

PUBLIC & GLOBAL HEALTH

Leaders in the Emergence of Social Emergency Medicine



Jonathan Olshaker, MD

Chief, Department of Emergency Medicine,
Boston Medical Center

Professor and Chairman,
Emergency Medicine, Boston University
School of Medicine

It is a pleasure to present the Department of Emergency Medicine of Boston Medical Center and Boston University School of Medicine 2018 Newsletter of our Section of Public and Global Health. The past year has been extremely productive, demonstrating the major impact our advocacy, research, and clinical care have on opioid harm reduction, violence intervention, and other major public health challenges we face in our city, state, and country. This newsletter highlights many of our department and campus initiatives focused on addressing social determinants of health to positively impact on our patients, community, and society.

Michael Botticelli, Executive Director of BMC's Grayken Center for Addition Medicine, offers a guest editorial on

innovation in substance use disorder in the emergency department and beyond. Dr. Edward Bernstein, Professor of Emergency Medicine and Project ASSERT founder, gives an update of the significant progress of Faster Paths to Treatment, a new opioid urgent care center dedicated to giving patients with substance use disorders rapid access to a full continuum of treatment services. Dr. Jeffrey Schneider, the Designated Institutional Official for ACGME and Assistant Professor of Emergency Medicine, describes a novel educational platform for all residents and fellows in substance use disorders and safe prescribing practices. Dr. Thea James, Vice President of Mission and Associate Professor of Emergency Medicine, updates us on the BMC's accountable care organization's major focus on addressing root causes of chronic health instability and eliminating or mitigating structural barriers to stability, including lack of adequate income, unemployment, and unaffordable housing. Elizabeth Dugan, Clinical Director of BMC's Violence Intervention Advocacy Program, (VIAP), outlines VIAP's new innovative home visiting nurse program and updates us on VIAP's continued success and outreach. Dr. Jonathan Howland, Professor of Emergency Medicine, and Dr. Traci Green, Associate Professor of Emergency Medicine, summarize the recent and ongoing projects of the Injury Prevention Center that are playing a major role in local and national research, education and advocacy in opioid harm reduction, violence intervention and prevention, fall reduction in the elderly, hepatitis screening, and other areas of public health and injury prevention. Finally, Emergency Medicine residents from all years of our program passionately and vividly describe the experiences and the impact of global health electives in Kenya, Italy, Zambia, Columbia, Vietnam, Haiti, and Uganda.

On behalf of the Department of Emergency Medicine of Boston Medical Center and Boston University School of Medicine, thank you for reading the 2018 Public and Global Health Newsletter. We are very proud to present this work.

Jonathan Olshaker

Contents

PUBLIC HEALTH AND THE COMMUNITY

Innovation in Substance Use Disorder Treatment in the Emergency Department and Beyond	2
The Grayken Center's Mission.....	3
Changing the Language of Addiction.....	3
Faster Paths to Treatment: Program offers a Continuum of Addiction Treatment Services	4
BMC Assumes New Leadership Role to Address Addiction Crisis.....	7
Accountable Care: Shifting the Paradigm of Traditional Healthcare Delivery	8
The Mission Advisory Group	9
VIAP Expands Services to Victims of Violence	10
VIAP Launches Pilot Home Visiting Nursing Program.....	11
Department of Justice/Office for Victims of Crime Grant.....	12
Boston Community Tour.....	14
Injury Prevention Center at BMC: Recent and On-Going Projects	16

GLOBAL HEALTH

Campus Wide Global Health Grand Rounds.....	22
Global Health Electives.....	23
2017 – 2018 Public & Global Health Publications	32
Future Conferences.....	34

Our Mission: By utilizing the principles of epidemiology and public health, the Department of Emergency Medicine — Section of Public & Global Health — strives to promote and improve the health of the populations we serve. We are dedicated to excellence in emergency care through Research, Education, Advocacy, Clinical Competency and Humanitarianism (REACH).



Guest Editorial

INNOVATION IN SUBSTANCE USE DISORDER TREATMENT IN THE EMERGENCY DEPARTMENT AND BEYOND

by Michael Botticelli, Executive Director, Grayken Center for Addiction Medicine



Every day, hundreds of patients present at the emergency department with conditions ranging from heart attacks to bronchitis to broken legs. We treat the acute condition, but there's been a growing awareness that in many cases, an underlying substance use disorder is the actual root cause. As the opioid epidemic worsens, EDs are seeing extraordinarily high number of patients with conditions both directly caused by and exacerbated by substance use disorders.

Emergency departments, however, have not historically had formal systemic programs to address substance use disorders. As the volume of patients increase, it's become clear that EDs can and must play a larger role in developing and deploying innovative programs for identifying and treating SUDs.

Studies show that initiating treatment in the ED leads to better retention and engagement in that treatment. One reason for this is that treatment readiness is an important predictor of starting and staying with a treatment course. When a patient comes into the ED for an acute condition that is caused by or exacerbated by their SUD, treatment readiness is often higher. EDs therefore need to capitalize on this opportunity to provide intervention since readiness may quickly wane after an acute episode.

Unfortunately, there's often little training for ED staff on substance use issues. We know we need to strengthen core competencies in this area for ED staff as well as across the hospital. To this end, many medical schools have begun to develop curricula on substance use disorders. At BMC, all residents are required to take online training on substance use disorders and related issues.

In addition to the current efforts, BMC has longtime been a leader in addressing addiction in the ED setting. Project ASSERT, for example, was one of the first ED programs to use peer counselors/educators to identify and provide intervention for patients with substance use disorders. For over 20 years, these counselors – who are also licensed alcohol and substance use disorder counselors – have helped assess treatment readiness, help motivate patients to start treatment, and connect patients to treatment services or begin treatment and act a bridge to community based treatment.

The peer counselor model is an invaluable tool for emergency departments. Peers help EDs provide intervention for substance use disorders without adding significant work to the already busy staff. Further, peers are likely to be able to develop trusting relationships with patients, which is an important component of treatment retention. Peers also play a critical role in motivating patients, making them more willing to enter and stay in treatment.

While Project ASSERT has been a highly effective model for the Emergency Department, the reality is that patients with substance use disorders touch many points of the hospital. The Grayken Center for Addiction is therefore focusing on all interventions and systemic policies to ensure that we take the opportunity to create connection and treatment points throughout BMC.

The goals of a comprehensive program are to create a standard assessment for universal screening, use motivational interviewing to try to help the patient in seeking care, provide some level of immediate referral or access to treatment services, have a comprehensive policy on prescribing opioids, and to distribute naloxone with opioid prescriptions.

The ED is only one part of the larger ways people use our system, but it is a crucial place for a comprehensive program to be implemented.



THE GRAYKEN CENTER'S MISSION:



Grayken Center
for Addiction
at Boston Medical Center

RESEARCH AND EVALUATION

BMC conducts high quality research that broadens and deepens our understanding of addiction treatment and care delivery so that successful approaches can be extended to more patients in need. Given rapidly growing addiction overdose and death rates, that lifesaving work has never been more important. The Grayken Center for Addiction at Boston Medical Center will increase the pace of innovative research, evaluating new models of care delivery to create pathways to long-term recovery throughout the health care system.

TREATMENT

BMC's groundbreaking and highly successful addiction treatment programs are the result of hard earned experience. BMC builds on the knowledge of what works and what doesn't to continually improve and innovate. Many of the effective models first discovered at BMC are today used in hospitals and community-based programs around the country. Going forward, the Grayken Center for Addiction at Boston Medical Center will scale successful programs and export them to local and national partners, expanding access to treatment and recovery, and in turn reducing the significant cost of the disease to the health care system.

TRAINING AND PREVENTION

BMC's addiction leaders are sought-after experts in training medical professionals to diagnose, treat and prevent substance use disorders. They have created curriculum for physicians on safe prescribing, worked with the Massachusetts Department of Public Health to develop effective overdose prevention programs and been leaders in the work to expand access to naloxone to reverse opioid overdose. They have trained colleagues across the nation in groundbreaking treatment techniques. Continuing this work, the Grayken Center for Addiction at Boston Medical Center will partner with key local and national leaders to reduce barriers to addiction treatment and expand training for doctors, nurses and other clinicians.

CHANGING THE LANGUAGE OF ADDICTION

WORDS MATTER:

What we say and how we say it makes a difference to our patients with substance use disorder.

✓ NON-STIGMATIZING LANGUAGE

- Person with a substance use disorder
- Substance use disorder or addiction
- Use, misuse
- Risky, unhealthy, or heavy use
- Person in recovery
- Abstinent
- Not drinking or taking drugs
- Treatment or medication for addiction
- Medication for Addiction Treatment
- Positive, negative (toxicology screen results)

✗ STIGMATIZING LANGUAGE

- Substance abuser or drug abuser
- Alcoholic
- Addict
- User
- Abuser
- Drunk
- Junkie
- Drug habit
- Abuse
- Problem
- Clean
- Substitution or replacement therapy
- Medication-Assisted Treatment
- Clean, dirty

BOSTON MEDICAL CENTER
Grayken Center for
Addiction Medicine



To learn more about
non-stigmatizing
language, please visit
[www.bmc.org/addiction/
reducing-stigma](http://www.bmc.org/addiction/reducing-stigma)

State and Local Public Health ***Faster Paths to Treatment*****PROGRAM OFFERS A CONTINUUM OF ADDICTION TREATMENT SERVICES****Edward Bernstein, MD**

*Professor of Emergency Medicine &
Vice Chair, Academic Affairs, Boston
University SOM*

*Professor, Community Health Sciences,
Boston University SPH*

*Director, Faster Paths to Treatment,
Boston Medical Center*

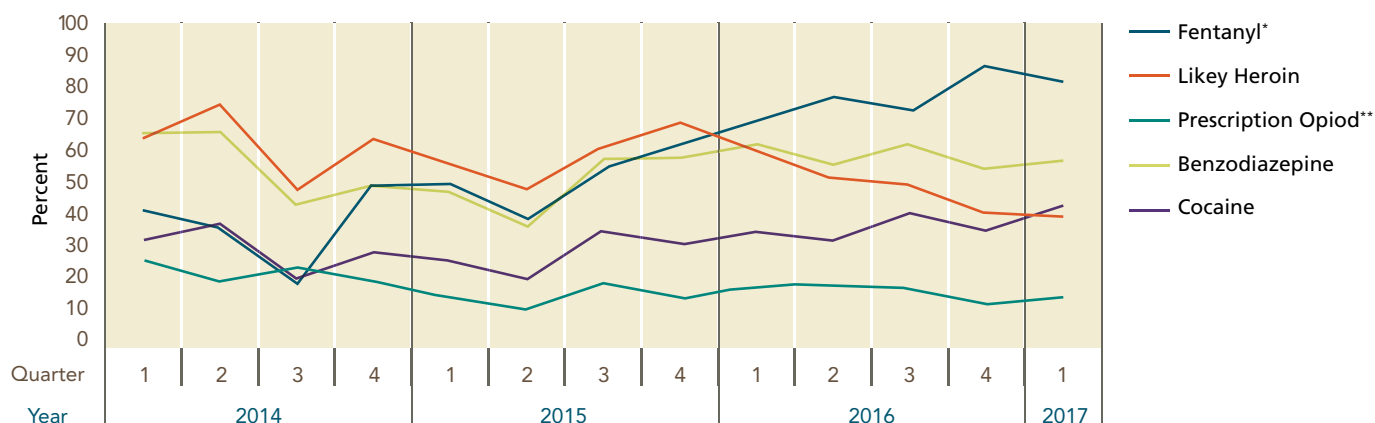
Medical Director, BMC's Project ASSERT

On August 1, 2016, Boston Medical Center, in collaboration with the Massachusetts Department of Public Health (DPH) and the Boston Public Health Commission (BPHC), launched Faster Paths to Treatment (Faster Paths), a new opioid urgent care center to give patients with substance use disorders (SUD) rapid access to a full continuum of treatment services.¹

Funded by a four-year, \$3.1 million grant from DPH Bureau of Substance Abuse Services; Faster Paths is one of three regional opioid urgent care centers (OUCC) established in response to overdose epidemic that cost the lives of 2,107 Massachusetts residents in 2016.² (Figure 1) Fifty four percent of these deaths took place in our regional OUCC grant's catchment area of Suffolk, Essex, Middlesex and Norfolk counties. The new program expanded access to medical and mental health treatment for patients

with SUDs. Faster Paths serves as a short-term addiction treatment home to improve coordination across BMC programs and departments, capture economies of scale, increase resources, and improve collaboration with community and agency partners and BPHC.

Situated adjacent to the BMC Emergency Department and outpatient laboratory and pharmacy sites, Faster Paths incorporates and builds upon the existing addiction services provided by BMC and BPHC. Faster Paths fills the gaps in care to create a seamless continuum across agencies and across treatment modalities, from overdose prevention and other harm reduction education and syringe services programs to medication for addiction treatment (MAT), detox, transition, clinical stabilization, and residential programs. To avoid stigmatization, Faster Paths has no signage that mentions addiction or opioids and patients are seen in a private office environment. Faster Paths is a collaborative effort of several long-standing initiatives, including Project ASSERT (Alcohol & Substance Use Services, Education, and Referral to Treatment); Office Based Addiction Treatment (OBAT); the inpatient addiction consult service (ACS); addiction psychiatry, and BPHC's PAATHS (Providing Access to Addictions Treatment, Hope and Support) program. Each of these entities can be viewed as a program node affiliated with Faster Paths network.

Percent of Opioid Deaths with Specific Drugs Present | Massachusetts 2014 to 2017

Source: Public Health Council 2017 Q2 Briefing. MA DPH Opioid-related Overdose Deaths among Massachusetts Residents

* This is most likely illicitly produced and sold, not prescription fentanyl

** Prescription opioids include: hydrocodone, hydromorphone, oxycodone, oxymorphone, and tramadol

1. Massachusetts EOHS, Department of Public Health, Bureau of Substance Abuse Services: Substance Abuse Services Description. <http://www.mass.gov/eohhs/gov/departments/dph/programs/substance-abuse/providers/substance-abuse-services.html> [Accessed 8/25/2017]

2. Massachusetts Department of Public Health. Data Brief: Opioid-Related Overdose Deaths among Massachusetts Residents. <http://www.mass.gov/eohhs/docs/dph/stop-addiction/current-statistics/data-brief-overdose-deaths-aug-2017.pdf> [Accessed 12.1.17]



Grayken Center Presentation to Taiwanese Government Officials at the Kennedy School

The Harvard Kennedy School invited the Grayken Center to share BMC innovative substance use disorder treatment programs during a visit by government officials from Taiwan. Pictured along with Taiwanese officials at the presentation are: Jenni Watson of the Grayken Center, Ed Bernstein from Faster Paths, and Donna Beers of the Office-Based Addiction Treatment program.

