Once again it is my pleasure to present the Department of Emergency Medicine of Boston Medical Center and Boston University School of Medicine newsletter of our Section of Public and Global Health. This past year saw a continuation of the ED’s significant productivity both in research efforts and impactful, published scholarly activity. The section continues its advocacy on opioid harm reduction, violence intervention, ED hepatitis screening, and other major public health initiatives.

Inside you’ll find highlights of the extremely important work being done across the campus to address immediate public health challenges and related social determinants of health. Our committed pursuit is to help improve the lives of our patients while offering a positive difference for our city, state, and nation.

Our guest commentator is Scott Weiner, MD, MPH, who provides important updates on nationwide efforts directly addressing the opioid epidemic. Hanni Marie Stoklosa, MD, MPH, and Larissa Lester Truschel, MD, MPH, have given permission to reprint their article on recognizing and stopping human trafficking that appeared in AAMC News earlier this year. Edward Bernstein, MD, Professor of Emergency Medicine and founder of Project ASSERT details the many successes of BMC’s Faster Paths to Treatment Opioid Urgent Care Center which bridges the chasm of transition from ED patient to medication for addiction treatment and addiction services.

The newsletter calls attention to the Boston Sun op-ed: “Re-Entry Services for Ex-Inmates are Crucial to Combating the Opioid Crisis,” submitted by Jon Santiago, MD, emergency department attending and our new Massachusetts state representative for the 9th Suffolk district. Elizabeth Dugan, LICSW, Clinical Director of BMC’s Violence Intervention Advocacy Program (VIAP) outlines the program’s focus on addressing social determinants of health and the comprehensive wrap-around services made available for victims of violence and their families.

Elissa Schechter-Perkins, MD, Vice Chair of Research and Associate Professor of Emergency Medicine describes the tremendous success of the ED hepatitis C virus (HCV) screening program. The efforts of this program have led to hundreds of patients being linked to care, and cures for 47 HCV positive patients.

The BMC Injury Prevention Center has many ongoing projects focusing on harm reduction relating to violence, substance use disorder, injury from falls and youth traumatic brain injury. Co-principal investigators, Kalpana Narayan, MD, MSc, MSHP, Assistant Professor of Emergency Medicine along with Patricia Mitchell, RN, Research Assistant Professor of Emergency Medicine, Director of Research Operations summarize the ED based program “Addressing Social Determinants of Health in High ED Utilizers,” sponsored by the Massachusetts Health Policy Commission.

International electives are undertaken by many of our emergency medicine residents. Inside they share — in vivid and passionate detail — their global medicine experiences, including work in Africa, China, Vietnam, Nepal, Mexico, Nairobi, and Guatemala.

On the following pages you will find more in-depth detail on the many ongoing research and grant-related projects of faculty, residents and researchers. This newsletter is another example of BMC’s continued commitment to our patient population and to further demonstrate that we strive to provide exceptional care for our patients and surrounding community.

Jonathan Olshaker
Guest Commentary

ADDRESSING THE OPIOID EPIDEMIC COUNTRYWIDE

By Scott Weiner, MD, MPH, Chief, Division of Health Policy and Public Health Director, Brigham Comprehensive Opioid Response and Education (B-CORE) Program, Department of Emergency Medicine at Brigham and Women’s Hospital

The Emergency Quality Network (E-QUAL) is a program of the American College of Emergency Physicians (ACEP) – a broad-reaching intervention that any ED in the country can participate in.

The project was created under the Transforming Clinical Practice Initiative (TCPI), a program created by CMS under the Affordable Care Act. The purpose is to help clinicians achieve large-scale health transformation. Under the leadership of Dr. Arjun Venkatesh (Yale University) and Jeremiah “Jay” Schuur (Brown University), ACEP was awarded funds by Centers for Medicare & Medicaid Services (CMS) to become a Support and Alignment Network (SAN) to participate in the initiative. The result was the creation of the E-QUAL network, a broad-reaching intervention that any ED in the country can participate in.

The first three arms of the E-QUAL project were designed to:

1. improve outcomes for patients with sepsis;
2. reduce avoidable testing by following the “Choosing Wisely” recommendations; and,
3. improve value by reducing avoidable testing and admissions for low-risk patients with chest pain.

To participate in the program, EDs enroll in a “learning collaborative.” EDs provide some baseline data to E-QUAL, roll out education in the form of a toolkit containing several online resources, articles, and webinars to their physicians, and then repeat data reporting. By doing so, they are eligible for additional funds through CMS’ Merit-based Incentive Payment System (MIPS), meaning that there is a financial incentive for participating.

A key strength of the program is that the reporting requirements are not very onerous and the E-QUAL website is easy to use. As a result, departments that have traditionally been hard to reach, especially smaller, non-academic community sites, have an opportunity to update their physicians’ practices. Physicians who participate can also obtain free CME credit by watching the webinars. The results of the first phase of the project were positive. Looking just at the sepsis intervention, compliance with the CMS severe sepsis/septic shock early management bundle (SEP-1) improved from 39% to 57%, and 92% of participating sites implemented at least one of the consensus quality improvement best practices.

As we all know, the opioid crisis has created a new need for practice improvement, particularly around how we, as emergency physicians, prescribe opioids and how we treat opioid use disorder. The team approached the Addiction Policy Forum, a nonprofit foundation with the goal of ending addiction in America. This group agreed to fund an additional, opioid-focused arm. Dr. Kate Hawk (Yale University) and I were identified as the co-leads of the opioid initiative. To create the intervention, we convened a panel of opioid experts from around the country (including Dr. Bernstein).
This group created a list of opioid-related best practices, eight for prescribing opioids and five for treating opioid use disorder and opioid overdose:

### Best Practices for Opioid Prescribing

1. Opioid prescriptions should be limited to the shortest duration possible; three days or less will be sufficient in most cases (up to seven days may be appropriate in certain circumstances).
2. All patients should be educated about opioid-specific risks and realistic benefits when considering an opioid prescription, with attention to high risk groups including adolescents, pregnant women, elderly and those with a history of substance use disorder.
3. Non-opioid pain relievers should be recommended and/or prescribed prior to and concurrent with opioids as appropriate.
4. The state Prescription Drug Monitoring Program (PDMP) should be checked prior to prescribing an opioid, when feasible.
5. Educate patients about the risks associated with concurrent use of opioids and benzodiazepines and avoid co-prescribing whenever possible.
6. Opioid prescriptions generally should not be written for chronic pain unless there is coordination with the patient’s primary pain treating clinician.
7. Prescriptions for long-acting/extended-release opioids for the treatment of pain should not be initiated from the ED.
8. Lost, destroyed, or stolen opioid prescriptions should not be refilled.

### Best Practices for Patients with Opioid Use Disorder or Overdose

1. After an opioid overdose, consider communication with the patient’s primary care physician if possible.
2. Naloxone should be prescribed or provided to opioid overdose patients as well as patients at risk for overdose along with overdose prevention education.
3. Referral to treatment should be provided, with warm handoff, as available.
4. Consider buprenorphine for the treatment of unprovoked opioid withdrawal in patients with opioid use disorder based on standard guidelines, and provide ED linkage to ongoing treatment as available.
5. After opioid overdose, consider assessing for suicidal ideation and ask permission to contact a friend or relative prior to ED discharge.

The group then created a toolkit containing policies/guidelines, apps/websites, and important manuscripts. There are 16 webinars, covering everything from the neurobiology of addiction, to non-opioid analgesic techniques, to advanced treatment of opioid use disorder. Finally, we partnered with Academic Life in Emergency Medicine (ALIEM) and have produced several podcasts.

For our first learning collaborative, which wrapped up a couple months ago, we had 189 sites enroll. Sites chose to report their opioid prescribing practices for patients with back pain, headache, or dental pain by doing a chart review of 30 cases of one of the conditions. They could alternatively report on their care for patients who experienced opioid overdose. In our preliminary data, which we just received, we were reassured to see that fewer patients received opioids for the painful conditions, more were given alternatives to opioids, and more were given safe pain management instructions at discharge. The number of departments reporting on the overdose measure was small, so those results are not meaningful.

However, the second learning collaborative is starting now. We are delighted that there are already 418 EDs who have signed up to participate, indicating that the reach of the initiative is growing. Furthermore, we expanded the opioid overdose metric to now also include treatment of opioid use disorder and not just overdose. We are introducing and reinforcing the idea that ED-initiated buprenorphine is both feasible and evidence-based. We are looking forward to seeing if even more EDs are able to improve their opioid-related practices by participating.

One important thing to know: although only individual EDs can sign up for the program, we have made all of the educational resources completely open access.

You can visit this site to watch any of the webinars, download the best practices pocket card, listen to the podcasts, or access the toolkits. We hope you will take advantage of this comprehensive resource: https://www.acep.org

References:

Boston Medical Center’s ED Responds to the Opioid Overdose Epidemic:

BRIDGING THE CHASM OF TRANSITION FROM ED TO OUD TREATMENT

Edward Bernstein, MD, FACEP
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

Epidemiology

Under current conditions, the opioid overdose crisis is expected to worsen—with the annual number of opioid overdose deaths projected to reach nearly 82,000 a year by 2025, resulting in approximately 700,000 deaths from 2016 to 2025.

In 2018, opioid overdose deaths in Massachusetts reached 2,033 (29.4/100,000 and up from 14.3/100,000 in 2013), with fentanyl confirmed in 89% of cases. Non-fatal overdoses have been rising in the Boston area, based on Boston EMS data. From 2013 to 2018, narcotic related incidents (NRI) reported by Boston EMS rose from 1518 to 3546; among the 2018 NRIs, 42% (1250/2912) were transported to BMC ED, double the number of NRIs transported in 2013.

Boston Medical Center’s Response

In 2009 BMC’s Project ASSERT partnered with the Boston Public Health Commission (BPHC) and the South End Healthy Boston Coalition to be the first ED to conduct overdose education and Narcan distribution to patients using drugs. At a meeting in 2013 with the BPHC Commissioner, BMC’s President Kate Walsh announced a policy that all ED patients at risk for opioid overdose should be offered opioid education and naloxone/Narcan rescue kits.

Research has shown that the greater the concentration of naloxone in communities, the lower the rates of mortality. Over the past five years, Project ASSERT peer counselors, ED providers, and pharmacists collaborated to implement the Narcan take-home rescue kit policy. Project ASSERT/Faster Paths staff counsel about treatment options and utilize the PEERS model:

1. Paged to bedside;
2. Evaluate, Educate, and Refer interested patients to treatment including addiction medication; and
3. Negotiate a Safe discharge.

In 2016 the Departments of Emergency Medicine and General Internal Medicine joined forces to expand treatment options to BMC patients, supported in part by a DPH Bureau of Substance Use Services five-year grant to develop, implement and evaluate a regional opioid urgent care center (OUCC). As a result, BMC was able to expand Project ASSERT services and add a medication for addiction treatment (MAT) clinic.

From July 1, 2018 to June 30, 2019 Faster Paths to Treatment OUCC had 7,160 encounters; 2,199 resulted in placement in detox and 837 of these were transported by local taxi or Uber Health. Sixty-five were placed...
in clinical stabilization or transitional programs. Four hundred sixty five patients were initiated on buprenorphine and 61 on naltrexone. These encounters represented service to 2,199 unique patients: 72% male, 56% white, 24% Black, and 17% Hispanic. Among them, 70% reported high rates of homelessness, 10% manic depression, 10% PTSD, and 10% incarceration in past year.

