Dear esteemed guests and presenters,

We hope everyone is staying healthy during this uncertain time.

We sincerely regret that we will not be able to gather in person for the 2020 NCEAS Annual Conference this spring to learn, network and to honor our presenters and attendees. In lieu of the conference, the conference committee decided to publish our program digitally along with a book of abstracts. Our goal is to share the important SDOH work being done around the country and to spotlight our talented presenters.

Thank you for your interest in and support of our conference this year. Next spring, we plan to meet again to continue our mission of establishing a community for medical educators, practitioners, students and researchers to create better health outcomes for all people.

In the meantime, please share any SDOH resources or curriculum you discover on our website. Visit our curriculum collection for inspiration in developing teaching materials. Follow us on Twitter and subscribe to our newsletter to hear of our upcoming events and the latest in SDOH news.

Sincerely,

Stephen Persell, MD, MPH  Deborah S Clements, MD
DIRECTOR OF NCEAS   CO-DIRECTOR OF NCEAS
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Plenary Speakers
Leslie Rydberg, MD

Attending Physician
Associate Residency Director, Physical Medicine and Rehabilitation
Monika and Henry Betts Medical Student Education Chair
Shirley Ryan AbilityLab
Assistant Professor, Physical Medicine and Rehabilitation and Medical Education
Northwestern University Feinberg School of Medicine

“Disability Education in UME”

Dr. Rydberg graduated Medical School from the Northwestern University Feinberg School of Medicine and attended residency in Physical Medicine and Rehabilitation at the Northwestern University Feinberg School of Medicine/Rehabilitation Institute of Chicago. She is currently an Assistant Professor of Physical Medicine and Rehabilitation at the Northwestern University Feinberg School of Medicine. Her area of focus in medically complex rehabilitation, neuromuscular disorders, and electrodiagnostic medicine. Dr. Rydberg currently serves as the Monika and Henry Betts Medical Student Education Chair at the Shirley Ryan AbilityLab (2016-present). She also serves as the clerkship director for the Physical Medicine and Rehabilitation rotation at the Northwestern University Feinberg School of Medicine. Dr. Rydberg is also on the Medical Student Educators Council and the Education Committee for the Association of Academic Physiatrists.
Ranit Mishori, MD
Professor of Family Medicine, Georgetown University School of Medicine

“Beyond the Social Determinants of Health: Looking at Population Health Through a Human Rights Lens and the Political Determinants of Health”

Ranit Mishori is a recognized expert and advocate for the health of the public in general, and of marginalized populations in particular. Her medical expertise covers a broad range: from women's and migrant health, to evidence-based medicine, to health disparities, to prevention and primary care. Her research and insights on medicine and policy find a broad audience both in her academic writing, and through her frequent articles and appearances in the mainstream media. At the same time, Dr. Mishori is a practicing family physician, who sees patients in Washington DC, while also mentoring medical students and residents. A former journalist, Dr. Mishori is skilled at rendering complex issues into plain English and has been an innovator in designing programs that enhance connections between doctors and patients, between science and those it should serve.

Among these: Dr. Mishori directs the Department of Family Medicine's Global Health Initiatives, where she has initiated and leads the Global Health Scholars Track at the residency and various collaborative projects internationally. In addition, she is the founder of the Health and Media Fellowship, and directs the Robert L. Phillips, Jr. Health Policy Fellowship, in partnership with the Robert Graham Center for Policy Studies in Family Medicine & Primary Care. She directs Georgetown's Practice-Based Research Network. Most recently, she was a member of health policy team for presidential candidate Pete Buttigieg where she participated in drafting multiple policy briefs, and co-chaired the women's, sexual and reproductive health policy sub-committee.

Dr. Mishori brings a social justice and human rights lens to all of her medical pursuits. From an early start covering wars and the plight of refugees for global news organizations, she has been focused on the far-reaching impact of conflict, and ways to relieve the suffering that comes with it. She is medical director and co-founder of Georgetown's Asylum Program, an initiative designed to provide medical evaluations to migrants seeking asylum in the US, while also functioning as a teaching opportunity for health professionals of all disciplines and specialties. This work dovetails with her position as Senior Medical Advisor for the Nobel Prize co-laureate organization Physicians for Human Rights, where she is deeply engaged with PHR's Asylum Program, and with its Program on Sexual Violence in Conflict Zones, among others.

