the division of pulmonary critical care medicine (PCCM) leadership. His admitted privilege for the COVID-ICU were granted by the division of PCCM leadership as part of the medical ICU privileges. With three ECCPs, the BWH division of emergency critical care medicine (DECCM) was established.

Our fourth ECCP was trained at the BWH IM-CCM sponsored, emergency medicine critical care medicine (EMCCM) fellowship and hired by the ED to work in both the ED and an affiliated community hospital ICU, and his critical care privileges were initially signed off by the chief of critical care at the affiliated community hospital. As he transitioned to include work in the medical ICU at BWH, his critical care privileges were signed off by the division of PCCM

continued on Page 18

CRITICAL CARE

continued from Page 17

leadership. His admitting privileges for the COVID-ICU were granted by the division of PCCM leadership. As he further transitioned to include work in the surgical ICU at BWH, his critical care privileges were also signed off by the division of PCCM leadership.

Our fifth ECCP was ACCM fellowship trained and hired to work in the cardiac surgery ICU, and her critical care privileges were signed off by the department of anesthesia's credentialling designees.

Our sixth ECCP was trained at the BWH IM-CCM sponsored, EMCCM fellowship and hired to work in the thoracic surgery ICU, and his critical care and ECMO privileges were signed off by department of anesthesia's credentialling designees.

Our seventh ECCP was trained at the BWH IM-CCM sponsored, EMCCM fellowship and was hired to work in the hospital-owned, community hospital ICU, and his critical care privileges were signed off by the chief of medicine at the community hospital.

As described, the BWH DECCM faculty staff's credentialing of their critical care privileges is decentralized.

Currently, the BWH DECCM has been asked to provide additional staffing for the hospital-owned, community hospital and is in the process of hiring two ECCPs. Moreover, BWH is planning to add a mixed ICU, and the DECCM has been asked to provide additional staffing

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for this mixed ICU as well. As ECCPs are asked to staff in additional ICUs, who should be signing off on the ECCPs' critical care privileges? Who should be approving the critical care privileges for these new hires and existing ones moving forward? As hospitals are asking the division of emergency critical care to hire additional ECCPs, would it make sense that the division chiefs of emergency critical care be designated to sign off on the critical care privileges for the new ECCP hires to streamline the hiring and credentialling processes together?

By developing a governance that streamlines the hiring and credentialing processes of ECCPs, the ED and ICU leadership can prevent delays in the new hire's ability to start on time and existing ECCPs to work in additional ICUs. Hence, a proposal to change the governance of credentialling ECCPs for their critical care privileges has been granted at Brigham and Women's Hospital:

"Emergency Critical Care Core Privileges

Evaluate, diagnose and provide treatment or consultative services to critically ill patients of all ages except where specifically excluded from practice, with post-surgical, trauma and multiple organ dysfunction and in need of critical care for life threatening disorders.

Requires: Successful completion of an ACGME training program in emergency medicine followed by a fellowship in Anesthesia Critical Care Medicine, Internal Medicine-Critical Care Medicine, Surgical Critical Care, and Neuro Critical Care with ACGME categorical approval to sit for one of the congruent boards or individual boards."

ABOUT THE AUTHORS

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Bringing Hospital Care into the Home

By Yosef Berlyand, MD; Ryan Thompson, MD, MPH; and Brian J. Yun, MD, MBA, MPH, on behalf of the the Boarding and Crowding Subcommittee of the SAEM ED Administration and Clinical Operations Committee

Hospital overcrowding and boarding in the emergency department (ED) are major challenges facing hospitals in the U.S. and can negatively impact many aspects of care, from patient experience and quality of care to staff experience and operational efficiency. We've all felt this recently with hospitals shattering admission records and both hospitals and clinicians feeling stretched thin like never before. Driven by high volumes and boarding of patients in the ED for hours and sometimes days before receiving their inpatient bed, significant efforts have emerged to find alternative pathways to hospital admission, including Home Hospital.

> "Home Hospital works particularly well for patients who do not anticipate the need for an inpatient procedure and are at low risk for decompensation necessitating critical care."

Home Hospital is defined as the community-based provision of services usually associated with acute inpatient care. In practice this means mirroring services delivered in a physical hospital, including therapies such as IV medications and oxygen, daily lab monitoring, and continuous cardiac monitoring in the comfort of a patient's home. This model has been successfully implemented in Australia and Spain, and has recently gained traction in the United States with innovative Home Hospital programs established at several academic medical centers including Massachusetts General Hospital, Brigham and Women's Hospital, Mount Sinai, and Johns Hopkins.

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necessitating critical care. Common diagnoses for Home Hospital include COPD exacerbation, CHF exacerbation, community acquired pneumonia, and cellulitis. In combination with the Home Hospital team, emergency medicine (EM) providers help screen patients who may be appropriate for Home Hospital. Patients are cared for by a Home Hospital team comprised of a physician, a nurse, and an advanced practice provider. Patients are seen multiple times daily, at least once by the nurse and once by the advanced practice provider with supervision by a physician. In addition to IV infusions and monitoring, Home Hospital services include virtual specialty consults, case management services, and as needed services such as meals, physical therapy, overnight home health aide, and even portable radiology. CT and MRI imaging is available via roundtrip transportation to the hospital.

The benefits of Home Hospital are impressive: hospitalization at home saves money, maintains quality and safety, and improves patient experience while reducing the number of patients boarding in the ED awaiting admission. Patients hospitalized at home have the benefit of being in a familiar environment and undergo fewer laboratory tests, imaging studies, and consultations while remaining more mobile. Moreover, home hospital admissions have the potential to reduce the known risks of inpatient hospitalizations such as delirium, hospital-acquired infections, deconditioning, and falls. Not surprisingly, Home Hospital patients have been shown to have a significantly lower 30-day readmission rate than traditionally hospitalized patients.

Now that the Center for Medicare and Medicaid Services announced a waiver to reimburse for Home Hospital services, Home Hospital programs are rapidly expanding around the country with over 166 waivers granted as of September 2021. Home Hospital is already changing the landscape of modern medicine; as capacity surges continue to plague U.S. hospitals, Home Hospital offers an innovative, safe, cost-effective, and patient-centered alternative to inpatient hospitalization.

ABOUT THE AUTHORS

Dr. Berlyand is a resident physician in the Harvard Affiliated Emergency Medicine Residency at Massachusetts General Hospital and Brigham and Women's Hospital. His academic work is in emergency department operations with an interest in improving patient experience and operational efficiency.

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Dr. Yun is the director of clinical operations for the emergency department at Massachusetts General Hospital (MGH). Prior to this, he was the medical director of the 31-bed emergency department (ED) observation unit. He has expertise in implementing initiatives that improve ED throughput and developing alternative pathways to admission.

Emergency Medicine's Role in Home-Based Care

By David Whitehead, MD; Emily Hayden, MD; Benjamin White, MD; Brian Yun, MD; and Stephen Dorner, MD, on behalf of the SAEM ED Administration and Operations Committee

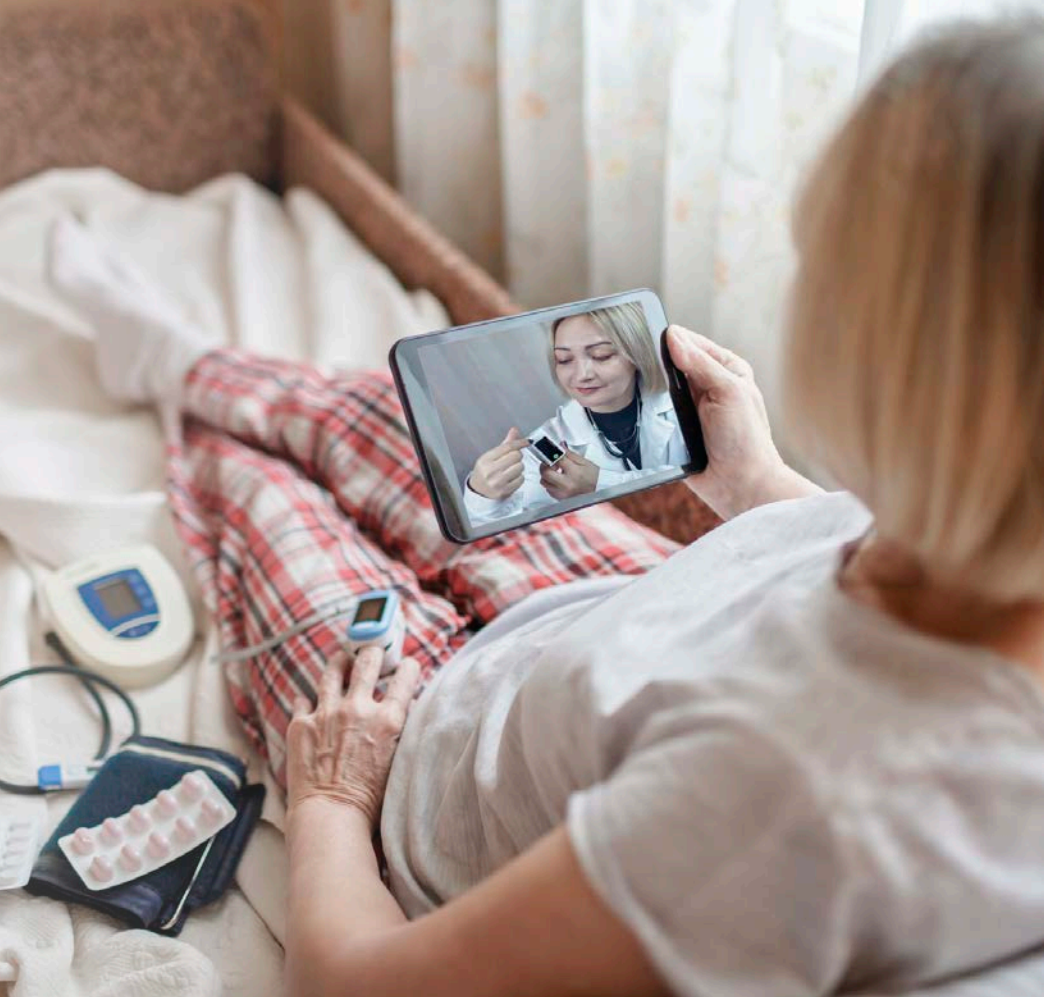
Background

As hospitals nationally struggle with capacity challenges, emergency department (ED) crowding has worsened again, increasing demand for alternative ways to care for patients. ED observation units (EDOUs), once thought of as an "alternative" care pathway, have grown significantly in number and provide care for patients needing prolonged monitoring and/or additional testing. Now mainstream, the growth and success of EDOUs have demonstrated that they can preserve ED resources and provide financial benefit to hospitals.

Amidst the COVID-19 pandemic, in recognition of constraints on in-hospital space, the Centers for Medicare and Medicaid Services (CMS) launched the Hospital Without Walls (HWW) waiver authorizing the use of telehealth and non-traditional spaces such as patients' homes to provide what has historically been hospital-based care. Enterprising EDs have seized on the opportunity created by CMS to expand their clinical skill set into alternative sites of care via mobile urgent care and virtual observation units.

Model

Extending the reach of emergency medicine (EM) beyond the walls of the hospital and into patients' homes is possible through a mobile integrated health (MIH) care platform: pairing a specially trained paramedic with portable diagnostics and therapeutics with real-time medical direction from



a prescribing clinician. The HWW waiver made the MIH model of care more financially viable through the reimbursement of telehealth services, which the paramedic can facilitate via chat- and video-based telehealth while in a patient's home. Medical systems can dispatch mobile urgent care units to evaluate patients with urgent medical needs who a) may not be able to access telehealth, b) experience issues outside of regular clinic hours, or c) require roundtrip EMS transport to receive in-person medical care.

The same MIH model of care can be used to provide observation level care for patients enrolled in virtual ED observation units. Also possible through the HWW waiver, home-based virtual observation units (VOUs) are particularly well-suited to care for patients with conditions typically treated in hospital-based observation units, including cellulitis, diverticulitis, COPD exacerbations, heart failure, and COVID-19 pneumonia, among others. Patients are enrolled after being evaluated in an ED and meeting CMS criteria for observation level of care. Thereafter, VOU patients have access to similar services available in hospital-based observation units from the convenience of their own home: vital sign monitoring, nursing evaluations via phone or video calls, in-home paramedic assessments inclusive of medication administration and lab draws, and virtual care from an EM clinician.

Benefits

Although new in structure from a regulatory and financial perspective, the MIH model of care relies on the tried-and-true pairing of emergency medicine and paramedicine. Early experience with both mobile urgent care and virtual ED observation units suggests improved patient experience, a reduction in ED boarding, improved equity in access to home-based and virtual care, and improved provider satisfaction. Moreover, patients are likely to experience less testing and have increased mobility in their home environment, as has been demonstrated through inpatient hospital at home programs.

Future

Extending the skillset of trained EM physicians into the home-based space through MIH holds significant promise in providing safe, effective, patient-centered, and convenient care while addressing mounting ED and hospital capacity challenges. Despite the early success of the models, many health systems have not pursued their development because the regulatory and financial framework authorizing them are due to expire with end of the public health emergency, creating an uncertain future. We anticipate that with increased reimbursement clarity and evidence of the positive impact virtual ED observation units and mobile urgent care have on patient care, that these models will have increasing adoption nationally in the coming years.

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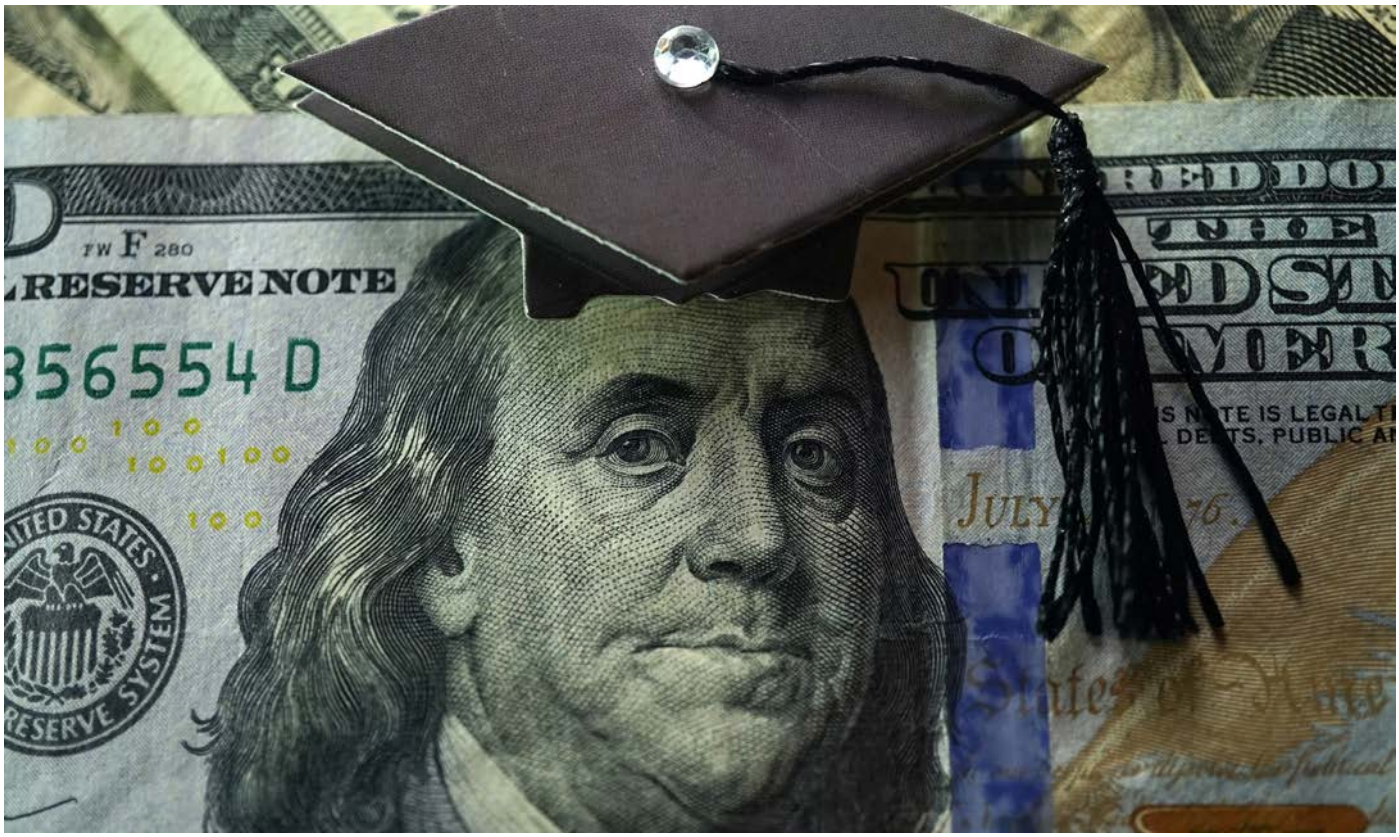

Tackling Your Student Loans

By Prayag Mehta, MD, and Alexandra Nordberg, MD, on behalf of the SAEM Education Committee

Disclaimer: Drs. Mehta and Nordberg are not financial advisors, nor do they claim to be experts. They have written this article from their own viewpoints, based on their personal experiences. Please do your own research, verifications, and take your own circumstances into account.

Dr. Mehta: Pay 'Em Off

Pursuing the Public Service Loan Forgiveness (PSLF) program is something I've considered since medical school. The idea of having your loans forgiven seems too good to be true, but is it? The average physician education debt is around $200,000, and for me it was slightly higher. As a resident, my income-based repayments were manageable. The few hundred dollars I paid each month did not touch the interest I was accruing each year, but it didn't matter because I was 36 payments closer to qualifying for loan forgiveness.

As emergency physicians, we are blessed with the opportunity to earn an average salary of $354,000. When it comes to PSLF, this is a detriment as payment plans are typically income-driven. As your discretionary income increases, PSLF becomes less beneficial. You must remember that PSLF isn't specific for physicians. There are people in other careers with similar loan burdens, but they earn significantly less; this program is ideal for them. As an attending, my payments went up to $3000 per month. Paying that amount for the next seven years would leave a loan balance around $15,000, which would be forgiven. So, the question became, was it worth it?

Everyone's circumstances and priorities are different. You should start by considering how carrying student debt will affect your life. High student debt is one of the top factors contributing to physician burnout. I felt my student debt was affecting my work satisfaction as well as my personal life, so for that reason alone, I needed it to be gone.

If you don't mind the mental aspect of carrying debt and want to address repayment from a purely financial approach, you should ask yourself a few questions to see if PSLF makes financial sense for you:

- Are you beginning the PSLF program as a resident, fellow, or attending?
- What is your debt-to-income ratio?
- Are you married, and if so, does your spouse contribute income?
- Do you have dependents?
- Is your job secure?
- Do you foresee any large purchases soon?
- What will you do with your income if not putting it towards loans?