**Faster Paths** July 1, 2018 to June 30, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique patients</td>
<td>2660</td>
</tr>
<tr>
<td>Total visits</td>
<td>7160</td>
</tr>
<tr>
<td>Detox placements</td>
<td>2199</td>
</tr>
<tr>
<td>MAT patients</td>
<td>526</td>
</tr>
<tr>
<td>MAT Rx</td>
<td>3841</td>
</tr>
<tr>
<td>CSS/TSS/Res</td>
<td>65</td>
</tr>
</tbody>
</table>

Begun Sept 2018

**FASTER PATHS TO TREATMENT** is comprised of two integrated programs:

**PROJECT ASSERT**
Assessment, Social Support, Resources & Referrals

**MEDICATION FOR OPIOID USE DISORDER (MOUD)**
A low barrier access bridge program & referral to maintenance

In March 2017 a $25 million dollar grant from the Grayken family to Boston Medical Center created the Grayken Center for Addiction to integrate and intensify BMC’s 25 years of innovation in addiction treatment, education, and research. Under the leadership of Michael Botticelli, President Obama’s Director of the White House Office of National Drug Control Policy, BMC’s Grayken Center has played an important role in policy advocacy.

One policy change designed to extend access to addiction care took place in August 2018, when Massachusetts promulgated Chapter 208, an act for prevention and access to appropriate care and treatment of addiction that requires emergency departments to institute “protocols and capacity to provide appropriate, evidence-based interventions prior to discharge that reduce the risk of subsequent harm and fatality following an opioid-related overdose including … protocols and capacity to possess, dispense, administer and prescribe opioid agonist treatment, including partial agonist treatment.” In October 2018, in response to the law, the BMC Emergency Department, supported by our hospital administration and the BMC Grayken Center for Addiction, implemented an ED opioid withdrawal policy.

At BMC, 80% of ED faculty are now X-wavered (DEA licensed to prescribe buprenorphine) and those that are not, including residents, follow the 72 hours federal rule that permits ordering and administering buprenorphine and methadone on a once-a-visit basis to treat symptoms of withdrawal.

As a result of the implementation of the new emergency law, we can report that from October 2018 to June 2019 there were 3,150 ED encounters related to diagnoses of opioid use disorder or an opioid overdose, 177 of which involved the administration of buprenorphine/suboxone and 117 methadone. Additionally, 1,142 patients were referred and seen by Faster Paths & Project ASSERT program and 43 were seen in Faster Paths’ medication clinic.

BMC’s ED is planning to roll out buprenorphine/suboxone take-home kits with a 48 hour supply, and has adopted quality improvement metrics to track has reached an 88% initiation rate as of June 2019.

**Addressing the Social Determinates of Addiction**

At BMC we are learning that medical approaches including safe prescribing practices, Narcan distribution, and medication treatment for addiction are necessary but may not be sufficient in themselves to end the opioid epidemic. Access to peer support, trauma-informed mental health and addiction services, safe and sober housing and recreation, good nutrition, jobs and job training, transportation, and other wrap-around support services requires that health systems such as ours engage with and invest in the communities we serve. Because of the scope of
the problem, success in any local area also requires national and global efforts to complement institutional and community programs.

For example, the rise in overdose deaths coincided with the entry of fentanyl, a synthetic opioid, into the illicit drug market. Dr. Nora Volkow, Director of the NIH National Institute of Drug Abuse, wrote in her NIH blog, “It is so highly potent, fentanyl is more easily smuggled into the country, and because it is so cheap to produce, drug traffickers have increasingly turned to fentanyl as a profitable product.” The illicit opiate global market annual value is estimated at between $75-132 billion.

The fentanyl epidemic clearly demonstrates the critical interdependence of global and public health. Global health IS public health.

– Ed Bernstein, MD, Professor of Emergency Medicine at Boston Medical Center. Professor of Community Health Sciences, Boston University School of Public Health; Director, BMC Faster Paths to Treatment

The opioid epidemic requires looking beyond biological and medical approaches of prevention, diagnosis, and treatment to strategies that address broader structural issues such as the underdevelopment and poverty within illicit drug producing and distributing countries, geo-political relationships that promote international cooperation in control of drug trafficking, and inequities in the opportunity structure among drug consuming populations. It is clear that policies and programs must broadly address both opiate supply and demand and the multi-factorial root causes that underpin the opioid epidemic. As clinicians, we start at home, one community at a time, working with others who have the capacity to tackle these larger issues.

Direct shipments from China, including Hong Kong
- High-purity synthetic opioids illicitly manufactured in China
- Sold and distributed through online illicit drug markets
- Transported directly into the United States

 Trafficked into the United States from China via Canada and Mexico
- Mixed with other illicit drugs (lowering purity)
- Sold as heroin or pressed into counterfeit prescription pills
- Potentially illicitly manufactured in Mexico

The illicit opiate global market annual value is estimated at between $75-132 billion.
BMC Awarded $89 Million Toward Goal of 40% Reduction in Opioid Deaths

BMC will lead in a research study with the goal of reducing opioid deaths by 40% over the next three years in some of the most heavily impacted Massachusetts communities. BMC’s study is part of a bold, trans-agency effort to speed scientific solutions to stem the national opioid crisis.

The National Institute on Drug Abuse as part of the National Institutes of Health’s Helping to End Addiction Long-term (HEAL) Initiative, has awarded a team of BMC/BU researchers $89 million as one of four sites in a $350 million national study called HEALing Communities.

BMC launched the Grayken Center for Addiction to make a national impact in the fight against the opioid epidemic. This grant is further recognition of BMC’s expertise in this field and its longstanding commitment to forge strong partnerships with peers and community-based organizations and institutions to make a major impact on individuals and families affected by the opioid epidemic.

– Kate Walsh, BMC President and CEO

Massachusetts is a leader in clinical care innovations for substance use disorders that have saved lives, but even within the state, many of these care models are not widely available. Through BMC’s data and community-driven approaches, researchers will work with communities to help address gaps in care and deploy innovative models of treatment that have been shown to support recovery.

Led by Jeffrey Samet, MD, MA, MPH, Chief of General Internal Medicine at BMC and Professor of Medicine at Boston University School of Medicine, and in collaboration with the Commonwealth of Massachusetts, partner organizations and communities across the state, researchers will study innovative addiction treatment interventions in order to create a national model aimed at curbing the opioid crisis. Edward Bernstein, MD, Professor of Emergency Medicine, BUSM and Traci Green, PhD, MSc, IPC Deputy Director are co-investigators. For more information, go to https://www.bmc.org/addiction/reducing-opioid-deaths-ma-communities.
Recognizing Massachusetts’ Innovations to Address the Opioid Epidemic:

**BMC’S PROJECT ASSERT RECEIVES THE ADDICTION POLICY FORUM’S 2019 INNOVATIONS NOW AWARD**

After receiving the American College of Physician’s Rosenthal Award for innovation in health care delivery in 2018, BMC’s Project ASSERT was again recognized in early 2019 by the Addiction Policy Forum (APF), a nationwide nonprofit organization dedicated to eliminating addiction as a major health problem. APF’s “Innovations Now” initiative showcases programs and interventions from across the nation that are actively transforming the field of addiction, imagining a world where these promising innovations are accelerated, scaled up, and accessible to communities most in need.

The award recognizes innovators and leaders across different sectors addressing addiction — prevention, treatment, recovery, child welfare, criminal justice, law enforcement, and health professionals — the leaders who are creating solutions and driving change. The APF particularly cited Project ASSERT for its innovative model of bringing access to addiction treatment into a health care system. Frederick Ryan, Arlington Retired Police Chief, The Essex County District Attorney Jonathan Blodgett and Maryann Frangules, Director of the Massachusetts Organization for Addiction Recovery were among other awardees.

APF brochure stated: “Project ASSERT, staffed by Licensed Alcohol and Drug Counselors (LADCs)/Health Promotion Advocates (HPAs) work with BMC clinicians to provide screening and intervention to at-risk emergency department patients. When someone arrives who may benefit from Project ASSERT services, staff perform ‘in-reach,’ providing emotional support and advocacy. Staff and advocates learned early on that creating a non-judgmental, open door environment is key to getting patients engaged in care….This approach has paid off and Project ASSERT has been going strong for 25 years with Ludy Young, LADC1, Med, as Supervisor, Dr. Edward Bernstein as Medical Director and six dedicated LADCs/HPAs: Brent Stevenson, John Cromwell, Moses Williams, Isaac Rutledge, Rosa Auterio-Williams and Jacqueline Shea. Project ASSERT has expanded beyond consulting and seeing patient in the emergency department. It now collaborates with local partners to train patients, family and friends in overdose recognition and response. In 2016 Project ASSERT became a key part of Faster Paths to Treatment, BMC’s Regional Opioid Urgent Care Center. The LADCs conduct SUD assessments; determine ASAM triage level..."

Only two things are needed to make a difference in the struggle against addiction: spotting an opportunity for reaching people, and acting on it — which is exactly what Project ASSERT does.

The program took off and we were able to provide vital resources that the community needed.

— Ed Bernstein, MD

bsas and project assert at addiction policy forum innovators awards: l-r, front row: brenda english, director, bmc sw; bsas partners eileen brigandi and sarah ruiz; and ludy young ladc1, med; l-r, back row: ed bernstein, medical director; dedicated ladcs/ hpas rosa auterio-williams, moses williams, john cromwell, and brent stevenson (not pictured isaac rutledge and jacqueline shea); and bsas partner james cremer.
Ludy Young and Brent Stevenson pictured on page 27 of the Innovation Now booklet.

Project ASSERT:
- Provides access to treatment and care to individuals who present in the emergency department with risky substance use behavior.
- Uses health promotion advocates to engage patients in respectful, compassionate, and informed conversations about their health and safety; encourage and motivate them to seek help; and advocate for and facilitate access to a variety of hospital and community resources and services.
- Provides naloxone rescue kits and serves the community’s regional opioid urgent care center at BMC, Faster Paths to Treatment.

The approach has paid off — BMC’s Project ASSERT has been going strong for 25 years.

Sponsored by the Massachusetts Health Policy Commission, the High Touch High Trust (HTHT) program integrates community health advocates (CHAs) within the adult Emergency Department at BMC. The CHAs screen and enroll patients for social determinants of health, as well as medical and behavioral health needs, and problem-solve with patients to address these needs with the goal of improving the overall health and well-being of patients, to decrease their ED utilization and subsequent admissions. This program offers six months of intensive case management services to patients who have four or more ED visits in one year. As a part of the program, CHAs work with patients both in a clinical setting as well as in their home to help address the issues and hopefully lessen and or alleviate them.

ED-Based Program Addressing Social Determinants of Health in High ED Utilizers:

HIGH TOUCH HIGH TRUST PROGRAM

Co-PI Kalpana Narayan, MD, MPH, Assistant Professor Department of Emergency Medicine

Co-PI Patricia Mitchell, RN, Research Assistant Professor, Department of Emergency Medicine

Of care; conduct patient assessment; and refer to the Faster Paths bridge addiction medication clinic, acute treatment services, clinical stabilization services, transitional support services and community support services.

Innovations in Healthcare

Substance use disorders (SUDs) remain one of the only illnesses that is treated outside of general health care systems. Because of this, there is very little, if any, communication between specialty SUD treatment providers and primary care doctors. This affects the overall quality of care and health outcomes of the patient. Evidence-based SUD treatment integrated into healthcare systems helps to close the gap between the number of people who need treatment for a SUD and the number of people who actually receive.

Sponsored by the Massachusetts Health Policy Commission, the High Touch High Trust (HTHT) program integrates community health advocates (CHAs) within the adult Emergency Department at BMC. The CHAs screen and enroll patients for social determinants of health, as well as medical and behavioral health needs, and problem-solve with patients to address these needs with the goal of improving the overall health and well-being of patients, to decrease their ED utilization and subsequent admissions. This program offers six months of intensive case management services to patients who have four or more ED visits in one year. As a part of the program, CHAs work with patients both in a clinical setting as well as in their home to help address the issues and hopefully lessen and or alleviate them.

For patients actively enrolled in HTHT, an attorney employed by Medical-Legal Partnership | Boston (MLPB) embeds within a weekly interdisciplinary case review meeting (CHA, MD, RN, and lawyer), and offers real-time identification of patients’ legal risks, rights, and remedies during case presentations. The legal partner also is available outside of standing case review to consult with the CHAs about legally-informed problem-solving strategies. Finally, MLPB facilitates — for a small subset of patients with acute/complex legal needs — “safe hand-offs” to MLPB-curated legal specialists for high-quality, free legal representation, through a range of resources including pro bono volunteers and a “rapid response” eviction defense subcontractor.