During its first year, Faster Paths, has demonstrated it can rapidly evaluate, motivate, and refer patients with SUDs to a comprehensive network of inpatient and outpatient SUD treatment services integrated with mental health and medical care. Project ASSERT's licensed alcohol and drug counselors conduct intake assessment and initial level of care determination using American Society of Addiction Medicine (ASAM) Triage Continuum Criteria. They also offer counseling, overdose education, and naloxone rescue kit distribution, as well as referrals to a continuum of treatment options available from 8:00 a.m. to midnight, seven days a week. These project ASSERT peer professionals, recruited from communities served by BMC, play a vital role in bringing their expertise, life experience, service network contacts, and a nonjudgmental, respectful approach to patients struggling with addiction and those who lack the basics of adequate housing, food security, and a living wage. They are committed to providing each and every patient with a voice and choice in care.

Faster Paths also provides MAT for patients with opioid and alcohol use disorder from Monday Friday 8 a.m. to 4:30 pm. The Faster Paths staff includes nine physicians, including addiction medicine and psychiatry fellows who are waived to prescribe buprenorphine for the treatment of OUD, one addiction nurse specialist, ten licensed alcohol and drug counselors (LADCs), four of whom have a master's degree, PAATHS recovery support navigator specialists, and pharmacy tech supported by a BMC village of IT, development, administrative, legal, financial support staff, and an internal Injury Prevention Center evaluator.

Patients meet with a licensed alcohol and drug counselor for intake and assessment to determine provisional ASAM level of care and negotiate a treatment plan. An addiction nurse care manager monitors buprenorphine/naloxone induction and stabilization and administers injectable extended-release naltrexone. Then, patients meet with a physician who will gather a history, conduct a physical exam, and prescribe buprenorphine, extended-release injectable naltrexone, naloxone rescue kits, or other medications as indicated. Each patient is offered community support services by a recovery specialist. BMC pharmacy technicians negotiate with insurance gatekeepers to arrange for approval of prescribed medications. Physicians also conduct a medical evaluation for safe placement in detox and transitional service. Faster Paths leverages a network of providers and transportation services to facilitate access to detox and other treatment and community support services in a variety of locations. Recovery specialists engage patients with complex problems requiring greater support services following assessment. The trained peer professionals motivate patients to stay safe and healthy and help them access further SUD care, mental health services, and primary care. They coordinate with the programs to ensure that behavioral health and psychosocial needs are addressed. They also assist with transportation, government IDs necessary for filling buprenorphine prescriptions, and appointments and medication adherence.

"We have learned from experience that one of the biggest barriers to effectiveness in treatment for substance use disorder is timeliness."

— Edward Bernstein, MD



Faster Paths/Project ASSERT Services Delivered During 2017

Total Unique Patients Served	Total Patient Visits	Male	Female	Received Addiction Medical Therapy	Transfer to Addiction Medical Therapy or Long Term Treatment	Detox Placement	Medical Exam
2,870	6,560	70%	30%	578	244	1,309	1,817

From January 1, 2017 through December 31, 2017, the Faster Paths/Project ASSERT collaboration resulted in services and referrals provided to 2,870 unique patients during 6,560 visits. Our patients were 70% male, 30% female; 25% Black, and 74% white, and of those, 17% were Hispanic. 86% were Medicaid insured, 6% Medicare, 4.7% privately insured, and 4% uninsured free care. Patients walked in or were referred from BMC ED/Inpatients & outpatient clinics, BPHC PAATHS referrals, residential and outpatient programs, other patients and agencies.

1,309 patients were placed and transported to acute treatment/detox facilities. 244 of the 578 who were started on medication therapy in our MAT clinic were transferred to continuing care in Office Base Addiction Treatment (OBAT) or other MAT programs. 598 patients were offered a bystander naloxone rescue kit and 174 received one. Faster Paths provided 2,502 other services and referrals including primary care appointments, outpatient treatment, NA/AA, integrated medicine (acupuncture massage and yoga), RMV I.D. vouchers, transportation, and shelters placement.

Funding from the Massachusetts Department of Public Health, Bureau of Substance Abuse Services was essential for the start up of Faster Paths. Boston Medical Center also contributed significantly by creating the space for the clinic, funds for physicians, and uncompensated administrative support.

We have made important strides to create a system of addiction health services that integrated the strength of a peer professional counseling and community support model into medical approaches, fostering partnerships across the BMC departments of Emergency Medicine, General Internal Medicine, Psychiatry, OB, and Pediatrics. Massachusetts still needs to increase treatment capacity especially for medication therapy programs and residential/safe housing to accommodate the needs of our patients. We are well aware at this early stage of our grant that Faster Paths’ sustainability will depend on being able to bill for appropriate patients services, integrate with our ACO, and for BMC and government agencies to address the social determinants of health like housing and transportation in order to improve outcomes and reduce unnecessary ED and hospital utilization.

Project ASSERT, Boston, Massachusetts is the recipient of the American College of Physicians (ACP) 2018 Richard and Hinda Rosenthal Award #2 from the Rosenthal Family Foundation #2, established November 1976 ...

“...To that individual or organization whose recent original approach in the delivery of health care (or facilities for the delivery) will increase its clinical and/or economic effectiveness.”



Faster Paths Team: (l to r) Devin Larkin, Lia Beltrame, Brent Stevenson, Commissioner Monica Bharel, Ludy Young, John Cromwell, Issac Rutledge, Edward Bernstein, Jonathan Olshaker, Patricia Mitchell, Moses Williams (not pictured: Jessica Kehoe and Gina Kelleher)



Public Education:

BMC ASSUMES NEW LEADERSHIP ROLE TO ADDRESS ADDICTION CRISIS



Jeffrey Schneider, MD
*Chair, Graduate Medical Education
 Committee*
*Designated Institutional Official (DIO)
 for ACGME*
*Associate Professor, Emergency
 Medicine*
*Assistant Dean for Graduate Medical
 Education*

BMC is also taking an important leadership role in addressing the opioid crisis via a novel educational platform that was implemented earlier this year. Understanding the vital role that residents and fellows play – both in their current role as front-line provider and in the future as the next generation of physicians – in altering the trajectory of the substance use disorder epidemic, BMC is believed to be the first institution in the state to require that all trainees complete a series of educational exercises on substance use disorder and safer prescribing practices. BMC's involvement in this program is critically important, as it works to address this public health emergency. The goal is for BMC to stand as a model for other teaching institutions. It's an opportunity to help patients, support other campus-wide initiatives, provide residents and fellows with a knowledge and skill set that will serve them well beyond their training, and to be at the forefront of safe prescribing education.

In developing the educational framework, BMC partnered with the Massachusetts Department of Public Health (DPH), Massachusetts Medical Society (MMS), and BMC's own content experts to collate a "menu" of training modules which are particularly relevant to residents and fellows. Each module is mapped to a particular core competency that had been previously identified by the deans of the four Massachusetts medical schools. Topics include preventing prescription drug misuse, helping patients treat and manage substance use disorders, and safer opioid prescribing principles. The modules are hosted on a public MMS website and are openly available to all.

This training, which includes both knowledge acquisition and opportunities for self-reflection, is being required of all residents and fellows regardless of specialty. Substance use disorder and opioid misuse are such important public health concerns that all trainees should have at least a baseline level of understanding the most influential factors at play. This platform will provide an introduction for those who seek additional expertise and learning opportunities.

Additional information can be found at
[massmed.org/Physicians/Residents-and-Fellows/
 Core-Competencies/#.WgtwCo9SyCo](https://massmed.org/Physicians/Residents-and-Fellows/Core-Competencies/#.WgtwCo9SyCo).



In October 2017, Project ASSERT staff, Public Safety, Pharmacy, residents, and the GME Office partnered to offer free Narcan training sessions to residents/fellows, faculty, and non-clinicians from across the campus. Over three days, more than 135 individuals were trained in the use of nasal naloxone, and more than 75 prescriptions for naloxone rescue kits were provided. Here, (L to R), Dr. Raagini Jawa MD, MPH (Internal Medicine Chief Resident), Thuy Luu BCPS, MPH (Pharmacy Clinical Specialist), and John Cromwell LADC (Project Assert staff) provide training while also preparing rescue kits for distribution. Dr. Jawa and Ms. Luu spearheaded these efforts.



ACCOUNTABLE CARE:

SHIFTING THE PARADIGM OF TRADITIONAL HEALTHCARE DELIVERY

For Boston Medical Center, payment reform and moving to an accountable care organization (ACO) necessitates a different approach to patient care. Having been a national leader on social determinants for decades, BMC is well prepared to address hunger, housing, substance use disorder, education, and other supports.



*Thea James, MD, IPC
Director for Community
Outreach, Associate
Chief Medical Officer,
Vice President of Mission,
Associate Professor of
Emergency Medicine at
BUSM and Director of
the Violence Intervention
Advocacy Program at BMC*

As a safety net hospital for the City of Boston and New England, BMC offers many non-traditional programs as part of overall patient care, including a food pantry, legal aid, housing assistance, and substance use disorder treatment. Traditionally, BMC has made excellent use of these programs and developed others to fill some of the gaps in addressing the social necessities and needs of our patients.

To succeed as an ACO, we have to move beyond filling the gaps, which can lead to temporary fixes. We have an opportunity to actually mitigate and eliminate some of these gaps and reduce cost by addressing the root causes of chronic health instability. Examples of structural barriers to stability are lack of adequate income, unemployment, unaffordable housing, and social isolation. As long as these issues are at

the forefront of patients' lives, overall health and healthcare will always be low on their list of priorities.

The aim is to enable patients to thrive by creating opportunities that remove structural barriers and improve their quality of life by providing equity in their healthcare. This also means that within clinical care models, we must identify root causes of chronic health instability that manifest the patient "downstream" to prevent negative consequences, such as multiple emergency department visits and repeat admissions. The goals of healthcare providers and patients are not aligned; consequentially this mismatch presents as chronic health instability. Nothing will align these priorities without addressing the frontline issues that affect patients the most. The solution is the creation of a non-traditional, upstream approach and model of care to shift the paradigm of traditional health care delivery.

The starting point is asking our patients "What and Why"

The starting point is asking "what is driving the instability and what it would take to achieve healthy stability?"

This question is what led to a required health curriculum on social determinants of health that has been added to the hospital-wide orientation for all new interns. The curriculum was co-developed with Jeffrey Schneider, MD, Associate Professor, Emergency Medicine and Chair, Graduate Medical Education Committee and Designated Institutional Official (DIO). Participants learn the importance of patient engagement, and explore structural determinants and conditions that can affect health such as socioeconomic status, employment, housing, education, and social supports. Answers to the questions of why there is instability and what we can do to assist can be surprising and may result in a different approach to treatment.

The patient engagement:

- What matters most to you?
- From your perspective, what is the cause of this problem?
- What would it take for this to never happen again?

For example, in the case of a patient who identifies as being food insecure, the first question should be "WHY?" If the root cause is lack of income, the patient should be operationally connected to a workforce community partner for employment readiness and job opportunities versus offering a referral to a temporary subsidy only. This approach MOVES upstream and is aimed directly at the root cause of instability, driving the patient toward self-sufficiency for themselves and their families.

Engagement at BMC includes screening patients for social health determinants such as secure housing, food, employment, and education. Those who want help will be connected to a network of community partners to address those domains. BMC is a member of the nascent [Healthcare Anchor Network](#) with more than 30 healthcare systems across the United States.

The Healthcare Anchor Network's strategies provide BMC with opportunities to secure its surrounding communities and remove barriers created by redlining, which prevent wealth building and restrain home ownership. Anchoring and investing in our communities happens by hiring



within BMC, creating networks of employers outside BMC to hire, and sourcing and purchasing from local vendors. BMC's practice of investing in patients and communities was highlighted in a December 2017 Boston Globe article by staff reporter Priyanka Dayal McCluskey: "[Boston Medical Center has a new prescription for its most vulnerable patients: housing.](#)"

Planned future direction includes utilizing analytics to evaluate interventions, outcomes and impact. The data will also be used to identify hot spots such as zip code spend to identify inequality in resource distribution. We are shifting our investment from charity to equity.

The long-term goal of the [Health Anchor Network](#) is to reach a critical mass of U.S.-based health systems, working strategically to improve community health and well-being. By leveraging institutional assets, local economic inclusion strategies will be intentionally integrated into areas such as hiring, purchasing and investing. The plan is to powerfully impact the upstream determinants of health and help build inclusive and sustainable local economies.

The Health Anchor Network is supported by [The Democracy Collaborative](#).

THE EVOLUTION OF HEALTHCARE AT BMC:

THE MISSION ADVISORY GROUP

The Mission Advisory Group (MAG) at BMC is comprised of people representing community, clinical, and non-clinical areas of BMC, BUSM, and BUSPH. The group was created to leverage opportunities for collaboration among colleagues across disciplines to execute BMC's mission and evolve vision on campus and in the community. The talent, passion, knowledge, and professional aspirations of MAG members drives projects that contribute to organizational goals and individual growth.

There are five main areas of focus: promoting well-being and equity, partnerships, diversity, value, and research, education, and advocacy.

Areas of Focus for the Mission Advisory Group at BMC

Promoting well-being and equity: Through patient engagement we will learn more about social determinants of health that are drivers of perpetual cycles of unstable health for our patients and communities. We will explore upstream health care interventions to mitigate and eliminate the downstream health consequences of structural barriers and social determinants of health. We endorse partnering with our patients and communities to ensure they get the access to care they need, at the level they need to attain overall wellness, and strive to deliver equitable care that leverages patients and community strengths and assets.

Partnerships: We can deliver the best team-based care by developing synergetic relationships with our patients, our BMC community (hospital, FPF, medical school, BU campus, HealthNet, HealthPlan), community-based organization partners, neighbors, and other organizations that share our mission to provide the quality of care at the right level and location to meet our patients' clinical and social needs.