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To begin digesting each of these financial implications, you should first use a rate calculator to see how much, if any, you will save by pursuing PSLF. You can use a formal loan simulator or get a quick idea from here. In general, if your salary is significantly higher than your remaining loan amount, PSLF will likely not make sense for you.

Now, determine your monthly expenses to decide how aggressive you can be with repayment. This will give you a realistic expectation of how quickly you can pay off your loans. After this, see at what rate you can refinance your loans. You can save thousands of dollars a year in interest which can be used to pay off loans quicker. If you plan to forgo PSLF, you will maximize your immediate savings by paying off the loans as soon as possible. Alternatively, some people find their rate is low enough that it is better for them to pay off their loans slowly over 20 years and use the extra money to contribute to retirement accounts, investments, or simply spend on things that bring them happiness.

I am married and my wife contributes to our total income. We lived in a reasonably priced apartment after residency. We traveled and enjoyed life but did not make exorbitant purchases. I wanted to pay my loans off quickly to reduce angst but was still aware of short- and long-term goals. We steadily contributed to our retirement accounts and set aside money for a down payment on a home. It took three years to pay off my loans after residency, which was still four years ahead of when I would qualify for PSLF. For us, the stress we would have carried for those additional four years wasn't worth the amount we would have saved. Being able to invest and spend our money, without lingering loans, has been invaluable for us.

Dr. Nordberg: PSLF Point of View

Deciding how to tackle student loans can be daunting. Factors such as how much student debt you have, your region of the country (and therefore salary), and academics versus community are all important components. One option for student loans is Public Service Loan Forgiveness (PSLF), which can seem like a confusing process itself.

The Rules and Details

Qualifying Employer. The organization who writes your paycheck must be a 501C3 or government employer. This can be tricky with emergency medicine (EM). At the end of the day, your employer is whoever writes your paycheck, not just where you work. This comes into play if you work for a for-profit group that is hired by the hospital. It is highly advised to submit an Employer Certification form yearly to keep track. This is a retroactive form, meaning it will update and count qualifying payments made up to the form's submission.

Work Full Time. Defined as meeting your employer's definition of full time OR work at least 30 hours, whichever is greater.

Federal Direct Loans. Only loans that say "direct" will be forgiven. With recent legislation, Federal Family Education Loans (FFEL) can now become eligible for forgiveness if consolidated into a Direct Consolidation loan before Oct 31, 2022. More on that here

120 payments. These do not have to be consecutive; however, they cannot be made sooner than 120 months. Payments made during grace periods or forbearance do not count; however, payments (including $0 payments) made during COVID administrative forbearance specifically will count.

Income-Driven Repayment. You must be on an income-driven repayment plan.

- Pay as You Earn (PAYE): 10% of your discretionary income divided by 12, not eligible for loans taken out prior to Oct 2007, "caps out" at what you would pay on the standard 10-year repayment plan.
- Revised Pay as you Earn (REPAYE): 10% of your discretionary salary divided by 12. There is no cap so depending on your income you could end up paying more than a standard 10-year repayment plan. This plan will always consider a spouse's income.
- Income Based Repayment (IBR): 15% of your discretionary income divided by 12. Caps out at the standard 10-year repayment amount.
- Income contingent Repayment (ICR): 20% discretionary income divided by 12 OR repayment plan with fixed monthly payments over 12 years, whichever is less.

If you are married, keep in mind that your spouse's income and tax filing status can impact your monthly payment for different plans. Here is more information to determine how your spouse's income can impact your loan payments. It may be advantageous to calculate the difference in savings between filing taxes jointly versus potential savings in loan payments if you file separately.

- This Federal Student Aid calculator will help you determine your repayment options
- This calculator will determine your standard 10-year repayment "cap"

During residency I was employed by a nonprofit, so I consolidated all my federal direct loans and immediately started paying. If you did not make any money as a medical student, your monthly bill will likely be $0; these payments count toward the 120 payments. As you progress through residency the monthly bill will increase with your higher salary each year. When job searching, it can be important to ask about 501c3 status.

Recently, there has been an increased push to make PSLF more attainable. This is a hot topic and surely we will continue to hear more about it, so make sure to stay current and keep track of your documentation!

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Prespectives on Goal Setting and Clinical Expectations on Shift

Medical Student Perspective

Taylor Daniel
Fourth-year medical student, University of Pennsylvania

The Importance of Clarifying Expectations

A unique aspect of rotating in the emergency department is that students rarely work with the same attending or resident more than once. While this presents an opportunity to learn from a diverse array of providers, it also necessitates adapting to different expectations each shift. Just as different supervisors may have different notions of the medical student role in the emergency department (ED), each student will have been shaped by the expectations of each prior evaluator; thus, the practice of clarifying expectations at the start of shift can enrich the learning experience in the following ways:

- Avoiding poor evaluations due to misunderstanding of expectations
- Opportunities for enriched learning by understanding each instructor's teaching styles
- Upfront expression of enthusiasm for learning and intent to contribute meaningfully to team

To clarify expectations at the start of each shift, ask the supervising resident or attending how they prefer you to see and present patients. What is the goal number of patients per shift? Do they expect you to function independently or would they prefer you work directly with a senior resident? Who should you present to? Should you complete notes, orders, consults, or discharge instructions?

The Utility of Identifying Specific Goals

While clarifying expectations allows the supervisor to give the student a sense of their teaching style, identifying specific goals allows the student to direct the educator's focus. There are three distinct aspects to incorporating goals on shift:

Create SMART Goals
Goals should be created using the SMART criteria and be specific, measurable, attainable, relevant, and timely. Discussing goals at the beginning of each shift gives evaluators time to consider actionable approaches for improvement.

Prioritize Learning
Setting specific goals allows the attending and/or resident to prioritize student learning in an efficient manner. Let's face it – the ED can be a hectic place. However, EM physicians are generally incredibly skilled at keeping miles-long mental to-do lists; therefore, when the student adds something specific to this to-do list, it helps evaluators ensure that it gets addressed. Doing so at the beginning of shift also allows educators to pay attention to the highest-yield educational opportunities throughout shift.

Solicit Targeted Feedback
Soliciting targeted feedback gives the learner an opportunity to hone a skill that they want to improve. Targeted feedback aligns the student's and evaluator's focus to make the educational opportunity maximally productive. In the absence of specific goals, the learner may have struggled or excelled in their target area and go entirely without feedback if the evaluator happens to focus on something else.

Resident Perspective

Nicole Prendergast, MD
Chief resident, Stanford University

As emergency medicine residents, we enjoy staying active and occasionally spend our free time hiking. How do we make each shift an upward step to this peak of not only becoming a competent attending physician, but a leader, supervisor, and teacher? We must find motivation, meaning, and direction in each of these shifts that will allow us to focus our attention on progressing in our careers. My thoughts regarding setting goals during my training have changed remarkably with my comfort with my job and the people around me. Understanding how to be intentional, solicit feedback, and take the lead have fostered my growth during residency.

Be Intentional

Communicate your goals to those who can support you and provide feedback. This involves answering the who, what, when, where, and how:

- Who: If you are not approached by your seniors and attendings, approach them and detail your goals for the day's shift.
- What: Utilizing the SMART framework allows you to create achievable goals for the shift.
- When: Take 3-5 minutes at the start of each shift to set goals with the attending or supervisory resident.
- Where: Find a place in the department where you feel comfortable to share your goals.
- How: Revisit goals throughout the shift to ensure you are on track to hitting your targets and, most importantly, ask for feedback.

Solicit Feedback

Although initially uncomfortable, the greatest favor you can do for yourself is to ask for feedback throughout each shift. For residents, there are multiple avenues by which feedback is delivered. In-person feedback tends to be more applicable for learners and allows lessons learned to be incorporated immediately into practice. In contrast, delayed electronic feedback may miss the mark by not being timely; however, electronic forms give the evaluator time to reflect and may allow for more substantial, thoughtful feedback. Regardless of the method of delivery, make sure you request feedback during and after each shift to guarantee you are hitting your goals.

Take the Lead

As a senior resident, we are in a unique position to be responsible for setting our own goals and lead by example and help junior learners establish their goals. After creating goals with your junior learners on shift, it is essential to provide feedback for their growth and development. In general, a well-established format includes prompting learners to discuss their thoughts on the shift, assess if goals were met, review what was done well, and finally discuss what they can work on in the future. In addition to giving feedback to your learners, create a bidirectional framework and actively solicit feedback from your learners. How did today go? What could I have explained more clearly? What do you still have questions about?

Attending Perspective

Allison Beaulieu, MD
Second-year Medical Education fellow and interim assistant program director, The Ohio State University

Preshift Preparation

As educators, our goal for each shift should be to help our learners get to the next level of training; to do so, it is helpful to know resident or student milestones and the goals they are hoping to achieve on shift. The official residency milestones are listed on the ACGME website; however, often the clinical milestones and competencies are included in your institution's postshift feedback form. Begin every shift with the end in mind and familiarize yourself with postshift evaluation forms.

Onshift Learning

Create a safe learning climate where learners feel comfortable sharing their goals and receiving feedback. Be cognizant of who is within earshot when asking learners to share their goals for the shift and giving feedback. Make it a point at the start of each shift to ask each learner their goals for the shift. If they are having difficulty, provide examples and discuss the SMART framework. Frequently check in with your learners throughout the shift to ensure they are meeting their goals.

Postshift Feedback

The closing is just as important as the set up. How can we best solidify what was learned today and be one step closer to the next milestone?

The Debrief

Leave time for questions, clarifications, and assignment of further reading. In resident postshift evaluation forms, consider leaving a link to a key paper or summary of a topic from one of the many emergency medicine Free Open Access Medical Education (FOAM) resources. This is typically on a high yield concept, procedure, or something we don't see as often in the department.

Corrective Feedback

Provide direct, corrective feedback on what learners did well and what are areas of growth. One framework to help with corrective feedback is the Stop, Start, Keep Framework. Adapted from the business world, this allows us to give direct feedback on what the learner should KEEP doing, what they should STOP doing, and finally, what they should START doing. What can they do to reach the next competency level?

Reflection

To reflect on the shift, I will ask learners three questions:

- What is the most important thing you learned during today's shift?
- What is something you encountered today that you are still confused by?
- What is one learning pearl you could teach a student or fellow resident from today's shift?

Not only does this allow the learner to reflect on all they have accomplished, but it also gives the instructor valuable feedback. Use what you've learned today and incorporate changes into your next shift with learners.

When a Surrogate Decision-Maker is Not Acting in the Patient's Best Interest

By Gerald Maloney, DO

It is a busy night, and you pick up the chart of a 60-year-old female patient who was sent over from the orthopedic clinic. She went there for shoulder pain but the x-ray the orthopedist obtained showed several acute rib fractures as well. The patient relates that her spouse got angry and shoved her to the ground a week ago, which is when she believed she got the rib fractures. A look at her chart reveals a history of cognitive impairment due to chronic alcoholism and prior severe traumatic brain injury, and her husband is listed as her health care surrogate. She is also listed as do-not-resuscitate (DNR) and her husband is listed as her medical decision make in her health care proxy form. She does not wish this to be reported and does not wish to have her husband removed as her surrogate decision-maker. You are concerned that the person responsible for her health care decisions is also being physically abusive and ask for an ethics consult.

In nearly every state, when a patient is deemed to lack capacity to make their own health care decisions, a surrogate decision-maker is identified. If the patient has previously identified the person they want to serve in this role, that person becomes the surrogate. Otherwise, the patient's next of kin, as identified in state law, generally, becomes the surrogate, unless they decline the role. (The relevant terminology varies from state to state—some states use the language of proxy and surrogate while others use power of attorney—but the practical outcome is substantially the same.) Regardless of the person appointed, they are required to act in the patient's best interest and express what they believe the patient would have wanted if they still had capacity.

Intimate partner violence is a pervasive problem in the emergency department, seen across boundaries of socioeconomic status, race and gender. Reporting laws vary by state; life-threatening injuries, stab wounds and gunshot wounds are generally reportable; less serious injuries may not be reportable depending on state laws. States also have reporting requirements regarding danger to specific vulnerable patients. All states require certain professionals to report suspicions of child abuse. Some states may also have requirements to report abuse to the elderly or intellectually disabled. When there is a mandate to report, whether

> "Intimate partner violence is a pervasive problem in the emergency department, seen across boundaries of socioeconomic status, race and gender."

because of the type of event or the type of patient involved, these reports must be made even over the patient's (or surrogate's) objection.

There are other issues involving vulnerable patients that may constitute abuse, even if not directly physical, such as taking financial advantage of the patient. In extreme situations, this may involve making decisions that may either shorten or unwantedly prolong one's life; for example, refusing certain treatments or signing a DNR order to obtain faster access to life insurance, or opting for treatment that the patient may not want to prolong their life to continue social security or disability payments. If such financial abuse is suspected, that is viewed in similar fashion to physical abuse and may also trigger mandatory reporting requirements.

When the surrogate decision-maker is not acting in the patient's best interests, then removing them as surrogate should be considered. If necessary, steps should be taken to protect the patient, up to and including removing them from the living situation they are in and obtaining an emergency appointment of a substitute surrogate.

In our case, for example, the patient had a DNR order signed by their spouse/surrogate; this needs to be extensively reviewed with the patient, her primary care team, and the hospital ethics team to determine if the DNR order should still stand. Understanding the dynamics of their relationship and the reasons why she was a DNR was necessary to ensure the DNR order was not meant to shorten her life or was not done for other nefarious reasons. It was imperative for the care team and hospital ethics team to determine whether she should have a new surrogate appointed.

Depending on local laws, filing a report may be required as well. While our patient was not technically an elderly person, she was vulnerable as a cognitively impaired person and her husband's assault on her may have been grounds for a report even if she did not want one filed. She may have required admission to the hospital, for safety if nothing else, while the situation was being sorted out. The case of a vulnerable patient with a surrogate—her husband—who appears to be at least physically abusive and possibly doing other things to work against her health and safety is an ethical nightmare case that requires a team-based, multifaceted approach.

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Dr. Maloney is an associate professor of emergency medicine, Case Western Reserve University and associate medical director, Louis Stokes Cleveland VA Medical Center.

First Person: Why I'm Choosing a Career in Geriatric Emergency Medicine

By Lily Leitner Berrin on behalf of the SAEM Academy of Geriatric Emergency Medicine

My interest in geriatric emergency medicine (GEM) stemmed from a personal interest. When I began medical school, I had two grandparents in their 90s. My parents are both considered "geriatric patients," and as the future doctor in the family, I know it will be my role to understand the systems and science behind aging to help take care of my grandparents, parents, and friends.

My assigned summer reading before starting medical school was Atul Gawande's Being Mortal: Medicine and What Matters in the End. Throughout the book, Dr. Gawande discusses what I call the "bumpy decline" that so many face at the end of life. This is a slow decline marked by minor ups and downs, but always traveling towards the inevitable end. I watched this happen to my grandmother, who passed away during my second year of medical school, and now it's happening to my grandfather, who recently celebrated his 95th birthday. While my grandparents have had access to quality care from physicians well-versed in aging, I know this is not the case for all patients and all providers. Reading "Being Mortal" impressed on me that we can and should do better for older patients.

> "As we work to lift patients to achieve equitable care models and reform our systems, it is important to remember the needs of our older patients who are underserved due to the lack of geriatric-specific training, dated systems, and an ever-changing society that often leaves them behind."

When I committed to a future career in emergency medicine, geriatric emergency medicine became an academic interest of mine. Within GEM, I have found a community of emergency physicians dedicated to improving care for older patients before, during, and after the emergency department (ED). This is done through leadership, scholarship, and advocacy. I saw GEM as a field where I could potentially have an impact. Since then, I've been mentored by passionate physicians dedicated to this group of patients. I've been fortunate to hold leadership positions, work on research projects, and educational resources. The leaders and mentors in the GEM community inspire me to dedicate my career to improving ED care for older patients.

Geriatric emergency medicine is also an important part of social emergency medicine. With the field's increasing attention on social emergency medicine, I see GEM as a necessary part of this cohort. Older patients span the spectra of race and socioeconomic status. They experience racism, poverty, homelessness, substance use, and ageism. As we work to lift patients to achieve equitable care models and reform our systems, it is important to remember the needs of our older patients who are underserved due to the lack of geriatric-specific training, dated systems, and an ever-changing society that often leaves them behind.

I recognize that it is rare to meet a medical trainee interested in GEM. Unfortunately, too few of my peers are aware of the value and satisfaction of working in this field. I challenge those trainees to think about their grandparents and parents; to think about the impact they want their careers to have on their patients, and to recognize how we can systematically and personally provide better care to our older patients in the ED.

ABOUT THE AUTHOR

Lily Leitner Berrin is a fourth-year medical student at the University of Pittsburgh School of Medicine. She completed her undergraduate degree in Cognitive Science and Spanish Literature at Occidental College in 2013 and worked at the Public Library of Science (PLOS) before pursuing medicine. Lily completed her premedical post-baccalaureate training at Bryn Mawr College in 2018. She is the current medical student representative on the AGEM Executive Board. @LilyBerrin

About AGEM

The Academy of Geriatric Emergency Medicine (AGEM) works to improve the clinical care of older patients, prepare trainees to care for older patients, and advance the geriatric EM research agenda. Joining AGEM is free! Just log into your member profile. Click "My Account" in the upper right navigation bar. Click the "Update (+/-) Academies and Interest Groups" button on the left side. Select the box next to the academy you wish to join. Click "save."

The Challenges and Priorities of Including Emergency Care in Universal Health Coverage in Low- and Middle-Income Countries

By O. Agatha Offorjebe, MD; Hussein Yakubu, MD; Stephanie C. Garbern, MD, MPH, DTMH; Taylor Burkholder, MD, MPH; Nicholas Risko, MD, MHS; and Rockefeller Oteng, MD on behalf of the SAEM Global Emergency Medicine Academy

Universal Health Coverage: Historical Context

Universal Health Coverage (UHC), as defined by the World Health Organization (WHO), means the ability of all individuals to access high-quality essential health services where and when they need them, without incurring financial hardship. The current global UHC movement is rooted in upholding the human right to the highest attainable standard of health. For this reason, UHC is a key tenet of the United Nations Sustainable Development Goals. Notably, all United Nations member states have agreed to work towards achieving UHC by 2030. One of the major challenges in this endeavor is overcoming the barriers posed by each country's unique social, political, epidemiologic, and economic conditions to deliver on the vision of UHC in a practical way. For many low- and middle-income countries (LMICs), the constraints of limited financial resources and competing health priorities make for difficult choices regarding which health services to provide, for whom, at what price, and of what quality. In the setting of severely limited resources, should emergency care services be included in a country's UHC package?