The MD and RN provide clinical input to the CHA and recommend referrals or plan of action as needed. Both the clinical and legal team are available in real time for consultation via telephone or e mail for any guidance or emergency situation that may arise.

HTHT has enrolled 178 patients to date with 839 social determinants identified during initial meeting with the CHA. On average, patients experience difficulties with 5-6 social determinants of health. Over 90% of our patients suffer from lack of income, housing, and social support with over 75% needing help with food security. Our patient seek help with approximately 2-3 of their social needs and mitigate approximately 50% of these. Our most difficult challenge is maintaining engagement due to the lack of affordable housing in Boston and patients’ resulting homelessness. Many patients are often reluctant to engage in programs that offer the hope of a better future but are not able to solve their needs due to the sometimes insurmountable hurdles of their built environment. Despite this, the CHAs try to keep the patient engaged to the best of their ability, help them navigate the complex medical and social systems within Boston and support them in every other way possible to collectively address their issues.
Across the country, community health workers (CHWs) are increasingly recognized within health systems and community-based organizations as unique and crucial members of care teams. The purpose of the CHW role is to support patients in improving their health and navigating complicated social and health care systems. The patients’ CHWs and other team members work to support our residents who are poor, disenfranchised, often experiencing racism and other forms of discrimination, and managing the impact of chronic diseases, trauma and violence, and demonstrating their resilience and strengths.

In Massachusetts, the CHW movement is very active. The Massachusetts Association of CHWs (MACHW), the advocacy and trade organization of CHWs, was established in 2000. Active stakeholders in CHW movement are employers from federally qualified health centers, hospitals, insurance companies, and multiservice organizations, CHW training programs, the Massachusetts Department of Public Health Office of CHWs, community colleges, the Massachusetts Public Health Association, and universities.

Last October, 2018, the MDPH initiated a certification program for CHWs. Recently, several Medicaid Accountable Care Organizations have decided to hire CHWs to help extend their support for patients with complex stressors and conditions into patients homes, shelters, or neighborhoods.

The definition of CHWs in Massachusetts reflects the American Public Health Association definition. DPH defines CHWs as public health workers who apply their unique understanding of the experience, language, and/or culture of the populations they serve in order to carry out one or more of the following roles:

- Providing culturally appropriate health education, information, and outreach in community-based settings, such as homes, schools, clinics, shelters, local businesses, and community centers;
- Bridging/culturally mediating between individuals, communities, and health and human services, including actively building individual and community capacity;
- Assuring that people access the services they need;
- Providing direct services, such as informal counseling, social support, care coordination, and health screenings; and
- Advocating for individual and community needs.

CHWs are distinguished from other health professionals because they:

- Are hired primarily for their understanding of the populations and communities they serve;
- Conduct outreach a significant portion of the time in one or more of the categories above;
- Have experience providing services in community settings.

The term community health worker is an umbrella term that includes a wide variety of roles and titles such as community wellness advocate, patient navigator, outreach worker, health educator, care coordinator, recovery coach, case manager, or peer specialist, amongst others. CHWs are hired primarily for their special understanding of and ability to relate to the people they serve. This quality allows CHWs to establish peer relationships with people that encourage trust and openness.

**BMC’s Community Wellness Advocates Address the Social Determinants of Health**

In BMC’s Medicaid ACO, Boston ACO or BACO, the Complex Care Management (CCM) program is an intensive home and community – based team that works with the top 2% highest cost and most complex patients in the Medicaid ACO. We have 18 teams at BMC and throughout the state in BACO affiliated practices that include community wellness advocates, the CCM name for CHWs, nurses, pharmacists, and pharmacy liaisons.

CCM CWAs are able to meet their clients in their homes or neighborhoods and therefore have a unique perspective of their patient’s skills, strengths and challenges. Our CWAs primarily focus on the complex social barriers our patients experience such as access to community based resources building a stronger connection between community organization’s and health systems on behalf of patients and their communities. Some of these social barriers include housing, transportation, food insecurity, substance use, mental illness, and poverty. The CWA observes the home and community environments and helps the care team become more responsive to their patient’s needs and assets.

As members of BACO’s CCM teams, Community Wellness Advocates walk with their patients through their social and medical struggles and successes and get to know other aspects of their lives rather than solely be responsive to a problem or health challenge the patient is experiencing. CWAs link people and communities to medical and behavioral health providers in a culturally intuitive way. Our goal is to help patients build independence and resilience by tapping into existing skills they or their community possesses as well as learn new skills and resources to manage challenges associated with their health.
Jessica Kehoe, RN, Faster Paths to Treatment. Recognized with Nursing Award

2019 Anne G. Hargreaves Nursing Award

Presented to Jessica Kehoe, RN, Nurse Care Manager, Faster Paths to Treatment, The Anne G. Hargreaves Nursing Award is given annually to one RN at BMC. The recipient is deemed to be an expert clinician who provides scientifically-based nursing care, empowers patients and their families, advocates for patients and fosters a multidisciplinary approach to patient care.

The award nomination letter described Jessica as:

“...an exemplary addictions nurse who consistently provides high-quality, evidence-based care to a vulnerable population of patients who face barriers to accessing substance use disorder treatment. These barriers unfortunately include stigma from the healthcare system, the criminal justice system, and the community that can discourage patients from accessing life-saving, data-driven treatment…

...in her role in Faster Paths, Jessica seamlessly collaborates with licensed drug and alcohol counselors, nurses, community partners, colleagues in Psychiatry and Adolescent Medicine, and a team of nurse practitioners and physicians who rotate each day. She provides continuity for high-risk patients who see multiple providers, and her input is sought out and respected by all who work with her. Jessica has helped institute several specific practices that foster a multidisciplinary approach; for example, before each clinic, she runs a huddle with the provider of the day, updating them on each patient’s recent history and care plan. When patients are struggling and express ambivalence about moving to a higher level of care, Jessica often arranges joint MD-RN visits so that they can hear multiple provider perspectives.”

IN MEMORY — ANNE G. HARGREAVES, 1924 – 2019

Anne G. Hargreaves, RN passed away at age 95 on August 27, 2019. A nurse graduate from Boston City Hospital class of 1944, Hargreaves received the first Frances Slanger Award which honors alumna who have advanced the practice of nursing during their career. She earned degrees from Boston University where she became a full Professor and Chairman of the Department of Psychiatry. A fierce advocate for the protection of nurses’ role in direct care, she served as president and executive director of the Massachusetts Nurses Association. Hargreaves was also a 1994 graduate of the Gerontology Program’s Manning Certificate Program and in 2010 received a Gerontology Alumni Community Service Award the UMass Vibrant Living Celebration and Manning Certificate Graduation.

In 2006, Hargreaves was awarded a Legend in Nursing Award from the Massachusetts Association of Registered Nursing and has received recognition from former Mayor Raymond Flynn and former Gov. Michael Dukakis. She was a nurse leader who consulted with universities all over the world and published over 50 articles. In her retirement Hargreaves served on many boards and was President of the Women’s Overseas Service League.

She served during World War II during the years 1944 –1946 with the 135th Evacuation Hospital in France and Germany for which she was awarded a Battle Star and later, recognition from the French Government for her efforts in defeating the Nazis.
In the summer of 2018, I found myself suturing sponges alongside my eleven co-interns as we prepared to become practicing physicians. Most of us had been compelled to pursue medicine out of a passion for science and a desire to create a better world. Yet as we prepared for intern year, surviving residency seemed like a much more reasonable goal than creating social change. Our whirlwind orientation swept over us as we learned to use the electronic medical records, filled out insurance forms, and practiced donning gloves, gowns, and masks in proper order. Yet for me, the most memorable event of intern orientation took place in the afternoon of when my co-interns and I piled onto a bus to visit the communities from which many of Boston Medical Center’s patients come.

The bus ride carried us through the South End on our way to Roxbury, with our guides pointing out the homeless shelters and substance use treatment clinics. We pulled up at the edge of Dudley Square where we met Joyce Stanley, the Director of Dudley Square Main Streets, a non-profit working to develop businesses and revitalize the economy in Roxbury. In recent years, Roxbury notably had one of the highest unemployment rates in Boston: 17% in 2014.

Stanley regaled us with the history of the area as we walked by bustling shops and restaurants in Roxbury – a neighborhood often referred to as the heart of Black culture in Boston. We gazed at stunning textiles and artwork in Black Market, smelled the scent of fresh injera wafting from Fasika Ethiopian Café, and sipped freshly brewed tea at Haley House. There, as we stuffed our mouths with pastries, we learned about Haley House’s operations as a bakery, soup kitchen, food pantry, and low-income property management organization, organic farming collective, and a community gathering space.

Throughout the day, whether walking through the streets of Dudley Square, or admiring the baked goods on display at Haley House, I found myself reflecting on the incredible work that was being done in this community. I thought about the men and women who poured their lives into building up their community, who worked tirelessly to help it grow. In the words of Dr. Réginald Sévère, “In a climate where it’s very easy to get discouraged by what’s happening nationally, it was very powerful to see what can be done locally through commitment and perseverance… it showed me that we can positively impact the lives of marginalized communities. It got me excited about our work ahead and reminded me that it might take time and effort, but we should always keep the faith that we can make a difference.”

From Dudley Square we took our bus on to Hope House, a substance use disorder treatment center with residential and outpatient programs. A converted Bostonian triple decker, Hope House packed an incredible number...
The first-year Interns are introduced to their surrounding communities during the annual community tour.

of services (group therapy, education sessions, and individualized treatments) into every square foot. After speaking with substance use counselors and HIV/STD educators, we filed into a conference room to hear from some of the Hope House residents themselves. Each speaker sat before us and shared how their substance use started. One resident described having beer at a high school party and quickly becoming hooked. Another spoke of the oxycodone he was prescribed for post-surgical pain and the gut-twisting sickness that overcame him once he tried to stop using it. The final speaker told us he’d been given heroin by a family member when he was just nine years old; that he’d never stood a chance.

Each person described to us what addiction had taken from them: relationships, financial security, and their health. The impact of their words was powerful. Reflecting on the day, Dr. Maria Drazek commented, “Our time at Hope House... provided a realness to the world of addiction and recovery that I had not known before as we heard from people about their personal experiences and met with the healthcare workers who help treat them. The people of Hope House offered us invaluable advice on how to better connect with them in the emergency room and their stories shattered several pre-conceived notions I had wrongly had about their struggle with addiction.” Again, we were humbled by the work each resident was pouring into their recoveries; not to mention the jobs they held and volunteer work they performed which is often facilitated by Hope House. Each person had advice for us as we embarked on our lives as physicians. One requested, “When you see us in the ED, treat us like patients, not junkies.” Another pointed out, “Remember that you don’t know what we’ve been through just to get to the doctor.” The final speaker waited a moment before adding, “For us, every day is a battle.” The other speakers nodded in agreement.

In 1994, Dr. Eric Nadel, Dr. Edward Bernstein, Dr. Peter Moyer, and Ludy Young of Boston Medical Center’s Project Assert included a community bus tour in the orientation for the oncoming emergency medicine interns. It has now impacted twenty-five classes of emergency medicine residents at BMC. It has served as our introduction to our patients outside of the hospital and the communities from which they visit us. It has allowed us to hear from the movers and shakers in Roxbury, the eloquent Hope House residents persevering in their recovery, and the everyday workers who build up their communities piece by piece. It has served as an inspiration to generations, and above all, a reminder that we have the capacity to create change—especially if we follow our patients’ lead.
WORKING FOR THE GREATER GOOD

A TRUE PUBLIC HEALTH CHAMPION

Jon Santiago, MD, is a physician and politician serving as the Democratic state representative for the 9th Suffolk district, which includes Boston’s South End and neighborhoods in parts of Roxbury, Back Bay and the Fenway area. Upon taking office, Santiago continued in his roles as resident and attending physician in emergency medicine for BMC, arguing that such a job informs his legislation, especially when it comes to matters of public health like the opioid epidemic. He has spent his life in service to others, whether as a Peace Corps volunteer or captain in the Army Reserve. As a Boston Medical Center emergency department doctor, he has devoted days and nights working for the greater good. He first ran for office because he understands that the acute problems of his patients are too often rooted in poverty, systemic injustice, and a lack of opportunity. Jon brings a sense of urgency and energy to the fight for progressive values in the Massachusetts State House.