Diversity: Promote and further develop an inclusive culture that integrates diversity into institutional goals, strategy, and metrics to achieve excellence. Institute hiring practices to attract people from diverse backgrounds and with diverse skill sets and ideas. Provide necessary support to attract and retain a diverse workforce through mentoring and

providing opportunities for success. Give people from different levels and areas of the community a voice at the table. Encourage "out of the box" and nuanced thinking – how do we solve every day social issues with the resources we have at our fingertips?

Value: Strategically position BMC to meet the challenges of the emerging healthcare landscape by striving to achieve the triple aim (better access, improved quality, lower cost) and shifting the paradigm of healthcare delivery to include breaking cycles of perpetual illness and stations in life. Start by defining value with our patients and focusing efforts to address social determinants of health.

Research/education/advocacy: Be the conduit to give our patients a voice and educate our community. Change the lens of medical care to one that is preventative and addresses the care for the whole person, not just treatment of episodic needs. Develop systems to test, evaluate, learn, adapt, educate, and spread interventions that are successful in addressing the impacts of social determinants of health. Advocate for health policy that promotes health equity and access.

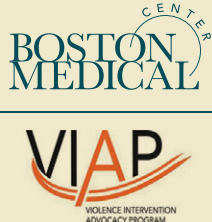
Because social determinants of health affect so many BMC patients, MAG is developing an SDH screening tool and will pilot in clinics before unrolling to all clinics and inpatient locations. It is MAG's goal that the implementation of an SDH assessment tool will allow providers to know about any non-medical situations that could negatively affect the outcome of clinical care.

Over time, MAG will support the BMC's evolving approach to healthcare such that medical and non-medical needs are supported for all patients.



BOSTON MEDICAL CENTER'S VIOLENCE INTERVENTION ADVOCACY PROGRAM (VIAP) IS A PROGRAM OF THE EMERGENCY MEDICINE DEPARTMENT

VIAP EXPANDS SERVICES TO VICTIMS OF VIOLENCE



VIAP MISSION: The Violence Intervention Advocacy Program (VIAP) assists victims of violence recover from physical and emotional trauma by empowering them with skills, services, and opportunities. Empowerment enables victims to return to their communities, make positive changes in their lives, and strengthen others who are affected by violence, and contribute to building safer and healthier communities.

*Elizabeth Dugan, MSW, LICSW
Clinical Director, Violence
Intervention Advocacy Program,
Boston Medical Center*

SINCE VIAP LAUNCHED IN 2006 THROUGH TO APRIL, 2018, MEMBERS OF THE VIAP TEAM HAVE SERVED 5,301 VICTIMS OF COMMUNITY VIOLENCE

In 2016, Boston Medical Center's VIAP program celebrated their tenth year of providing recovery services to victims of community violence resulting from gunshot and stabbing injuries.

In May of 2016, the program expanded those services by adding an employment program, educational support, and family support services. Since then, outcomes from the enriched services resulted in 56 new jobs for VIAP clients, with 67% being full-time positions with benefits.

Employers include BMC, Ironworkers, Staples, Newton Wellesley Hospital, Mass General Hospital, Brigham and Women's Hospital, Home Depot, Panera Bread and T-Mobile. In addition, 16 VIAP clients received stipends

for attending either continuing education or HiSet (formerly GED) and 31 have acquired new housing. A total of 104 families received services that included mental health counseling, housing, parenting, financial literacy and employment.

The Violence Intervention Advocacy Program (VIAP) is a program of BMC's Emergency Medicine Department and assists victims of violence recover from physical and emotional trauma by empowering them with skills, services and opportunities. Empowerment enables victims to return to their communities, make positive changes in their lives, strengthen others who are affected by violence, and contribute to building safer and healthier communities.



VIAP LAUNCHES PILOT HOME VISITING NURSING PROGRAM

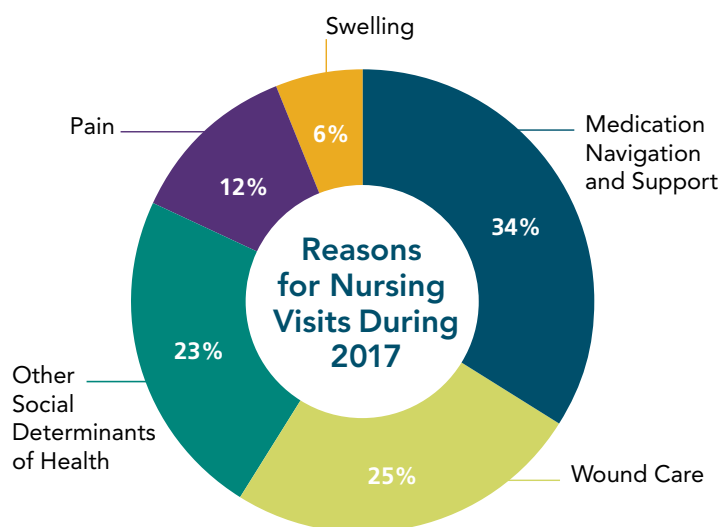
After several attempts to access grant funding for a home visiting nurse, the Philanthropic Board at Boston Medical Center generously supported the innovative idea to pilot a home visiting nursing program in VIAP. Frequently VIAP clients are discharged to home and face many barriers, including following through on their medical care. This puts them at high risk for re-admittance due to infection, not having the appropriate medications or supplies, or simply lack of connection to a medical home. VIAP is piloting a nursing partnership home visiting program to address this gap in the continuum of care. A VIAP/BMC nurse participates in conducting home visits with the VIAP advocates. The VIAP Home Visiting Nursing Program is modeled after The Nurse Family Partnership (NFP) model, an evidence based model of service delivery, and is based in the relationship with the client.



Julie Swain, RN,
VIAP Home
Visiting Nurse

VIAP Nurse Partnership was created to achieve the following objectives:

- Increase patient satisfaction
- Decrease recidivism
- Decrease utilization of ER visits
- Decrease number of inpatient days
- Decrease morbidity and mortality
- Increase medical literacy
- Increase medication monitoring
- Provide link to medical home



N = 42 Clients, 83 Visits, 161 reasons



Once again Julie [VIAP nurse] you saved my life ... what would I have done if you and Curtis [VIAP Advocate] didn't reach out to me ... thank God I have you on my side.

I owe you my life. My mother is so thankful for you and VIAP. Thank you so much for taking such good care of me and for being a great nurse."

– Jelani

When asked what they would have done if the VIAP team had not come to their home, the consistent client response was that they would have returned to the Emergency Department. In 2017, the VIAP Team prevented over 70 emergency room return visits for things that were treatable and preventable. Some qualitative data from client self reports include:

“ I can't do this on my own, not with CDA drain in place. They said my Insurance won't cover a VNA home visit, I don't know how anyone is supposed to do this on their own ... I was wondering if you could come by later in the week and change it again, I have an appointment on Wednesday at the clinic and they can change it, but I might need another before I'm comfortable on my own.”

“ After all this time, you still are taking care of me and helping me. I feel like everyone around me has forgotten about how difficult my life is, but you are still here helping me and I am so grateful, I don't know what I would do without you. I think people don't realize how hard it is for me to even book my appointment.”

VIAP Home Visiting Nursing will continue to pursue funding for sustainability. This is a best practice model and the goal is to incorporate this continuum of care into the VIAP service model.



DEPARTMENT OF JUSTICE/OFFICE FOR VICTIMS OF CRIME GRANT

Through a grant titled “**Supporting Male Survivors of Violence**,” VIAP conducted a gap analysis with clients, family members, community partners, and other hospital staff. Employment and housing were determined to be the two largest barriers to self-sufficiency and independence. In response, VIAP has initiated the following programs:

VIAP WORKFORCE DEVELOPMENT/JOB TRAINING PROGRAM

The VIAP Workforce Development/Job Training Program assists victims of violence with employment and educational opportunities that can prove challenging to access on their own. VIAP assists clients with strategically looking at work and education as a path to self-sufficiency and breaking cycles of violence. VIAP initially did this by providing one-on-one career advising sessions that focused on educational needs, resume development, interviewing skills, job search strategies, and workplace behavior for job retention. After a period of information gathering, VIAP saw the value of expanding out into the community, and has partnered with the Madison Park Development Corporation to provide the VIAP job training in a group setting in the community. This allows us to meet clients where they are and provides a group modality of implementation.

Our goal is to assist our clients in identifying employment skills that will match the hiring needs of employers. VIAP works to connect our clients with opportunities to participate in internships and job placement within BMC or with other community partners that they are qualified for. VIAP clients are paid during their internships and will be able to work on their high school equivalency concurrently, if necessary. During the internship, VIAP clients receive weekly coaching and guidance based on very specific workplace competencies to assist with continued learning and personal development.

VIAP has many community partners that have provided employment opportunities for clients, but Boston Medical Center and the Human Resource Department have worked diligently on a model that allows for support and technical assistance needs through HR, and also the opportunity for job placement here at BMC. Since implementation this past year, VIAP has assisted in accessing 40 new jobs. 13 of these were at BMC, and 27 were at other agencies that include food and hospitality services, other Boston hospitals, Gillette, cleaning companies, machine operators, warehouse, labor construction, and customer service and sales.

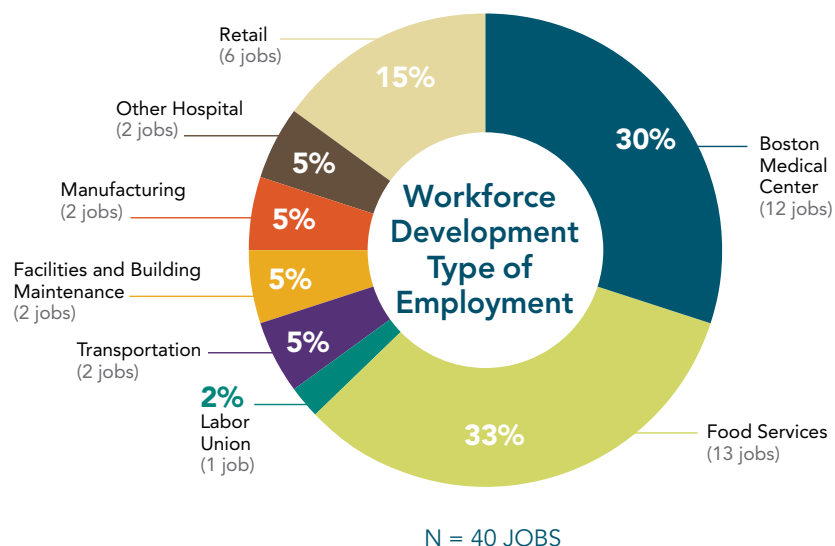


The VIAP Workforce Development and Job Training Group A partnership between VIAP and the Madison Park Development Corporation



Gunshot victim Kynndal Martin, who benefited from Boston Medical Center's Violence Intervention Advocacy Program, now works as a dietary aide. From "Is Violence a Contagious Disease?" by Felice J. Freyer; Photo By John Lumacki, Globe Staff

Read the full article “Is Violence a Contagious Disease?” at: [bostonglobe.com/metro/2017/02/26/violence-disease-hospitals-treat-wounds-physical-and-otherwise/TFFbdTysDAd9jVlnHr9AKI/story.html](https://www.bostonglobe.com/metro/2017/02/26/violence-disease-hospitals-treat-wounds-physical-and-otherwise/TFFbdTysDAd9jVlnHr9AKI/story.html)





VIAP TRANSITIONAL HOUSING PARTNERSHIP

The VIAP Transitional Housing Partnership was established to help clients access and sustain independent housing. Through a partnership with a local property management company, VIAP clients are given the opportunity to be in independent housing, and VIAP supports them by paying the rent for a one year period. The intent at the end of the year period is for the client to be able to take over the rent payments and sustain the apartment. Clients must meet the criteria of working, demonstrating financial literacy, and continuing to engage in weekly home visits with VIAP staff in order to be referred to the VIAP Housing Program. Life skills (food shopping, accessing resources, etc.), managing bank accounts, budgeting, and overall apartment management are all topics that are covered in the ongoing case management. VIAP has 4 clients housed, and are on target to house 12 over the course of the grant.



Julio Sanchez, VIAP housing participant, in his new home with VIAP Clinical Director Elizabeth Dugan.



Paula Morgan, community partner (center), donated furniture to support VIAP client moving in to new apartment, pictured are David Wiley, VIAP staff, and Jaime Campbell, VIAP housing participant.

Conferences and Lectures

VIAP is a founding member of the The National Network of Hospital-based Violence Intervention Programs (NNHVIP). The NNHVIP held its annual conference in September 2017 in Milwaukee, WI.

The VIAP Team presented “Challenges and Successes through Program Expansion- Riding the Waves” with their mental health partners, the Community Violence Response Team, as a panel discussion.

Looking Forward

The U.S. Department of Justice, Office of Justice Programs has approved an additional \$660K in funding under the Supporting Male Survivors of Violence grant to VIAP





Boston Medical Center Emergency Medicine Residency Class of 2021

BOSTON COMMUNITY TOUR

By Jessica Faiz, Emergency Medicine, MD, PGY 1



Newly moved into Boston and just starting to orient myself to the hospital and my intern responsibilities and expectations, my week of emergency medicine intern orientation closed with perhaps one of the most meaningful experiences of the whirlwind of the start of residency. Instead of simply discussing the myriad of social services available for our patients, we hopped on a bus to see them for ourselves. Our

first stop was the Hope House, where we were warmly greeted by Fred Newton, Director, who led us on the visit.

In the first few minutes, Fred made an important point, stating, "Addiction treatment is a continuum, beyond the 'spin dry' of detox." As an Emergency Department (ED) provider, this highlighted that for patients struggling with addiction, their exit through the emergency room doors is just the beginning of their recovery. There, we also heard a vivid testimonial from one of the residents of Hope House, soaking in the details of his cravings, journey, and continued struggle with addiction amidst numerous intentions to quit.

Next, we got off the bus at a "Fair Foods" stop in Dorchester, where many of us left with our own \$2 bags of vegetables and fresh challah bread, 400 of which are sold to members of the community each week as part of a Food Rescue program. Liz Camarota, who was manning the stop that day, was incredibly warm and excited to share with us how the program prevents food waste at local supermarkets while feeding hundreds of families each week.