Dr. Mishori’s leadership roles are numerous. A Diplomat and a Fellow of the American Academy of Family Physicians—the largest single specialty professional organization in the US—Dr. Mishori has been a deeply engaged leader in initiatives spanning primary care, global health, population and community health. She was selected to a 4-year term on the AAFP’s Commission on Health of the Public and Science where she helped steer the Academy's national policies. As chair of the Public Health Issues committee she authored multiple policies and position papers on behalf of the academy. She provided strategic leadership during her 3-year term on the AAFP's Center for Global Health Initiatives. She has represented the AAFP at various national meetings and committees, including at the CDC, ACOG, among others. Locally, she has served 4-consecutive terms on the board of the directors of the DC Academy of Family Physicians, co-chairing the advocacy committee. Dr. Mishori’s expertise and leadership on women's health have also earned her a spot as co-chair on the DC Department of Health's Maternal Health Advisory Board.

Dr. Mishori has received multiple awards and has been elected and selected to serve on more than a dozen national and international advisory boards and committees. True to her journalism roots, Dr. Mishori continues to report and write on health and medicine, publishing more than two hundred articles over the past 17 years in the popular media, including the Washington Post, USA Today, and the Huffington Post. Between 2008 and 2011, she was the medical columnist for Parade Magazine. She frequently represents Georgetown on TV, radio, print and web-based news outlets. Her medical education included an MHS in International Health from Johns Hopkins Bloomberg School of Public Health, an MD from Georgetown University School of Medicine and a residency in family medicine, also at Georgetown. Dr. Mishori is a mother of two children and lives in Washington, DC with her husband, broadcaster and author John Donvan.
Workshop Descriptions
A Structured Simulation Based on Health Disparities and Social Determinants of Health

FACILITATOR(S)
Tamzin J. Batteson, BSc; Lori Thuente, PhD RN; Sarah S. Garber, PhD; Samuel R. Bunting, BS

DESCRIPTION
This workshop will share an interactive module “Mr. Sodo” proven to increase student understanding that many health outcomes are related to environments and better outcomes can result with collaborative practice that addresses SDH. This module includes videos, with corresponding activities, that present Mr. Sodo’s sequential visits to health clinics and reveal his specific health disparities and chronic conditions reflective of his local community.

Addressing Treatment of Substance Use Disorder in Underserved Populations by Integrating Addiction Medicine Curriculum into Family Medicine Residency Training

FACILITATOR(S)
Daniel Berg, MD; Hanna Xu, MD; Andrew G. Birkhead, MD; Melissa Palma, MD; James Raspanti, DO

DESCRIPTION
There is a training gap in teaching primary care physicians how to treat substance use disorders. At Cook County Hospital, the Family Medicine Residency recently added addiction medicine to the curriculum for all residents. The goal of the curriculum is to teach both evidence-based medicine in didactic sessions and allow residents to manage patients with preceptor guidance in the hospital and primary care clinics.

Blended Learning of Human Dimensions Content in a Longitudinal Clinical Skills Course

FACILITATOR(S)
Kathy Eggleson, PhD; Matthew Holley, PhD; Beth Murray, PhD; Leanne Palmer, PhD candidate

DESCRIPTION
This workshop highlights the approach taken to integrate a human dimensions curriculum that highlights SDOH into a yearlong clinical skills course. This session will describe the learning environment, the changes that occurred, the development of materials, and educational outcomes of the intervention. Participants will walk away with an action plan for course improvement at their home institution.

Community Engagement and Service Learning in Medical Schools: A Workshop for Faculty

FACILITATOR(S)
Joanna Michel, PhD; Jorge Girotti, PhD

DESCRIPTION
This workshop will focus on educating medical school faculty and clinicians on the core tenets of community engagement and introducing them to the skills and actions necessary for medical schools to successfully and authentically developed sustainable community-based programming.
Community Engagement as an Approach to Teaching Social Determinants of Health

FACILITATOR(S)
Antonio Graham DO; Bisan Salhi, MD, PhD

DESCRIPTION
This workshop describes the use of community engagement as a tool to teach Social Determinants of Health (SDOH) to first year medical students. We present our experience with embedding students in various community organizations dedicated to addressing issues such as disability, aging, food insecurity, and refugee resettlement.