> "While surgical and primary care specialties have a robust body of literature around governance and financing of their services, there remain significant gaps in our understanding of the economics of emergency care, most notably, the health financing implications of implementing and maintaining emergency care systems."

Recognizing the Value of Emergency Care Systems in LMICs

As emergency care professionals know too well, emergencies occur regardless of whether the health system has the capacity to respond appropriately. Until recently, emergency care had been overlooked as a key component of health systems, particularly in LMICs where global aid had historically been directed toward disease-specific interventions (e.g., HIV, tuberculosis, malaria). Emergency care was often deemed a non-essential luxury for high-income countries and high earners in LMICs. However, recent studies have illustrated the global need for high-quality emergency care. For example, one study by Razzak et al. showed that in 2015 there were an estimated 28.3 million deaths due to emergent medical conditions, which contributed to over 50% of worldwide mortality. These figures reflect the critical role emergency care can play in reducing the global burden of disease, particularly in LMICs where the emergency disease burden in terms of disability-adjusted life years is 4.4 times higher compared to high-income countries.

There have also been increasing efforts to demonstrate the economic value of emergency care to the global health community at large. For example, a 2014 study by Ramierz et al. reviewed the implementation of an emergency medical system in rural Uganda and found that the intervention resulted in a cost of $89.95 per life saved with an estimated $0.93/capita to establish the system and $0.09/capita/year to maintain the system. Another study by Kivlehan et al. demonstrated that the WHO's Basic Emergency Care course is both a feasible and acceptable low-cost intervention that improves emergency care knowledge and skill. These studies are just a snapshot of the increasing body of evidence highlighting that the costs of emergency care interventions can be minimal and still have a significant impact.

In acknowledgment of this global need and economic value of robust emergency care, the World Health Assembly passed a series of resolutions calling on all member states to establish emergency care systems. This call to action was reinforced in May 2019, when the World Health Assembly called for the recognition of emergency care systems as an integral component of achieving UHC. These recent developments signal an opportunity for emergency care professionals to advocate for the inclusion of the specialty as a core component of UHC movements in countries across the globe.

Research Challenges and Priorities for Including Emergency Care in Universal Health Coverage in LMICs

As emergency care professionals continue to advocate for the development of global emergency care systems and the integration of emergency care in UHC, many questions arise. How can

continued on Page 34

GLOBAL EM

continued from Page 33

emergency care researchers move beyond this call to action and help governing bodies take practical steps towards developing UHC policies that include emergency care early in their coverage expansion pathways? What services should be included in an essential package for emergency care? Who will receive these services? Who will pay for these services and how? All these questions, and many more, arise in the context of limited resources and difficult choices. The issue is further complicated by donor funding priorities and the lack of emergency medicine specialists to advocate for the importance of universal emergency care in many LMICs.

Data around financing and the economic impact of specific health services is and will continue to be an invaluable resource to assist policymakers in identifying what emergency care services will be funded in UHC. This allows countries to obtain the best value for money and achieve health gains. While surgical and primary care specialties have a robust body of literature around governance and financing of their services, there remain significant gaps in our understanding of the economics of emergency care, most notably, the health financing implications of implementing and maintaining emergency care systems.

> "To ensure the development of evidence-based UHC policies that integrate emergency care, there will need to be a more robust body of context-specific research in LMICs."

One reason for these knowledge gaps is the unique challenge of conducting emergency care systems research, particularly in LMICs. For example, differences in epidemiology and resource availability in LMICs means that successful interventions in high-income countries cannot automatically be applied to resource-limited settings. To ensure the development of evidence-based UHC policies that integrate emergency care, there will need to be a more robust body of context-specific

research in LMICs. Fortunately, there are a handful of countries (e.g., Ghana and Thailand) that are both in active stages of UHC reform and also have established emergency care development efforts. These countries are uniquely poised to test strategies that integrate emergency care into UHC and tracking these results will provide vital lessons for other LMICs to follow suit.

Conclusion

As LMICs continue to move towards UHC, it is critical that provisions for emergency care services be included in the design of health insurance plans to meet the movement's goals of improved health, equity, and financial protection. As emergency medicine professionals, we must ensure that initiatives working to expand access to high-quality emergency care services across the globe be matched with research that informs governance and financing of these services. An emergency medicine research agenda that links emergency care financing and UHC should be a priority area for future research in the field.

Universal Health Coverage

Ghana is in West Africa and has a population of approximately 30 million. It was one of the first countries in sub-Saharan Africa (SSA) to make a commitment to UHC when it passed the National Health Insurance Scheme (NHIS) Act in 2003. This government-sponsored, mandatory health insurance plan aims to cover 95% of health conditions including emergency care services.

Ghana also became one of the first countries in SSA to strategically invest in expanding access to emergency care. In 2009, Ghana's Ministry of Health identified emergency care as one of its seven priority areas and constructed the National Accident and Emergency Center at Komfo Anokye Teaching Hospital (KATH). Ghana subsequently developed West Africa's first emergency medicine professional training program and since 2009 KATH has graduated over 50 emergency medicine physicians and more than 400 emergency nurses.

Despite overall improvements in health care access due to the NHIS, there have been a number of challenges well documented in the global surgery literature, including high numbers of uninsured patients and significant financial barriers, even for insured patients. However, little is known regarding emergency care. In partnership with the Ghana Emergency Medicine Collaborative and through the generous support of the Emergency Medicine Foundation, Dr. O. Agatha Offorjebe is conducting a study examining the role of health insurance coverage in limiting financial risk for patients accessing emergency care in Ghana. This kind of emergency care systems specific data is critical for evidence-informed priority setting in the context of UHC policy development in countries like Ghana.

ABOUT THE AUTHORS

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Refugees and Migrants Must Be Prioritized in COVID-19 Vaccination Programs

By Vinay Kampalath, MD, DTMH; Catalina González Marqués, MD, MPH; Ruhul Abid, MD, PhD; and Stephanie C. Garbern, MD, DTMH on behalf of the SAEM Global Emergency Medicine Academy

The last twenty years have seen the scale and number of global humanitarian crises grow to unprecedented levels. Ongoing humanitarian crises, or events that threaten the health, safety, or wellbeing of a population, include Yemen's civil war with resultant famine, Bangladesh's Rohingya refugee crisis, the Venezuelan economic crisis, and the Tigray conflict in Ethiopia. Globally, 235 million people needed humanitarian assistance in 2021 according to the United Nations' (UN) Office for the Coordination of Humanitarian Affairs. Many of today's humanitarian crises, which have arisen from protracted conflict, have produced large-scale forced displacement and, as a result, millions of refugees and migrants. Unfortunately, despite pleas from health care workers and humanitarian organizations, refugees and migrants have yet to be adequately prioritized in global COVID-19 vaccine programs.

Humanitarian crises produce a variety of health impacts, including violent trauma, post-traumatic stress, gender-based violence, and vaccine-preventable illnesses. Due to difficulties in testing and epidemiological surveillance, the prevalence of COVID-19 in humanitarian settings is likely underreported. The pandemic has disrupted health care in conflict-affected countries in several ways. In conflict settings, supply chain interruptions have impacted access to medicine, equipment, and personnel, essential childhood vaccinations have been delayed, and fragile health systems have been forced to reroute scarce resources to COVID-19 response.

Refugees and migrants are particularly vulnerable to the effects of COVID-19. Infection prevention guidelines, such as social distancing and self-isolation, are nearly impossible for people living in crowded camplike settings. Refugees and migrants also encounter multiple barriers in accessing timely health care. They often lack financial, logistic, or linguistic resources to access care in new health care systems and may delay care seeking out of fear deportation or detention, in addition to fears of contracting COVID-19.

> "Vaccinating the most vulnerable, including refugees and migrants, is the only right thing to do; failing to do so all but guarantees that the pandemic will rage on."

The pandemic has also had multiple non-health effects on refugees and migrants. COVID-19-related lockdowns and limitations on the freedom of movement have affected the ability of refugees and migrants to cross borders and flee violence. In the United States, COVID-19 has been cited as a reason to deport asylum seekers at the southern border, a policy that continues today. Furthermore, the ability of refugees and migrants to go to school and generate a livelihood are likely to be further compromised as nations prioritize their citizens.

COVID-19 vaccination has been championed as the most realistic way to safeguard against the pandemic's effects among the world's most vulnerable people. Disappointingly, the global allocation of vaccines has to date been inequitable. According to Our World in Data, while there have been 147 vaccine doses administered per 100 people in high-income countries, the number startlingly drops to 7 per 100 people in low-income countries. Dozens of countries will have not reached the World Health Organization's (WHO) goal of 10% vaccination coverage by the end of 2021.

Countries affected by humanitarian crises are most likely to see a delay in attaining widespread vaccination coverage. In February, the UN Security Council adopted Resolution 2565, which called on member states to include refugees and migrants in their COVID-19 national vaccination plans. While most countries have pledged to include these highly vulnerable populations in their national plans, a WHO review of 104 countries' national vaccination plans found that over 70% did not include migrants and nearly half did not include refugees or asylum seekers.

Recognizing that refugees and migrants may be shut out from national vaccination plans, the COVAX Facility established the Humanitarian Buffer in March. This option of "last resort" reserves up to five percent of total vaccine allocation for highly vulnerable populations. While countries and humanitarian organizations can directly apply for vaccines, not a single dose has been distributed through this mechanism as of September. Logistical issues, including cold chain storage requirements, vaccine expiration dates, difficulties reaching populations in insecure areas, and threats surrounding vaccine-related liabilities for humanitarian organizations have contributed to a slower-than-expected rollout in humanitarian settings.

The COVAX Humanitarian Buffer and low-income countries depend on vaccine donations from rich countries and vaccine manufacturers, which have been astonishingly slow to materialize. As of late October, only 14% of global pledged doses were actually delivered to low-income countries. The United States has only delivered or shipped one-fourth of its pledged 1.1 billion doses. Moderna has yet to directly deliver a single dose to COVAX, and like other vaccine manufacturers, it refuses to share vaccine technology with scientists in low-income countries. Rich countries have also raced to boost their already-vaccinated population so much that more booster shots have been distributed in rich countries within three months than total vaccine doses distributed among low-income countries in the entire year.

This global vaccine inequity will have global ramifications. Recently, we have

continued on Page 38

continued from Page 37

seen the discovery of a new, highly mutated variant, Omicron. Although the geographical origins of Omicron are still unknown, it is possible that it was able to accumulate a significant number of mutations in populations with little natural or vaccine-derived immunity. The arrival of Omicron provides yet another urgent call for more equitable vaccine allocation and speedier distribution, with a particular focus on access for the world's most vulnerable populations.

To vaccinate refugees and migrants, the global community must agree on several key steps to address global vaccine inequity. The human rights and dignity of refugees and migrants must be upheld by including and prioritizing these populations in national COVID-19 vaccination plans. Intellectual property rules must be suspended and the TRIPS Waiver must be adopted in order to share vaccine technology with low- and middle-income countries (LMICs), so scientists and facilities can safely and efficiently produce mRNA vaccines. High-income countries must share other diagnostic and therapeutic technologies, including oral antivirals, and invest in developing genomic surveillance capabilities in LMICs. Countries must unite in implementing a roadmap to herd immunity, with a minimum of 10% of people vaccinated by the end of 2021, and universal vaccine availability by the end of 2022.

The pandemic has reiterated that the health of one population is inextricably tied to the health of all people. Vaccinating the most vulnerable, including refugees and migrants, is the only right thing to do; failing to do so all but guarantees that the pandemic will rage on.

Case Example: Rohingya Refugees in Cox's Bazar, Bangladesh

Population

The world's largest refugee camp, over 1 million Rohingya (known officially as "Forcibly Displaced Myanmar Nationals") have lived in 34 camps in Cox's Bazar, Bangladesh since 2017. Despite high rates of hypertension, diabetes, and chronic lung disease, Rohingya tend to not report or seek health care due to fear, stigma, and mistrust of authorities.

Living Conditions

Densely populated camps (40,000 people/square km) with an average of five family members living in a single makeshift shelter and lengthy queues to obtain water from communal tube wells make social distancing or self-isolation nearly impossible.

Health Care Access

Health posts and primary health centers run by nongovernment organizations and the Bangladesh government provide basic outpatient care. Currently, there are only 15 oxygen concentrators and no ICU beds in the camps. The nearest district hospital (which serves the host community primarily), operates at 200% capacity and has 18 ICU beds for over 2.3 million people. Additionally, in March 2021, a massive fire spread through camps 8E, 8W, and 9, damaging or destroying six key health facilities.

Main Challenges for Vaccine Access/Uptake

- Lack of political will and effective, visible UN and global initiative to secure vaccines for the Rohingya and refugees worldwide in general.
- Lack of vaccine supply. Despite urges to begin vaccinations much earlier, after months of delay, COVID-19 vaccination began in August 2021. Currently, only 36,400 vaccines have been distributed among those >55 years. Interruption again occurred from October–December 2021 due to lack of vaccines.
- Lack of awareness and trust. Decades-long persecution and systematic deprivation of health and education in Myanmar has eroded trust in health and government authorities among Rohingya, leading to poor understanding of COVID-19 and mistrust of the vaccines.

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Dr. Garbern is an assistant professor of emergency medicine and research coordinator of the division of global emergency medicine at Alpert Medical School, Brown University. @sgarbern

Training Health Care Workers to Combat COVID-19 in Resource Limited Settings

By Matthew Strehlow, MD, and S.V. Mahadevan, MD

"Emergency care workers across the world are battling COVID-19 with not only limited resources but limited information. Massive Open Online Courses can help bridge this knowledge gap."

As Omicron and other COVID-19 variants create new spikes in cases around the globe, health care workers in low resource settings continue to struggle with limited health care resources as well as access to trusted information sources on evidenced-based medical practices. A Massive Open Online Course (MOOC) developed and launched by a broad coalition of medical educators and led by Stanford Emergency Medicine International has worked to bridge this knowledge gap.

While countries such as Singapore and the United Arab Emirates have fully vaccinated more than 90% of their population and the United States has leveled out at 60%, much of the rest of the world remains woefully behind — just 6% are fully vaccinated in World Bank designated low-income countries. Inadequate vaccination rates in combination with chronic financial, equipment and human resource shortages, have created an environment where COVID-19 morbidity follows the path of previous scourges, like malaria and HIV, where a disproportionate disease burden affects the most vulnerable populations. A lack of trusted, accessible information resources and a deluge of misinformation has further exacerbated resource limitations in these locations.

MOOCs have gained prominence as a means of spreading knowledge and information over the past decade.

Appropriate nasopharyngeal sample acquisition technique

However, as MOOCs have evolved, they have been primarily utilized by learners from high- and upper-middle-income countries to attain certification in areas such as mathematics and engineering or by traditional universities looking to expand their reach. The COVID-19 pandemic presented an ideal opportunity

continued on Page 40

GLOBAL EM

continued from Page 39

to test the global impact of a novel health care worker-focused MOOC as part of a comprehensive health care crisis response plan.

In March 2020, leaders from our global EM team had just returned from an international conference on Emergency Medical Services (EMS) in India, where the COVID-19 pandemic was slowly gaining momentum and where misinformation and confusion were rampant. The government of India reached out to our team to discuss building an online course focused on teaching noncritical care specialists how to manage critically ill, mechanically ventilated COVID-19 patients. In most health care settings globally, and particularly in resource-limited settings, patient care is primarily provided by nurses and other nonphysician providers in conjunction with generalist physicians. These providers typically have minimal training in performing advanced airway interventions or managing complex, critically ill patients. Consequently, we decided to strongly advocate for an intervention that had the highest chance of improving patient outcomes in most regions of the world; that is, strengthening the skills necessary for the early identification, evaluation, and treatment of COVID-19 patients with mild to moderate illness where appropriate early intervention could reduce the need for invasive mechanical ventilation.

> "Emergency care workers across the world are battling COVID-19 with not only limited resources but limited information. Massive Open Online Courses can help bridge this knowledge gap."

In April 2020, as we responded to WhatsApp messages from friends and

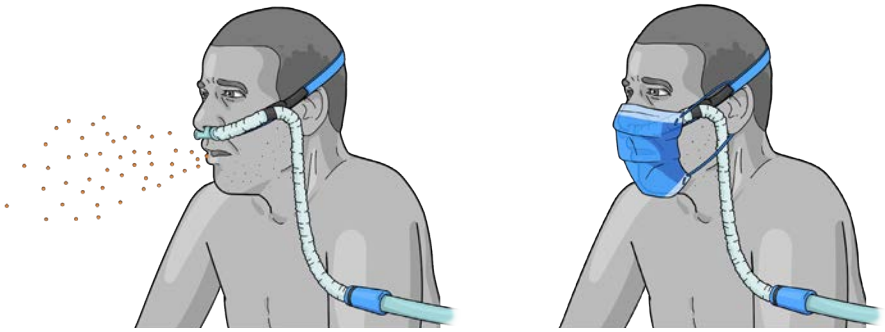
> "The COVID-19 pandemic presented an ideal opportunity to test the global impact of a novel health care worker-focused MOOC as part of a comprehensive health care crisis response plan."

colleagues from around the world about COVID-19-related management and best practices, we recognized that there was a paucity of credible medical information for health care workers in low resource settings. Over the subsequent months, we led a multi-institution, international team of health care educators, medical illustrators, video editors, and education technology staff in developing a MOOC for training bedside health care workers in the early diagnosis and management of COVID-19 patients. We anticipated that most of our target learners — self-directed, currently practicing health care workers in LMICs and remote and rural settings — would engage in course content via mobile devices. As such, the team aimed for a series of brief 10-minute modules containing practical tips and universal approaches to COVID-19 patient management as part of a three-hour course.

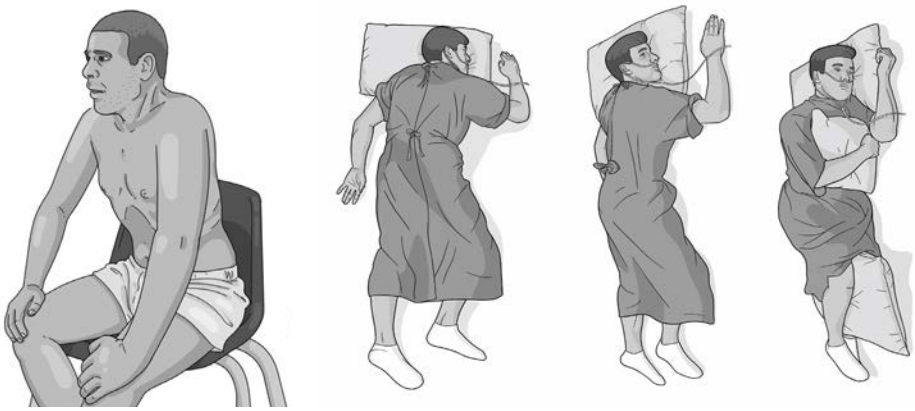
To disseminate the course, we partnered with the online education platforms Coursera and EdX, who agreed to offer the course for free, and also Digital Medic from Stanford University, who provided their free mobile app for accessing the course content offline. To date, over 100,000 global users have enrolled on the Coursera platform alone and the response has been overwhelmingly positive. We have consistently observed significant post-completion increases in learner confidence and knowledge. However, some challenges did emerge. While many of our learners were practicing health care workers and a significant number were from middle income countries, only a small percentage (10%) of learners hailed from Africa.