Captivated by public service and adventure, Jon joined the Peace Corps, organizing sugarcane workers and immigrants in the Dominican Republic; won a Fulbright Scholarship to study in Paris; and ultimately spent almost five years abroad working and traveling across Europe, Latin America, and Africa. He returned to Boston almost 10 years ago with a plan to study medicine and give back to the community.

Jon remains heavily involved in the community. He is an active participant in neighborhood meetings, has knocked on thousands of doors for progressive causes, and sits on the boards of the South End Community Health Center, Friends of the South End Library, Friends of Titus Sparrow Spark, and the Puerto Rican Veterans Park. In addition to his community activism and clinical responsibilities, Jon has worked to address health disparities and combat the opioid epidemic through policymaking. He led an effort to increase access to the state’s opioid prescription monitoring program, which played a role in reducing overprescribing in Massachusetts.

As Massachusetts state representative, Jon now has the opportunity to fight for a community where people can afford to live, where kids can go to quality schools, and through further bold action, where kids will be able to play outside safely.
Boston Sun Editorials

GUEST OP-ED: RE-ENTRY SERVICES FOR EX-INMATES ARE CRUCIAL TO COMBATING THE OPIOID CRISIS

By State Representative Jon Santiago

The intersection of Massachusetts Avenue and Melnea Cass Boulevard is ground-zero for the opioid epidemic in Boston. It’s an area I know well, given my work as an emergency room physician at nearby Boston Medical Center, my experience as a resident of that neighborhood, and my new role as the state representative.

During a regular shift in the ED, it’s almost guaranteed that I will care for multiple patients in the throes of addiction. Among the most vulnerable of these patients are men and women who have been recently released from incarceration, often without a place to live, a job to work, or access to treatment, which can mean the difference between life and death.

As the opioid crisis has reached all corners of our society, it has become especially devastating inside our corrections system. From 2011 to 2015, one-quarter of Massachusetts prison inmates received substance use treatment. Recently-incarcerated individuals are 120 times more likely to die of an overdose than the general public and in 2015 alone, almost half of all deaths of formerly incarcerated individuals in Massachusetts were opioid-related.

That’s far too many lives lost and second chances missed.

Community-based residential reentry centers are among the best tools we have to connect these individuals with treatment during that critical point in their transition. However, resources have been scarce and as a result, thousands of individuals return to our communities with inadequate support each year.

We need to change that.

Investing in quality reentry programs can help curb the opioid epidemic’s devastating toll by preventing gaps in treatment that begins inside our jails and prisons once someone is released. Maintaining that continuity of care is critically important to maximizing someone’s chances for beginning a sustainable path toward recovery. In addition to serving as that crucial link to substance use counseling, reentry centers help individuals find housing, employment, and other support services. These programs benefit not just the individuals who spend time in them, but their families and entire communities by reducing recidivism, improving the quality of life in neighborhoods, and promoting greater public safety.

The Legislature included $5 million for residential reentry centers in this year’s state budget, up from $90,000 the previous year. The tremendous investment is already bolstering the network of programs that had been shrinking due to a lack of funding. This year, we have an opportunity to go further and increase funding, allowing for access to these life-changing programs to expand beyond pockets in Boston, Worcester, and Springfield.

Starting over after incarceration can be enormously difficult even under the best of circumstances. For individuals also battling addiction, the challenges of reentry are exponentially harder. We know that community-based residential reentry centers can help these individuals and strengthen the communities that we all share. Let’s invest in what works.
VIAP LEADS THE WAY

ADDRESSING SOCIAL DETERMINANTS OF HEALTH

There is increasing awareness that social determinants of health affect physical and mental health outcomes. The World Health Organization describes social determinants of health as “the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life.”

Five areas are key to addressing social determinants of health and VIAP leads the way in providing comprehensive, wraparound services for victims and families that include resources and solutions for each.

The five areas are:

- Financial self-sufficiency;
- Education;
- Social and community context;
- Health and health care; and
- Community and environment.

Providing for basic needs during a crisis is part of the continuum of care for VIAP clients, which includes addressing food insecurities, housing, and employment. These issues are addressed concurrently, as the challenges of finding employment without having stable housing are significant. Additionally, gaps and interruption in education are addressed and VIAP clients work towards long-term, achievable goals for educational attainment.

In 2018, VIAP provided services to a total of 350 new, unduplicated victims of gunshot and/or stabbing.

Housing Services

VIAP advocates provided housing assistance 663 times in 2018, which included housing applications, requests for transfers due to safety issues, relocation, and accessing emergency shelter services. 12 VIAP clients received new housing in 2018.

The VIAP Housing Program, funded by a Department of Justice grant, has been a great learning experience for both staff and clients. For a one year period, housing is provided to VIAP clients and rent is paid through the grant. During this period, intensive work is done to address financial literacy, employment, and life skills. The goal for the end of the year is for clients to be able to take over the lease and maintain their financial self-sufficiency. Two VIAP clients recently graduated from the housing program, and both are employed, maintaining their housing independently, and have their own leases as of June 1, 2019.

VIAP clients Isaac Davis and Jean Woodley Theodat graduated from the VIAP Housing Program, pictured here with Munther Faisal, Alpha Management. Isaac is a full-time union laborer, and Jean works at BMC.
Employment and Educational Support

VIAP provided services to 56 clients, obtained 17 new jobs for clients, and three clients received their HiSet (GED).

Family Support Services

VIAP believes that including the victim’s family and those around them significantly influences outcomes. VIAP utilizes families as a resource for victims, and provides wrap-around services to anyone identified by the victim as someone impacted by the traumatic event.

In 2018, VIAP family support advocates provided 27 new families and 43 family members with support with mental health, legal, parenting, and other case management services.
Vicarious Trauma Corner

Vicarious trauma is prevalent in many professions, and for violence intervention programs, the importance of recognizing risk factors and implementing pro-active self-care plans for all staff is imperative. Vicarious trauma is the process of change that happens because you care about other people who have been hurt, and feel committed or responsible to help them. Over time this process can lead to changes in your physical, mental, and spiritual well-being.

Staff members of violence intervention programs come in contact with enormous amounts of trauma daily. Many staff members are committed to this type of work due to similar personal experiences with both violence and trauma. While recognizing this as an asset to relationship development and trust building with clients, it also makes staff extremely vulnerable and susceptible to vicarious trauma and burnout.

We at the Boston Medical Center Violence Intervention Advocacy Program are committed to being ambassadors of well-being and self-care, recognizing that without it, our quality of client services is compromised. VIAP has a staff Wellness Program, and all VIAP staff participate. Within our VIAP Wellness Program, the following competencies are addressed and incorporated- Leadership and Mission, Management and Supervision, Employee Empowerment, and Work Environment. These components are woven into our daily operations, and the culture resulting from this is one of respect, support, and hope. Vicarious trauma and burnout are occupational hazards of the work. All VIAP staff participate in creating their self-care plans. Self-care plans include identifying triggers in the workplace, and also providing easily accessible solutions and resources to promote wellness. Historically, “helpers” are the very folks that do not practice what they preach. An important component of the VIAP Wellness Program is accountability. All VIAP staff share their self-care plans at staff meeting, and also identify an “accountability partner,” who is always available to debrief, discuss, and implement the self-care plan. We spend a great deal of time with co-workers and peers, and they are the ones who can most easily recognize when someone is affected by something or out of sync at work. Making yourself vulnerable to co-workers inevitably may make you feel exposed, but it also allows you to grow and learn about each other, and teaches you how to manage vicarious trauma most effectively. Striving to be pro-active versus reactive is the key to any self-care plan, and having a variety of options to choose from will increase the odds of minimizing vicarious trauma and burnout.

VIAP is at the forefront of addressing and raising awareness regarding this issue, and has initiated research to better understand the issue in Violence Intervention Programs. A cross-sectional survey of helping professionals was first administered during the 2018 Healing Justice Alliance’s annual conference held in Denver, Colorado, hosted by the National Network of Hospital-Based Violence Intervention Programs (NNHVIP). The network aims to support community violence intervention and prevention programs across the nation using a trauma-informed care model. Participants of the study completed the Professional Quality of Life, Fifth Version (ProQol-5), a 30 item self-assessment of two factors of Professional Quality of Life: Compassion Satisfaction and Compassion Fatigue. Findings from this study are currently submitted for publication.

“\nIn dealing with those who are undergoing great suffering, if you feel burnout setting in, if you feel demoralized and exhausted, it is best, for the sake of everyone, to withdraw and restore yourself. The point is to have a long term perspective. “\n
– The Dalai Lama
PREVENTION CORNER

VIAP IN THE BOSTON PUBLIC SCHOOLS

Succeed Boston, a Boston Public School formerly known as the Counseling and Intervention Center and the Barron Center, is a short-term counseling and intervention program that addresses a range of Code of Conduct violations by students. Initially the Center was created in urgent response to the escalating problems in Boston communities and schools; namely, young people carrying weapons into school, which resulted in the increase of violence-related incidents and subsequent deaths. The Center was first established to provide services to all students city-wide who were found to be in possession of a weapon on school property. In 2012, a shift occurred from the focus on consequences of negative behaviors to decision-making, social emotional learning, and the impact of trauma. Curtis Santos, VIAP Advocate, is spearheading the partnership with Succeed Boston to provide monthly workshops during the school year that address intergenerational trauma, community violence, and building resiliency and coping skills. Recently, the students spent a half day at Boston Medical Center visiting the food bank, the rooftop garden, the operating room, and other departments. Feedback from the students was that this was “the best field trip they ever had.” A number of students also expressed an interest in future careers in health care.

BMC AWARD RECOGNIZES VIAP

VIAP TEAM RECEIVES “BE EXCEPTIONAL” AWARD

The VIAP enjoys a light-hearted moment (left to right) Yeymi Mujo, Thea James, Liz Pino, Troy Heggie, Dave Wiley, Rusti Pendleton, Elizabeth Dugan, Julie Swain, Francesca Fontin, Kali McNeal. (Front Row) Ross Pendleton and #OMG Curtis Santos.
POLICY AND ADVOCACY CORNER

VIAP IS ACTIVE IN ORGANIZATIONS WORKING TO PREVENT VIOLENCE

Funding for hospital-based violence programs is inconsistent and insufficient in meeting the needs of the victims and families presenting for services. Program staff are constantly searching for funding to support the robust work being done, and the uncertainty of allocated dollars causes stress for programs, staff, and communities. The VIAP team is highly visible in the community, and participates in advocacy at all levels of city, state, and national advocacy efforts.

VIAP is a member of the Massachusetts Coalition to Prevent Gun Violence. This coalition brings together organizations and institutions across Massachusetts to end the epidemic of gun violence that plagues communities and takes the lives of so many.

VIAP is a part of the (MCAN), which advocates for legislative changes that impact our clients and communities. MCAN is a federation of community organizations across Massachusetts working for social and economic justice. Actions include advocacy at the State House, and working with legislators to support bills and amendments that impact funding and resources for our communities.

VIAP is an active member of the National Network of Hospital Violence Intervention Programs (NNHVIP), and the NNHVIP policy workgroup facilitates the expansion and development of hospital-based violence intervention programs and related best practices throughout the country, and uses voice, experience, and expertise of hospitals and physicians to advocate for violence prevention policies.

VIAP is a member of the Massachusetts Coalition to Prevent Gun Violence. This coalition brings together organizations and institutions across Massachusetts to end the epidemic of gun violence that plagues communities and takes the lives of so many.