Fair Foods is a non-profit food rescue organization dedicated to providing surplus goods at low or no cost to those in need. Since 1988 the organization has rescued and delivered millions of pounds of fresh produce and quality building supplies to low income communities throughout New England and around the world.



Hope House Addiction Services (Hope House) is the oldest, and now among the largest residential treatment programs in Massachusetts for adults with substance use disorder (SUD) on the Roxbury/South End line of Boston.

The penultimate stop on the tour was the Haitian Multi Service Center. Run by the organization Catholic Charities, this center provides child care, adult education, job search support, and a food pantry, amongst many other services, to the community. There, we also heard from members of the Haitian community about the current and real fear of deportation, even amongst green card holders. They distributed informational cards from the Center, which list your rights if you were to be approached by law enforcement, which we were empowered to pass on to our patients.

The last stop on the tour was around the corner from BMC, where we enjoyed a Cuban meal with representatives from our social resources in the ED at BMC: social work, Project ASSERT, VIAP, Faster Paths, and the Boston Department of Public Health. It was clear that for us residents working in the department, they are only a call away from coming to see our patients and connect them to detox programs, primary care, and further outreach beyond discharge from the hospital. We also learned that elective opportunities for us to go out in the community with VIAP are available, and many of us are looking forward to potentially taking advantage of this during our third year of residency.

Prior to starting at BMC as an intern, I rotated at BMC as a sub-intern during my last year of medical school. I was drawn to BMC because it was a city hospital and a pioneer in so many efforts to partner with the community it serves. Even as a medical student rotating in the ED for one month, Dr. Bernstein met with us to inform us about the various resources we have to connect patients with the social services that they need. It was clear that in the absence of these services, our patients could not go home and achieve the goals for their health that we discuss as we hand them their discharge instructions. Now as I embark on the next four years of opportunity to treat and learn from an extremely high need, diverse patient population, this Boston Community Tour incorporated into our orientation reinforced how proud and excited I am to be training at Boston Medical Center.



Observations about the Tour by Other Residents

"It was such a pleasure to be welcomed to BMC with a community tour. We were lucky to have the opportunity to talk to some inspiring people who are working to make neighborhoods in Boston a better place to live and work. We had the chance to tour multi-cultural centers, food banks, and rehabilitation programs where selfless individuals dedicate their lives to helping others and advocating on behalf of populations that often have their voice taken away. I am honored that these communities allow us to serve their medical needs and proud to belong to a program that works hard to address the needs of our patients from a multi-faceted and interdisciplinary approach. I hope to continue building relationships with these leaders and work together towards wellness in our community."

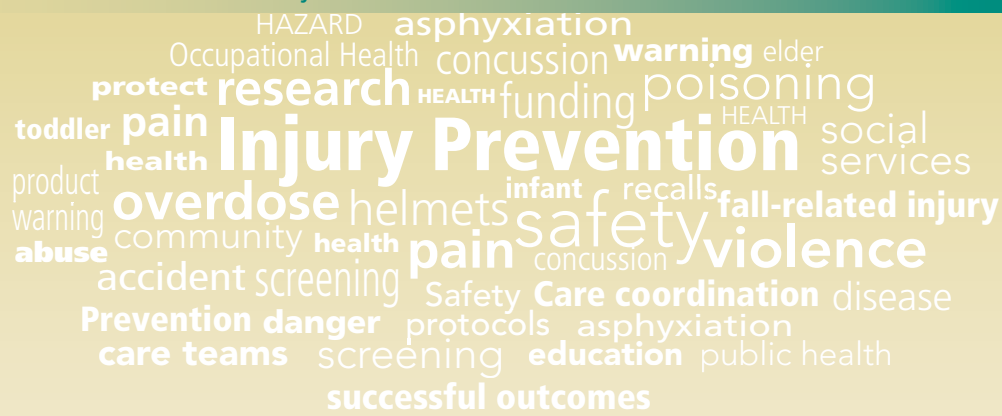
— *Maddie Brockberg, PGY 1*

"I found the community tour extremely eye-opening. I was once living off of rumors about the various communities and neighborhoods in Boston but being able to see them and the social services in place was very meaningful. I think understanding social determinants of health is critical to caring for patients and so I really appreciated that for our orientation we were able to incorporate the tour. That was not something I expected to be honest. It was also equally helpful to get to know the staff of the various social services available to our patients so that we know how and who to refer them to. Thanks for putting it together and taking us along!"

— *Theodore Mooncai, PGY 1*

"Integrated into our orientation to the BMC emergency department was a community tour of some of the phenomenal resources we have access to as residents. While our ED is leading the way in acute treatment of addiction, it was a whole different experience visiting the Hope House and meeting some members who are currently working through their sobriety. We see our patients in the ED for hours, but the road to recovery is paved in years. As an emergency department and a community as a whole, we rely on programs like the Hope House to better our patients' lives. The staff could not have been more welcoming, driven and supportive. It was apparent that they work tirelessly to better the long-term outcomes of those battling addiction. And nowhere was there a sense of punitive measures or judgment, just open arms for those who need them most which is a breath of fresh air in an area still challenged by stigma. It is these resources that made me seek out BMC for residency, and I look forward to working with these organizations in the years to come."

— *Sean Burns, PGY 1*



Injury Prevention Center at BMC:

RECENT AND ON-GOING PROJECTS

The Department's Injury Prevention Center is playing a major role in local and national research, education and advocacy in opioid harm reduction, violence intervention and prevention, fall reduction in the elderly and many other areas of public health and injury prevention. Grants have come in from the CDC, Massachusetts Department of Public Health, AHRQ and other major funders to foster research and interventions on those important issues.



Jonathan Howland, PhD, MPH, MPA
*Professor of Emergency Medicine,
Boston University School of Medicine
Executive Director, Injury Prevention Center,
Boston Medical Center*

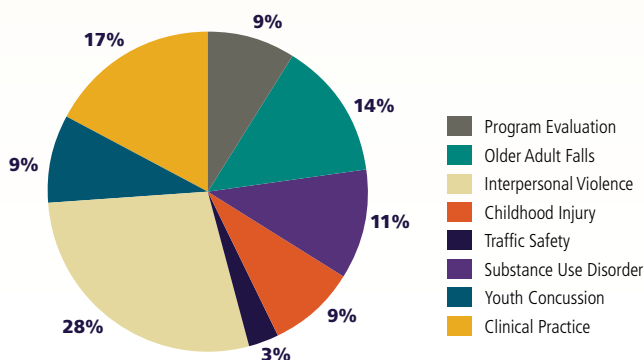


Traci C. Green, PhD, MSc
*Associate Professor, Emergency Medicine
and Community Health Sciences,
Boston University School of Medicine
Deputy Director & Senior Scientist,
Injury Prevention Center,
Boston Medical Center*

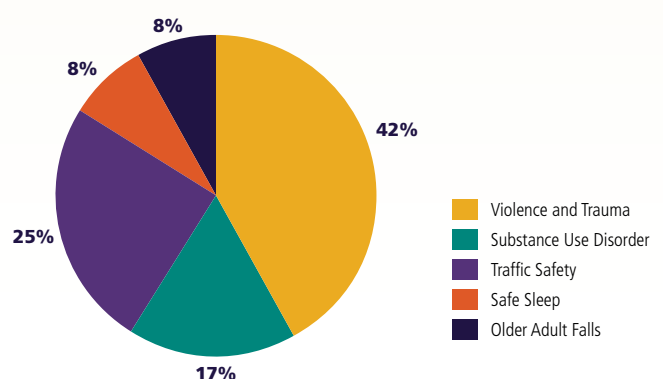
PROGRAM EVALUATION

The Injury Prevention Center was again selected for a second five-year contract by the Massachusetts Department of Public Health to serve as the third party evaluator for the Department's new CDC-funded injury prevention grant. The Department's new five-year injury prevention initiative began in August 2016 and targets traffic safety, youth sports concussion, child sexual abuse, and interpersonal violence.

Distribution of IPC Research Projects by Focus (n=35)



Distribution of IPC Services and Programs by Focus (n=12)





FOCUS ON FALLS

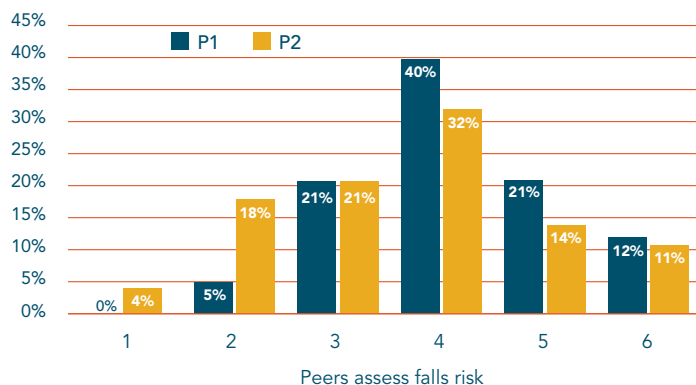
Fall Prevention Activities Following Emergency Department Care for an Older Adult Fall Injury

How does the health care system respond when an older adult is discharged from the emergency department after being treated for a fall? This is the question addressed by a study conducted by Drs. Shankar and Howland at the Injury Prevention Center at Boston Medical (IPC) and recently published in the *Journal of Injury Epidemiology*. The question is important. Falls are the leading cause of injury death among older adults and fall mortality rates are increasing. Older adults who have fallen are at elevated risk for a subsequent fall. The likelihood of a subsequent fall can be reduced by various approaches including assessment of strength, balance, gait, and vision, review of medications that might potentiate falls, and participation in low-cost community programs.

Investigators enrolled 100 older adults being treated for fall injuries at the BMC Emergency Department and contacted them by 60 days after they were discharged home. A questionnaire was administered to determine what steps they and their primary care providers had taken to reduce the chances of another fall. Of the 87 that completed the follow-up questionnaire, 71% had spoken to their primary care physician about their fall, but only 37% had spoken about fall prevention. Only 22% had spoken about how medications could increase risk for fall and only 11%

Figure 2

Professional Peers Assess Risk for Falls Among Their Patients



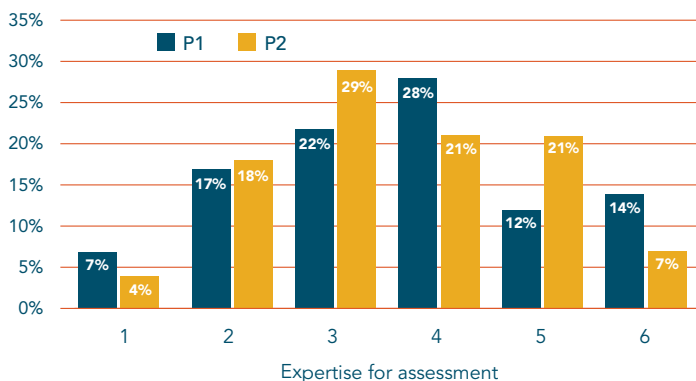
had spoken about how vision impairment could increase risk for falls. None had participated in a community-based falls prevention program.

(Shankar K, Treadway NJ, Taylor AA, Breaud AH, Peterson EW, Howland J (2017). *Older adult falls prevention behaviors 60 days post-discharge from an urban emergency department after treatment for a fall. Injury Epidemiology, in press*)

In a comparison study, IPC investigators Howland, Hackman and Taylor surveyed primary care physicians (PCPs) at two Massachusetts managed care organizations (P1 and P2). Findings indicated that most PCPs were concerned about falls among their older adult patients, but many were unfamiliar with evidenced based community fall prevention programs and few were aware of the STEADI (Stop Elderly Accidents, Deaths, and Injuries) Toolkit, an algorithm developed by the Centers of Disease Control and Prevention for assessing risk for falling among older adult patients. On a scale from 1-6 (1 being "strongly disagree" and 6 being "strongly agree"), 52% overall agreed that they have the expertise to do a falls risk assessment on patients 65 years and older (see Figure 1), and 68% overall agreed that it is the prevailing community standard among their professional peers to assess risk for falls of their patients (see Figure 2).

Figure 1

Falls Risk Assessment Expertise (patients 65 years and older)





CARING FOR CONCUSSION



Sports and recreation-related concussion is a common and potentially serious health problem. A recent study estimated that between 1.1 and 1.9 million sports and recreation concussions occur annually in U.S. children under age 19 years. Massachusetts was among early adopters of sports concussion legislation, with passage of its 2010 law, Chapter 166, An Act Relative to Safety Regulations for School Athletic Programs. In 2015, the Massachusetts Department of Public Health (MDPH) engaged

the BMC Injury Prevention Center (IPC) to conduct focus groups with Massachusetts middle and high school nurses (SNs) and athletic trainers (ATs) to assess implementation of regulations relative to the management of students' head injuries incurred during extracurricular sports. Four focus groups were conducted. Findings indicated that overall SNs and ATs supported the sports concussion legislation; felt that implementation had gone well; indicated that the law empowered them in managing return-to-school/play for students with concussion; and, experienced support from their school administrators. Moreover, some SNs reported that they apply return-to-activity protocols to all students with head injuries, regardless of how or where the injury occurred.

Working with school health and injury prevention staff at the MDPH, IPC investigators subsequently developed conducted a survey of a half sample of Massachusetts SNs (N=227) to assess the extent to which sports concussion return-to-activity protocols had been generalized to all high school students, not just students injured in extracurricular sports. The survey response rate was 80%. Results indicated that 94% of SNs had generalized regulations to apply to all students who experienced concussion, regardless of cause (e.g., traffic crash, skate board injury, fall) and 92% of responding schools cared for all students' concussion as a matter of school policy. This study will provide legislators and public health leaders with data to inform future development of statewide infrastructure to treating concussion among Massachusetts adolescents.

CHILD INJURY

Infant Safe Sleep

Sudden unexpected infant death (SUID) is a leading cause of death among U.S. infants and the leading cause of death among infants' aged 1-11 months. In 2013, SUID accounted for 3,422 deaths, or 14.6% of all U.S. infant deaths. Reduction of SUID rates are a national Healthy People 2020 health objective. To reduce the risk of SUID, the American Academy of Pediatrics recommends that hospitals adopt safe infant sleep policies consistent with the Academy's updated recommendations, educate their

staff on safe sleep techniques, and model these techniques to families of newborns. This project examined the extent to which birthing hospitals in Massachusetts followed these recommendations at baseline and following public health interventions to improve their status.