In response, we developed a three-pronged approach to increase dissemination: 1. translation of the course into languages beyond English; 2. partnering with regional organizations to localize and disseminate the learning materials; and 3. broadening access to individual course modules. As a result, the course is now offered in French, Spanish, Portuguese, and Hindi. We have collaborations with EduCast in Pakistan (an organization charged with caring for COVID-19 outpatients by their government), the government of Uganda, and with AfreHealth (a transcontinental health care worker organization supported by the United States Agency for International Development and the World Health Organization). We have also offered individual lessons via a partnership with YouTube to help further disseminate the educational materials.

As the pandemic evolves, new variants emerge, vaccine recommendations change, and new treatments become available, it has been critical for our team to update and augment the course materials. We continue to seek out new collaborations and mechanisms for supporting our fellow health care workers and the people they serve during this ongoing global health care crisis.



Patient mask use to limit aerosolization of viral particles and prevent COVID-19 spread



Upright and prone positioning in COVID-19 patients with difficulty breathing

ABOUT THE AUTHORS

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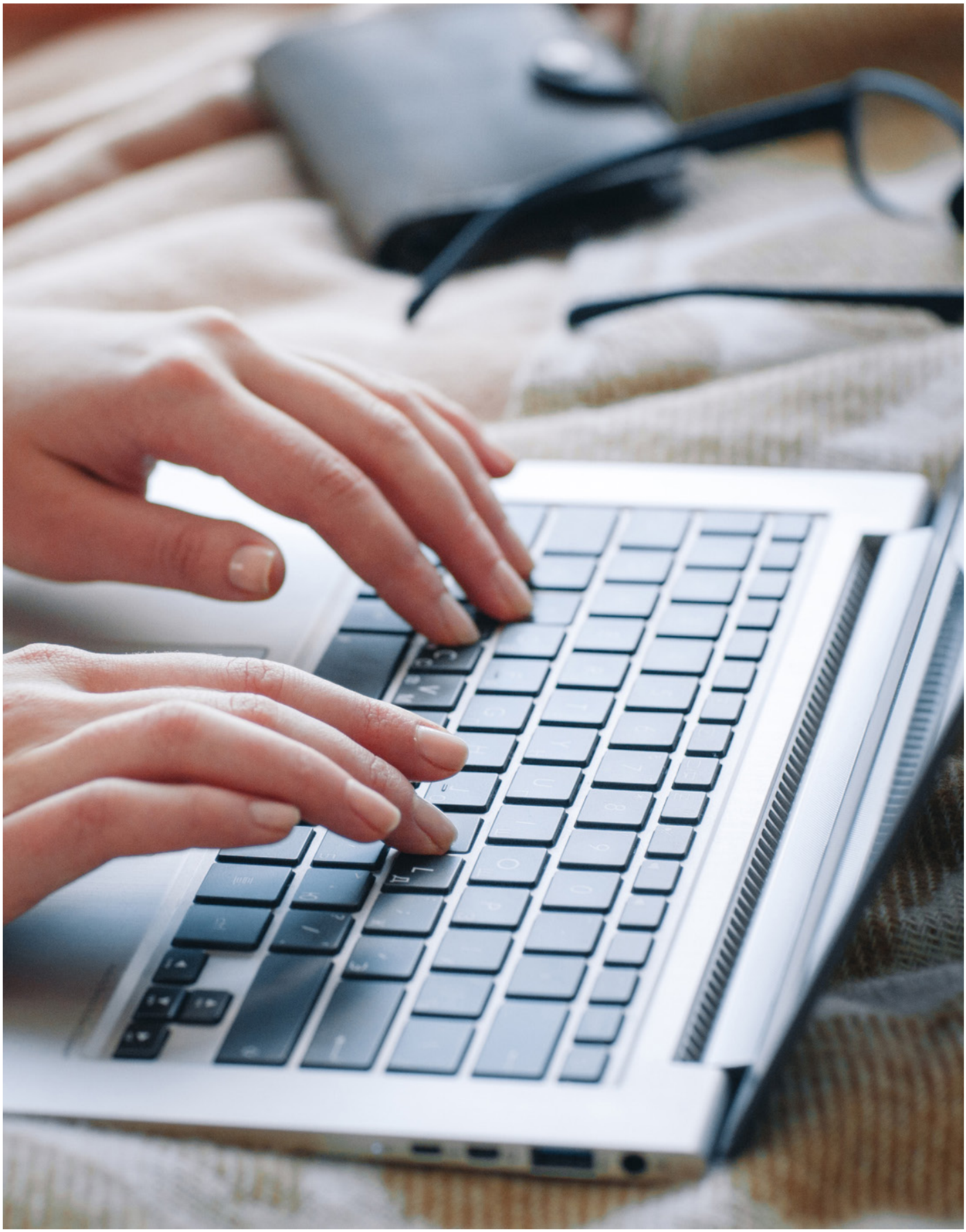
Dr. Mahadevan is a professor of emergency medicine at Stanford University and serves as director of global affairs and strategy for Stanford Medicine. He was the founding director of Stanford Emergency Medicine International (SEMI) and is currently director of South Asia Outreach, Center for Asian Health Research and Education (CARE).

EM RESEARCH



Grantsmanship for Education Scholarship: A Cornerstone of the ARMED MedEd Research Training Program

Wendy C. Coates, MD; Holly Caretta-Weyer, MD, MHPE; Stefanie Sebok-Syer, PhD; Jonathan Ilgen, MD, MCR; John Burkhardt, MD, PhD; and Lalena M. Yarris, MD, MCR on behalf of the SAEM Research Committee

> "The successful teacher is no longer on a height, pumping knowledge at high pressure into passive receptacles."
>
> —*Sir William Osler*

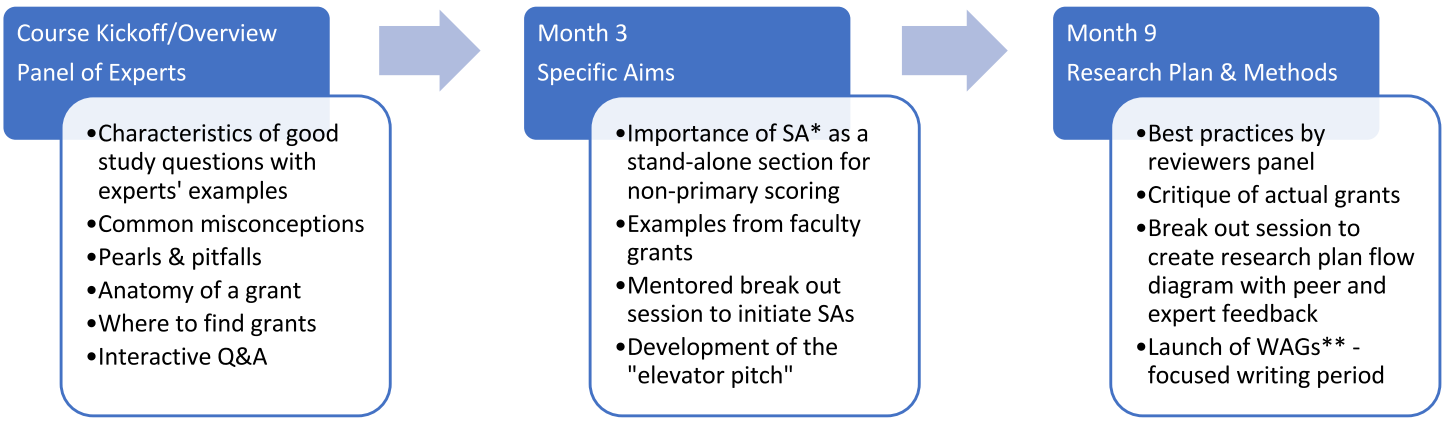
Emergency care researchers discover new ways to understand the world through basic science and clinical research and intervene to improve the lives of others. Health professions (medical) education (HPE) researchers aspire to find better ways to teach trainees to improve patient care using evidence-based educational interventions. While some individual educators may skillfully conduct an intervention focused on their own learners, widespread improvements to patient care rely on studying problems and translating important discoveries broadly. Using the education literature (teaching and learning theories) and empirically focused outcomes research, it is possible to create educational interventions that are likely to result in measurable behavioral change that enhances patient care.

In the early days of emergency care research, pioneers in our discipline identified strategies needed to create a skilled cadre of emergency medicine (EM) focused researchers who could compete for federal funding. In partnership with EM organizations and knowledgeable funded researchers outside EM, they outlined a strategy to improve knowledge, mentorship, funding, and research networks. In response to these early needs, SAEM launched supportive programs, including didactics on grant writing, opportunities to share research in a national venue, a journal for disseminating EM research, and the SAEM Foundation to provide grants to launch the careers of these researchers. More recently, SAEM developed Advanced Research Methodology Evaluation and Design (ARMED), a fundamentals of research cohort course for emerging basic science and clinical researchers.

The needs of today's HPE researchers are similar. In 2007, Reed et al. demonstrated that there is a direct correlation between funding and high-quality education research. One way to measure quality is to apply Kirkpatrick's framework. A major challenge is creating empirical scholarship that climbs the pyramid from reactionary outcomes to those resulting in improved learner-behavior and patient-care outcomes. To attain these goals for HPE research in EM, we must foster a network of highly trained, mentored researchers who can compete for substantial federal and foundational funding. SAEM has recognized these needs to

continued on Page 44

Figure 1 – ARMED MedEd synchronous grant writing workshops



**SA-specific aims **WAGs-writing accountability groups*

ARMED MEDED

ANATOMY OF A GRANT PROPOSAL

- TITLE PAGE
- SUMMARY PAGE
- KEY PERSONNEL
- BUDGET
- BUDGET JUSTIFICATION
- RESOURCES
- RESEARCH PLAN
- LITERATURE CITED

continued from Page 43

support the professional development of HPE researchers by offering didactic sessions, creating a journal, and supporting Advanced Research Methodology Evaluation and Design in Medical Education (ARMED MedEd), a longitudinal cohort course to equip HPE researchers with tools to succeed in building a program of scholarship.

ARMED MedEd is designed for those with moderate research or scholarship experience. Many are enrolled in, or have completed, a master's degree and/or an education or other academic fellowship. Some have participated in additional programs sponsored by institutions or associations. ARMED MedEd offers pragmatic tools for building a program of research, engaging with a knowledgeable community of practice, and developing robust grant-writing skills to enhance the visibility and support of their work. Baseline Google Scholar profile data and prior grant support are used to track future progress and productivity.

A central aspect is the capstone project of a submission-ready grant, with the unique opportunity for course participants to apply for the ARMED MedEd research grant offered by the SAEM Foundation (beginning in 2022). Learners are encouraged to prepare for alternative grant mechanism submissions that align with their projects and career goals. ARMED MedEd offers a series of three synchronous grant writing workshops (Figure 1) that map to each stage of the longitudinal course, using a novel educational approach that incorporates multiple perspectives (applicant, team member, senior mentor, reviewer) on the principles and components of successful grant writing. By explicitly incorporating various perspectives, early-career researchers understand both the "what" (e.g., components) and the "how-to" aspects of grantsmanship.

An ongoing asynchronous component relies on our mentorship family model, which consists of expert content and methodology mentors and peers. ARMED MedEd mentors provide ongoing support as participants engage with research ideas, craft study designs, and navigate administrative aspects of research. Participants work closely with their faculty mentors and have ongoing opportunities to share their study ideas and explore opportunities for collaboration with the other two course participants in their mentor family. We introduce writing accountability groups (WAGs) in month 10. Our curriculum offers a flexible model for seeking and securing grant funding over one's research career and highlights the importance of team-based, multi-institutional science and iterative peer-review in the grant writing process.

The ARMED MedEd grants education team partnered with SAEM Foundation to develop the request for proposal (RFP) for the targeted ARMED MedEd research grant. The RFP was specifically designed to facilitate ongoing mentorship of the successful ARMED MedEd award winner without imposing the constraints typically associated with a career development grant. For a variety of reasons, education researchers typically do not receive the same dedicated or protected time for research; therefore, the RFP is designed to promote high-quality, team-based science among a community of HPE researchers in EM.

ARMED MedEd will culminate with a research symposium and graduation at SAEM22 where participants will share their research. Anyone with an interest in the future of education scholarship may attend. We hope that the creation of this network of highly trained HPE researchers will promote multi-institutional collaborative research projects that have the potential to yield high level, generalizable learner and patient outcomes. We expect that our network of graduates will be able to compete for major external funding, including federal and foundational grants, with EM serving as a model for medical specialties to organize around a discipline wide HPE research goal. Over time, ARMED MedEd will serve to mature our HPE research community to create more robust multi-institutional research and succeed in securing funding to expand the footprint of EM HPE research.

"Over time, ARMED MedEd will serve to mature our HPE research community to create more robust multi-institutional research and succeed in securing funding to expand the footprint of EM HPE research."

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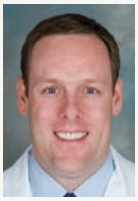

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Let's Talk Education Research in Emergency Medicine: An Interview With Dr. Wendy Coates

By Maurice Dick

Dr. Wendy Coates

Wendy Coates, MD, is professor of emergency medicine at UCLA Geffen School of Medicine, Department of Emergency Medicine at Harbor-UCLA. She pioneered the first post-graduate fellowship in medical education scholarship and research in 1997 and recently led the creation of SAEM's research course, ARMED MedEd for which she presently serves as codirector. Dr. Coates also serves as the secretary/treasurer and member of the executive committee on the SAEM Board of Directors.

What is this field of emergency medicine (EM) education research all about? What triggered your interest in pursuing this career path?

Education research has its roots in social and cognitive science and in the past was conducted primarily by learning scientists without medical training. In the early 20th century, there was an upheaval led by Abraham Flexner questioning the way doctors were trained in the US that prompted experimentation with new teaching methods. By the mid-20th century, this movement was gaining momentum and islands of reform appeared.

(Case) Western Reserve Medical School pioneered a revolutionary medical curriculum. With my roots in education theory, I was thrilled to study medicine there and thrived in the creative environment with so many pioneers in medical education research. Later, I joined the EM faculty at Harbor-UCLA in Los Angeles, where our chair, Dr. Bob Hockberger, set high standards for faculty achievement. Immersed in this faculty group of impressive leaders, I had the mentorship and surrounding experts I needed to carve out my career path to create new opportunities for our specialty to lead the way in rigorous medical education research.

Looking back at the beginning of your career in this field, there would have been significant changes from then to now, medically, scientifically, environmentally, can you identify some changes and how they impacted your research?

When I first started, education research was not a common discipline in the medical field. There were amazing teachers from whom learners and their patients derived great benefit, but there was no way to "package" their unique skill and export it widely.

Early on, if you wanted to study an educational phenomenon, you had to partner with PhD researchers.

> "To be a successful researcher in any discipline, there is a pretty standard formula for success: knowledge, mentorship, and networks."

Obtaining an advanced degree was limited to a master's degree focused on kindergarten-12th grade education!

I was a credentialed secondary education and adult education teacher and involved in a national organization that endorsed measurable outcomes for high school science students. With rigorous post-graduate training in methodology, I knew I wanted to join an academic emergency department (ED) to apply these skills to make a measurable difference in patient outcomes.

Nowadays, it's easy to find training in education research methods through courses offered by organizations (like ARMED MedEd at SAEM) or through fellowship programs at academic EDs or health professions education master's degrees.

Is there a synergistic relationship between EM education research and the delivery of health care? How does one benefit the other?

This goes so far beyond synergy; the delivery of health care is the core driver of all research, including that focused on medical education. Every research question should consider patient outcomes, from basic science, clinical trials, to the scientific basis of imparting this knowledge to learners at all levels.

Method design is a critical determining factor toward the quality of any research. What are the key components that must be included in medical education research?

As in any research project, you must consider key elements when designing a medical education study. This begins with posing a feasible, interesting, novel, ethical, relevant (FINER) research question, then defining theoretical and conceptual frameworks to answer it. Both hypothesis testing (deductive) and subjective/inductive frameworks are possible. External and internal validity should be considered in advance and a comprehensive research plan should be constructed and reported, with careful consideration to the methods: selection of participants, specific aims, data analysis, etc. Assembling a

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capable research team is critical, and one must always keep in mind that the best medical education research studies will stand the test of generalizability, where the intervention is likely to be successful in most settings, not only the original study site. This is why multi-institutional projects are so much more reliable than those conducted in a single site.

Based on your years of expertise in method design, what advice would you give to student researchers that would help them to demonstrate their understanding and application in designing studies for research?

To be a successful researcher in any discipline, there is a pretty standard formula for success: knowledge, mentorship, and networks. An aspiring education researcher's best first step is to identify a skilled mentor who has a track record of success who can guide their learning and provide hands-on research experience. As a member of the research team, the novice researcher will gain knowledge and begin to develop a network of like-minded individuals. If they find this enjoyable, the next step should be to learn the science behind the discipline, ideally with a fellowship and/or advanced degree. In the meantime, self-directed learning under the mentor's guidance can lay a methodological foundation. National and regional meetings offer didactics on theoretical topics with the added benefit of exposing the learner to like-minded individuals to begin building their network. An exceptionally motivated student may consider getting a master's degree in education research as a fifth year in medical school, in the same way many students earn an MBA or MPH.

Are multiple intelligences considered when developing and designing research questions for participants?

At the end of the day, the most important outcome for any educational intervention is improved patient care. An experienced educator realizes that learners have different strengths and there is no "one size fits all" session to suit all learners. Therefore, the welcomed departure from the large lecture hall as the only means of imparting knowledge has yielded new educational methods aimed at various intelligences, including experiential/kinesthetic (e.g., simulation), intrapersonal (e.g., flipped classroom), verbal/linguistic (e.g., podcasts), visual/spatial (e.g., infographics, anatomy coloring books). The critical element is that educational outcomes must still be realized and that these alternate learning strategies must be planned and rigorously studied to show that learners can demonstrate mastery that translates into improved patient care.