VIAP is a part of the Massachusetts Communities Action Network (MCAN), which advocates for legislative changes that impact our clients and communities. MCAN is a federation of community organizations across Massachusetts working for social and economic justice. Actions include advocacy at the State House, and working with legislators to support bills and amendments that impact funding and resources for our communities.

VIAP is an active member of the National Network of Hospital Violence Intervention Programs (NNHVIP), and the NNHVIP policy workgroup facilitates the expansion and development of hospital-based violence intervention programs and related best practices throughout the country, and uses voice, experience, and expertise of hospitals and physicians to advocate for violence prevention policies.

VIAP is a member of the Boston Neighborhood Trauma Team (NTT), a city wide effort made up of many community partners which provides comprehensive wraparound services to individuals, families, and communities impacted by community violence.
A BOSTON UNIVERSITY SCHOOL OF MEDICINE STUDENT-RUN LEARNING ORGANIZATION

INTEGRAL STEPs IN MEDICINE

By Ethan Montemayor, MSIII, Jessica Faiz MD, PGY 2, Adam McFarland MD, PGY 2

To inspire local high school students from disadvantaged backgrounds to become the next generation of healthcare professionals.

The Science Teaching Enrichment Program (STEP) is a student-run service learning organization at Boston University School of Medicine. Founded in 2011 by Simone Ellis (MED ’15), the mission is simple: to inspire local high school students from disadvantaged backgrounds to become the next generation of healthcare professionals. The students selected for the program come from nearby public and charter high schools and are from largely minority backgrounds. They are selected for their academic ability, compassion, and interpersonal skills that are essential to face the challenges of promoting health equity of diverse populations. With guidance from mentors, the students take an active leadership role in reducing the impact of health disparities that plague their neighborhoods. The program hopes to empower and encourage these local high school students with a variety of after-school experiences, lifelong mentorship, and exposure to the field of medicine.

The pursuit of this goal is a collaborative effort between medical students, physician assistant students and, most recently, BMC Emergency Medicine (EM) residents to offer a clinical representation of life as a medical professional. Each high school student is paired with an MD or PA student, and meetings are held weekly throughout the academic year. The sessions are packed with activities that range from hands-on basic life support and physical exam skills, to creating student-driven community service projects focused on health disparities. One mentee currently works at the Boston Public Health Commission at a program called “Start Strong,” which focuses on promoting healthy relationships and preventing abuse. Students also learn anatomy through direct instruction and in the anatomy lab. The “career day” session is not just a panel of speakers, but includes different healthcare professionals with interactive demonstrations of everyday responsibilities, such as an RN demonstrating venipuncture, a midwife delivering a mannequin baby, and EM residents teaching how to splint. At the conclusion of the program, students participate in a trip to the Boston University undergraduate campus, which is often their first experience on a college campus.

Starting in 2017, STEP has successfully partnered with the BMC EM Residency Program to increase the amount of exposure students have to practicing physicians. The program likes to call the EM residents
“super-mentors” because they can directly bring their experience into the classroom for students. Examples of sessions run by the EM residents include recognizing an opioid overdose, suturing, and head trauma, among others. Student feedback has repeatedly demonstrated the value that residents bring to the program, and how much the students enjoy learning about medicine from first-hand providers. For the residents, connecting with the high school students at the end of a stressful week in a very high-volume emergency department is a welcome reminder of why they went into medicine.

Over the past three years, the Emergency Medicine Residency Program has made a concerted effort to increase diversity within the program. There is a demonstrated lack of under-represented minorities entering and completing medical school, which is reflected in the Program’s resident body. In order to increase diversity and representation in medicine, it is clear that interventions and exposure to the medical field should happen earlier rather than later in a young person’s education. The partnership between the EM residency and STEP seemed to be a natural one, given the two organizations’ mutual interest in mentorship, expanding opportunities for young people, combating inequity in health, and overcoming underrepresentation in medicine.

One recent mentee, Jamilet, says: “The STEP program was one of the most memorable experiences not only because I was introduced to a variety of health topics and lessons, but also because I got to physically practice everything. To hear and learn is one thing, but to get an actual experience on how instruments work, check-ups, and effect on the community around me, is another. It made health and science more personal and realistic, rather than just a dream.”

One goal of the program is to see students like Jami matriculate to medical school and hopefully to BMC for residency – students with not only the drive to make a difference, but also the backgrounds that inform their desire to be in healthcare and need to serve the local community. Working with STEP has also helped to establish multiple other outreach partnerships for the residency, namely the Boston Area Health Education Center and the Northeastern Minority Association of Pre-Health Students. This is an integral step in ultimately diversifying providers at BMC and the Boston area to better serve this community.

In the words of STEP founder Dr. Ellis, “every time you take a moment to acknowledge someone’s dream and look into their eyes and give them advice to help them to realize and accomplish their goals - it matters. It always makes a difference.” Since its foundation, the STEP program has impacted hundreds of students through mentorship, leadership development, and exposure to the field of medicine, and will continue to reach hundreds more. Programs such as these are critical to inspiring young students to dream big, believe in themselves, and find a path to a career in medicine. We hope STEP acts as a stepping-stone for this incredible generation of leaders, and serves as a model for other medical schools or organizations looking to make a similar impact in their communities.
RECENT AND ON-GOING PROJECTS

The Injury Prevention Center (IPC) was founded in 2010, as a joint project of the Emergency Medicine Department and Trauma Services. The aim of the IPC is to study the causes of injury and develop and assess injury prevention interventions.

The Center is a confederation of new initiatives and injury prevention projects that were ongoing prior to the Center. The Center combines research, service and advocacy relative to injury control; it provides health and social services to BMC patients to mitigate physical and psychological trauma and to prevent future injury; it collaborates with colleagues throughout the medical campus and at other institutions; it provides technical assistance to local and state government; and, it collaborates with community organizations engaged in injury and violence prevention.

Focus Areas

The largest focus areas in terms of proportion of all projects, are:

- Violence – 25%
- Substance/misuse – 20%
- Older adult falls – 13%
- Youth mTBI – 11%

This year, the IPC joined the Department of Radiology in a study of the epidemiology of frostbite among BMC ED patients, and the development of new clinical interventions to treat this problem.

Summary of Current Status

Since last year, the IPC’s relationship with the CTE Center has expanded in scope with collaborations with Dr. Stern and Dr. Torres on several projects. In addition, we work closely with the newly formed BMC Grayken Center for Addiction Medicine which was started with an initial $25 million donation and has recently received an $89 million NIDA grant for which Traci Green, IPC Deputy Director, and Edward Bernstein, MD are a co-investigators.

In aggregate, the IPC currently has 55 active projects, compared to 48 last year. Fifty-one percent of current projects are externally funded, compared to 37% last year. Total funding has increased by about $1 million, relative to 2018, from around $8 million to around $9 million.

For the most part, the distribution of projects by injury type is about the same as last year, except for youth mTBI, which has increased from 3% to 11% of projects and occupational health which has decreased from 6% to 0%.
Board of Visitors

In 2018 the IPC convened for the first time the IPC Board of Visitors that includes Karen Antman, MD, Medical Campus Provost and Dean of the Medical School, Sandro Galea, Dean of the BU School of Public Health, the directors of injury centers at Columbia, Brown, and Harvard (Guohua Li; Michael Mello; David Hemingway; respectively), Alice Bonner, former MA Executive Secretary for Elder Affairs; Monica Bahrel, Commissioner of the MA Department of Public Health; Monica Valdez Lupi, Executive Director of the Boston Public Health Commission; Ed Davis, former Chief of the Boston Police Department; Carlene Pavlos, Executive Director of the MA Public Health Association; Michael Botticelli, Executive Director of the Grayken Center for Addiction Medicine; Jes Lauritzen, Professor of Orthopedics, University of Copenhagen; Matthew Miller, Professor, Northeastern University; Jonathan Woodson, Director of the Institute for Health Systems Innovation, Boston University School of Management; Cynthia Rodgers, Coordinator of the Northeast and Caribbean Injury Prevention Network; and Melissa Shannon, BMC Vice President for Government Affairs.

The second annual Board of Visitors meeting was in April 2019. The keynote talk, “Why Children Should Not Be Exposed to Repetitive Head Impacts,” was given by Robert A Stern, PhD, Professor of Neurology, Neurosurgery, and Anatomy & Neurobiology at BUSM; Director of the Clinical Core of the BU Alzheimer’s Disease and CTE Center.

IPC Grand Rounds

The IPC presents Injury Grand Rounds four times per year. Recent presentations include a talk by Michael Siegel, MD, MPH, Professor of Community Health Science at the BUSPH, on developing consensus on around gun control and Tim Naimi MD, on new initiatives for reducing alcohol-related traffic fatalities.

Personnel

The IPC welcomes Julia Campbell, MPH as the new Center Coordinator.
ED HCV TESTING

THE IMPORTANCE OF HCV TESTING

Since the advent of direct-acting antiviral medication for hepatitis C virus, HCV has gone from a disease that was difficult to treat to one that is easily curable. At the same time, the opioid epidemic and its resulting increase in injection drug use has led to increased numbers of people contracting HCV.

ED HCV Screening Program

Over the last few years, a successful collaboration has developed between the Emergency Department, the Section of Infectious Diseases, the Massachusetts Department of Public Health (MDPH), and the Gilead Focus Program. This collaboration resulted, in 2016, in the creation of a HCV screening program in the Emergency Department at Boston Medical Center. It began with the creation of a Best Practice Advisory that fires whenever phlebotomy is ordered, and alerts clinicians and nurses that a patient is eligible for HCV screening. If the patient accepts the test, the antibody result will be in their medical record within a few hours, and their RNA result will be in their medical record within a week.

On the back end, the HCV screening program utilizes two full-time and one part-time public health navigator, as well as a data analyst. The navigators track down patients that have positive RNA results, and link them to outpatient HCV care. Their work does have some frustration, as many of our patients are difficult to contact. However, they have become experts and their successes in linking our patients to care continues to grow.

Our Successes

Since starting our program, we have screened almost 18,000 patients for HCV. We have confirmed exposure to HCV (ie Ab+) in over 2,200 patients, and diagnosed 1,242 patients with active infection (ie RNA+). Two hundred fifty-three patients have been linked to care, and 47 patients have been cured. While that may seem like a small number, it represents 47 patients that might have gone on to develop chronic liver disease, and possibly even died from it.

The successes of the ED HCV screening program have been recognized nationally. It has been highlighted at Gilead Focus conferences, and the work that we do is considered an example of a best-practice program.

We would like to thank all of the clinicians and staff in the Emergency Department for supporting this important endeavor.
QUALITY IMPROVEMENT:

IMPROVING THE CARE OF PATIENTS WITH OPIOID USE DISORDER
IN THE EMERGENCY DEPARTMENT

By Emma Mulligan, BUSM II and Lauren Nentwich, MD, Medical Director, Quality and Patient Safety, Department of Emergency Medicine

As of 2015, two million adults in the United States\(^1\) had an opioid use disorder (OUD), and one in 22 Massachusetts residents over age 11 suffered from OUD.\(^2\) Opioids have significant impact on health and overall mortality, with opioid overdose deaths increasing over the past two decades in the United States, to an age-adjusted death rate of 21.7 per 100,000 in 2017.\(^3\) This is particularly true in Massachusetts, which suffers from an even higher rate of opioid-related overdose deaths at 29.6 per 100,000 in 2017.\(^4\)

Many patients with OUD receive treatment in the emergency department (ED). 28.6% of individuals who underwent some type of treatment for OUD received that care in an ED.\(^5\) Opioid-related ED visits have increased 170% from 1999 to 2013\(^6\) and continue to climb, with Massachusetts rates of opioid-related ED visits more than twice the national average.\(^7\) The ED is an obvious key intervention site for patients with OUD\(^8\)\(^-\)\(^11\). Beyond the treatment of patients who suffer an overdose, EDs are well positioned to improve the overall quality of care of patients with OUD through improved practices in identification, harm reduction, treatment initiation, and linkage to care.