Making Social and Structural Determinants of Health Visible: Best Practices for Bedside Teaching

FACILITATOR(S)
Amy E. Caruso Brown, MD, MSc, MSCS; Rachel E. Fabi, PhD

DESCRIPTION
In this interactive workshop, we will explore what is known about the challenges and barriers that clinician-educators face and share strategies for overcoming them. Participants will have ample time to share their own experiences and reflect upon how they will apply these strategies in their own institutions.

Medical-Legal Partnership – Providing Collaborative and Experiential Learning Opportunities for all levels of Medical Training in Clinics Serving Children and Teens

FACILITATOR(S)
Ana M. Caskin, MD

DESCRIPTION
This workshop will provide an overview of the different learning opportunities and training modalities currently being used by the Georgetown University Health Justice Alliance in community health clinics. Also, we will introduce the screening tool developed to identify patients with health harming social and legal needs and the learners’ role in administering the screening.

Modified Design Thinking Model in SDOH Curriculum

FACILITATOR(S)
Asha Shajahan, MD, MHSA; Lakshmi Swaminathan, MD, MHSA; Denise White Perkins, MD, PhD; Ijeoma Nnodium Opara, MD, FAAP

DESCRIPTION
This session introduces the principles and practice of health disparities including basic concepts, key exposure, an introduction to community-based participatory research, and creative interventions such as visual thinking strategies (VTS) addressing health disparities. Participants will learn about the modified design thinking model designed by Dr. Asha Shajahan for teaching disparities curriculum. This session will also discuss three Metro Detroit residency programs creative components of curricular design.
Social Workers Vital Role in Helping Patients to Manage the Social Determinants of Health

FACILITATOR(S)
Pamela Lynch, MSW, LISW-S

DESCRIPTION
This presentation will describe a Social Work practice model that was developed by the presenter and is used by primary care Social Workers in the Department of Veterans Affairs. The Model identifies domains for evaluation and lists interventions designed to impact SDOH. It also contains an acuity measurement to identify the severity and need for psychosocial intervention across the domains. Through case studies in small groups, we will demonstrate the Model. We will also discuss the trainings provided to the interprofessional team that improve awareness of the SDOH issues and lead to warm-handoffs and referrals to address patient/family needs.

Teaching Health Disparities Using Case Narratives

FACILITATOR(S)
Ifeolorunbode (Bode) Adebambo, MD; Adam Perzynski PhD

DESCRIPTION
Narratives are a method of sharing information that has a special impact on the audience. A narrative personalizes the events of an individual's life experience as well as the barriers some patients encounter when seeking care. During this session, the workshop participants will read two case narratives authored by the workshop faculty.

The Power of Terminology in Health Disparities Education: Determinants or Contributors?

FACILITATOR(S)
Kara McGee, DMS, PA-C, MSPH, AAHIVS; Schenita Randolph, PhD, MPH, RN, CNE; AnnMarie Walton, PhD, MPH, RN, OCN, CHES

DESCRIPTION
During this workshop, facilitators aim to help participants consider how SDOH terminology fosters or interferes with teaching learners to recognize social issues that influence health and how deterministic terminology impacts communities that experience health disparities. In addition, the facilitators will share their experience with how the awareness of terminology impacted graduate nursing students at their institution. Finally, the facilitators will foster collaboration among workshop participants to consider educational innovations aimed at exploring terminology to advance health professions education related to SDOH and ensure that learners are empowered to intervene to improve health outcomes for their patients.