Where do you see the future of EM education research?

The exciting answer to this question is that the future is already unfolding! SAEM supported the development of a cohort-based program called ARMED MedEd that targets moderately experienced education researchers to advance their knowledge and creates a network of trained researchers in EM to facilitate multi-institutional studies and ultimately improve patient outcomes. Key features of this course are the Mentor Family Program, in which each participant has a panel of content and methodology mentors and peer mentors; an equity thread with active learning and ongoing consultation services to assure that studies are equitable with respect to learners and eventually patients. We have assembled a world class faculty of experts in education research across all disciplines and have great hopes as our graduates advance in their research careers and compete for federal and foundational funding. We believe this is the first such program in any medical specialty.

What is your most profound achievement or contribution in the field of EM education research, and why?

My most profound achievement is the creation of the discipline of postgraduate training in education research in EM. I started the first fellowship in education scholarship/research in 1997 at Harbor-UCLA. It served as a springboard for the scholarly training component of the 2012 AEM Consensus Conference on Education Research. Many institutions across the country have adopted this model to train specialists. My program was the model upon which the fellowship approval process was based. SAEM subsequently formed the Fellowship Approval Committee to apply metrics of rigor for non-ACGME accredited fellowships. This active committee now evaluates EM fellowships of many types, including education scholarship. I am most proud of all the accomplishments of my many mentees over the years. They have emerged as leaders in virtually every aspect of EM and conduct evidence-based curriculum development and high-level research in areas such as GME, UME, and prehospital care, and in every national EM organization and several international organizations. Many of them have created education research fellowships at their institutions and they are now my trusted colleagues whose accomplishments amaze me.

ABOUT THE AUTHOR

Maurice Dick is a third-year medical student at Saint James School of Medicine and a 2021 SAEM Medical Student Ambassador. His aspiration is to become an emergency medicine physician devoted to underserved communities.

Sex, Gender, and the Opioid Epidemic in the COVID-19 Era

By Savannah Russell Bunnell and Kathryn Wiesendanger on behalf of the SAEM Sex and Gender in Emergency Medicine Interest Group

Although the opioid epidemic has ravaged the United States for several years, the COVID-19 pandemic has heavily compounded the complex issues surrounding this public health crisis. The multiple stressors associated with the pandemic have resulted in men and women experiencing a drastic increase in both new and relapsing substance abuse and, most alarmingly, opioid-related overdose deaths have also increased. Social isolation due to lockdowns, financial insecurity due to loss of employment, and difficulty accessing medical and behavioral health care have all contributed to this exacerbation. Further, it appears that individuals with substance use disorder are at significantly increased risk for COVID-19 infection and have significantly worse outcomes.

While both men and women with opioid use disorder (OUD) have been affected significantly by the COVID-19 pandemic, the degree of impact between men and women may differ. An observational study from Kentucky, for instance, which considered overdose deaths in 2019 (pre-pandemic) as compared to 2020, noted significant increases in mortality rates for both sexes; however, the relative rate of increase was higher among male residents (1.58 RR versus 1.22 RR in female residents). Similar results demonstrating significant increases in opioid-related overdoses in both sexes, albeit again with a disproportionate increase in males, were noted by King et al., in a pre-/post-COVID observational study in Pennsylvania. While historically men have represented the majority of overdose deaths and persons with OUD, the etiology of the disparate

> "The multiple stressors associated with the pandemic have resulted in men and women experiencing a drastic increase in both new and relapsing substance abuse and, most alarmingly, opioid-related overdose deaths have also increased."

impact of COVID-19 on the mortality trajectory in men specifically is unclear. The pandemic's negative influence on stable housing and the domestic illicit drug supply chain have been offered as potential contributory explanations although qualitative research continues.

From a gender perspective, women appear to have been more affected by many of the psychosocial effects of the COVID-19 pandemic with subsequent ramifications for OUD. The closure of childcare facilities and the implementation of online schooling has resulted in a disproportionate number of women staying home to care for their children, as they are more often the primary caregiver in their households. In fact, women with young children decreased their work hours 400 to 500 percent more than men during the pandemic, resulting in an increase in the gender gap in work hours by 20 to 50 percent. The COVID-19 pandemic has also caused increased rates of post-traumatic stress disorder (PTSD), affecting women at higher rates than men. These particular psychosocial stressors, disproportionately affecting women, may contribute to opioid use or reuse in women.

In response to the pandemic-driven worsening of the opioid crisis, legislators amended certain OUD treatment-related policies. For example, buprenorphine is now approved to be prescribed via telehealth, psychotherapy via telehealth is increasingly covered by insurance companies including Medicare, and methadone regulations mandating daily, in-person administration have been lifted. Further, and perhaps most notable from an emergency clinician perspective, on April 28, 2021, the Biden administration waived the mandatory training component for qualified practitioners to obtain their 30-patient limit X-waiver, enabling broader utilization of buprenorphine. Emergency department-initiated buprenorphine and referral to OUD services has repeatedly been demonstrated to be a feasible and efficacious practice intervention, which can now more readily be adopted and employed for men and women.

As we continue to tackle the opioid epidemic in the pandemic era, a sex- and gender-based approach to analysis and research will be particularly necessary to better understand the phenomena described above.

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About SGEM

The Sex and Gender in Emergency Medicine (SGEM) Interest Group works to raise consciousness within the field of emergency medicine on the importance patient sex and gender have on the delivery of emergency care and to assist in the integration of sex and gender concepts into emergency medicine education and research. Joining SGEM is free! Just log into your member profile. Click "My Account" in the upper right navigation bar. Click the "Update (+/-) Academies and Interest Groups" button on the left side. Select the box next to the academy you wish to join. Click "save."

Trust Me, I'm a Patient! Mutual Respect in the Treatment of Medical Mistrust

By John Lewis, MD, MS; Kristen M. Bascombe, MD; and Kimberly Herard, MD

Case One

Mr. J is a 75-year-old male with past medical history of hypertension, coronary artery disease (CAD), first-degree atrioventricular block (AVB), and pulmonary embolism (PE) who was admitted two weeks ago for new onset third-degree AVB, however left against medical advice (AMA) after declining cardiac pacemaker placement. He presents to the emergency department (ED) one week from discharge after an episode of chest pain and dizziness similar to his last hospital visit. He is now asymptomatic.

Me: If you don't mind me asking sir, why did you decline getting a pacemaker?

Mr. J: I don't want anything foreign put in my body.

Me: Tell me what you understand regarding the reason the doctors wanted to place a pacemaker.

Mr. J: It's something about my heart not functioning right

Me: Yes. You have a third-degree heart block which causes your heart to beat too slowly. It sounds like you've had multiple conversations with the previous doctors about your condition, but do you understand there is a risk you could die suddenly without a pacemaker?

Mr. J: I understand, but I believe that God will heal me, and I will die when he says it's my time. I told them I'm willing to take a pill if there is one for this.

I informed Mr. J that unfortunately there is no medication to fix this. I asked for his permission before explaining the condition further. I drew a simple heart divided into four quadrants, explaining how the top part of the heart signals to the lower part so the heart squeezes and pumps enough blood to keep him alive. I also drew an EKG strip of a normal functioning heart versus his heart. Lastly, I asked if he had been shown what a pacemaker looks like. I googled a picture and explained how the device sits beneath the skin and has leads that connect to the heart, signaling the heart to beat at a normal rhythm.

Mr. J: No one explained this to me the way you did. If I would've understood this before, maybe I would've agreed to the procedure.

Me: It's not too late. You returned to the ED today for symptoms that are due to the same problem. I can admit you to the hospital and have the cardiologist see you.

Mr. J: Oh no. I can't stay in the hospital today because I have an appointment tomorrow for getting housing. I don't trust anyone else with my money. I can come back later this week. I can tell you are a good person and that you care. Will you be here when I come back?

Case Two

Mr. X is a 35-year-old man with a past medical history of hypertension (untreated) who is awaiting admission to the ICU for hypertensive emergency with new heart failure and acute kidney injury. His care is transferred during shift change as pending ICU bed placement if he decides not to sign out against medical advice (AMA). There is an AMA form sitting at his bedside. He is the first patient I see before picking up new patients.

Me: I heard that you were thinking about leaving.

Mr. X: I know that I need to take care of my blood pressure. I'm just anxious, and I know that is making my pressure and heart rate go up even more.

Me: You're right and your being anxious is legitimate, but it is not the cause of your blood pressure being this elevated or the damage being caused to your heart and kidneys.

Mr. X: Tell me what I really need to do, doc. I'm already eating right — no meat. I'm on my phone right now researching natural treatments. I know that I need to start taking blood pressure medications, but what else?

Me: Good job on the diet. Keep it up. In addition to that, you should stay overnight so that we can lower your pressure more rapidly in a controlled fashion and prevent further damage.

Mr. X: How bad is it, seriously? It's not permanent, right? I'm scared because my mother died with fluid in her lungs, and she had high blood pressure and diabetes.

Me: That's why we need to admit you. We want to prevent this from being life threatening and stop or even reverse the damage if we can. That is what your mother would want too. As parents, we want our children to not suffer the same losses that we did, especially if they are preventable. This is preventable. In fact, before I came in tonight, I almost forgot to take my blood pressure medication. I ran in the house to take it. Yes, I have to take medicine for blood pressure too. That's advice from one brother to another.

Mr. X: You take meds too? Alright, I'm going to stay. Do you know how long? Thanks doc (extends arm for a fist bump).

Me: Long enough to put you on the path of health (I give him a "pound," aka fist, bump back). Can I tear this up? (Referring to the AMA form at his bedside.)

Mr. X: Uhh. Yeah, I'm going to stay.

While all experiences are not universal, the human experience is. Broken trust, whether at an interpersonal or institutional level, takes significant time and effort to reconcile. When confronting medical mistrust, the phrase "trust me, I'm a doctor" holds little weight for many and does little to dispel the opposing belief, "I don't trust you BECAUSE you're a doctor", which stems from historical and present-day discrimination in health care.

Social psychologist, Laura Bogart, PhD, defines medical mistrust in part as "an absence of trust that health care providers and organizations genuinely care for patients' interests and are honest." In some cases, your humanness means more than your expertise and credentials. In cliché terms, patients don't care how much you know until they know how much you care.

The first goal is to meet the patient where they are. Ask questions to understand your patient's decision-making process. Seek permission before soliciting or providing information. If you share anything in common (race, gender, culture) meet them there; you will have less distance to traverse and fewer bridges to cross. Respect the uniqueness of each patient's story and beliefs. Provide empathy along with information. Be transparent, sharing your concerns, uncertainties, and the limitations of medical research.

Secondly, in humility, acknowledge that the shared goals between provider and patient is caring for the patient's overall well-being but has been complicated by legitimate fear and historical abuses. These ideas are not without merit and often stem from well-documented misuse and abuse of minorities in science. Physicians must also address how factors such as social and structural determinants of health impact their patient's health and decisions, which requires an investment of time and patience. Mistrust develops over time; we cannot expect it to be dissolved using anything less.

Mistrust in medicine is not an isolated concept. Mistrust exists wherever a power gradient exists. Daily experiences reinforce that certain populations are affected by institutions of power differently. This "everyday racism" that flows into health care can widen the divide between patients and physicians. A true partnership is needed for patients to feel safe from mistreatment. Respect these differences and the conclusions that are drawn from them.

The treatment protocol for medical mistrust must include:

- Time
- Transparency
- Empathy
- Patience
- Humility
- Respect

These six items do not guarantee a 100% first-pass rate, but they do significantly improve success in building a relationship of trust.

Always remember, both of you are provider and patient — the difference is when and for whom. Patients are the most powerful agent and advocates for their health. Share and respect that power.

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Dr. Lewis is an assistant professor of emergency medicine at Emory University. He serves as the cochair of the American College of Emergency Physicians (ACEP) Social EM Section Education Workgroup. He created and cohosts the podcast, Emergency Medicine Remix (EM Remix).

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Medical Errors and Quality Improvement: Opportunities for Collaboration in Simulation

By Collin Michels, MD; Alok Harwani, MD; Michelle Hughes, MD; and Nicholas Kuehnel, MD

Medical errors are a serious cause of patient morbidity and mortality and a focus of many health system efforts. Taking the steps to prevent medical errors is a critical part of residency education. Many factors contribute to medical errors, including the individual, the health care facility, and the health care system. Understanding how to analyze medical errors can improve patient outcomes and save lives.

Simulation is an effective mode of education during residency training. There is opportunity to incorporate quality improvement and evaluation of medical errors into simulation. Our team created a unique simulation and tabletop exercise combination for the University of Wisconsin BerbeeWalsh Department of Emergency Medicine residents.

> "There is opportunity to incorporate quality improvement and evaluation of medical errors into simulation."

The residents participated in a pre-simulation lecture, a simulation case, and a tabletop exercise variation in care and causal factors.

The Lecture

The lecture focused on the fundamentals of continuous rapid-cycle improvement strategies with approach to systems thinking. Residents then took part in a high-fidelity simulation involving a medical error.

The Case

In the case, EMS brought a pediatric patient into the emergency department right before sign out. The off-going emergency physician gave a hurried handoff to the oncoming team stating, "a new pediatric patient just came in with an obvious right arm deformity and was given 2mg/kg of intranasal fentanyl for pain but otherwise the kid looks fine."

The nurse alerted learners that the patient was now more somnolent and hypoxic. The residents needed to recognize and manage an opiate overdose, as well as the patient's mother, during this unintentional overdose. The nurse confederate realized that an incorrect dose of medication was administered because the team was told the patient's weight in kilograms instead of pounds.

The Debrief

Following the case, each group of residents participated in a medical debrief to discuss the case. The debrief included a reaction phase for learners to summarize the case, an understanding phase to explore areas of action or inaction and discuss teaching points, and finally a summary phase to create a take home message.

Tabletop Exercise

The residents then moved to small group tabletop exercises to conduct a root-cause analysis and discuss contributing factors leading to the medical error. The goals of the small group exercise were:

- Recognize medical errors as a source of patient harm
- Emphasize the importance of signout communication
- Identify a process for medication dose verification
- Understand rapid-cycle improvement methods and an approach to root cause analysis of problems

Each group created a fishbone diagram of contributing factors that resulted in the medical error and identified key interventions that could be tried to help reduce similar errors. Each of the five small groups identified the incorrect patient weight as the most important contributing factor to the error and discussed a variety of interventions such as having ED gurneys with built in scales, requiring an updated patient weight in the chart before medication administration, and creating standardized whiteboards in patient rooms that have a fixed unit of kilograms, among others.

Residents were surveyed following the session and asked, "how useful was this session for your education" with one being lowest and five being the highest usefulness and rated the session at an average of 4.5. Comments included that the lecture, simulation, and tabletop exercise were "highly effective, timely."

By incorporating quality improvement lectures with a simulation case involving a medical error we were able to teach residents fundamental quality improvement and operational techniques to help reduce future patient harm.

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Beyond Vicarious Trauma: Moving from Naming, Blaming, and Shaming to Growth Mindset in Medicine

By Al'ai Alvarez, MD, on behalf of the SAEM Wellness Committee

Despite having practiced emergency medicine (EM) for more than a decade, I still get palpitations whenever I receive an email that includes the words "SECURE" and "Peer Review" or similar versions of correspondence. To me, the subject line in the email has implied that I screwed up. That something terrible happened, and somehow, my care is being brought to question. Before I even click the email, my mind has already started racing. Was it that case last week? I wonder if something bad happened to that patient I discharged yesterday. Did someone complain? What did I miss?

Before I can even open the email, I've already jumped into my own shame spiral and made a conclusion that I screwed up, I'm in trouble, and somehow, I'm not a good doctor.

I don't think I'm alone in this.

We know that medical harm leads to vicarious trauma. What is often unspoken is how commonly case reviews focus on the naming, blaming, and shaming of the physician, which further leads to more trauma. Earlier in my career, I served as a quality improvement (QI) director. Knowing what I know now, I admit that I have caused this same experience in my colleagues. It was not until I worked at my current department that I was introduced to human-centered design thinking and human-factors engineering.

Beyond the acknowledgment of vicarious trauma, there is intentionality in even the language being used. For one, we do not refer to the required Joint Commission process as "Peer Review."

We acknowledge that this is beyond the level of the peer. The clinician involved is already blaming themselves, and likely a lot more than the intent and outcome of the review process. Dr. Laleh Gharahbaghian, the director of process improvement at Stanford Emergency Medicine, has led this change and renamed our "peer review committee" the "case review committee." From the start of any retrospectives, the nomenclature signals clearly that the review is no longer just about the peer. The focus is shifted on the case to include a robust analysis of the environment, systems, and processes that impacted the care delivery by the team. In this way, we can all continue to learn from each other and develop and iterate our current processes to prevent the recurrence of medical harm.

> "The focus is shifted on the case to include a robust analysis of the environment, systems, and processes that impacted the care delivery by the team."

Case reviews include discussions of events with clinical empathy. During deliberations, the clinical environment is kept in mind — how busy the shift was, the interruptions, and the resources available at the time of the incident. This critical framing is included in understanding how a well-trained clinician could have missed a diagnosis and what other system factors contributed to the event. Again, the assumption is explicit: everyone has the appropriate training, and everyone has good intentions. The delineation of contributions between the team and human factors versus systems and processes causes of harm is also deliberate and structured. Discussions are anonymized in keeping with the focus on the case and not on the clinician. Correspondence includes the reviewer's phone number to properly investigate the 5 whys of a case/clinical decision to understand the root causes of an event. Consider also including a link to resources, such as your institution's peer support, when sending case review correspondence. Other humanizing opportunities can include avoiding the use of the term "medical error," which implies mistake. If you must, then instead consider using "medical harm," which paves the way for a more objective case review.

Dr. Gharahbaghian adds, "we simply ask for insights in a case that the clinician was involved in, asking the 5 whys of a particular decision or event, and having the physician contribute to ideas for a future solution. If it is known it was a physician knowledge gap, then we address that as well by providing [the physician directly with the] educational resources. If it is a global knowledge gap, then we take the opportunity to create an educational session for our entire [clinician] group, while thinking of how we can adjust the system to ensure that gaps leading to bad outcomes are closed. The investigation and queries also include the nurses and other staff involved in the case to get their insights."

The above changes are in keeping with the Safety-II approach, and that in complex systems, we can focus on "ensuring that 'as few things as possible go wrong' to ensuring that 'as many things as possible go right.'" Instead of looking at clinicians as liability or hazard, there is a focus on the broader clinical environment. Dr. Shannon McNamara refers to this as doing "less bad" coupled with doing "more good" in order to have a "better world."