In April 2018, BMC assembled a committed group of ED physicians and pharmacists, along with leaders in addiction, to develop processes to expand upon and facilitate access to treatment for patients presenting to our ED with OUD. The team started by creating a standardized hospitalized protocol to treat opioid withdrawal in ED patients.

In July, ED pharmacy obtained hospital approval and began stocking methadone and buprenorphine-naloxone in the ED Pyxis for rapid access to care for patients suffering acute opioid withdrawal.

In fall 2018, led by the chair and ED administrative leadership, there was a concerted effort to encourage ED attendings to undergo buprenorphine waiver training, which resulted in more than 80% of ED attendings completing waiver training and gaining the ability to prescribe buprenorphine to their patients. During this same time, a large educational initiative was undertaken by ED pharmacy and ED leadership to educate residents, nurses, physicians, and attendings on treating opioid withdrawal in the ED. This initiative resulted in more than tripling the number of patients treated for opioid withdrawal during their ED visits (see Table 1).

In October 2018, the Office of Quality Improvement at BMC focused the 2019 Grayken Center quality goal on initiating treatment for ED patients presenting with a primary diagnosis of OUD. The Grayken Center goal specified that for ED patients discharged with a primary diagnosis of OUD, 80% of these patients would have an explicit attempt to initiate and bring patients into treatment.

Table 1

In this endeavor, initiation of treatment was defined as: treatment of withdrawal with methadone or buprenorphine, initiation of the buprenorphine home induction protocol, consultation with a substance use disorder specialist within 14 days or an explicit referral to a substance use disorder consultant, or transfer to a psychiatric facility for concurrent mental health and substance use disorder treatment. The team collected data from October-December 2018 and then implemented an improved process of referral utilizing Project Assert and Faster Paths, which went live on March 20, 2019 and allowed us to reach our goal and help more of our patients suffering from OUD.
Though we have reached one goal, this is not the end of our endeavor to improve the health and well-being of our patients suffering from OUD. We are fortunate to have strong partnerships with Project Assert, Faster Paths, and BMC Addiction Medicine and will continue to work with them and the BMC community to innovate and create additional opportunities to better our patients’ overall quality of care.

GLOBAL HEALTH
RECOGNIZING AND STOPPING HUMAN TRAFFICKING

Guest Contributors:

Hanni Marie Stoklosa, MD, MPH, Emergency Physician and Director, Global Women’s Health Fellowship, Brigham and Women’s Hospital Executive director of HEAL Trafficking

Larissa Lester Truschel, MD, MPH, Pediatric Emergency Medicine Fellow Boston Children’s Hospital

The media often portrays victims of human trafficking as young women in developing countries who are kidnapped, sold into slavery, and physically held against their will. But trafficking occurs every day in the United States, too, and physicians must learn to recognize the signs.

Amy was an 11-year-old girl who arrived at the pediatric emergency department where I work, accompanied by the police. Frightened and alone, she told me that she was dragged and physically restrained by family members to be transported to the home of her molester. Once she arrived at his house, she ran away and asked a stranger to call the police, who brought her to my hospital.

I learned more about Amy’s troubled life. The Department of Children and Families (DCF) had investigated this man twice for physical and sexual violence against her. At the tender, young age of 11, Amy had already had two inpatient psychiatric stays, multiple runaways, a suicide attempt, and various instances of DCF involvement in her family life. I now realize that many aspects of Amy’s story were “red flags” for human trafficking, but at the time did not have the training to recognize them and refer her to appropriate resources.

What exactly is human trafficking? It’s a form of modern slavery and occurs when someone exploits an individual with force, fraud, or coercion to make them perform work (labor trafficking) or commercial sex (sex trafficking). Notably, according to federal law, those under the age of 18 who are compelled to perform a commercial sex act are considered trafficked regardless of whether or not there is force, fraud, or coercion. Furthermore, according to U.S. law, trafficking does not require someone to be moved, and may occur in someone’s own home.

The definition of trafficking is broad, and yet when most people, including physicians, think about trafficking, the stereotypical images that emerge are of young woman being kidnapped, sold into slavery, and physically held captive against their will. The media reinforces this portrayal, yet labor and sex trafficking happen to those of any nationality, immigration status, gender, sexual orientation, and age.

In the United States, men and women are trafficked in a number of industries, including legal ones (e.g., construction and health care) and illegal ones (drug dealing and commercial sex). For instance, some carnival companies recruit young men and women from abroad, and when they arrive they are forced to work under abusive conditions without pay and threatened with deportation if they try to leave. American children may be targeted by gangs to sell drugs. If they do not comply, they face extreme threats of, and sometimes perpetration of, violence against themselves and family members. There is no “typical victim” of human trafficking. However, certain populations may be more vulnerable to trafficking. Risk factors for trafficking include poverty, history of abuse, hunger, substance use disorders, migrant status, homelessness, being LGBTQ+, and having a disability.

Despite the prevalence of trafficking and its infiltration into various industries, as physicians, we frequently miss this diagnosis. We know that the majority of individuals trafficked in the United States seek medical treatment at some time during their exploitation, but health care providers are ill-prepared to recognize trafficked persons even in our own exam rooms.

How do we as physicians improve our ability to recognize the red flags of our patients who have experienced trafficking? Like any other disease process, the first step is recognizing characteristic signs and symptoms. The patient may be with a person who is speaking for them, seem afraid to answer questions, unaware of where they live, not in control of their personal documents, not able to keep the money they earn, or have a cryptic story that does not match their clinical presentation. In particular, victims of child sex trafficking are more likely to have had previous experiences with violence, substance use, running away from home, involvement with child protective services and/or law enforcement, and a longer history of sexual activity.

As I think about children like Amy, vulnerable to horrific exploitation, I am reminded that our medical schools, residency, and fellowship programs need to rise to the challenge to train physicians to recognize people at risk for trafficking.

Two free educational resources that have been helpful in teaching physicians and physicians-in-training include the Department of Health and Human Service’s online interactive training program called SOAR, which can be integrated into learning management systems, and the National Human Trafficking Resource Center’s brief webinar for health professionals. Furthermore, as physicians, we can and must champion the development of protocols in our own institutions to recognize at-risk individuals and refer patients to supportive programs. In my own hospital, we are currently implementing policies to better identify at-risk individuals such as Amy, including a list of resources physicians can tap into at any time.

National Slavery and Human Trafficking Prevention Month takes place in January and there are an estimated 40.3 million victims of trafficking worldwide. Let us acknowledge this global crisis and bolster our health care systems to recognize and respond to the red flags before us.

This article has been reprinted with permission from the Association of American Medical Colleges (AAMC). — January 31, 2019.
Click here to link to the original article (news.aamc.org).
GLOBAL HEALTH ELECTIVES — CLINICAL EXPERIENCE AROUND THE GLOBE

RWANDA

BREAKING BARRIERS IN EMERGENCY MEDICINE EDUCATION

By Ben Nicholson, Class of 2019

In November, 2018, I participated in the African Federation for Emergency Medicine’s conference (AfCEM) in Kigali, Rwanda. This provided the opportunity to crowdsource feedback on two projects.

The first is a tool to evaluate tier 1 (lay provider program) and tier 2 (formal EMS systems) EMS systems. The tool will allow systems to self-evaluate and eventually link to information on how to move from a less developed system to a more developed system. Ideally, this will be done in the context of developing the overall approach to emergency care in the region or country.

The second project involves developing a prehospital curriculum that is flexible enough to be used by any country in Africa while still requiring sufficient core content to ensure trainees are trained to the level of an EMT-Basic as defined in prior consensus work.

For both of these projects, I met with members of multiple nations who were present at the AfCEM conference. As a result of this work, we are revising the initial draft of the assessment tool to include more space for qualitative responses and removing language that was felt to indicate judgment of a lower performing system. The BLS curriculum was reviewed multiple times and is also undergoing a revision process.

Moving forward, we are working to define curriculum items that should be considered core content for all providers regardless of setting, and identifying content that is optional based on local needs. The hope is that through a consistent curriculum, providers throughout Africa who self-describe as EMTs will have all learned core content. It is also important that this curriculum define the upper limits of what an EMT should be expected to know. This will allow systems to ensure that they are defining basic, intermediate, and advanced level providers appropriately and consistent with prior consensus work. Ultimately, the hope is that both products will receive support from larger organizations and undergo rigorous review and continuous updating to meet the changing needs of Africa.

Nicholson Receives Fellowship Award

Congratulations to Dr. Benjamin D. Nicholson, Department of Emergency Medicine, Boston Medical Center, who is the recipient of the NAEMSP/Stryker EMS Medicine Medical Director Fellowship.

The 12-month, $80,000 fellowship covers training and education costs to pursue a career as a clinically-focused EMS medical director who is board-certified in EMS medicine. The opportunity was created to expand the commitment of academic institutions to EMS medicine as a subspecialty and graduate a fellow with a passion for EMS leadership on a national level.

“This fellowship is an important avenue to advancing NAEMSP’s mission of improving out-of-hospital emergency medical care. We look forward to following Dr. Nicholson’s career and continued accomplishments,” noted NAEMSP President J. Brent Myers, MD, MPH, FAEMS.

The fellowship was presented at the 2019 NAEMSP Annual Meeting in January, 2019 in Austin, Texas.
During my visit to Shanghai United Family Hospital, I was exposed to some of the challenges and rewards of teaching emergency medicine in another country. United Family Hospital is a private hospital. All of the patients have private insurance; thus the majority are either expatriates or Chinese nationals who work for multi-national corporations. As these patients expect a certain style and standard of care, the hospital has traditionally hired expatriate physicians or Chinese physicians who have trained and practiced in more Western style of medicine. Given the expense and high turnover of these physicians, the hospital decided to hire Chinese physicians. However, given the big difference in the training and style of practice, they offered the physicians a special contract. For the first three years, they would have a salary higher than that working in a Chinese public hospital. However, they would be in training, with weekly didactics, rotations through other specialties such as ENT, orthopedics, obstetrics and anesthesia, and 100% supervision by attending physicians. The final two years of the contract, the physicians have a pay increase and function as full attending physicians.

During my stay in Shanghai, I also had the opportunity to visit Changhai Hospital, a public hospital where the fellows spend about six months of their rotation. That visit demonstrated some of the challenges of training and practicing in the Chinese system. The residents do have attendings available for supervision, but they have no didactics and very limited bedside teaching. Essentially, they watch the attendings, take care of patients themselves, and at some point, the hospital bestows on the title of specialist in emergency medicine. There are no GME requirements or milestones to graduate. Residency may be very different from hospital to hospital. Additionally, there is no specialty-specific board exam or CME requirements. The result is that practice can vary widely from hospital to hospital, without consideration of evidence-based medicine. In the public hospital, the residents encounter a great volume of patients, many with serious pathology. They get skilled in many procedures simply secondary to volume. Specialists also deal with high volumes in their clinics. Patients can make appointments, often for the same day, without a referral and for a pretty low consultation fee. The specialists may be booked for 8-10 patients per hour. Given insufficient time to take full history and physical and educate the patient on their condition, the physicians often take a cursory chief complaint, then order tests and write prescriptions. In a way, this practice matches the expectations of the patients: a doctor is supposed to order tests and write prescriptions. The test results come back to the patient, who then has to make another appointment with a same or different doctor to explain the results. As a result, patients with end stage COPD or cancer who present in respiratory distress to the emergency department are often intubated for a prolonged time before dying — the patient and their family simply never having had a discussion with their pulmonologist or oncologist regarding their disease condition and prognosis.