In 2015, the Massachusetts Department of Public Health (MDPH) engaged the BMC Injury Prevention Center to conduct a survey of nurse managers within maternity departments at all Massachusetts birthing hospitals to examine the extent to which they followed the AAP's recommendations. This was a follow-up to a survey conducted in 2013 by the Harvard School of Public Health (HSPH) and MDPH, enabling longitudinal comparisons. The survey response rate obtained in 2013 was 100% and 84% in 2015.

The proportion of respondents reporting that their hospital had a written policy on safe sleep was 43.5% in 2013 and 73.7% in 2015 (increasing 29.7 percentage points in the matched pair analyses ($p = 0.019$)).

Policy content specific to supine sleep, avoidance of soft items in the sleep environment and co-sleeping with an adult was present in all hospital policies by 2015, while 57.1% included all six safe sleep content areas listed in the survey. Side positioning for vomiting in healthy infants was reported to occur at least occasionally by the majority of hospitals at both time points, decreasing 13.5 percentage points in the matched pair analyses ($p=0.227$). Patient and family beliefs was the leading barrier identified. Massachusetts' birthing hospitals showed statistically and clinically significant improvements in infant safe sleep policies and practices from 2013 to 2015 coinciding with public health programming. This study can inform what additional programming is needed to address SUID in Massachusetts.



Teens & Tots

Investigators at the IPC and the BMC Department of Pediatrics are working with researchers at the Rhode Island Hospital Injury Prevention Center to develop an intervention program on infant and toddler injury prevention that targets teen and young mothers (15-22 years). The children of young mothers are at higher risk for injury, particularly falls, burns, poisonings than the children of older mothers. This study proposes to develop a text messaging program that will model child injury prevention strategies. The strategies include on injury-proofing the home environment, such as locks on cabinets that store poisonous substances, window bars, thermometers to assess bath water temperature, and furniture arrangements to facilitate safe crawling and ambulation.



Naloxone Academic Detailing to Prevent Overdose

By Traci Green, PhD, MSc



Opioid overdose is the leading cause of accidental adult death.¹ Fortunately, there is a rescue medication called naloxone that can reverse an opioid overdose. Research shows that increasing the availability of naloxone in a community substantially reduces the risk of overdose death.² In Massachusetts and Rhode Island, the laws

were recently changed to allow patients to get naloxone from the pharmacy directly, without having to see a medical prescriber first. In both states, pharmacists have been trained and most pharmacies can provide naloxone in this way.

The Maximizing Opioid Safety with Naloxone (MOON) Study aims to help pharmacies determine the best way to provide naloxone in the pharmacy setting. A key activity of the MOON Study is academic detailing. During an academic detailing visit, a MOON team member visits a pharmacy for a brief one-on-one conversation with pharmacists, pharmacy technicians,

and/or pharmacy interns about opioid safety and naloxone provision. Pharmacy staff are provided with materials to facilitate conversations about naloxone and opioid safety. The pharmacies targeted for academic detailing were chain and independent pharmacy study collaborators in communities with high rates of opioid overdose deaths, defined as 27 or more opioid overdose deaths per 100,000 population. Over the course of the study, the MOON team has completed over 450 pharmacy visits in Massachusetts and Rhode Island.

To promote sustainability and engaged community-level opioid stewardship, the MOON study adopted the academic detailing training and materials for community-led implementation. MOON study staff have trained over a dozen members of the community in Rhode Island and Massachusetts to perform academic detailing of pharmacies to improve opioid safety. The community members, from various fields such as academia, public health, and peer recovery support, are united in their desire to keep their communities safe from overdose and reduce the stigma of addiction. Thus far, community members have conducted over 75 visits across Massachusetts and Rhode Island. It is expected that the reach of community academic detailing will continue to grow, as the instructions and materials were recently hosted on the [Prevent & Protect website](#). This website, developed by MOON Study staff and collaborators, is an important tool to disseminate lessons learned from the study and from our community partners.

GUIDE FOR PHARMACISTS DISPENSING NALOXONE TO PATIENTS

Easy to use instructions for dispensing naloxone to patients

The high number of opioid overdoses is a public health crisis in the US. The rescue medication naloxone can help people survive an overdose. Pharmacies can help by providing naloxone by request, under a standing order or collaborative practice agreement.

Studies show that increasing access to naloxone can reduce overdose death by 35-50%.

HIGH RISK FOR OVERDOSE

Some patients are at higher risk of overdose or may be able to use naloxone to save a life in an overdose emergency:

- Patients taking opioid medications at a high daily dose of 50 morphine milligram equivalent (MME) per day or more
- Patients using opioids along with benzodiazepines or alcohol
- Voluntary request
- Other circumstances can affect risk. For more information, visit [PrescribeToPrevent.org](#).

HOW TO RESPOND IN AN OVERDOSE

If someone is not breathing or you think they may have overdosed:

- 1 Check for response to yelling or shaking.
- 2 Call 911.
- 3 Give naloxone. If no reaction in 2-3 minutes, give another naloxone dose.
- 4 Give rescue breaths or chest compressions if you know how to do them. Follow 911 dispatcher instructions.
- 5 Stay with the person for at least 3 hours or until help arrives.

TYPES OF NALOXONE

<p>A MULTI-STEP NASAL SPRAY</p>	<p>B SINGLE-STEP NASAL SPRAY (NARCAN®)</p>
<p>C INTRAMUSCULAR INJECTION</p>	<p>D AUTO-INJECTOR (EVZIO®)</p>

For more information on naloxone see page 2 of handbook

ROLES

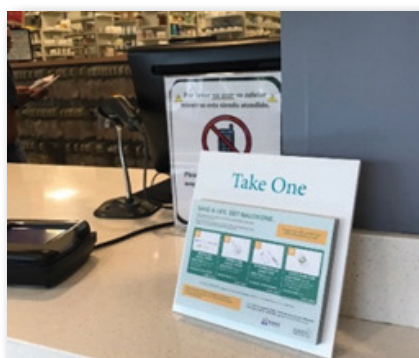
Pharmacy Technician: Fill and process insurance or provide cash price to patient. Get pharmacist for verification and counseling.

Pharmacist: Counsel patient on overdose prevention and steps of overdose response.

For more on opioid safety, videos on how to use naloxone, or to get help for addiction, go to [PrescribeToPrevent.org](#).

RESOURCES

- [PrescribeToPrevent.org](#): Naloxone information and videos
- [Learn to Cope](#): [learn2cope.org](#), Support group for families coping with addiction
- [I'm the Evidence](#): [facebook.com/NaloxoneWorks](#), faces and voices of overdose prevention with naloxone
- [Buprenorphine Locator](#): [samhsa.gov/medication-assisted-treatment/physician-program-data/treatment-physician-locator](#)
- [SAMHSA's National Helpline](#): 1.800.662.HELP (4357), for treatment referrals
- [American Heart Association](#): [heart.org](#), for training on performing chest compressions



Distributed as part of Academic Detailing: Pharmacist Guide (left) is kept behind counter for pharmacists to use when dispensing naloxone. Display Pad (above) on display at a participating pharmacy.

¹ Centers for Disease Control and Prevention. (2016). Drug Overdose Death Data: www.cdc.gov/drugoverdose/data/statedeaths.html.

² Walley, AY, Xuan Z, Hackman HH, Quinn E, Doe-Simkins, M, et al. Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. *BMJ*. 2013;346:f174. PMID: MC4688551. doi: 10.1136/bmj.f174.



Hepatitis C Virus Screening, Confirmation, and Linkage Initiative

By Elissa Perkins, MD, MPH, Vice Chair, Emergency Medicine Research



The Boston Medical Center “Hepatitis C Virus Screening, Confirmation, and Linkage Initiative,” has been active since July 2016. Funded largely by a grant from Gilead Sciences, with Dr. Elissa Perkins as the principal investigator, this ongoing study is a collaboration between the departments of Emergency Medicine, Section of Infectious Disease, and Section of Pathology and Laboratory Medicine and works to expand hepatitis C virus (HCV) detection and treatment across the institution.

The first step was for the laboratory to implement reflex testing for HCV. This means that when a patient’s preliminary screening test for the HCV antibody is positive, their confirmatory RNA test is automatically sent, using blood that was already collected. Patients don’t need to return for a second laboratory draw. Across BMC, the rate of disease confirmation has improved from 87%, prior to reflex testing, to 99% currently. The rate in the Emergency Department (ED) has improved from 59% to 98%!

The next step was to expand the scope of testing in the ED. A best practice advisory (BPA) was created so that whenever a patient eligible for screening undergoes a blood draw in the ED, an order is automatically generated. The physician only needs to get the patient’s authorization for testing, click “accept” on the BPA, and the test is ordered. This BPA, together with support from nursing and physician leadership and educational outreach,

has led to a tremendous increase in testing in the Emergency Department – from 18 tests/month prior to program implementation to 820/month in the first year. Over 1,200 patients were found to have a positive antibody, which is a rate of almost 13%.

At BMC we have a team of public health navigators who pick up the baton from here. Each day they get a printout from the laboratory of all of the patients that have tested positive for HCV. They spend hours contacting the patients, informing them of their results, and explaining the options that they have for getting treatment. They work with patients to get them linked to an outpatient appointment in a primary care or drug treatment facility, either inside or outside of BMC, depending on where the patient receives their healthcare. Over 40% of the patients that have been found to have HCV have been linked to care.

Our ED program has been so successful that we have expanded our work outside of the ED. During year 2 of this program, we have adapted the BPA model of HCV screening, reflex testing, and linkage navigation to a number of ambulatory care clinics. Our program has been featured nationally as an example of a “best practice” program. Stay tuned for updates as we expect this initiative to continue to successfully expand to other patient care programs.

An Invitation to join the new Social Emergency Medicine Section of ACEP

By Harrison J. Alter, MD, MS, FACEP, Founding Executive Director Andrew Levitt Center for Social Emergency Medicine



This year’s annual Scientific Assembly of the American College of Emergency Physicians (ACEP) was typical of the genre in many ways: choreographed yet chaotic, cutting-edge yet tradition-bound. But ACEP17 was different in one very important way. It hosted the first meeting of the new Social Emergency Medicine Section (SEMS). Though it has been practiced actively at Boston Medical Center for generations, social emergency medicine (SEM) is an emerging field within

emergency medicine (EM). The work that now falls within social EM, such as hospital-based violence prevention, housing as healthcare, food as medicine, combatting exploitation, ED-based opioid treatment, ED-based HIV/hepC identification and linkage, and more, has been carried out by emergency physicians since the birth of the specialty. But only in the last few years has social EM begun to find an internal logic and to cohere as a distinct field. And only this year does social EM find itself with its own section at ACEP, placing it on equal footing with such fields as ultrasound, critical care, global EM and other high-profile areas of focus within our field.



Thea James, MD, presents at the 1st Consensus Conference to establish the intellectual underpinnings and future direction of Social Emergency Medicine. The conference was held at September 14-15, 2017 at ACEP headquarters, Dallas, Texas.

There were five prepared papers, each with two prepared commentaries, all circulated to the participants in advance of the meeting. "A Paradigm Shift to Interrupt the Bi-directional Flow Driving Community Violence," was presented by Thea James, MD, of Boston University School of Medicine, and its commentaries by Dr. Hargarten and Dr. Irvin.

Among other objectives, the SEMS seeks to: Promote the incorporation of patients' social context into routine emergency care; translate research into best practices for addressing social determinants of health at the bedside; disseminate ED interventions that improve population health through community emergency medicine, with a focus on EDs in underserved areas; and propose, evaluate, and critique policies that affect the social determinants of health of our communities, especially as they pertain to marginalized and vulnerable populations. These and the remaining objectives of the group were ratified at the first meeting of the SEMS. The meeting was relatively brisk and businesslike, but as we grow larger and demand more of a voice, the meeting can grow with us and provide a robust arena for new thoughts and developments in the field. At this meeting, we established the first committees, which include Research, Education, and Advocacy, as well as a standing Nominating committee to help map out the future of the section. Volunteer SEMS members populated the committees without cajoling, and they are about to set off on their first-year goals.

BMC is in many ways a national leader in SEM. Drs. Thea James, and Edward Bernstein are key national figures in the movement, and Kalpana Narayan Shankar, MD is emerging as an important national voice in SEM. I encourage you to establish yourselves and your department as leaders with the formal SEMS movement as well. Join SEMS through your ACEP membership. If you are not already an ACEP member, think of SEMS as your natural home within ACEP. Through research and advocacy, our goal is to expand the practice of emergency medicine to include social context in every encounter and to reach into all corners of our community to reduce the burden of acute illness. For more information on the independent nonprofit research and advocacy institute, **Andrew Levitt Center for Social Emergency Medicine**, visit: www.levittcenter.org

This impassioned conversation touched on all the ways that violence affects our emergency departments and communities, as well as how our emergency departments and hospitals affect the communities our patients comprise. We went upstream to economic opportunity and how the concept of anchor institutions can enhance job prospects for youth in our hospitals' communities and downstream to the secondary prevention of violence interruption initiatives. Finally, reflecting on the distinction Dr. James drew between the emergency department treatment of survivors of the Boston Marathon bombing and the daily survivors of gun injury, Dr. Hoffman remarked, "Unfortunately, we can fall into the trap of looking differently at 'innocent victims' with whom we empathize, and other patients whom it's easy to blame—reflexly or even subconsciously—for their own circumstances. Addressing and correcting this pattern presents an enormous opportunity for the bedside practice of social EM."



Boston University School of Medicine

Campus Wide Global Health Grand Rounds

By Don Thea, MD, Director of the Center for Global Health and Development, BUSPH

This newly established campus wide monthly meeting is intended to showcase the exceptional health work being done by the many units on the BU medical campus. Sponsored by numerous departments from BUSPH, BUSM, GSDM, and BMC, these monthly meetings will introduce the many unique research, educational and service delivery projects being conducted by members of the BU community.

The format will be a 45-minute plenary presentation followed by 15 minutes of questions, answers, and discussion. Light

refreshments will be provided to facilitate networking and informal discussion. The intended audience is everyone: faculty, residents, students or staff interested in hearing about the highly diverse global health work being done at BU.