Changing names will not immediately remove the guilt and shame associated with medical harm. As emergency physicians, we pride ourselves on our work, and therefore, it is only natural to feel these emotions after any adverse events. Dr. Mickey Trockel coined self-valuation to include a growth mindset attitude with self-compassion. Yet, there is only so much self-compassion that we can practice as individuals. Therefore, as we aim towards Physician Well-Being 2.0, we can design a human-centered system that understands the impact of medical harm on clinicians. We can minimize vicarious trauma and prevent burnout without sacrificing accountability and quality of care. As we strive towards clinical excellence for our patients, we must also not forget that #DoctorsAreHumanToo.

ABOUT THE AUTHOR

Dr. Alvarez is director of well-being and cochair of the Human Potential Team at Stanford Emergency Medicine. @alvarezzzy

Unequally Worse: The Disproportionate Intensification of the Opioid Epidemic Along Racial and Socioeconomic Lines During the COVID-19 Pandemic

Corey Hazekamp, MD; Bernard P. Chang, MD, PhD; and Dana Sacco, MD, MSc, on behalf of the SAEM Behavioral and Psychological Interest Group

> "You may have to fight a battle more than once to win it."
>
> —*Margaret Thatcher*

The COVID-19 pandemic has upended life across the globe; however, the extent of disruption has varied greatly throughout society. For some, the pandemic was a mere annoyance that forced social isolation or prevented travel to see loved ones. Among medical students, hands on clinical clerkships were transitioned to virtual platforms, and board exams were frequently cancelled or postponed. Yet for those from marginalized and vulnerable communities, the adverse effects of the pandemic have been particularly severe. In particular, those suffering from opioid use disorder (OUD) have faced grim circumstances and record-breaking overdose death tolls.

The opioid epidemic had been a longstanding challenge for those working in the emergency department (ED) well before the global pandemic of COVID-19. While there was reason for

"as COVID-19 ravaged the world, the opioid epidemic intensified."

cautious optimism after a slight decline in opioid-related deaths in 2018, it has become obvious that we now have to strengthen our efforts to quell the uprise in opioid overdose deaths. The National Center for Health Statistics released data that confirmed what many health care professionals had feared: as COVID-19 ravaged the world, the opioid epidemic intensified. Annual opioid overdose deaths rose more than ever before. There was a marked spike in opioid overdose deaths caused by synthetic opioids such as fentanyl. And though most may remember 2020 as the year of the COVID-19 pandemic, health care professionals should note this milestone as motivation to redouble efforts against the opioid epidemic: (1) most drug overdose deaths in a year, (2) most deaths from opioid overdoses and (3) the most deaths from fentanyl.

Early in the pandemic, EPs voiced concern about the repercussions for those suffering from substance use disorders. They predicted that as the pandemic drove us to accessing online health care and pushed us further into social isolation, those lacking resources such as housing, cell phones or health insurance would be further marginalized. In hindsight, their prediction that "Epidemics don't smolder during pandemics — they ignite" could have gone a step further to imply that this epidemic wouldn't just ignite, it would quite literally detonate — though in an unequal fashion.

A concerning issue that surfaced during the COVID-19 is the racial disparity in deaths due to opioid overdose during the pandemic. Recently published investigations have provided evidence that opioid overdose deaths among Black patients outnumbered those among White and Hispanic patients at urban emergency departments in Virginia, Pennsylvania and Alabama. In urban Massachusetts, within a large multi-specialty health care system, it was found that during the initial COVID-19 surge, visits for mental health and substance use disorders increased among non-Hispanic white patients whereas they decreased among non-Hispanic Black patients compared to prepandemic visits. Furthermore, during the partial reopening of the state, visits by non-Hispanic Black patients decreased by over 24% whereas visits by non-Hispanic white patients decreased by less than 9% compared to prepandemic visits. Over 80% of these visits were conducted virtually, suggesting that virtual treatment for mental health

continued on Page 58

continued from Page 57

and substance use disorders may have been less accessible to the non-Hispanic Black patients versus the non-Hispanic White. These results could leave one pondering: had these disparities existed prior to the pandemic, are they a product of socioeconomic disparities caused by the pandemic, or all the above?

The racial disparities in treatment for those suffering from OUD may stem from the historical context in which methadone and buprenorphine were introduced. Methadone was initially introduced as a strategy to reduce crime. The establishment of methadone dispensing clinics was protested by neighborhood associations. Buprenorphine on the other hand, after it became FDA approved in 2002, was marketed by pharmaceutical companies towards middle class white patients suffering from OUD.

> "The racial disparities in treatment for those suffering from OUD may stem from the historical context in which methadone and buprenorphine were introduced."

In practices that may be akin to redlining and segregated housing, we may now be faced with a situation that may exacerbate disparities among vulnerable population with regards to access to obtain medications for OUD (MOUD). Recent research has shown that Black patients are less likely to receive follow-up treatment for OUD after emergency department (ED) discharge and there is a racial divide between who has access to methadone versus buprenorphine. It was found that throughout the U.S., facilities primarily intended to dispense methadone were more highly concentrated in counties with segregated Black and Hispanic communities whereas counties with primarily white communities had mostly buprenorphine dispensing facilities. Studies have also shown that buprenorphine is more accessible to white patients, patients with employer-based insurance or patients that can afford prescribers who only accept cash payments.

COVID Adaptations Provide Opportunities to Address Disparities in OUD Treatment

Pre-existing racial and socioeconomic disparities among patients with OUD combined with disparities created by the COVID-19 pandemic may have explained in part the findings that Black patients with OUD were more likely than white or Hispanic patients with OUD to die from opioid overdose during 2020. Treating patients with OUD in the ED isn't always easy, but some of the adaptations made during the COVID-19 pandemic may provide an opportunity for emergency medicine to address these racial and socioeconomic disparities in access to treatment for OUD, and ultimately to address the disparities in opioid-related deaths.

1. The major barrier to prescribing and initiating buprenorphine in the ED has changed.

The Department of Health and Human Services has eliminated certain administrative requirements, such that emergency physicians (EPs) are now able to file a "Notice of Intent" and initiate buprenorphine from the ED without completing the eight-hour X-waiver training. The American College of Emergency Physicians has released a consensus recommendation on the treatment of OUD in the ED officially recommending that EPs offer to initiate OUD treatment with buprenorphine in appropriate patients and provide direct linkage to ongoing treatment for patients whose OUD is untreated. We have a clear opportunity to equalize access to buprenorphine by increasing access in EDs, especially in EDs serving disadvantaged and primarily Black or Hispanic communities.

2. The use of telehealth services during the COVID-19 pandemic reached unprecedented levels.

Though telehealth admittedly creates an advantage for patients with access to technology, many of our vulnerable patients do have access to a cell phone. Utilizing the ability to initiate and provide follow-up treatment with MOUD via telehealth appointments is undoubtedly beneficial and will also reduce racial disparities.

3. The crucial role of harm reduction clinics was threatened during the forced shutdowns and mandated social distancing measures taken to mitigate COVID-19 transmission.

Many of these clinics themselves moved to a virtual model. These clinics help reduce risks imposed by socioeconomic marginalization and help the most at-risk patients. It is easy to imagine how suddenly losing access to harm reduction clinics would lead to a rapid rise in morbidity and mortality among OUD patients. The benefit of harm reduction clinics is in their ability to supply physical resources such as clean needs, Narcan, fentanyl test strips or safe spaces for patients. Encouraging patients to utilize a harm reduction clinic that has safely reopened will reduce their risk of overdose and death.

Patients with OUD are plagued by an epidemic imploding within a pandemic. The racial and socioeconomic disparities created or exposed can become a thing of the past, if we act now. A few steps such as prescribing a MOUD (and buprenorphine is well in the arsenal of an emergency medicine physician), referring your patient to a telehealth clinic, and educating your patients about how to access local harm reduction clinics can help tackle the disparity that exists in obtaining treatment for OUD and among deaths from opioid overdose nationwide.

ABOUT THE AUTHORS

Corey Hazekamp is a first-year emergency medicine resident at Lincoln Medical and Mental Health Center. He is interested in researching health care disparities. @coreyhazekamp

Bernard P. Chang is Vice Chair of Research and Associate Professor of Emergency Medicine at Columbia University, with research interests in health psychology, clinician health, and neuropsychiatric disease.

Dana Sacco, MD, MSc is a practicing emergency physician at NYP-Columbia University Irving Medical Center and is involved with substance use disorder research.

The 21st Century Cures Act: What Do the Patient's Think?

By Kyle Stucker, MD

Your patient is reading your notes. We are all familiar with the concept of our attending, the consultant, the primary care doctor, the billing department, and perhaps legal teams reading our documentation. We appropriately tailor our descriptions, diagnoses, plans, and medical decision making for these audiences. However, recent federal legislation has mandated access to a new pair of eyes: the patient's.

The 21st Century Cures Act was enacted by the 114th United States Congress in December 2016 and signed into law by President Barak Obama. The Act was truly bipartisan, passing the House 392–26 and the Senate 94–5, with a mixture of Republicans and Democrats representing the small cohort of dissenters.

Title IV of the 312-page act addresses the "delivery" of health care and harbors the new changes resulting in mandatory patient access to their records. In addition, it encourages certain reporting and security practices in EHRs (Electronic Health Records). Section 4004 specifically limits "Information Blocking" — defined as "a practice that… is likely to interfere with, prevent, or materially discourage access, exchange, or use of electronic health information." Section 4006 sets the goal of "offering patients access to their electronic health information in a single, longitudinal format that is easy to understand, secure, and may be updated automatically."

Finally, 4006 ends by stating that in accordance with Health Insurance Portability and Accountability Act of 1996 (HIPAA), a patient has "a right of access to inspect, obtain a copy of, and transmit to a third party a copy of such individual's protected health information."

There are several reasons to support this legislative change, including a few shared by both AMA and ACEP. One potential benefit is increased patient compliance and adherence. A 2019 Annals of Internal Medicine survey study of 19,411 respondents identified around 60% reported greater understanding, control, and comfort with their medications when they had access to their clinical notes. Only 4% of patient respondents were more worried about their medications and 2% reported to be more confused. Similarly, a 2012 Annals

> "Though our patients have access to clinical notes which may cause a slight increase in documentation burden or risk causing offense, the data to this point seems to indicate it will be an overall benefit to the doctor-patient relationship."

of Internal Medicine study of 13,564 patients discovered that 60% reported increased medication adherence.

The accuracy and efficiency of EHRs could also be improved by this change. The policy requires increased interoperability and access between different EHR systems, and this could be a great benefit to emergency physicians since they are frequently required to access data on patients from other hospitals and EHRs. Additionally, a 2020 survey in Jama Network Open of 29,656 patient respondents examined the frequency of patient-reported errors in EHRs. 21.1% reported a mistake in their physician's clinical notes. Older and sicker patients were twice as likely to report a serious error compared with younger and healthier patients. The most common reported errors were inaccurate diagnoses (27.5%), medical history (23.9%), allergies (14.0%), and 6.5% even reflected notes written on the wrong patient. Increasing patient access could reduce these frequently identified errors.

There are certainly valid concerns raised about increasing patient access. Patients who are reading their records could misinterpret or take offense by medical jargon. However, in the 2012 Annals of Internal Medicine study of 13,564 patients, only 8% reported that the notes caused "confusion, worry, or offense." Similarly, a 2017 BMJ Quality and Safety survey of 4,592 patients reported nearly all patients feeling better (37%) or the same (62%) about their doctor after gaining the ability to read clinical notes. Traditionally more vulnerable patient populations were particularly more likely to feel better about their doctor. Physicians had similar observations, with 53% believing patient satisfaction increased and 51% believing patients trusted them more. Finally, although increased administrative burden is another potential concern, the 2012 Annals of Internal Medicine survey found no increase in volume of messages sent to providers from patients and about 5% of the physicians reported spending more time in visits due to patient access to notes. Only 8% of physicians spent more time answering questions outside of appointments.

Though our patients have access to clinical notes which may cause a slight increase in documentation burden or risk causing offense, the data to this point seems to indicate it will be an overall benefit to the doctor-patient relationship. Perhaps this change will even make EHRs more efficient, accurate, and beneficial for patient and provider alike.

ABOUT THE AUTHOR

Dr. Stucker is a first-year resident at the University of Louisville. From Franklin, Indiana, he completed his undergraduate education at Wabash College and his medical education at the Indiana University School of Medicine.

Member Spotlights: The Value of an SAEM Membership

By Ramana Feeser, MD, on behalf of the SAEM Membership Committee

The 2022-2024 SAEM strategic plan states "SAEM aspires to be the premier organization for developing and supporting academic leaders and shaping the future of science, education, and practice of emergency and acute care." Given the value proposition of SAEM, a membership survey was completed in December 2020. Almost 90% of respondents indicated (agreed or strongly agreed) that SAEM is an essential contributor to the personal and professional development of the academic emergency medicine community and that SAEM increases the impact, productivity, and visibility of emergency care research. From this survey, SAEM learned that networking, committee/academy involvement, and the annual meeting are the main drivers for the value of membership. SAEM also learned that the SAEM website had low satisfaction and SAEM heard our membership, so we rolled out a new website in May 2021. This is an area we plan to reassess in the Society's next membership survey.

SAEM benefits and privileges have never been more valuable. The Society's educational offerings and professional development resources continue to grow in quality and quantity. Start taking advantage of the many benefits that our members enjoy, such as reduced registration fees for the annual meeting.

Stay connected with:
- Colleagues
- SAEM committees
- SAEM academies
- SAEM interest groups
- SAEM task forces

Opportunities for:
- Leadership
- Grants
- SAEM22 Registration Discounts (SAEM22 is open for registration!)

If you're not sure which membership category you qualify for, just click here to find out more about SAEM member types. For an overview of ALL the programs, services, and opportunities the Society offers, and the tools and information to make the most of your SAEM membership, check out the interactive SAEM Membership Guide!

Name: **Wendy C. Coates, MD**
Role: **Professor of Emergency Medicine**
Institution: **UCLA Geffen School of Medicine, Harbor-UCLA Department of Emergency Medicine**
Years as SAEM Member: **32 years**

Top reason I belong to SAEM: SAEM has been my academic home since I was a resident appointed to the SAEM Education Committee. Through the incredible networking and creative opportunities, I have been able to present my research, mentor junior members, initiate new SAEM programs, and develop leadership skills. I am honored to be serving as the secretary/treasurer on the SAEM Board of Directors, where I get to interact with so many hard-working members across multiple academies, committees, and task forces and to be able to "give back" to this organization that has meant so much to me for so many years.

My favorite memory involving SAEM: My favorite memory was sneaking into the lazy river after it closed at the SAEM Annual Meeting in Scottsdale, Arizona with Mary Jo Wagner and Gloria Kuhn. We were just too busy all day to enjoy the feature. Floating along, we noticed little "glow in the dark" specks densely populating both edges of the waterway. Curious, we took a closer look and discovered it was an army of scorpions! The three of us escaped and ran dripping and screaming right through the middle of the SAEM opening reception, where we collected an entourage of curious, brave faculty colleagues who retrieved our abandoned shoes. We had some explaining to do over the hors d'oeuvres. SAEM is a great place to make lifelong friends!

Name: **Ramana Feeser, MD**
Role: **Interim Chief Quality and Safety Officer and Associate Professor of EM**
Institution: **Virginia Commonwealth University (Richmond VA)**
Years as SAEM Member: **24 years**

Top reason I belong to SAEM: The networking that allows me the opportunity to continue to develop and learn as a leader from rockstars in academic emergency medicine.

My favorite memory involving SAEM: EM Chair Gabe Kelen, who continues to make time for me at national meetings, meets up for mentorship and friendship (Johns Hopkins is where I did my residency).

Name: **Martin A. Reznek, MD, MBA**
Role: **Professor and Executive Vice Chair for Clinical Operations and Education**
Institution: **Department of Emergency Medicine, UMass Chan Medical School, Worcester, MA**
Years as SAEM Member: **21 years**

Top reason I belong to SAEM: Countless opportunities to advance academic emergency medicine through collaboration with amazing people.

My favorite memory involving SAEM: 2008 SAEM Consensus Conference on simulation really got the ball rolling for EM to take a leading role in simulation nationally.

Name: **William (Bill) Toon, EdD, NRP**
Role: **Semi-retired, EMS Educator, consultant, expert witness**
Institution: **Over the past 46 years I have worked in six different states as an EMS provider**
Years as SAEM Member: **At least 10 years**

Top reason I belong to SAEM: SAEM allows me to network with amazing EM educators and researchers. I truly enjoy being around smart people.

My favorite memory involving SAEM: Being a referee at dodgeball during the annual meeting.

Name: **Andrea Fang, MD**
Role: **Director, Pediatric Emergency Medicine Fellowship**
Institution: **Stanford University School of Medicine**
Years as SAEM Member: **8 years**

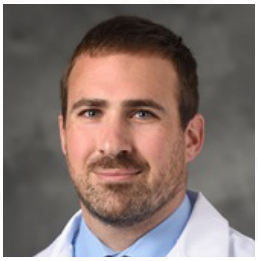
Top reason I belong to SAEM: Opportunities to bond in shared experiences in academia and join forces in work, opportunities to synergize academic work, invaluable opportunities in career advancement.

My favorite memory involving SAEM: Meeting my SAEM BFF Amy Zeiden after a meeting and knowing we'd get along really well. We have now become wonderful friends.

Name: **Cassandra Bradby, MD**
Role: **Residency Program Director, Vice Chair of Diversity and Inclusion**
Institution: **East Carolina University**
Years as SAEM Member: **7 years**

Top reason I belong to SAEM: As an educator and hopefully budding researcher, the network that SAEM provides for emergency medicine faculty is amazing. There are not only faculty development opportunities in these areas, but also an avenue to give back to medical students and residents with similar interests.

My favorite memory involving SAEM: Being able to attend SAEM19 and realize that I'm in that sweet spot of still being able to work with my mentors and now mentees in the same meeting!



Name: **Daniel N. Jourdan, MD**
Role: **PGY-2, Emergency Medicine/Internal Medicine**
Institution: **Henry Ford Hospital, Detroit**
Years as SAEM Member: **5 years**

Top reason I belong to SAEM: The ability to network and collaborate with national leaders in academic emergency medicine and work alongside them. SAEM has provided me opportunities to become involved on projects and initiatives at the national level; opportunities that would otherwise likely not be open to someone like me at a similar point in their career path.

My favorite memory involving SAEM: Being relatively new to SAEM, the majority of my time has been affected by the pandemic and thus working mostly online. One of my favorite SAEM memories is when we had our first in-person meeting this past October and I finally got to meet all these people who I had been working with virtually for the past few years.