Moving Toward Cultural Humility in Undergraduate Medical Education

FACILITATOR(S)
Ashti Doobay-Persaud, MD; Odera Ekeh, MPH (c); Wivine Ngongo, MPH

DESCRIPTION
This workshop will discuss the false competencies and fallacies generated through the competency framework and describe successful strategies and tools to move toward a humility-based approach. Drawing on recent literature and expert panels, we will present practical tools and best practices that educators can use as a foundation for diversity, equity and inclusion curricula and ways to integrate cultural humility training principles into existing curricula and clinical experiences. Participants will have the opportunity to implement cultural humility practices. Activities will focus and examining the importance of cultural humility training, identifying best practices for implementing and transitioning curricula from cultural competency to humility.
Using Art and Literature to Teach Social Determinants of Health: Implementing a Health Humanities Curriculum

FACILITATOR(S)
Kamna Balhara, MD, MA; Nathan Irvin, MD

DESCRIPTION
This dynamic workshop will demonstrate how the arts and humanities can be used by clinicians and educators as pedagogical tools in undergraduate, graduate, and continuing medical education to: introduce foundational concepts of SDoH, promote critical thinking on SDoH, and generate reflection on the specific relevance of SDoH to surrounding communities and patient populations.

Using a Systems Perspective to Support Optimal and Equitable Outcomes for All

FACILITATOR(S)
Lindsay Rosenfeld, ScD, ScM; Jonathan Litt, MD, MPH, ScD

DESCRIPTION
Workshop participants will explore systems assessment methods that can aid in everyday systems-based thinking and practice, leading to improved child and family outcomes. We will explore these methods for teaching and practice implementation, focusing on maximizing children’s development and participation across the life course. In addition, we will engage in a case study useful for work with students, professionals, and families.

Using the Medical-Legal Partnership Model to Teach Law as a Social Determinant of Health

FACILITATOR(S)
Vicki Girard, JD; Eileen Moore, MD

DESCRIPTION
In this session we will model how to teach law as a SDOH and expand learner’s understanding of health harming legal needs using the lens of Medical-Legal Partnership (MLP), which offers a more holistic approach to healthcare delivery by integrating lawyers into the health care team.

Building the Future Geriatrics Workforce through Transformative Interprofessional Education

FACILITATOR(S)
Memoona Hasnain, MD, MHPE, PhD; Valerie Gruss, PhD, APN, ANP-BC, FAAN

DESCRIPTION
The presenters will share the content, process and lessons learned in developing and implementing an IPE course in primary care geriatrics for health professions students. The presenters will engage participants in discussing key issues surrounding training an interprofessional workforce. This workshop will prepare participants to address challenges in creating and delivering multifaceted interprofessional education.
Oral Presentations
Partnerships Across Sectors to Prevent Childhood Lead Poisoning

Nivedita Mohanty, MD
Alliance Chicago

ABSTRACT
Lead poisoning in children imposes lifelong health consequences. In Chicago, where almost 90% of available housing stock was constructed prior to lead paint bans, nearly 2,000 children are lead poisoned every year. Elevated blood lead levels (BLL) in children are associated with adverse cognitive outcomes, lower IQ, and poorer education achievement. Children in neighborhoods with low child opportunity are disproportionately exposed to lead.

PRESENTATION DESCRIPTION
This project is a collaborative effort among the Chicago Department of Public Health (CDPH), Chicago Public Schools (CPS), Chicago Department of Innovation and Technology (DoIT), the University of Chicago’s Center for Data Science and Public Policy (DSaPP), the Public Health Institute of Metropolitan Chicago (PHIMC), and AllianceChicago to deploy innovative methods and technologies to empower providers who care for pregnant women, children, and families in proactively identifying lead risk and mitigating adverse outcomes and also to contribute to policies to enhance lead prevention. This project harnessed predictive analytics to create a real-time, actionable system to describe and advocate for vulnerable populations. Health Information Technology was leveraged to predict risk and facilitate remediation of lead poisoning hazards before children are poisoned, preventing lifelong detrimental health and development consequences. Multi-sector information management and data sharing demonstrated the potential to yield tremendous benefits as data held by disparate sectors was aggregated to offer more complete, timely and actionable data. Data sharing strategies for quality and safety must be designed to impact individual patient needs while improving the health status of broader populations and leveraging opportunities to improve practice and policies for the benefit of vulnerable populations.