The fellow in the program expressed some of the tension they felt between these two systems. They enjoyed practicing evidence-based medicine and having the time to fully evaluated and educate their patients, but they also liked the financial accessibility of the public system. Finally, the patients sometimes preferred the public hospital way of practice: how could the doctor diagnose their child with a viral respiratory illness without doing blood tests, and why were they not being prescribed antibiotics? Overall, at UFH, I got to observe the challenges and success of offering private “Western” medicine in a large urban Chinese setting.
VIETNAM

THE EMERGENCY DEPARTMENT IN HUE

By Leila Amini, MD, PGY 3

My experience in Vietnam was truly amazing from both a clinical standpoint and one of personal growth and cultural understanding. It was amazing to see the efficiency with which the emergency department in Hue handled very sick patients, in a setting limited with regards to resources compared to BMC, and in a country where emergency medicine is still in its infancy. In a city where there is not yet any pre-hospital care or formalized EMS system, and ATLS is still a relatively new concept, patients still received standard of care overall due to the physician and nurses abilities to rapidly and intuitively make a diagnosis. Aside from the medical aspect of the rotation, it was truly eye-opening and refreshing to be in an environment where everyone was so genuinely happy to be there, to have us there, and so eager to constantly learn.

Both at the bedside, and at lectures, residents and attendings were constantly asking very thought-provoking questions out of a genuine desire to learn and develop their emergency medicine skills. This was refreshing to see, especially in contrast to our home department where sometimes fatigue lends to complacency and apathy. Being in a country with a very different culture was eye-opening in that people’s everyday priorities are very different than ours, with the central priority being relationships with families and friends, and contentment with what one has. This contrasts with the constant stress in the US to constantly search for the “next best thing” or climb the economic/social and career ladder that can be so exhausting at times. The experience profoundly impacted me in a very positive way by solidifying my plans to eventually move out of the US.

NEPAL

EVEREST BASE CAMP

By Ted Mooncai, MD, PGY 2

Traveling to Nepal is a wild ride. The people were extremely welcoming and kind, but it was still a chaotic place to navigate. The streets were packed and traffic seemed to follow no rules. All the traffic lights were broken save for one that I saw no one obeying anyway. Getting out of the city and traveling to the trekking region of the Khumbu Valley was a drastic change from the city of Kathmandu. That is where the elective really began. During our trek to Everest Base Camp, I was able to befriend other providers in the field of wilderness medicine who are similarly passionate. We had unique access to the few hospitals and clinics along the trek and it was humbling and inspirational to meet the rural providers stationed there. With absolutely no resources or supplies, they cared for thousands of local patients and told incredibly understated stories of acts of medical heroism. Hearing these rare cases were some of the highlights of the elective.

It was also a privilege to help set up the Everest ER for the climbing season. Few groups get to spend a night at base camp and it was special to be part of that. Also very interesting was experiencing high altitude illnesses first-hand and amongst members of our own group. We trekked up with the three doctors working at Everest ER this season and put them to work on us before they even got there! For many years I have dreamed of being an expedition doctor and being able to see that process was eye-opening. As a resident, I have gained a new perspective on how much I appreciate the practice of medicine and what I find important in how I am able to practice medicine and care for patients. The limitations of truly austere environments is a hard struggle, especially when you know what a patient needs and how you would treat them in a more resource-rich environment. My early excitement in providing field care on the side of a mountain is now tempered by the dismay of having limited interventions beyond calling for evacuation support. I think there is a lot of good and important medicine to be done in the wilderness, but all the algorithms lead to a helicopter and diesel.

Beyond our daily lectures on wilderness and expedition medicine topics, we also learned a lot about Nepali culture. It is an amazing and beautiful part of the world to experience. Nepal is an explosion of adventure tourism now. With a culture rooted in Buddhist beliefs, it was common to have Sherpas chanting mantras or whistling prayers as they lead their trekkers. There was a true dichotomy between the wealthy western travelers and the very poor guides and porters making everything possible behind the scenes. It was often hard not to feel guilty or as if it was an unjust system full of frauds ignoring inconvenient realities of their operations. At least all the clinics were free to locals due to fees charged to the foreigners.

The elective set a new bar. Never had I seen more austere medical practice environments. Never had I seen more majestic mountains. Never had I been so high up and with so low a baseline O2 saturation. I would recommend it to any resident interested in wilderness medicine.
CROSSING ON FOOT TO HELP OUT AT A BORDER TOWN CLINIC

By Alejandra Alvarez, MD, PGY 2

I chose to cross on foot every day. I would park my car and walk to the border crossing and from there hop in a cab to the hospital or clinic I would be at for the day. My initial days consisted of EMS ambulance ride-alongs; it was an intimate tour into the heart of Tijuana and a crash course on the city and its people. Tijuana is the sixth largest city in Mexico by population; data from 2015 put the city’s population at 1,641,570. This number rose by 6,000 in November 2018 when the caravans from Central America began arriving in Tijuana.

There are two types of border towns: ones that were established and a border crossing then followed, and those that were born out of border crossing sites. Tijuana is an example of the latter; until recent decades, no one really was from Tijuana. Tijuana marked a place of limbo for those waiting with the hope to cross into the US or those attempting to put their lives back together after being deported from the US. Over the past few decades, Tijuana has developed a population of people who do call Tijuana home: people who were born, raised, and intend to stay in Tijuana. The health and lifestyle disparities are blatantly apparent between these two groups of people, those choosing to stay in Tijuana and those stuck in Tijuana. These disparities are even more vastly apparent when compared against the Americans who come to the city for tourism — both for leisure and “hospital tourism” — or the Americans who choose to live in the city of Tijuana.

My preceptor was Dr. Patricia Gonzalez, a primary care physician in Tijuana. Dr. Gonzalez works with the department of global health at UCSD while also maintaining her own practice in Tijuana and running the Wound Clinic she started. The Wound Clinic was established when Patricia could no longer stand to see the homeless in Tijuana be neglected. She started a mobile clinic which brought basic health care to those who needed it most. The clinic runs ones a month and has attracted a faithful group of incredible volunteers. During my time in Tijuana I assisted with follow-up care from patients seen at the Wound Clinic. This involved going out to the streets of Tijuana to find the patients. I quickly got acquainted with a whole new side of the city.

On one of our first days out, we searched for a patient who needed to have sutures removed. The patient was a young man who had been struck by a vehicle and he had required the use of a wheelchair the last time Patricia had seen him. We visited a few locations he was known to frequent beginning at one called “tent city” where we asked for the gentleman but no one had seen him. A few people mentioned they were being forced to vacate the area. I learned that many of the shelters were saturated with migrants from the caravans, leaving Tijuana’s homeless few options. Tent city had been there a few weeks and at one point a string of port-o-potties was set up. Soon though, the toilets were gone and the pressure from law enforcement began. This, unfortunately, is a cycle they know all too well: the homeless find a place; attention is brought and some help follows, but eventually attention fades along with the help. Finally, they are forcefully vacated.

Every person I spoke with that day spoke both Spanish and English; most of my conversations were held in my native Spanglish. I consider myself Mexican-American, and am proud and privileged to claim both Mexico and the United States of America as my own. I am privileged to have loving family in Mexico and to have every memory of my time in Mexico be a happy one. That was not the case for the people I was meeting and it hurt to hear their stories—stories of being born into a life where the deck was stacked against you, starting a life and then being evicted across an imaginary line to a place you did not know, a place where you had nothing and no one—a place against which you will forever hold animosity.

In one short month in Tijuana, I met some of the most resilient, most caring, most selfless people. I had the privilege to work alongside and learn from EMTs, paramedics, physicians, and various citizens of Tijuana who all give so much of their time, efforts and compassion to make Tijuana better. Not because it is bad, despite what mainstream media attempts to paint the city as, and not because it is in “a state of emergency,” because I can assure you, it is not. For better or for worse, for a short time or a long time, Tijuana is home to many. Everyday efforts are being made to try to fill the gaps in healthcare and lifestyle disparities to make this home better.
KENYA

CURRICULUM DEVELOPMENT IN NAIROBI

By Gatebe Kironji, MD, PGY 2

This past October I traveled to Nairobi, Kenya to work on a curriculum development project. In collaboration with the Emergency Medicine Kenya Foundation (EMKF) team, we have developed an emergency medicine training course to start bridging the gap in emergency medicine training. EMKF is an organization made up of primarily Kenyan health care providers whose mission is to develop an evidence-based universal emergency care system in Kenya that seeks to improve morbidity and mortality for patients with medical emergencies, promote emergency care research and education, and also improve the patient experience. The course we designed, The Emergency Care Course (TECC), will enable the health workforce to develop the knowledge and skills necessary to respond with confidence to emergency situations and to deliver safe, evidence-based quality emergency care. During my five weeks in Kenya we completed the course's curriculum. We also trained one group of 12 in-country TECC educators. Alongside curriculum development I also met with the Director of Medical Services for one of Kenya’s 47 counties and the head of the County Executive Committee (CEC) on health of another county, to discuss implementation of TECC for health providers of these respective counties. Lastly, I traveled to a rural government hospital for a site visit to gather information on an example environment where our course would be implemented. Over the course of my time in Kenya, I made a lot of connections, which I have continued to cultivate as we scale up implementation of TECC. Our goal is to teach TECC to every emergency care provider working at a level 4 or 5 county hospital in all 47 counties in Kenya. To accomplish this, I plan on continuing with this project throughout residency and beyond. Additionally, Kenya is in need of legislation reform to provide the foundation for emergency medicine, which I would like to contribute to. Thus far EMKF has made great strides by bringing together government officials from the ministry of health and other key players in the health sector to draft a policy that would establish a right to emergency care for Kenyan citizens. I plan on leveraging my experience in public health to help the EMKF team to realize this goal.

GUATEMALA

A MISSION TO SERVE THE COMMUNITY IN XELA

By Maddie Brockberg, MD, PGY 2

Pop Wuj is a foundation serving Xela, Guatemala. They run several projects in the community and surrounding areas that are partially funded by the Spanish school they run in Xela. Nurses and doctors enroll in the Spanish school in Xela then participate in various projects there. I was very impressed with the quality of the Spanish school and the individual instructors. The projects include a primary care clinic, mobile medical clinics, and nutrition programs plus community projects such as safe stove building for rural communities. The foundation employs all Guatemalan physicians, teachers, and employees. They are very responsive to the needs of the community and I have a lot of respect for the way they operate. I lived with a host family that was very kind, and also enjoyed the city of Xela. I also had the opportunity to travel in Guatemala on the weekends. It was an educational experience in terms of improving my Spanish language skills and getting exposure to a different clinical environment, particularly in a limited resource setting. I also had the opportunity to learn more about Guatemala and the local culture and history. Overall, it was a great experience that I would recommend to anyone.
SELF-REPORTED BARRIERS TO EMERGENCY CARE FOR LIMITED-ENGLISH PROFICIENT PATIENTS

Authored by:

Nivedita Poola (BUSM 2020)
Rashmi Koul (BUSM 2021)
Shreya Sharma (BUSM 2021)
Angie Ng (BUSSW 2019)
Elana Hayasaka, M.D., EM PGY 3, Boston Medical Center

Christina Borba, PhD, MPH, Boston University School of Medicine, Boston Medical Center
Elida Acuna-Martinez, Department of Interpreter Services, Boston Medical Center
Suzanne Sarfaty, M.D., Boston University School of Medicine

Nicolette Oleng, M.D., Boston University School of Medicine, Boston Medical Center
Sondra Crosby, M.D., Boston University School of Medicine, Boston Medical Center
Linda Piwowarczyk, M.D., Boston University School of Medicine, Boston Medical Center

Senait Ghebrehiwet, MPH, Boston Medical Center
Gabrielle A. Jacquet, M.D., MPH, Boston University School of Medicine, Boston Medical Center

Over the past decade, the United States has seen a dramatic increase in immigration, with foreign-born individuals comprising nearly 50% of the nation’s population growth.¹ This influx has bolstered economic growth and contributed to a rich cultural diversity throughout the country. However, providing healthcare to this vulnerable population presents multiple challenges. Specifically, foreign-born individuals often lack reliable primary healthcare due to various barriers to accessing and utilizing our healthcare system. These barriers include socio-economic factors, cultural beliefs about healthcare, unfamiliarity with the US healthcare system, and not speaking the same language as care providers.² Due to these multiple factors, these individuals often utilize emergency departments (ED) for non-emergent issues or delay utilizing other sources of care until their health issues become acute or life threatening.³,⁴,⁵,⁶

Previous studies specific to emergency care have shown that linguistic barriers play a significant role in patient satisfaction and utilization of the ED.³,⁷,⁸ Beyond language barriers, however, little is known about what other barriers foreign-born patients face to accessing or utilizing emergency care. Since the ED serves as an entry point to healthcare for this population, understanding the barriers to care unique to this setting is imperative to ensuring accessible and quality care for these patients.