The schedule is still being developed for the semester so please stay tuned for updates on which unit is sponsoring, as well as the presentation topics. For more information please visit: www.bu.edu/sph/about/departments/global-health/global-health-events/bumc-global-health-grand-rounds



GLOBAL HEALTH ELECTIVES — CLINICAL EXPERIENCE AROUND THE GLOBE

KENYA

TRAGEDY SPAWNS A GROWING EMERGENCY MEDICAL RESPONSE

By Ben Nicholson, PGY 3



Kenyan EMS started as a direct result of the 1998 U.S. Embassy bombing in Nairobi. Since then, providers have worked to develop a national curriculum, training content and expectations for emergency medical technicians (EMTs). In the coming months and years, the senior leadership has plans to expand EMS to more cities in Kenya and increase the scope of practice. This

August, I spent an elective rotation working in Nairobi, Kenya to evaluate the current curriculum that the Kenya Council of Emergency Medical Technicians uses to instruct EMT students. This was part of a broader evaluation of the state of prehospital education across Kenya as the country stands ready to greatly expand their prehospital resources.

I interviewed EMT students, trainees on their clinical rotation, EMT instructors, and senior leadership. With players from many different stages of training, we worked through the current curriculum, how people view EMS and their role in EMS, the process for delivery of out of hospital care in Kenya, and the financial realities of providing this service. I met some wonderful people who taught me a great deal about Kenya and how the country has changed, particularly in the last decade.

As an educational assessment, I learned the processes involved in formally evaluating an educational product. Day to day, this meant interviewing people, typing up my notes, then summarizing these notes, and finally trying to extract themes from all of the interviews. Many days were spent Ubering around Nairobi or sitting in the garden at the guesthouse drinking Cokes with cane sugar, pouring over my notes.



I spent time riding in the ambulance and seeing parts of Nairobi I otherwise would not have been able to safely travel. The EMTs gave me a personalized driving tour of Nairobi. Another interesting experience was meeting the senior EMT who oversees the training of the airport firefighters. He picked me up and drove me over 40 minutes to the airport for the meeting. The entire way we chatted about Kenya and EMS. This was a really great opportunity to meet someone from the country, across a shared interest, and understand more about Kenya and its people than would have otherwise been possible.

In the future, there is a great deal of opportunity for further collaboration and involvement. The EMS system has many areas of potential growth and refinement. One of the more exciting things was finding so many people who are passionate about EMS and have been working to develop it largely without any outside support or influence.

Overall, this was a great experience in terms of personal growth, learning how to conduct formalized research, and building relationships with folks in Kenya. It was certainly challenging, and required a lot of self-motivation to stay on task, but I think it was well worth it.





ITALY

By Christopher Gruenberg, MD, Class of 2017, Attending Physician, Holy Family Hospital, Methuen, Massachusetts; and Carol Shih, MD, Emergency Medicine, PGY 4



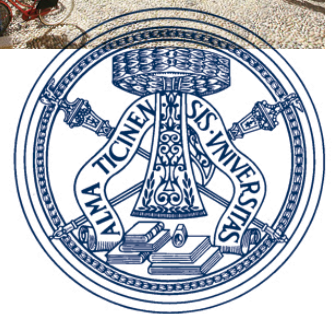
We are very privileged and thankful to have been invited by Professor Giovanni Ricevuti to the University of Pavia as visiting professors. From the moment we arrived and were greeted by Miss Edona Leka at our dormito-

ries at the Collegio Universitario S. Caterina da Siena, we knew that our visit would be filled with warmth, reward, and growth. With Professor Giovanni Ricevuti, we planned and orchestrated a series of didactic lectures, small groups, case discussions, and simulations that would review essential concepts of emergency medicine, and also introduce key differences in American health care practices and systems compared to Italy. We designed over 30 hours of content given to a multidisciplinary group of medical students, residents, and faculty members from specialties such as emergency medicine, cardiology, orthopedics, and traumatology. We presented provocative topics such as the American opioid epidemic, gun violence, and out of hospital cardiac arrest management to present new cases to medical students and residents that they may not see in Italy, while also engaging senior faculty in controversial issues of public health, policy, and community leadership.

Although a majority of the legwork of the elective was devoted to the conference halls, most of the rewards were realized outside of it. Professor Giovanni Ricevuti unexpectedly and graciously made sure that we had every opportunity to integrate into the culture and lifestyle of Pavia. We toured the University of Pavia where Nobel Prize winners Golgi, Scarpa, and Volta taught centuries ago. We traveled to Milan to

take part in an international conference attempting to detect patterns of dementia by employing the resource of smart cities and phones. We broke bread and grape with medical leaders from England, Ireland, Spain, and, of course, Italy. Although branded as "non-academic," it was this cumulative experience that gave us the insight into not only the cultural values of Italian and European people, but also an appreciation for how those values guide the structure and function of their healthcare system.

The last night of the elective could not have been a more proper summary of the give and take of our time with the students, residents, and faculty at the University of Pavia. Professor Giovanni Ricevuti rented out a small farmhouse in the countryside with tables 30 people long. Together we reminisced on our times together and made plans for the future. We debated the overutilization of resources for end of life care in America, and possibly the underutilization in Italy. We discussed the EKG curriculum and how it was taught in a way that really challenged clinical thinking instead of rote memorization which they had been accustomed too. We, of course, talked about Trump. We delved into the drawbacks of government health care in Europe. At the end of this friendly debate we each learned something about each other and ourselves, and thanked each other in one of best Italian traditions of all, singing all together. I am excited about the prospect of sending residents to Pavia in the future, and hopefully we can return the favor and accept visiting students from Pavia as well. Sharing our experiences, perspectives, strengths, and weaknesses as people and societies through these ventures is what has impacted me most as a person and will make this elective live on as one of the most rewarding memories of residency.





COLUMBIA

EMERGENCY DEPARTMENTS IN CALI AND MEDELLIN

By Elizabeth Wallace, Emergency Medicine, PGY 4 and Konrad Karasek, Emergency Medicine, PGY 3



In 2017, Dr. Ellie Wallace and Dr. Konrad Karasek traveled to the beautiful country of Colombia to work separately in two local hospital EDs. Throughout February and March, they were able to experience

the culture first-hand. Ellie traveled to Medellin, and rotated in Hospital Pablo Tobon Uribe (HPTU), a Level 1 Trauma Center, where she trained with one of the most prominent residency programs in Colombia. Konrad worked in Cali, Columbia under the guidance of Dr. Virginia Zarama, at the Fundación Valle del Lilli (FVDL), ranked as one of the best hospitals in all of South America, with the newest residency program in the country.

Emergency medicine is a fairly new field in Colombia, and there are only six EM residency training programs in the entire country, all of varying sizes and structures. Ellie served with a variety of resident and attending physicians in a large and academic setting. Konrad worked with a smaller team, primarily alongside one resident and a few medical interns. While Hospital Pablo Tobon Uribe was similar to residency programs found in the United States, Fundación Valle del Lilli is in its nascency, with its first cohort of only two residents. For this reason, at FVDL in Cali, most of the EP's role was as resuscitators, treating the sickest of the sick, compared to the more varied cases seen in Medellin.

As international rotators, both spent the majority of time in the resuscitation bay – observing, helping, and learning from the sick medical and trauma patients who came daily to both hospitals. Patients at FVDL ranged from scooter accidents, gunshot victims, MVCs, strokes and MIs. Patients at HPTU presented with fewer traumas, but were equally ill with new onset heart failure, intracranial hemorrhage, emergent dialysis needs, and cancer, usually patients being transferred from other surrounding facilities.

Ellie and Konrad were impressed by the capabilities at each hospital. The trauma team at FVDL functioned in much the same way as the trauma teams of BMC, with the whole resuscitation team assembling every time a new patient presented. The hospital was equipped well enough to treat both medical and trauma patients just like any large U.S. academic center, and even had some capabilities that BMC doesn't have (e.g. ECMO!). As a private hospital serving mostly middle and upper middle class patients, HPTU was similarly well equipped, in some ways with more resources than BMC, able to obtain rapid MRIs on every possible stroke patient. They were also, however, efficient and thoughtful with how these resources were used, and worked hard to make everything count. They

reuse anything they can, including trauma dressings and isolation gowns that are usually disposable in the United States. By doing so, they are able to order advanced imaging and specialist consultations on more patients without as much concern for cost to the system.

The education at both programs was also impressive. They practice evidence-based medicine on all treatment decisions, and manage patients conservatively, with frequent testing and admissions. Ultrasound has also become much more prevalent in Colombia in the past 5-10 years, and is utilized on most resuscitations and sick patients. Academic teaching and presentations are highly valued, with frequent conferences and lectures, and Ellie and Konrad both learned just as much as they were able to teach. Patients were always treated thoughtfully, carefully, and with great respect.

Traveling to a international country and working in a second language can be intimidating, but also exciting. The two began mostly as observers, but warm and welcoming physicians were able to quickly integrate them as members of the team, teaching them about the Colombian medical system. With their ultrasound skills, Konrad and Ellie were able to assist on patients with diagnostic uncertainty. The personal relationships, cultural exchanges, and language immersion were the most rewarding aspects of the elective for both, enabling them to discuss the strengths and limitations of a health care system different from their own. Being able to have thoughtful discussions with providers in other countries, and find common ground in different environments, is where the true value of global health may be found. Through further rotations and global health experiences, the two hope to be able to bridge more boundaries, and continue to discover how truly similar we all are.





ZAMBIA

"I DIDN'T WANT TO TRAIN THE PORTERS"

By Morgan Broccoli, PGY 2



To say that I learn something new every time I travel is an understatement. Wherever I go, I take away salient experiences and interactions that change my perspective in the future. In September, I traveled to Zambia to teach the World Health Organization's Basic Emergency Care (BEC) course to nurses and physicians at two hospitals.

The WHO's BEC course is a clinical course aimed at frontline providers (doctors, nurses, clinical officers) who by necessity provide emergency care at their facilities, but have received little or no formal training in the field. I have a particular attachment to the BEC course because I helped with its development while working at the WHO.

Zambia, like many low- and middle-income countries, has a high burden of acute illness and injury, but lacks an emergency care system capable of meeting this need. The Zambian Ministry of Health (MoH) has prioritized developing and strengthening their emergency care system, and we collaborated with them on this project. The MoH chose Kafue General Hospital and Choma General Hospital as the training sites based on their high burden of acute illness and injury.

Kafue General Hospital is the only hospital in the town of Kafue, a town of over 200,000 residents and over 130,000 surrounding rural residents that is located about 50 km from the capital of Lusaka. The town is

uniquely situated on both the Great North Road, a busy highway that runs to Lusaka, and the southern highway that runs to Livingstone. There are many road traffic accidents that occur on this road, and the providers at the hospital are charged with caring for the injured.

When we were preparing for this course, the MoH connected us with clinical heads at each of the hospitals who were tasked with finding participants for the course. In email communication, our MoH contact stated that they "usually invite a heterogeneous group of health workers that attends to emergencies in some way [including] nurses, clinical officers, doctors, radiographers, lab technologists, porters" When I read this email, I felt slightly annoyed and figured that he had misread our course description. The BEC course was designed for those with medical training, specifically junior doctors, clinical officers, and nurses. We had not planned on teaching those without a medical background, and I was afraid that having such a heterogeneous course would detract from the learning of the target audience. I wanted to reply and specify that the course was for healthcare providers only, but I decided to wait and see who would come to the course.

On day one of the course in Kafue we arrived to a classroom of 35 participants. Most participants were nurses, plus a few clinical officers and doctors. There were also a medical equipment technician and a registry clerk present as well. During introductions, they voiced their concerns that



Teaching cervical spine immobilization at the WHO Basic Emergency Care Course.



they did not have a medical background, but stated that they were very eager to learn about medical emergencies in case they were asked to help. The medical equipment technician and the registry clerk were very eager, active participants of the course, and they engaged in all practical activities. On the last day of the course, after the final exam, the medical equipment technician approached us and thanked us. She told us that she had learned a lot from the course, and felt that all employees of the hospital should be trained in BEC. She did fail the final exam, but not by much. Most impressively, she improved her exam scores from 36% prior to the course to 64% after.

So what did I learn from my time in Kafue? I learned that all employees of healthcare facilities may want to learn about basic emergency care, and that they may be called upon to actually use this information. On our hospital tour, we learned that junior doctors were supposed to be staffing and overseeing the outpatient department (where emergencies present), but they had all been pulled to work in the wards as there were not enough doctors. The outpatient department was currently being covered by a few clinical officers and nurses. In understaffed hospitals, task shifting takes place by necessity all the time, and you never know who may be asked to provide medical care. I also learned that I shouldn't form judgements, as the medical equipment technician and the registry clerk did learn a lot from the course. In fact, two of the best students were a dentist and a medical scientist.

This experience was a good segue into the next part of my teaching experience in Zambia. After teaching the BEC course at two hospitals, we spent a week teaching basic first aid to community members in Choma. The goal of this course is to provide education and empowerment to community members, so they can recognize acutely ill and injured patients, provide basic stabilization, and transport them safely to a medical facility. We trained 20 community members in Choma, who will then act as a link between the community and the hospital. While it is important to tailor an educational curriculum to the experience level and needs of participants, I also believe that all people should be trained in basic emergency care – from community members, to medical equipment technicians, to doctors. This way, we are all prepared to help when we encounter a medical emergency.



Sister Celine and Sister Margret practice splinting.



VIETNAM

A DEVELOPING COUNTRY LOOKING TO EXPAND EMERGENCY MEDICINE

By Avery Clark, PGY 3 and Liam Mahoney, PGY 3



We arrived in Hue, Vietnam excited to experience a new culture and gain exposure to the Vietnamese model for healthcare delivery. Although we had never traveled to Southeast Asia before, we were aware that

Vietnam was a country on the move, developing at a rapid pace but also lagging behind many of its neighbors in the Association of Southeast Asian Nations (ASEAN) in terms of development. We chose Hue because its University of Medicine and Pharmacy currently has the only emergency medicine training program in the country and the faculty were keen to have visiting U.S. physicians help to teach their residents.

Emergency medicine remains in its infancy in Vietnam. Recognizing a need for the development of the specialty, several NGOs helped to organize the Vietnam2010 Symposium in Emergency Medicine which was held in Hue in March 2010. This initial conference helped to raise the profile of EM within the country and springboard the establishment of the Vietnam Society of Emergency Medicine in 2013. Although physicians have been practicing emergency medicine in Vietnam for many years, they came from other specialties and none were certified as EM specialists. Hue University of Medicine and Pharmacy was granted the first EM specialist training by the Ministry of Health and the first class of residents graduated in November 2014.