SAEMF
Society for Academic Emergency Medicine
FOUNDATION

SAEMF Announces Funding Opportunities for Geriatric Emergency Medicine and to Encourage Medical Students

Bolstering Funding for Geriatric Emergency Medicine Research

The National Institute on Aging (NIA) offers a grant called the Grants for Early Medical/Surgical Specialists' Transition to Aging Research (GEMSSTAR) Program. The GEMSSTAR program uses an NIA-funded small research project (R03) mechanism. As part of the R03 application, investigators may include a Professional Development Plan (PDP) to run concomitantly with the R03 award which is to be supported through non-R03 funds.

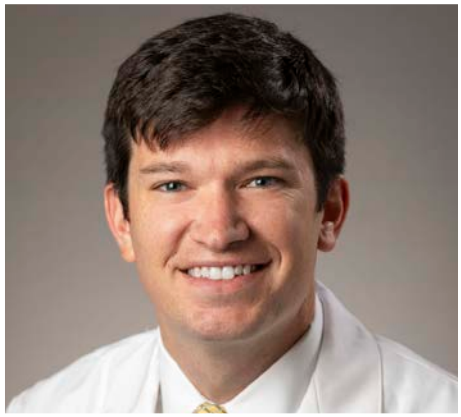
To support emergency medicine GEMSSTAR applicants in their Professional Development Plan, matching grant funding of $25,000 is provided by SAEM Foundation (SAEMF) and Emergency Medicine Foundation (EMF), who jointly created a special GEMSSTAR for Emergency Medicine Supplemental Funding Program.

The Details

- A maximum of $25,000 will be provided over two years if selected to receive this award
- The program has a separate application process from the NIA R03. See the grant announcement for more information and to apply. For questions about the NIA R03, view the GEMSSTAR FAQs
- Applicants for the GEMSSTAR for Emergency Medicine Supplemental Funding Program must have applied to the NIA GEMSSTAR program prior to applying for SAEMF's/EMF's supplemental award
- Only NIA GEMSSTAR funding recipients are eligible to receive the GEMSSTAR for Emergency Medicine Supplemental Funding Program
- **Applications due by 5 pm, CT on February 15, 2022**

Congratulations to Cameron Gettel, MD, MHS, for receiving this year's GEMSSTAR!

Dr. Gettel is an assistant professor in the department of emergency medicine and a clinical investigator at the Yale Center for Outcomes Research and Evaluation. Through his work, he aims to advance the understanding of emergency department care transitions in the growing geriatric population through the identification and development of patient- and caregiver-reported outcome measures and then to design, implement, and validate innovative care transition strategies and interventions to improve clinical outcomes. Most recently, he completed an emergency medicine residency at Brown University, where he served as chief resident, and the National Clinician Scholars Program at Yale University. Hear more from Cameron and donate to help make possible more funding available for geriatric emergency medicine research and education projects.



Looking for Funding for Future Emergency Medicine Researchers and Educators? Start Here!

The Emergency Medicine Foundation (EMF) and Society for Academic Emergency Medicine Foundation (SAEMF) partner each year to award stipends to encourage medical students (our future emergency medicine researchers and educators) to engage in and to be exposed to emergency medicine research. We applaud the 2021 cohort of grantees and wish them all the best as they move forward with their research training. See the EMF-SAEMF Medical Student Research Grant announcement for more information about how to apply for these important grants.

The Details

- A maximum of $5,000
- Up to four awards
- Application may be made by either a specific medical student or by an emergency medicine residency program wishing to sponsor a medical student research project
- **Applications due by 5 p.m., CT on February 4, 2022**

Congratulations to the 2021 EMF-SAEMF Medical Student Research Grant Recipients

Kavya Davuluri
University of Michigan Medical School
Optimizing the UME to GME Liminal Space: Identification of the Need for Diversity, Equity, and Inclusion Competencies as Core Entrustable Professional Activities

Grace Amadio
Thomas Jefferson University
Exploration of U-Scale Use in Patients with Potential Acute Coronary Syndrome

Andrew Monick
Thomas Jefferson University
Framing and Constrained Time - Considering Heuristics in Emergency Clinical Knowledge (FACT-CHECK)

Priya Patel
University of Maryland School of Medicine
The Ideal Transcutaneous Cardiac Pacer Pad Study

SAEMF Continues to Offer Popular Emergency Medicine Interest Groups Grants

SAEMF recognizes the valuable role of emergency medicine medical student interest groups (EMIGs), and awards $500 grants to support the educational activities of these groups. EMIG grant goals are:

- To promote the growth of emergency medicine education at the medical student level
- To identify new educational methodologies advancing undergraduate education in emergency medicine, and
- To support the educational endeavors of an EMIG.

Given these broad goals, there are few limitations on the nature of eligible proposals. Proposals should focus on educational activities or projects related to undergraduate education in emergency medicine. See the grant announcement for more information and to apply.

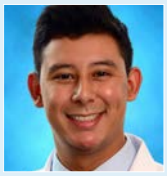
The Details

- The award is provided for one year
- Awardees may apply for subsequent year/s of funding on a competitive basis
- Grant monies may be used for supplies, consultation, and seed money. Faculty salary support is exclude
- **Applications due by 5 p.m., CT on January 31, 2022**

Congratulations to the 2021 SAEMF EMIG Recipients

Aaron Deng
Loyola University Chicago, Stritch School of Medicine
Effectiveness of Online Workshops for Teaching Introductory Suturing Skills Compared to In-Person Instruction

Caroline Lee
Harvard Medical School
Trauma-Informed Care Practices in Acute-Care Settings: Training for Medical Students



Kalani Nakashima
Saint Louis University
A Suture Lending Library for Medical Students

For more information, or to apply for these grants, please visit our website. Join the Annual Alliance today to support more future leaders like these grantees.

This Year, Partner With SAEMF to Fund Emergency Medicine's Future

Join the Annual Alliance, a community of academic emergency medicine leaders as they connect, network, and influence the future of emergency medicine. It's easy: donate online today or download the pledge form and your gift will help fund future researchers, educators, and leaders.

Your participation is essential to the specialty's progress. Each year SAEMF makes a significant investment in emergency medicine's future by funding close to $700,000 in research and education grants. This is only possible through the generosity of our Annual Alliance donors.

These visionary donors make SAEMF's work possible by partnering with us to award more and larger grants and to ensure vital resources for initiatives that build emergency medicine's pipeline of researchers and educators.

Amy H. Kaji, MD, PhD

SAEMF's donors have a generous spirit and often choose to support year after year. This is the case with Amy H. Kaji, MD, PhD, SAEM's president and a Sustaining donor of the Annual Alliance. We recently asked her to share her thoughts about the importance of personally contributing through SAEMF's Annual Alliance:

"Federal funding is decreasing for all areas of research. Emergency medicine has always disproportionately had inadequate support. When I donate to an organization, its mission and principles are of vital importance and SAEMF checks both of those boxes. We need organizations like SAEMF to support our specialty's research and train the next generation of researchers and educators. With the guidance of the SAEM Grants Committee, SAEMF has selected proposals from the best and brightest in our academic departments. I trust SAEM/F's Board members to direct donations to the topics that currently warrant emergency medicine research and education. Each $1 invested in an SAEMF grant also yields $3 in additional federal funding.

"As SAEM's president, I have been inspired by the generosity of my colleagues. Their giving compelled me to become a Donor of the Annual Alliance. If you have not already done so this year, please consider an annual alliance donation."

Donate Today!

We are grateful for the support of our 2022 Annual Alliance donors. Thank you if you have joined or renewed support -- if not, please do so today.

Did You Know...

- **Your gift will now count towards participation in the Chairs Challenge and the Academy, Committee, Interest Group Challenge that take place later this year. Give once and you are done!**
- **It's easy to become a Mentor level donor with an annual monthly gift of just $83. Pledge that same monthly gift for three years and you'll be our newest Advocate donor.**
- **New this year: name a grant in honor of someone who has made a difference in your career or to recognize someone important in emergency medicine. Email Julie Wolfe for details.**
- **Join now to take advantage of 2022 benefits. It's easy: donate online today or download the pledge form and your gift will help fund future researchers, educators, and leaders.**

Donor Perspectives

Andrew S. Nugent, MD

Chair, Department of Emergency Medicine
University of Iowa, Carver School of Medicine
SAEMF Sustaining Donor of the Annual Alliance

How has your engagement with SAEM / SAEMF impacted your professional or personal life?
I think SAEM has done a lot to shape my career arc. I began as a strictly clinical doctor doing an academic administrative job. Over the years, the exposure to SAEM and SAEMF has really helped me build an appreciation for academic work and how challenging it can be at times.

What compelled you to support the SAEMF? Why do you feel now is the right time to support more grants for emergency medicine research / education?
To be honest, it is tough to build a research program where one didn't exist before. Having the ability to draw on the help of SAEMF makes all the difference in the world when resources are limited. There is no wrong time to support SAEMF! However, right now makes all the sense in the world because the research power of our specialty is growing, and we can collectively make a difference with our support.

How do you feel SAEMF makes a difference for SAEM members, future practitioners, and patients?
SAEMF supports clinical research, which leads to improved clinical care and education for our residents. Ultimately, the patients benefit from our ability to advance our specialty and improve outcomes.

What impact do you hope your donation will have?
While I will never personally win a Nobel Prize, I hope that my contributions will enable the next generation of EM doctors to pull even (and, maybe ahead!) of the rest of the House of Medicine. A chair can dream!

What was the most important consideration in your decision to make a gift to SAEMF?
Just knowing that my contribution was going to support a specialty to which I have devoted my life's work.

Is there an important moment, person, or special occasion that influenced your decision?
While he was not an EM doctor, my dad was my first and greatest mentor. He was an old-fashioned country surgeon, and that sort of "do-it-all" mentality works equally well in EM. He retired to the countryside, and every day I try to improve the care rural patients receive in emergency departments in his memory.

Do you have any sentiments to share with others who may be considering a gift?
You'd be crazy not to! All of us benefit in many ways through these contributions.

What is the first thing that comes to mind when you think of SAEMF?
Potential.

Ultimately, why do you choose to support SAEMF's mission?
Not everyone can create the research, but we can all help create the researcher!

We're Grateful to Dr. Nugent and all our Annual Alliance donors. You can join him and the rest of the Annual Alliance, a community of academic emergency medicine leaders, as they connect, network, and influence the future of emergency medicine. It's easy: donate online today or download the pledge form and your gift will help fund future researchers, educators, and leaders.

BRIEFS AND BULLET POINTS

SAEM22 UPDATES

SAEM22 Registration is Open!

It's been two long years since SAEM's last live annual meeting, and we can't wait to welcome you back with an expansive lineup of expert educational content, ground-breaking research, cutting edge innovation, energetic events, career development opportunities, and a chance to connect in person with your friends and contemporaries. Register now for early bird pricing! Visit the SAEM22 website — your essential source for all the latest annual meeting news and information.

SimWars Team Lottery is Now Open!

The team lottery is now open for the 2022 Simulation Academy SimWars, to be held on May 11, 2022 from 1-5 p.m. CT during SAEM22 in New Orleans. SimWars is THE premier national simulation competition for emergency medicine residents. Will your residency reign supreme at SIMWars 2022? You'll never know if you don't enter your team for the chance to compete! Deadline for submissions is March 1, 2022. Questions? Contact simulation@saem.org.

SAEM JOURNALS

Accepting Applications for the AEM Education and Training Fellow Editor-in-Training Program

AEM Education and Training (AEM E&T) journal is accepting applications for its 2022–2023 Fellow Editor-in-Training program. This one-of-a-kind opportunity is open to any SAEM member who is a current resident and who will start a medical education fellowship in the summer of 2022 OR is a current fellow in a 1- or 2-year medical education fellowship program. The fellow appointment to the editorial board of AEM E&T is intended to mentor a medical education fellow in the process of peer review, editing, and publishing of education research manuscripts. Application deadline is February 10, 2022. Read more.

Call for Resident Members to Serve on the Editorial Board of Academic Emergency Medicine

Applications are now being accepted for the resident appointment to the editorial board of Academic Emergency Medicine (AEM). The 12-month resident appointment is intended to introduce the resident to the process of peer review, editing, and publishing of medical research manuscripts and will provide the resident with an experience that will enhance his/her career in emergency medicine and in scientific publication. Application deadline is February 10, 2022. Read more.

SAEM FEATURED NEWS

Accepting Applications for New Emerging Leader Development Program

The Association of Academic Chairs in Emergency Medicine (AACEM) and the Society for Academic Emergency Medicine (SAEM) are proud to introduce the inaugural Emerging Leader Development Program (eLEAD). This year-long course will provide emerging leaders in academic emergency medicine with a structured, longitudinal experience designed to develop foundational leadership skills, cultivate a meaningful career network, and build a bridge to countless opportunities in their field. Applications are now being accepted. Visit the eLEAD website for updates and further details.

AACEM Leaders Publish Paper Urging Action to Address Emergency Department Crowding

ED crowding and resultant delays in patient care have been incontrovertibly shown to lead to patient harm. ED crowding is a problem largely caused by overall hospital crowding and thus cannot be solved by a single department but through ongoing commitment by institutional leaders as well as payer and regulatory segments of the health care system. This is an assessment put forward in a commentary article titled Emergency Department Crowding: The Canary in the Health Care System, published in New England Journal of Medicine Catalyst. The article was coauthored by members of the AACEM.

It's Time to Renew Your SAEM Membership!

Renew your membership now so you can keep on accessing your SAEM member benefits. SAEM's Membership Guide highlights all the benefits available to you. There are three easy options for renewing:

1. Log in to an existing SAEM account or create a new SAEM account
2. Download and complete a membership form
3. Make payment over the phone: (847) 813-9823.

Please Take a Few Minutes to Update Your Profile

An up-to-date member profile not only helps SAEM keep the most accurate record of our members, it ensures you never experience a lapse in communication, assists us in providing you with the services that are of most value to you, and supports us in our efforts to build a more diverse and inclusive SAEM leadership. In addition, SAEM recently added a field to your member profile that will capture your fellowship specialty. This will help SAEM to identify subspecialties within our membership.

Coming in February 2022! COVID-19 Curriculum for EM Providers and Patients

The Society for Academic Emergency Medicine is pleased to provide its members with a COVID-19 Curriculum for Emergency Care Providers and Newly Diagnosed COVID-19 Patients. This curriculum is supported by an unrestricted educational grant from Glaxo.

From the very beginning of the COVID-19 pandemic, SAEM members have been on the frontlines, leading the way to better care for COVID-19 patients. With the quickly changing and constantly evolving landscape of diagnosis and treatment options for COVID-19 patients, there is a greater need than ever to develop a formal curriculum for emergency care providers who are on the frontlines of caring for these patients. Further, there is a need to improve upon the understanding surrounding the identification of COVID-19 patients at risk of poor outcomes. Emergency care providers must be the safety net for this vulnerable patient population that often presents to the emergency department (ED) and a curriculum is needed now.

With this in mind, SAEM created a task force of experts in emergency medicine and emerging infectious disease to uncover the barriers to treatment of COVID-19 in patients with a high risk of poor outcomes. The task force developed a formal curriculum for dissemination to academic emergency departments nationwide and developed a patient-facing toolkit that can be used by EDs to share with newly diagnosed patients so that they know the first steps to take after diagnosis. The resources will include answers to frequently asked questions as well as links to evidence. This educational initiative is supported by an unrestricted educational grant from Glaxo and is scheduled for release in February 2022. Check saem.org in February for downloadable toolkits and resources for providers and patients. Stay tuned as we add to the resources as the latest knowledge continues to evolve.

Webinars Now on Video!

- Pathways to Professor
- 'You're on Mute': Lessons Learned and Best Practice for Taking Simulation Virtual
- Tips for Effective On-Shift Teaching: Becoming the Best Clinical Educator to Medical Students that You Can Be
- Faculty Development Webinar Series: Bias in MedEd
- Faculty Development Webinar Series: Reinforcing Your Wellness: What's Your Value?
- Faculty Development Webinar Series: Reinforcing Your Wellness: What's Your Value?
- Reinforcing Your Wellness: What's Your Value?
- Creating Calm With Acupressure and Visualization
- Making a Virtual Lecture Engaging
- Developing an Academic Career in EM
- Ageism in Emergency Medicine

New Publications from SAEM

The Immigration Advocacy Toolkit equips front line clinicians and ED administrators with information and resources to provide welcoming and person-centered emergency care to immigrants. These resources can be used to develop a more immigration-informed emergency department that supports a variety of needs for immigrants who seek care in the ED.

The Reason for Research is a comprehensive guide for medical students, residents, and junior faculty who may be interested in pursuing an academic career in emergency medicine research. It provides an overview of a career in EM research, including career planning tips, information on required education and training, and advice and inspiration from some of the top researchers in emergency medicine.

The Fellowship Program Guide is a comprehensive, online tool that offers advice and resources for creating and leading emergency medicine fellowship programs from the ground up. It includes detailed chapters on problem identification, general needs assessment, targeted needs assessment, goals and objectives, educational strategies, implementation, and evaluation and feedback.

Let SAEM's Expert Consultants Help You With Teaching, Research, and Other EM Practice Issues

SAEM committee and academy members possess expertise in teaching, research and other aspects of academic emergency medicine (EM) practice. Through SAEM Consultation Services, these experts, in consultation with Association of Academic Chairs of Emergency Medicine (AACEM), are available to assist individuals, departments, and institutions with developing, evaluating, and/or improving various services; developing departmental status for EM divisions; subspecialty expertise (research, ultrasound, etc.); and billing, patient safety, etc.

The Latest in the SAEM Clinical Image Series

- Silver Scales by Drs. Andrew Mittelman and Haeyeon Hong, Boston Medical Center
- A Rapidly Spreading Rash by Ellsworth Wright, MD, St. Joseph's University Medical Center
- A Young Woman with Chest Pain by Emily Walton, MD, MPH, Brittany Kotek and Stacy Chamberlain, MD, MPH, University of Illinois at Chicago
- Pediatric Rash by Kate Alemann, MD, Saint Louis University
- Chronic Back Pain by Daniel Phillips and Michael Sternberg, MD, University of South Alabama

SAEM RAMS

Introducing a New Roadmaps for Residents and Medical Students

Physician involvement in local, state, and federal legislation is essential to advocating for and protecting the patients that emergency physicians serve. The involvement of emergency physicians in health policy is vital to upholding the

continued on Page 70

continued from Page 69

standard of care and seeking justice for all individuals in need of medical assistance. The SAEM RAMS Health Policy Roadmap is a definitive, step-by-step guide on how to succeed in health policy at every training level.