This study utilized a quantitative approach to assess the barriers to emergency care for limited English proficiency (LEP) patients seeking healthcare at the Boston Medical Center ED. In order to develop the preliminary questionnaire, the authors completed a literature search and conducted a focus group with 22 employees of the BMC Interpreter Services Department. Study participants who met eligibility criteria completed this questionnaire with a research assistant and interpreter or completed a self-administered questionnaire.

Through this questionnaire, the authors assessed previous ED experiences, satisfaction with the current ED visit, preferences for interpretation modalities, and barriers to accessing or utilizing the ED, including concerns about confidentiality, financial concerns, concerns about physical examination and testing, language barriers, and concerns about the availability of interpreters and healthcare providers from similar cultural backgrounds.

The study population was comprised of 87 LEP participants from 13 countries and speaking eight primary languages, the most common being Spanish (n=56, 65.1%). A majority of study participants reported preference for in-person professional interpreters (n=60, 61%) over interpretation via telephone interpreters, family members, or friends. This study assessed 17 different barriers to accessing or utilizing emergency care among patients seen in the ED.

Overall, the top three barriers that participants expressed “high concern” about delaying or discouraging care were: “paying the bill” (n=19), “wait time” (n=18), and “belief that professional care probably would not help” (n=15). Participants expressed low concern about barriers regarding examination by healthcare providers, blood draws, and imaging, or previous negative experiences in this ED.

This study documents the challenges to accessing emergency medical services for LEP patients, which includes and goes beyond potential language barriers. Despite the limited scope, the findings suggest changes to ED policies and procedures, through methods such as improving availability of in-person interpreter services in the ED or educating patients and providers about social service financial options, have the potential to improve the care delivered to a highly vulnerable population of patients. In addition, addressing barriers to care for LEP patients may also improve the care delivered to other patients facing psycho-socio-economic barriers to emergency care.
SCHOLARLY WORK JULY 2018 THROUGH SEPTEMBER 2019

Ewen AM, Gardiner PM, Palma S, Whitley K, Schneider JI. We Matter Too! Addressing the Wellness of Program Coordinators in Graduate Medical Education. J Contin Educ Health Prof. 2018 Summer; 38(3):165-70. PMID: 29933264

Stone AC, Carroll JJ, Rich JD, Green TC. Methadone maintenance treatment among patients exposed to illicit fentanyl in Rhode Island: Safety, dose, retention, and relapse at 6 months. Drug Alcohol Depend. 2018 Nov 1; 192:94-7. PMID: 30243145


AWARDS AND RECOGNITION

Benjamin Nicholson, MD – Class of 2019

NAEMSP®/Stryker EMS Medicine Medical Director Fellowship

The National Association of EMS Physicians® (NAEMSP®) and Stryker (formerly Physio-Control), the world leader in emergency medical response technologies, announce Benjamin Nicholson, MD, the winner of the NAEMSP®/Stryker EMS Medicine Medical Director Fellowship.

Ben is thankful for the mentorship and guidance he has received as his career has moved from EMT-B to flight paramedic and soon an EMS fellow. He is excited to continue to develop his skills under the mentorship of Virginia Commonwealth University faculty and with the support of the NAEMSP®/Stryker Fellowship in the areas of global EMS development, prehospital ultrasound, and helicopter EMS.

Madeline Brockberg, MD - Class of 2021

2019 EMRA CORD Academic Assembly Travel Scholarship

Maddie will be attending the conference in March in New York.

A. Gatebe Kironji, MD – Class of 2021

2019 EMRA International EM Rotation Scholarship

This Scholarship assists an exemplary resident with the costs associated with an elective in International Medicine that engages the evolution of Emergency Medicine in environments where there is such a need.

Gatebe will be going to Kenya to conduct a study in collaboration with a Kenyan group called Emergency Medicine Kenya Foundation. The study seeks to characterize provider gaps in knowledge and skills regarding the management of critically ill patients in emergency centers across Kenya. The results will be used to inform the development of an emergency care course for emergency department staff in Kenya as a short-term measure to improve emergency care delivery.

Thea James, MD, Vice President of Mission, Associate, Chief Medical Officer

Massachusetts Public Health Association Honors Thea James, MD

Thea James, MD received the 2019 Public Health Leadership in Medicine Award from the Massachusetts Public Health Association. The award honors a physician who inspires others with their leadership and determination to advance health equity in Massachusetts.

Recognized by Get Konnected

Dr. James was also honored as one of 25 of the Most Influential LGBTQ+ People of Color in Boston hosted by Get Konnected.
REGIONAL AND NATIONAL PRESENTATIONS:

The 2019 New England Regional SAEM Assembly

The 2019 NERDS conference was hosted by Boston Medical Center. Co-chairing the meeting were committee members Elissa Schechter-Perkins, MD, MPH, DTMH and Patricia Mitchell, RN. Moderated sessions by BMC/BU Faculty included E. Perkins, P. Mitchell, M. McGrath and J. Feldman.

More than 130 presentations from across New England were presented with BMC/BUSM having a total of 16 presentations. Presenters included faculty, residents and medical students.

   Thomas Gill, MD (Class of 2019).
   a. Also presented at SAEM Annual Meeting: Presenting Author(s): Thomas Gill, MD, MS (Garcia, Baker, Nentwich).

2. Implementation of shock index display in an electronic health record (Baker).

3. The Practitioner’s Guide to Global Health: an online curriculum preparing medical learners for field experiences (Jacquet).

4. February teach-off competition: A $60 teaching intervention to beat the winter blues (McGrath).

5. An emergency department’s response to a statewide hepatitis A outbreak (Fett).

6. Self-reported barriers to healthcare for patients with limited-english-proficiency in the emergency department (Koul).

7. Incidence of resident attrition in emergency medicine (Brockberg).
   a. Also presented at SAEM Annual Meeting: Presenting Author(s): Madeline Brockberg, MD (Mittelman, Liu, Specter, McCabe, Sheng).

8. HCV screening, linkage to care, and treatment patterns at different sites in our medical center (Foss).
   a. Also presented at SAEM Annual Meeting: Presenting Author(s): Glory Ruiz, MD (Calner, Foss, Miller, Andry, Battisti, Scrudder, She, Chan, Perkins).


10. Improvements to EMR result in increased hepatitis C screening and treatment (Ruiz-Mercado).
   a. Also presented at SAEM Annual Meeting: Presenting Author(s): Glory Ruiz, MD (Scrudder, Andry, Miller, Perkins).

11. Public health students’ role in a pediatric emergency department health promotion advocacy program (Campbell, McCartin).

12. Feasibility of a hospital-wide EMR-enabled airway registry (Baker).

13. Resident perceptions of the annual in-training exam in emergency medicine (Severe).

14. Instructing Zambian health care providers in basic emergency care (Broccoli).

15. Peer-to-peer support program: an intervention to foster resiliency during residency (Zametkin).

16. Novice echocardiographic assessment of tricuspid regurgitant jet velocity in a pediatric population (Binder).

International Brain Injury Association, Toronto, Canada (March 2019)


BUMC - 14th Annual John McCahan Medical Education Day (May 2019)

Best Resident/Fellow Abstract

A Novel, Trauma-Informed Curriculum for History Taking from Refugee Patients for Second-year Medical Students

Shabatun Islam, MD, Christina P. C. Borba, PhD, MPH, Muna Sheikh, MD, Kathleen Flinton, LICSW, Sondra Crosby, MD, Nicolette O leng, MD, Linda Piwowarczick, MD, Gabrielle Jacquet, MD, MPH, Suzanne Sarfaty, MD

There were 25.4 million refugees and 3.1 million asylum seekers around the world in 2017, with many seeking healthcare at Boston Medical Center. They represent a unique patient population as their health and wellbeing are affected by multiple losses and traumatic events. Healthcare providers need to be prepared to recognize and
serve the complex health, psychosocial and cultural needs of these patients. Boston University School of Medicine received a grant through the Josiah Macy Jr. Foundation to train future physicians to meet the complex needs of refugee patients. All second year medical students at BUSM participated in a curriculum designed to introduce them to refugee health and to take a medical history from this vulnerable patient population. Students first watched a live play demonstrating refugee history taking and then were able to practice their skills in smaller group breakout sessions with feedback from a facilitator. A total of 149 out of 180 students completed the post survey (response rate 82.7%). 84.6% of students thought that the training was relevant to their future careers, with 79.2% believing that the training would help them take care of future patients. 75.2% of students thought the training was useful in teaching them about refugee health and 77.8% thought it taught them how to take trauma histories. In the qualitative analysis, the students showed a preference for the small group breakout sessions as it allowed them to practice their skills.

Overall, 77.1% of students found the training to have enhanced their skills in taking medical histories from refugee patients. Therefore, this curriculum equips second year medical students with an introduction to refugee health and history taking and prepares them as they enter the clinical portion of medical school where they will be taking care of this vulnerable population.
Emergency Medicine, Public & Global Health and Residency & Pre-Hospital Education

NATIONAL CONFERENCES

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>DATE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEP</td>
<td>October 27-30, 2019</td>
<td>Denver, Colorado</td>
</tr>
<tr>
<td>NAEMSP</td>
<td>January 9-11, 2020</td>
<td>San Diego, California</td>
</tr>
<tr>
<td>CORD</td>
<td>March 8-11, 2020</td>
<td>New York, NY</td>
</tr>
<tr>
<td>SAEM</td>
<td>May 12-15, 2019</td>
<td>Denver, Colorado</td>
</tr>
<tr>
<td>IHI</td>
<td>December 8-11, 2019</td>
<td>Orlando, Florida</td>
</tr>
</tbody>
</table>

INTERNATIONAL CONFERENCES

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>DATE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUSEM</td>
<td>October 12-16, 2019</td>
<td>Prague, Czech Republic</td>
</tr>
<tr>
<td>WACEM</td>
<td>October 20-24, 2019</td>
<td>Roda AL Bustan, Dubai</td>
</tr>
<tr>
<td>EMSSA</td>
<td>November 5-7, 2019</td>
<td>Cape Town, South Africa</td>
</tr>
<tr>
<td>ACEM</td>
<td>November 7-10, 2019</td>
<td>New Delhi, India</td>
</tr>
<tr>
<td>ACEMAC</td>
<td>March 26-27, 2020</td>
<td>Abu Dhabi, UAE</td>
</tr>
<tr>
<td>CUGH</td>
<td>April 18-20, 2020</td>
<td>Washington, DC</td>
</tr>
<tr>
<td>AAEM</td>
<td>April 18-23, 2020</td>
<td>Phoenix, Arizona</td>
</tr>
<tr>
<td>ICEM</td>
<td>June 15-18, 2020</td>
<td>Buenos Aires, Argentina</td>
</tr>
<tr>
<td>AfCEM</td>
<td>November 9-12, 2020</td>
<td>Mombasa, Kenya</td>
</tr>
</tbody>
</table>

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:** [bmc.org/violence-intervention-advocacy/donate.htm](https://bmc.org/violence-intervention-advocacy/donate.htm)

**Project ASSERT:** [https://development.bmc.org/ways-to-give](https://development.bmc.org/ways-to-give)

**Emergency Medicine Residency Program:** [www.bumc.bu.edu/emergencymedicine](http://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.*
WHERE THERE ARE NO SILLY QUESTIONS.

Welcome to your medical home, where a stronger you starts with a primary care team who listens. Book your checkup today at bmctogether.org