Despite these moves, the role of the emergency department or “khoa cap cu” in Vietnamese remains that of a triage center where physicians quickly determine which type of sub-specialty treatment is required and facilitate care to be delivered by other physicians. Although now, at Hue University, there are technically emergency medicine-trained attendings and residents and the actual experience with acute emergency care is marginal. This is partly why there is such a pull for internationally trained EM physicians to share their skills.

Our role in Hue was to provide bedside teaching to the current residents and medical students. This was supplemented by lectures given several times per week on core content of emergency medicine. From our first days in Hue it was clear that much of what we take for granted in the U.S., not only in terms of access to care, but also access to medications, imaging, and life-saving interventions was significantly limited.

The ambulance service was slow and expensive for patients, so most people walked to the ED or were brought in by family members. Many were sent in from surrounding rural clinics for assessment of various ailments. The entire ED consisted of one large room with a row of stretchers against one wall. There was only one cardiac monitor which

was almost never used and a single old EKG machine with limb attachments that resembled jumper cables used to re-charge a car battery. Many people arrived in pain but providing analgesia in the ED was not common practice.

Many patients we encountered in the ED received care that in the U.S. would be considered substandard. One patient with a ruptured ectopic pregnancy had to wait an hour for her ultrasound report to come back revealing free fluid, as the only bedside U.S. machine was broken. Another patient with a ST elevation MI laid on a stretcher having only been given aspirin while he waited for cardiology to see him, as the standard pre-catheterization treatments in the U.S. were simply not available. Another patient involved in a moped accident did not receive CT scans he would have certainly have had in the U.S. because the attending was concerned the patient’s insurance provider would determine the scan was not clinically indicated. In Vietnam, the ED provider has to pay the insurance company out of his own pocket for “inappropriate imaging” in cases like this.

Although the experience and the resources were lacking, the enthusiasm and eagerness to learn was palpable. We quickly tailored our talks toward core content and the development of basic differential diagnoses. The residents we encountered were clearly very clever and quickly began applying new concepts to the patients they saw in the ED.

There is clearly huge scope for the growth and development of emergency medicine in Vietnam, but they have established a good basic framework for helping to facilitate this, in only a few short years. Vietnam will continue to require help from international EM faculty as they look to expand their EM training programs to include planned centers in Hanoi and Ho Chi Minh City as well as developing a more robust framework for instruction of their trainees. We hope that in the years to come we will be able to work with our friends in Hue to continue to support this effort.





UGANDA

GLOBAL EMERGENCY CARE ELECTIVE IN RUKUNGIRI, UGANDA

By Megan Rybarczyk, Chief Resident 2016-2017 and current international EM Fellow at Brigham and Women's Hospital



I completed a teaching/clinical elective with Global Emergency Care (GEC) at Nyakibale Hospital in Rukungiri, Uganda. Now in their tenth year (formerly the Global Emergency Care Collaborative, or GECC), the mission of GEC is to advance the practice of emergency medicine in Uganda by training nurses to be emergency care providers (ECPs). This experience was like my experience with the same program in Masaka, Uganda in December 2015. I spent three weeks at the hospital dividing my time among bedside/clinical teaching, helping junior and senior ECPs prepare for lectures to be given to the new ECPs in training, and preparing and giving my own "advanced" lectures.

The Emergency Department at Nyakibale has six beds and can range from being empty to having to constantly turn over beds. There are some subspecialties during certain times of the week (one formally trained surgeon, orthopedic officers, dentists, etc.). However, the remainder of the time, the general ward medical officers/MDs do everything. Laboratory services and radiology (ultrasound and X-ray) are available during weekday days. The radiologist or laboratory technician can be called in at other times if it is an emergency. Fortunately, most of the staff live on the hospital grounds, so it does not take them very long to "come in" when they are called. The Emergency Department does have its own ultrasound. To highlight the rest of the capacity of the Emergency Department: oxygen is limited to one oxygen concentrator with two hook-ups (no ability to intubate), and the pharmacy consists of a handful of antibiotics, one or two oral anti-hypertensives, aspirin, limited pain medications, intravenous fluids, one or two anti-epileptics, ketamine, insulin, and a few other medications.

Much of the teaching that I did while there was on ultrasound and on clinical decision-making. I developed an advanced ultrasound lecture, organized a simulation case on abdominal pain, and prepared a self-directed PowerPoint presentation on the neurological exam and common neurological complaints. One other resident and an attending was also volunteering with the program at the same time, and I assisted them with a lecture on interpreting laboratory testing. Given that there were three of us available for teaching, we often divided the time in the Emergency Department in order to provide supervision and teaching to the ECPs.

The most common clinical pathologies encountered on this rotation included complications from HIV (called ISS in Uganda), tuberculosis, malaria, dengue fever, and trauma. There was also "the usual" pathologies such as pneumonia, urinary tract infections, appendicitis, ectopic pregnancy, PID, intussusception, and so on. Conditions such as acute coronary syndrome, congestive heart failure (called CCF in Uganda), diabetes (and related complications), and hypertension were also seen, but not as common as in the United States.

Overall, it was an excellent rotation, both in terms of the teaching experience and the clinical pathology. All of the ECPs are incredibly motivated and dedicated to learning/teaching emergency care, and it was encouraging to see the three new students continue to improve in their skills and clinical decision-making even during the very short time I was there. I highly recommend this elective for anyone interested in medical education and developing emergency medicine as a specialty globally. I hope I have the opportunity to work with GEC more in the future.





HAITI

A ROTATION AT BERNARD MEVS HOSPITAL IN PORT AU PRINCE

By Joe Benedict, PGY 4



During my two-week rotation at Bernard Mevs Hospital in Port Au Prince, Haiti, I worked primarily in the Emergency Department. There, I worked under the supervision of Haitian physicians who were typically trained the Dominican Republic. The ED was a one-room area approximately 500 square-feet which had three treatment beds, one examination table, and three chairs for patients.

There was always one physician, one nurse, and one "tech" (typically a former EMS provider) staffing the ED, but often there were several medical and nursing students and at least one resident as well.

There was access to 24-hour lab services, though the battery of available laboratory tests was limited and results typically reported many hours after they were ordered. The ED had an ultrasound and access to X-ray as well. A mobile CT was available, but for half of my rotation, it was inoperable and needing repair.

Patients were typically Haitian, though there often were non-Haitian patients from the UN, aid organizations and the airline companies. A large portion of patients were victims of trauma: violent penetrating trauma, but more often blunt trauma from car and motorcycle crashes. On one rainy night, I remember a large multi-vehicle crash that resulted in four critically injured patients presenting at once, stressing resource capacity of the Emergency Department.

In addition to approximately 30 hospital beds, the hospital had eight ICU beds. General surgery, neurosurgery, and orthopedic surgery were available on-call, and there was a separate pediatric ED and inpatient unit. While we had many ventilators, there was only one respiratory tech occasionally available, so the physicians were entirely responsible for ventilator setup, management, and operation. Medications were largely

donations, so while the formulary was fairly broad, medications were often in small quantities and unpredictable supply. Commonly, patients or their families would go to a nearby private pharmacy to retrieve the medications needed for a patient.

When patients arrived in extremis, which was often, emergent life-saving interventions were made without consideration to payment. However, any further intervention after stabilization (imaging, medications, etc) were only administered after the service had been paid for. For example, it was common for a critically neurotraumatized patient to be acutely stabilized in the ED but then languish for hours while waiting for the family to determine if they were able to pay the near \$300 USD for a head CT to determine if their lesion was amenable for operative intervention. Often the family was unable to pay and often only supportive medical therapy was given.

The resource limitations in terms of what equipment, medications, imaging studies, labs, consultations, and dispositions were available, made providing medical care in the way I have been trained challenging to say the least. However, meeting those challenges with treatment plans maximizing all available resources and sometimes discovering new resources through creativity and persistence was very rewarding. In spite of long waits, the financial stress of paying for medical care, and of course the awful experience to be sick enough to have presented to the ED, patients were unimaginably grateful, gracious, and pleasant. The staff were always a pleasure to work with and I learned so much from the Haitian doctors. This rotation was a very personally and professionally rewarding experience and I would absolutely enjoy working there again. I would strongly recommend this elective to other emergency medicine residents who wish to have a very hands-on experience of practicing and learning emergency medicine in a limited resource/global health setting.



Emergency Department and Staff at Bernard Mevs Hospital, Port Au Prince, Haiti



HAITI

A VIEW INTO LIVES AT RISK WHERE MEDICAL TREATMENT IS LACKING

By Grace Garcia, PGY 3



During my emergency rotation in Haiti, I got to see the dual burden of infectious and chronic disease at work. A fair number of patients presented with gastrointestinal infection or pneumonia. As the local trauma center, I also saw patients with trauma, both gunshot wounds or a rock to the head. Given the crazy traffic, the numbers of pedestrians struck and car accidents were unsurprising. A large number of patients presented with heart failure. The etiology of the heart failure was unclear, potentially from untreated hypertension, but also rheumatic heart disease in the younger patients.

Patients made decisions based on financial considerations, and sometimes a less interventional approach worked well for the family. One young man came with a classic story for appendicitis with one day of abdominal pain, fever, and anorexia. He was focally tender in the right lower quadrant, and I did a bedside ultrasound that confirmed appendicitis. We gave him pain medications and IV antibiotics, and waited for the surgeon we consulted. After several hours, the patient wanted to leave. I discharged him with strict return precautions, oral antibiotics, and an appointment for the next day surgery clinic. He returned the next day to give thanks for his treatment, markedly improved, and escaped without any surgery. Other times, patients left with much more uncertain outcome. A woman in her 40s with a history of heart failure presented with malaise and labs showed new elevation of creatinine to six. Even though she was still making urine, her degree of ESRD meant that she would likely need dialysis, which was difficult to access and expensive. While waiting for a bed, she decided that she wanted to leave given that her family had been unable to gather the funds for a hospital stay. She had a fatalistic attitude, stating that her mother had died of heart problems around the same age.

The hospital where I worked had a donated CT scanner, which was predominantly used for neurological applications. A family brought in a 70 year old relative. For the past five days, he had not been able to move half his body. He was otherwise awake and alert. After triage, the Haitian attending prescribed a CT scan. I questioned the utility of a scan in what was obviously a stroke outside the window of any intervention. She replied that he needed the scan to follow up with a neurologist. The family took the prescription for the CT scan to the cashiers, but once told that it would cost 250 U.S. dollars, more than most Haitian families

make in a month, they came and gathered their relative and went away. The system of paying up front for medications, blood work, and radiology could be frustrating, sometimes delaying antibiotics or other interventions. However, sometimes having transparent costs let the family avoid entering into debt for interventions that probably would not change the outcome.

Due to the local crime in the area along with a series of protests happening during my stay, I was not allowed to leave the hospital on foot. The couple times I went out, either to a restaurant or to buy food, I was in a car with a driver. Despite not having a perfect immersion, the guest quarters were comfortable and convenient.





JULY 2017 – JUNE 2018 PUBLIC AND GLOBAL HEALTH PUBLICATIONS

Weiner SG, Mitchell PM, Temin ES, Langlois BK, Dyer KS. Use of Intranasal Naloxone by Basic Life Support Providers. *Prehosp Emerg Care*. 2017;21(3):322-26. PMID: 28166446. DOI: 10.1080/10903127.2017.1282562 PMID: 28166446

Ryan KM, Breaud AH, Eliseo L, Goto R, Mitchell P. Injuries and exposures among ocean safety providers: A review of workplace injuries and exposures from 2007-2012. *J Occup Environ Hyg*. 2017 Jul;14(7):534-39. PMID: 28426289

Evans TI, Liebling EJ, Green TC, Hadland SE, Clark MA, Marshall BDL. Associations between Physical Pain, Pain Management, and Frequency of Nonmedical Prescription Opioid Use Among Young Adults: A Sex-specific Analysis. *J Addict Med*. 2017 Jul/Aug;11(4):266-72. PMID: 28514234 PMCID: PMC5536999

Jacquet GA, Schneider JI, Hudspeth J, Rybarczyk MM, Sugarman RA, Miller C, Tupesis JP. A Centralized Structure and Process to Approve and Monitor GME Global Health Electives at a Large Academic Institution. *J Grad Med Educ*. 2017 Aug;9(4):547-48. PMID: 28824782

Horton M, McDonald R, Green TC, Nielsen S, Strang J, Degenhardt L, Larney S. A mapping review of take-home naloxone for people released from correctional settings. *Int J Drug Policy*. 2017 Aug;46:7-16. PMID: 28575724

Carroll J, Marshall BDL, Rich J, Green TC. Exposure to fentanyl-contaminated heroin and overdose risk among illicit opioid users in Rhode Island: A mixed methods study. *Int J Drug Policy*. 2017 Aug;46:136-45. PMCID: PMC5560423.

Shankar KN, Liu SW, Ganz DA. Trends and Characteristics of Emergency Department Visits for Fall-Related Injuries in Older Adults, 2003-2010. *West J Emerg Med*. 2017 Aug;18(5):785-793. PMID: 28874929

Marshall BDL, Krieger MS, Yedinak JL, Ogera P, Banerjee P, Alexander-Scott NE, Rich JD, Green TC. Epidemiology of fentanyl-involved drug overdose deaths: A geospatial retrospective study in Rhode Island, USA. *Int J Drug Policy*. 2017 Aug;46:130-135. PMID: 28601512

Nicholson B, McCollough C, Wachira B, Mould-Millman NK. Emergency medical services (EMS) training in Kenya: Findings and recommendations from an educational assessment. *African J Emerg Med*. 2017 Aug;157-159.