RAMS Biosketch Series

Visit the RAMS Biosketch webpage and listen on line to the latest podcasts in the series:

- Maame Yaa "Maya" A. B. Yiadom, MD, MPH, MSCI, of Stanford University
- Tsion Firew, MD, of Columbia University Medical Center
- Chris Kabrhel, MD, MPH, of Massachusetts General Hospital
- Alex Limkakeng, MD, MHSc, of Duke University

SAEM COMMITTEES

Virtual Presence Committee

Now Accepting Submissions for the 2022 FOAM Showcase

Do you have a FOAMed project that deserves to be shown to the world? We want to hear from you! The SAEM FOAM Showcase is back for SAEM22! Participants will take to the stage at SAEM22 with an opportunity to promote their work and compete for the title of best FOAMed project of 2022. Participants will have the chance to meet and have their work judged by leaders in FOAM. Get your submissions in now! Just complete the simple entry form here and get ready for your chance to show the world your contribution to emergency medicine!

SAEM ACADEMIES

AWAEM

Now Accepting Nominations for AWAEM Awards

SAEM's Academy for Women in Academic Emergency Medicine (AWAEM) is accepting nominations for awards in several categories: Faculty and Department Awards, Faculty Scholarships, and Resident Scholarships and Awards. For full details, including eligibility criteria and submission requirements, visit the AWAEM Awards webpage. All nominees are required to be an AWAEM member. You can join AWAEM for free through your SAEM profile. The deadline for all award nominations is 11:59 p.m. CT, January 15, 2022.

SAEM INTEREST GROUPS

Evidence-Based and Healthcare Implementation IG

New Award Named in Honor of the Late Dr. Rakesh Engineer

Dr. Rakesh Engineer

SAEM's Evidence-Based and Healthcare Implementation interest group has announced the Engineer Award, named in honor of Rakesh Engineer, MD, an accomplished emergency medicine clinical researcher and physician at MetroHealth Cleveland Clinic who passed away in 2019. Rakesh epitomized the vision of Implementation Science that "knowing is not enough…we must apply" and therefore this award will forever bear his name.

The Engineer Award honors an abstract that evaluates the implementation, or de-implementation, of a process that leads to an evidence-based improvement in patient care. The abstracts will be scored in two phases using a modified RE-AIM (Reach, Effectiveness, Adoption, Implementation Consistency, Maintenance) approach. First, judges will score written abstracts on the reach, effectiveness, adoption, and maintenance. For the top three abstracts, the oral or poster presentation will be then judged live at the SAEM Annual Meeting. From these scores, a final winner will be chosen and announced at the conclusion of the SAEM Annual Meeting. Submit your abstract here.

REGIONAL MEETINGS

Dates Announced for Western Regional Meeting

The SAEM Western Regional Meeting will be held April 1-2, 2022 at Stanford University. This meeting is the primary forum for presenting original emergency medicine research in the western region. Note this is a 100 percent in-person event.

SAEM FOUNDATION

Join SAEMF's Annual Alliance and Support Researchers/Educators Like Dr. Anne Messman

Anne Messman, MD

Associate dean of graduate medical education/designated institutional official and vice chair of education, department of emergency medicine, Wayne State University School of Medicine.

"I received the Education Fellowship Grant (2018-20) for my project 'Faculty Development of the Novice Medical Educator: Turning LIMEs into LEMONs.' This was my first grant as a medical educator, and it helped to fund my participation in the University of Michigan's Master of Health Professions Education. Besides helping my personal development, it has also made me a better and more valuable mentor to those in my department and in the medical school. My project is helping educators to better understand the effect (or lack thereof) of asynchronous resources (blogs, podcasts, etc.) on their learners. It will also stimulate thought among educators to wonder what is the real effect of these resources on learners."

Join SAEMF's Annual Alliance today and support more researchers/educators like Dr. Messman as they make a difference in emergency medicine's future. It's easy: donate online today or download the pledge form and your gift will help fund future researchers, educators, and leaders.

Introducing Stop the Stigma EM: A Toolkit for Individuals, Educators, and Institutions

Every physician is vulnerable to mental illness, just like any other medical problem, and attending to one's mental health is as important as managing one's physical health. Institutional leaders, colleagues, and peers can have a powerful influence on those struggling with mental health issues by normalizing the seeking of mental health and making it safe for individuals to seek support and care. These are some of the goals of the "Stop the Stigma EM" campaign. Take care of yourself. Take care of each other. Start now. Start here.

Help Stop the Stigma One Story at a Time

One of the most powerful things you can do to help break down barriers to mental health is talk openly about your personal mental health journey. Sharing your positive story of help, hope, and healing is empowering. Simply put, sharing your mental health journey opens the door to healing for yourself and others. With your help, we can stop the stigma in emergency medicine one story at a time. Please consider sharing the story of your mental health journey.

Tell Us What Your Institution is Doing to Stop the Stigma in EM

Sharing fosters support, inspires others, and is a powerful tool for making a difference. We invite you to share what your department and/or institution is doing to reduce the stigma surrounding mental illness in emergency medicine. Tell us what is working for you. Share your ideas, tips, programs, activities, and initiatives and we'll pass them along to others. Working together we can begin to destigmatize mental health care in emergency medicine.

SAEM Foundation Announces Challenge Winners

On behalf of SAEM and SAEMF, a special thank you to our group leaders and donors who made this record-breaking year possible. Together SAEM academies, committees, and interest groups raised a total of $35,000; SAEM will match that amount with an additional $10,000, for a grand total of $45,000 to fund more grants.

SUBMIT YOUR ANNOUNCEMENT!

The SAEM Pulse **Academic Announcements** section publishes academic appointments, promotions, retirements, grant awards, research announcements, published papers, etc. Send your content (50-75 words max) to newsletter@saem.org. The next content deadline is February 1, 2022 for the March/April 2022 issue.

ACADEMIC ANNOUNCEMENTS

Dr. Jill Corbo Promoted to Professor of EM

Dr. Jill Corbo

Jill Corbo, MD, was promoted to professor of emergency medicine at Albert Einstein College of Medicine, New York. She is an attending physician in emergency medicine at Jacobi and North Central Bronx and a senior faculty member, leader of resident research, and a senior faculty leader of Women+ mentorship group at Albert Einstein. Dr. Corbo joined the emergency medicine faculty at Albert Einstein in 1998. She was instrumental in developing a robust ultrasound program in the department and was promoted to associate professor in 2007. She is the founding director of one of the first Emergency Medicine Ultrasound Fellowships in the country in 2005. Dr. Corbo is currently a senior faculty member, a dedicated member of our residency team as the leader of resident research, and a senior faculty leader of our Women+ mentorship group.

Dr. Jeffrey Lai Named Fellowship Director of Medical Toxicology at the UMass Medical School

Dr. Jeffrey Lai

Jeffrey Lai, MD, is the new Fellowship Director of Medical Toxicology at the University of Massachusetts (UMass) Medical School. Dr. Lai, an emergency physician and medical toxicologist, is also the director of the outpatient toxicology clinic, and the clerkship director for the Introduction to Medical Toxicology elective at UMass. He previously served as the Associate Fellowship Director at UMass. His academic interests include medical education and the application of novel technologies to the treatment of substance use disorder. He is well known for his excellent clinical acumen, commitment to outstanding educational offerings, methodologic excellence in research.

Dr. Kaushal Shah Promoted to Professor of Clinical Emergency Medicine

Dr. Kaushal Shah

Kaushal Shah, MD, has been promoted to professor of clinical emergency medicine at Weill Cornell Medicine. Dr. Shah joined the emergency department at Weill in 2018 as the vice chair of education. He is also the assistant dean of academic advising for the medical college, where he is responsible for the development and ongoing management of academic advising for all medical students. Prior to his role at Weill Cornell, Dr. Shah was the vice chair of education and the residency program director for the department of emergency medicine at Mount Sinai.

Dr. Eugenia South Awarded Multimillion Dollar NIH Grant

Dr. Eugenia South

Eugenia South, MD MSHP assistant professor of emergency medicine at the Perelman University of Pennsylvania School of Medicine and faculty director of Penn's Urban Health Lab, was awarded a nearly $10 million NIH grant (U01OD033246) to conduct an RCT to study the impact of environmental and economic interventions to reduce health disparities in Black Philadelphia neighborhoods. The grant will fund research to investigate the impact of neighborhood place-based and financial well-being interventions, targeting the root causes of structural racism that contribute to poor health in Black communities. Read more.

Drs. Carreiro and Haran Named Codirectors of the Research Division of EM at UMass

Drs. Stephanie Carreiro and John P. Haran are the new codirectors of the Research Division of Emergency Medicine at the University of Massachusetts Chan Medical School. In their new roles they will expand their administrative responsibilities; grow their mentorship of junior faculty, fellows, and residents; and foster networking and interdepartmental team building across the UMass organization.

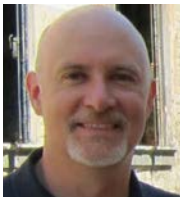
Dr. Stephanie Carreiro

*Stephanie Carreiro, M*D is an attending physician in the Department of Emergency Medicine at the University of Massachusetts Medical School

Dr. John P. Haran

John P. Haran MD, PhD is an associate professor of emergency medicine, an associate professor in the department of microbiology and physiological systems, and associate clinical director of the Center for Microbiome Research at the University of Massachusetts Medical School

Dr. Chad E. Darling Named EM Research Fellowship Director



Dr. Chad E. Darling

Chad E. Darling, MD, MSc, a professor of emergency medicine (EM) at UMass and is an EM faculty physician within the UMass Memorial Health organization, is the new EM Research Fellowship Director at the UMass Chan Medical School. Dr. Darling's research interests include acute cardiovascular conditions in the ED, and wearable medical monitoring devices.

Drs. Hsia, Lemery, Salas Elected to the National Academy of Medicine

Election to the National Academy of Medicine (NAM) is considered one of the highest honors in the fields of health and medicine and recognizes individuals who have demonstrated outstanding professional achievement and commitment to service.

Dr. Renee Yuen-Jan Hsia

Renee Yuen-Jan Hsia, MD, MSc, is professor of emergency medicine and health policy, and associate chair of health services research, department of emergency medicine, University of California, San Francisco.

Dr. Renee N. Salas

Renee N. Salas, MD, MPH, MS, is affiliated faculty, Harvard Global Health Institute; Yerby Fellow, Harvard T.H. Chan School of Public Health; and attending physician, department of emergency medicine, Harvard Medical School and Massachusetts General Hospital.

Dr. Jay Lemery

Jay Lemery, MD, is professor of emergency medicine, University of Colorado School of Medicine.

Dr. Richard Trepp Appointed Chief Medical Information Officer

Dr. Richard Trepp

Richard Trepp, MD has been appointed chief medical information officer for NewYork-Presbyterian (NYP) Hospital. Dr. Trepp has been faculty at Columbia University Department of Emergency Medicine since 2005. He has served in a variety of roles including the director of informatics for the department of emergency medicine, the NYP assistant chief quality officer for informatics and, most recently, as NYP's Medical Director for Epic.

Dr. Jenny Castillo-Cato Promoted to Associate Professor

Dr. Jenny Castillo-Cato

Jenny Castillo-Cato, MD has been promoted to the rank of associate professor of emergency medicine at Columbia University Vagelos College of Physicians and Surgeons. Dr. Castillo is also the director of wellness for the Columbia University Department of Emergency Medicine, the first departmental Wellness Director within the medical campus.

Dr. Tiffany Murano Joins Columbia University as Vice Chair of Education

Dr. Tiffany Murano

Tiffany Murano, MD has joined the Columbia University Department of Emergency Medicine as the vice chair of education. She was also appointed by NewYork-Presbyterian (NYP) Hospital as an associate designated institutional official (ADIO) to join the graduate medical education (GME) team.

Dr. Paul Musey Named Vice Chair of Innovation

Dr. Paul Musey

Paul Musey, MD, MSc, has been named vice chair of innovation at Indiana University School of Medicine (IUSM) Department of Emergency Medicine. Dr. Musey is an associate professor of emergency medicine at IUSM.

Dr. Katherine Pollard Named Assistant Medical Director

Dr. Katherine Pollard

Katherine Pollard, MD, the new assistant medical director at Methodist Hospital! Indiana University School of Medicine, Department of Emergency Medicine. Dr. Pollard is also an assistant professor of clinical emergency medicine at IUSM.

Commentary by Drs. Hollander and Sharma Appears in NEJM Catalyst

Dr. Judd E. Hollander

Dr. Rahul Sharma

A commentary by Judd E. Hollander, MD, and Rahul Sharma, MD, MBA, The Availablists: Emergency Care without the Emergency Department, appeared in the December 21, 2021 issue of NEJM Catalyst. The commentary suggests that the COVID pandemic offers an opportunity to rethink the role of EDs and emergency physicians, and to create new care options that remove traditional barriers to effective emergency care.

NOW HIRING

THE UNIVERSITY OF KANSAS HEALTH SYSTEM | THE UNIVERSITY OF KANSAS PHYSICIANS | KU MEDICAL CENTER The University of Kansas

Emergency Medicine Vice Chair of Research

University of Kansas Health System, Kansas City, KS

Seeking a Vice Chair of Research as an integral member of a growing emergency medicine program.

About our institution:

The University of Kansas Health System

- Quaternary care center
- Greater than 63,000 patient ED visits per year
- Certified STEMI & Advanced Cardiac Care center
- Advanced Comprehensive Stroke Center
- Nationally certified adult and pediatric burn center
- Nationally certified Poison Control Center
- ED expansion scheduled to be completed in 2023

The University of Kansas Medical School

- Sole academic medical center in the state serving over 800 medical students and over 3,500 students across all disciplines
- Over $50 million in NIH-funded research
- Opportunities for paid teaching positions in newly-redesigned medical school curriculum, including in small-group facilitation and simulation

TUKHS Emergency Department

- Dynamic, award-winning faculty
- Emergency Medicine Residency Program (30 residents)
- Nationally recognized Emergency Nursing
- Fellowships in Education, Administration and Ultrasound
- Plans for future fellowship in EMS

We are an Equal Opportunity / Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, protected veteran or disability status, or genetic information.

Responsibilities to include:

- Growth and vitality of emergency care research including, but not limited to, clinical research, health services and medical education
- Advance the national reputation of the department by means of research excellence and securing of departmental NIH, other federal research support and industry support
- Clinical shifts in the emergency department
- Clinical and/or didactic teaching of medical students and residents
- Possess the ability to work across disciplines within a large, diverse organization

Position compensation and incentives:

- Highly competitive salary
- Industry-leading benefits and retirement
- Collaborative and supportive multi- disciplinary environment.

Qualified candidates must have:

- PhD, MD or DO designation
- MD or DO must be BC/BE in emergency medicine
- PhD must have secured extramural funding source

Please send inquiries to:

Chad Cannon, MD
Professor & Chair, Department of Emergency Medicine
The University of Kansas Health System
Email : ccannon@kumc.edu
Or apply online at :
https://kumc.wd5.myworkdayjobs.com/kumc-jobs/job/Kansas-City-Metro-Area/Emergency-Medicine--Vice-Chair-of-Research_JR000867-1

BEST HOSPITALS U.S.News & WORLD REPORT RANKED IN 7 SPECIALTIES 2021-22

MASSACHUSETTS GENERAL HOSPITAL HARVARD MEDICAL SCHOOL

DEPARTMENT OF EMERGENCY MEDICINE
MASSACHUSETTS GENERAL HOSPITAL

Vice Chair for Clinical Affairs

The Department of Emergency Medicine at Massachusetts General Hospital is seeking candidates for the position of Vice Chair for Clinical Affairs (VCCA). The VCCA will be responsible for all aspects of clinical care within the MGH emergency department and observation unit, and will be a key member of the leadership team of the Department of Emergency Medicine. Candidates must have both appropriate leadership experience and a commitment to excellence in clinical care and teaching, and will be appointed to the faculty of Harvard Medical School.

MGH is the home of the 4-year MGH/BWH Harvard Affiliated Emergency Medicine Residency Program. The ED at MGH is a high volume, high acuity level 1 adult and pediatric trauma and burn center caring for approximately 112,000 patients annually.

The successful candidate will join a faculty of 65 academic emergency physicians in a department with active research and teaching programs as well as fellowship programs in administration, research, ultrasonography, medical education, geriatrics, wilderness medicine, and disaster medicine.

Inquiries should be accompanied by a cover letter and curriculum vitae and may submitted by email (ARaja@mgh.harvard.edu) to:

Ali S. Raja, MD, MBA, MPH
Interim Chair and Executive Vice Chair
Mooney-Reed Endowed Chair in Emergency Medicine
Department of Emergency Medicine Austen 110
Massachusetts General Hospital
Boston, Massachusetts 02114

Massachusetts General Hospital is an equal opportunity/ affirmative action employer.

Penn State Health Emergency Medicine

About Us:

Penn State Health is a multi-hospital health system serving patients and communities across 29 counties in central Pennsylvania. The system includes Penn State Health Milton S. Hershey Medical Center, Penn State Children's Hospital, and Penn State Cancer Institute based in Hershey, PA; Penn State Health Holy Spirit Medical Center in Camp Hill, PA; Penn State Health St. Joseph Medical Center in Reading, PA; and more than 2,300 physicians and direct care providers at more than 125 medical office locations. Additionally, the system jointly operates various health care providers, including Penn State Health Rehabilitation Hospital, Hershey Outpatient Surgery Center, Hershey Endoscopy Center, Horizon Home Healthcare and Pennsylvania Psychiatric Institute.

JOIN OUR TEAM
EMERGENCY MEDICINE
OPPORTUNITIES AVAILABLE

In December 2017, Penn State Health partnered with Highmark Health to facilitate creation of a value-based, community care network in the region. Penn State Health shares an integrated strategic plan and operations with Penn State College of Medicine, the university's medical school.

We foster a collaborative environment rich with diversity, share a passion for patient care, and have a space for those who share our spark of innovative research interests. Our health system is expanding and we have opportunities in both an academic hospital as well community hospital settings.

Benefit highlights include:

- Competitive salary with sign-on bonus
- Comprehensive benefits and retirement package
- Relocation assistance & CME allowance
- Attractive neighborhoods in scenic Central Pennsylvania

PennState Health

FOR MORE INFORMATION PLEASE CONTACT:

Heather Peffley, PHR CPRP - Penn State Health Physician Recruiter
hpeffley@pennstatehealth.psu.edu

Penn State Health is fundamentally committed to the diversity of our faculty and staff. We believe diversity is unapologetically expressing itself through every person's perspectives and lived experiences. We are an equal opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to age, color, disability, gender identity or expression, marital status, national or ethnic origin, political affiliation, race, religion, sex (including pregnancy), sexual orientation, veteran status, and family medical or genetic information.

You're a human, not a superhero.

It's okay to need help.

#StopTheStigmaEM

STOP THE STIGMA EM

Breaking Down Barriers to Mental Health Care in Emergency Medicine