Becker TK, Hansoti B, Bartels S, Hayward AS, Hexom BJ, Lunney KM, Marsh RH, Osei-Ampofo M, Trehan I, Chang J, Levine AC; (Jacquet GA) Global Emergency Medicine Literature Review (GEMLR) Group. Global Emergency Medicine: A Review of the Literature from 2016. *Acad Emerg Med*. 2017 Sep;24(9):1150-60. PMID: 28474823

Baird J, Faul M, Green TC, Howland J, Adams CA, George A, Mello MJ. A Retrospective Review of Unintentional Opioid Overdose Risk and Mitigating Factors among Acutely Injured Trauma Patients. *Drug Alcohol Depend*. 2017 Sep;178:130-5. PMID: 28647680

Donovan E, Ranney ML, Baird J, Patry E, Cabral S, McKenzie M, Green TC. Beliefs about a complementary and alternative therapy-based chronic pain management program for a Medicaid population. *Pain Med*. 2017 Sep 1;18(9):1805-16. PMID: 28398544.

Hanchate AD, Paasche-Orlow MK, Dyer KS, Baker WE, Feng C, Feldman J. Geographic Variation in Use of Ambulance Transport to the Emergency Department. *Ann Emerg Med*. 2017 Oct;70(4):533-543.e7. PMID: 28559039. PMCID: PMC5614809

Robinson TD, Oliveira TM, Kayden S. Factors affecting the United Nations' response to natural disasters: what determines the allocation of the central emergency response fund? *Disasters*. 2017 Oct;41(4):631-48. PMID: 28133779

Madsen TE, Linden JA, Rounds K, Hsieh YH, Lopez BL, Boatright D, Garg N, Heron SL, Jameson A, Kass D, Lall MD, Melendez AM, Scheulen JJ, Sethuraman KN, Westager LM, Safdar B. Current status of gender and racial/ethnic disparities among academic emergency medicine physicians. *Acad Emerg Med*. 2017 Oct;24(10):1182-1192. PMID 28779488

Gibson J, Schechter-Perkins EM, Mitchell P, Mace S, Tian Y, Williams K, Luo R, Yen-Lieberman B. Multi-center evaluation of the cobas® Liat® Influenza A/B & RSV assay for rapid point of care diagnosis. *J Clin Virol*. 2017 Oct; 95:5-9. PMID: 28818691

Marshall BDL, Yedinak JL, Goyer J, Green TC, Koziol JA, Alexander-Scott N. Development of a Statewide, Publicly Accessible Drug Overdose Surveillance and Information System. *Am J Public Health*. 2017 Nov;107(11):1760-1763. PMID: 28933938

St Clair NE, Pitt MB, Bakeera-Kitaka S, McCall N, Lukolyo H, Arnold LD, Audcent T, Batra M, Chan K, Jacquet GA, Schutze GE, Butteris S; Global Health Task Force of the American Board of Pediatrics. Global Health: Preparation for Working in Resource-Limited Settings. *Pediatrics*. 2017 Nov;140(5): pii: e21063783. PMID: 29074640

Linden JA, Grimmnitz B, Hagopian L, Breaud AH, Langlois BK, Nelson KP, Hart LL, Feldman JA, Brown J, Reid M, Desormeau E, Mitchell PM. Is the Pelvic Examination Still Crucial in Patients Presenting to the Emergency Department With Vaginal Bleeding or Abdominal Pain When an Intrauterine Pregnancy Is Identified on Ultrasonography? A Randomized Controlled Trial. *Ann Emerg Med*. 2017 Dec;70(6):825-34. PMID: 28935285

Jordan J, Linden JA, Maculatis MC, Hern HG, Schneider JI, Wills CP, Marshall JP et al. Identifying the Emergency Medicine Personality: A Multisite Exploratory Pilot Study. 2017 Dec. *Acad Emerg Med*. Education and Training. <https://doi.org/10.1002/aet2.10078>

Shankar KN, Treadway NJ, Taylor AA, Breaud AH, Peterson EW, Howland J. Older adult falls prevention behaviors 60 days post-discharge from an urban emergency department after treatment for a fall. *Inj Epidemiol*. 2017 Dec;4(1):18. PMID: 28626848

Liebling EJ, Green TC, Hadland SE, Marshall BDL. Injection drug use and overdose among young adults who use prescription opioids non-medically. *Addict Behav*. 2018 Jan;76:20-26. PMID: 28735037

Marshall BDL, Green TC, Elston B, Yedinak JL, Hadland SE, Clark MA. The Effectiveness of Internet- and Field-Based Methods to Recruit Young Adults Who Use Prescription Opioids Nonmedically. *Subst Use Misuse*. 2018 Jan;24:1-12. PMID: 29364768



- Sheng AY, Sullivan R, Kleber K, Mitchell PM, Liu JH, McGreevy J, McCabe K, Atema A, Schneider JI. Fantastic Learning Moments and Where to Find Them. *West J Emerg Med*. 2018 Jan;19(1):59-65. PMID: 29383057
- Soipe AI, Taylor LE, Abioye AI, Green TC, Hadland SE, Marshall BDL. Prevalence of Hepatitis C Screening, Testing, and Care Experience Among Young Adults Who Use Prescription Opioids Nonmedically. *J Adolesc Health*. 2018 Jan;62(1):114-117. PMID: 29102250
- Jacquet GA, Hamade B, Diab KA, Sawaya R, Dagher GA, Hitti E, Bayram JD. The Emergency Department Crash Cart: A systematic review and suggested contents. *World J Emerg Med*. 2018;9(2):93-98. PMID: 29576820
- Jacquet GA, Sarfaty S, Tupesis JP. Comments on 'Protecting the health of medical students on international electives in low-resource settings.' *J Travel Med*. 2018 Jan;25(1). Doi: 10.1093/jtm/tay008. PMID: 29608737
- Beaudoin FL, Gutman R, Zhai W, Merchant RC, Clark MA, Bollen KA, Hendry P, Kurz MC, Lewandowski C, Pearson C, O'Neill B, Datner E, Mitchell P, Domeier R, McLean SA. Racial Differences in Presentations and Predictors of Acute Pain after Motor Vehicle Collision. *Pain*. 2018 Feb. [Epub ahead of print] PMID: 29438226
- Siegel J, Coleman DL, James T. Integrating Social Determinants of Health into Graduate Medical Education: A Call for Action. *Acad Med*. 2018 Feb;93(2):159-162. PMID: 29140918
- Ryan K, George D, Liu J, Mitchell P, Nelson K, Kue R. The Use of Field Triage in Disaster and Mass Casualty Incidents: A Survey of Current Practices by EMS Personnel. *Prehosp Emerg Care*. 2018 Feb;1-7. [Epub ahead of print] PMID: 29425472
- Bouvier BA, Waye KM, Elston B, Hadland SE, Green TC, Marshall BDL. Prevalence and correlates of benzodiazepine use and misuse among young adults who use prescription opioids non-medically. *Drug Alcohol Depend*. 2018 Feb;183:73-7. PMID: 29241103
- Krieger MS, Yedinak JL, Buxton JA, Lysyshyn M, Bernstein E, Rich JD, Green TC, Hadland SE, Marshall BDL. High willingness to use rapid fentanyl test strips among young adults who use drugs. *Harm Reduct J*. 2018 Feb 8;15(1):7. doi: 10.1186/s12954-018-0213-2. PMID: 29422052
- Ramos R, Cherpitel CJ, Alvarez J, Beltran O, Woolard R, Villalobos S, Bernstein J, Bernstein E. Preparing Mexican-Origin Community Health Advocates (Promotores) to Conduct SBIRT for Problem Drinking in the Emergency Room. *Pedagogy in Health Promotion*. 2018 Feb. <https://doi.org/10.1177/2373379918756425>.
- Gruenberg CC, Breaud AH, Liu JH, Mitchell PM, Feldman JA, Nelson KP, Kahn JH. Are Geriatric Patients Placed in an Emergency Department Observation Unit on a Chest Pain Pathway More Likely Than Non-Geriatric Patients to Re-Present to the Hospital within 30 Days? *J Emerg Med*. 2018 Mar;54(3):302-6. PMID: 29336989
- Carroll JJ, Rich JD, Green TC. Reducing Collateral Damage in Responses to the Opioid Crisis. *Am J Public Health*. 2018 Mar;108(3):349-50. PMID: 29412724
- Linden JA, Breaud AH, Mathews J, McCabe KK, Schneider JI, Liu JH, Halpern LE, Barron RJ, Clyne B, Smith JL, Kauffman DF, Dempsey MS, Dechert TA, Mitchell PM. The Intersection of Gender and Resuscitation Leadership Experience in Emergency Medicine Residents: A Qualitative Study. *Acad Emerg Med - AEM Education and Training*. 2018 Mar;2:162-168. <https://doi.org/10.1002/aet2.10096>
- Green TC, Rich JD, Sharfstein J. Commentary on 'Revisiting the 'paradigm shift' in opioid use: Developments and implications 10 years later.' *Drug Alcohol Rev*. 2018 Apr;37 Suppl 1:S206-S207. doi: 10.1111/dar.12684. Epub 2018 Feb 26. No abstract available. PMID: 29479758
- Brinkley-Rubinstein L, Macmadu A, Marshall BDL, Heise A, Ranapurwala SI, Rich JD, Green TC. Risk of fentanyl-involved overdose among those with past year incarceration: Findings from a recent outbreak in 2014 and 2015. *Drug Alcohol Depend*. 2018 Apr 1;185:189-191. doi: 10.1016/j.drugalcdep.2017.12.014. Epub 2018 Feb 9. PMID: 29459328
- Green TC, Clarke J, Brinkley-Rubinstein L, Marshall BDL, Alexander-Scott N, Boss R, Rich JD. Post-incarceration Fatal Overdoses after Implementing Medications for Addiction Treatment in a Statewide Correctional System. *JAMA Psychiatry*. 2018 Apr 1;75(4):405-407. doi: 10.1001/jamapsychiatry.2017.4614. PMID: 29450443
- Rixe JA, Liu J, Breaud H, Nelson K, Mitchell P, Feldman J. Is Hallway Care Dangerous? An Observational Study. *Am J Emerg Med*. 2018 Apr. pii: S0735-6757(18)30278-X. doi: 10.1016/j.ajem.2018.04.003. [Epub ahead of print]. PMID: 29747896
- Schechter-Perkins EM, Miller NS, Hall J, Hartman JJ, Dorfman D, Andry C, Linas B. Implementation and Preliminary Results of an Emergency Department Nontargeted Opt-Out Hepatitis C Virus Screening Program. *Acad Emerg Med*. 2018 May. Doi: 10.1111/acem.13484. PMID: 29851238
- Douglass KA, Jacquet GA, Hayward AS, Dreifuss BA, Tupesis JP. Development of a Global Health Milestones Tool for Learners in Emergency Medicine: A Pilot Project. *Acad Emerg Med. AEM Education and Training*. 2017;1(4):269-79. www.aem-e-t.com
- Beaudoin FL, Gutman R, Zhai W, Merchant RC, Clark MA, Bollen KA, Hendry P, Kurz MC, Lewandowski C, Pearson C, O'Neill B, Datner E, Mitchell P, Domeier R, McLean SA. Racial Differences in Presentations and Predictors of Acute Pain after Motor Vehicle Collision. *Pain*. 2018 June;159(6):1056-63. PMID: 29438226
- Strony, R., Marin, J. R, Bailitz, J., Dean, A., Blaivas, M., Tayal, V., Leo M et al. (2018). Systemwide Clinical Ultrasound Program Development: An Expert Consensus Model. *Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health*. Retrieved from <https://escholarship.org/uc/item/4fp97925>



Emergency Medicine, Public & Global Health and Residency & Pre-Hospital Education:

FUTURE CONFERENCES

NATIONAL CONFERENCES

ORGANIZATION	DATE	LOCATION
ACEP	October 1 – 3, 2018	San Diego, California
NAEMSP	January 7 – 9, 2019	Austin, Texas
CORD	March 31 – April 3, 2019	Seattle, Washington
SAEM	May 14 – 17, 2019	Las Vegas, Nevada

INTERNATIONAL CONFERENCES

ORGANIZATION	DATE	LOCATION
INDUS EM	October 30 – November 3, 2018	Doha, Qatar
AFCEM	November 7 – 9, 2018	Kigali Rwanda, Africa
EMCON	November 15 – 18, 2018	Bangalore, Karnataka India
CUGH	March 8 – 10, 2019	Chicago, IL
ICEM	June 12 – 15, 2019	SEOUL, KOREA
EUSEM	September 8 – 12, 2019	Glasgow, Scotland



SUPPORT BOSTON MEDICAL CENTER

Please consider a tax-deductible* contribution to support BMC's Department of Emergency Medicine. Visit the websites listed below if you wish to make a contribution to a program of your choice. Thank you for your consideration and dedication to the department's mission.

VIAP Program: <https://www.bmc.org/programs/violence-intervention-advocacy-program>

Project ASSERT: <https://development.bmc.org/ways-to-give>

Emergency Medicine Residency Program: www.bumc.bu.edu/emergencymedicine

Or you can choose to send your contribution via U.S. postal mail.

Please note on your check that your donation should be directed to one of the above listed programs.

Boston Medical Center

Office of Development

801 Massachusetts Avenue, 1st Floor

Boston, MA 02118-2393

*Boston Medical Center is a non-profit 501(c)3 organization. All donations are tax deductible.

Launched June 6, 2018: The Grayken Center for Addiction at @The_BMC and @thepartnership have teamed up to provide Massachusetts families with support and information to help address youth substance use <https://bit.ly/2JIFaUT> #FamiliesCanHeal.



Grayken Center
for Addiction
at Boston Medical Center



Partnership[™]
for Drug-Free Kids
Where families find answers

WHERE SUCCESS STORIES ARE BORN

STRONGER
TOGETHER



Welcome to your medical home, where being stronger
for life's biggest moments starts with a checkup.
Book yours today at bmctogether.org



Boston Medical Center Department of Emergency Medicine

PUBLIC & GLOBAL HEALTH SECTION NEWSLETTER

Jonathan Olshaker, MD, Chair, *Editor-in-Chief*

Edward Bernstein, MD, Director, *Public Health Section Editor*

Gabrielle A. Jacquet, MD, MPH, *Managing Editor, Global Health Section Editor*

Benjamin Nicholson, MD, PGY 3, *Resident Managing Editor*

Kathleen Shea, *Technical Editor*

For more information about BMC's Department of Emergency Medicine and its section of Public and Global Health, please visit:

www.bmc.org/emergency-medicine



EXCEPTIONAL CARE. WITHOUT EXCEPTION.

Department of Emergency Medicine
One Boston Medical Center Place
Dowling One South, Boston, MA 02118