LEARNING OBJECTIVES
1. Understand how disparate information systems from the public and healthcare sectors can improve information sharing of disease prevalence and can surface the needs of populations who are at highest risk due to their social determinants
2. Describe how predictive analytics can improve clinical practice
3. Understand the value of leveraging data and partnerships to change the current model of clinical care from being reactive to proactive.
Leveraging People, Process, and Technology Needed to Address Housing Instability

Nivedita Mohanty, MD
Alliance Chicago

ABSTRACT
Housing instability impacts both health status and health service utilization, however, large-scale prevalence data on health status of homeless populations, health service utilization patterns and impact of supportive services and housing has been difficult to assemble. Additionally, across different health care organizations, the workforce and technology have not been optimized to identify and address the needs of individuals who experience housing instability. In this session, we will describe current practices for collecting data on housing status and review outcomes data for patients who are homeless across multiple institutions in Chicago. We will also engage attendees in discussion on best practices for addressing challenges in mobilizing people, processes, and technology to improve care for individuals who have unstable housing.

PRESENTATION DESCRIPTION
While it is recognized that homelessness impacts both health status and health service utilization, large-scale prevalence data on health status of homeless populations, utilization patterns and impact of supportive services and housing is difficult to assemble. In part, because healthcare entities do not consistently capture housing status. Building capacity across teams and health sectors to identify housing instability is critical for public health and health systems to provide coordinated, patient-centered care. By optimizing the use of technology and skills of the workforce, health systems can also reduce costs, and improve outcomes and the overall health of communities. This presentation will describe a collaborative assessment of housing data collection practices, including survey results from 11 healthcare organizations in Chicago who participate in the Chicago Area Patient Centered Outcomes Research Network (CAPriCORN). These organizations include safety net health centers, academic medical centers, and safety net hospitals. It also includes a crosswalk of Electronic Health Records across these 11 organizations with a homeless service provider database to determine if health outcomes vary based upon identification across both systems. Attendees will gain insights into the challenges and importance of gathering data on homeless populations across care settings and the need for novel approaches to overcome these challenges.

LEARNING OBJECTIVES
1. Understand current data collection practices for identifying housing status across health systems and opportunities for improvement
2. Synthesize data from a large multi-organization cohort on health services utilization and health outcomes of patients who have unstable housing
3. Discuss best practices across session attendees for addressing housing status in underserved communities
Beyond Referrals: Innovating Practice Transformation Strategies to Address Social Needs for Latino Immigrants Managing Diabetes

Angela Suarez, MD; Suyanna Barker, MD; Rodrigo Stein; Luzilda DeOliveira, MHA
La Clinica Del Pueblo

ABSTRACT

Sixty percent of a person’s health is determined by social factors (e.g., income, immigration status). Vulnerable and low-income communities are impacted by deep-rooted, inequitable systems and practices that shape their environments and opportunities to achieve optimal health. While some healthcare organizations are implementing strategies to address social needs, these efforts do not always sufficiently address how immigration status and food security impact health outcomes for Latino-immigrant patients.

PRESENTATION DESCRIPTION

Since 1983, La Clínica del Pueblo (LCDP) has worked to meet the comprehensive needs of vulnerable, low-income, limited English proficient Latino immigrants. LCDP regards immigration status as a key structural driver of health due to its impact on access to insurance and healthcare services in the U.S. Lack of or tenuous immigration status is a significant stressor for Latino immigrants and has been associated with poor chronic disease outcomes. Exposure to chronic stress can negatively impact the physiological and psychological status of an individual. Increased attention has focused on stress as a modifiable risk factor for chronic disease, with implications for coping and self-management. Food insecurity is another key determinant of health for patients with chronic conditions like diabetes. Rates of food-insecure households are higher among Latinos who are 50% more likely to die from diabetes than their White counterparts. Therefore, implementing care models that attend to food security and immigration status has become indispensable among other efforts at LCDP to address diabetes prevention and management.

To enhance diabetes care and address these issues, we describe LCDP’s process to develop a practice transformation strategy that combines 1) standardized social needs screening and 2) implementation of case-based learning sessions where multidisciplinary teams analyze barriers, develop a coordinated response for diabetes care, and agree on recommendations to support medical and social needs.

Care coordinators systematically screen for social needs in the electronic medical record, making this information accessible to the multidisciplinary team. To address legal assistance and food security, LCDP established a referral system to local partners where patients are accompanied by Health Navigators to appointments. To bolster strategies to address social needs, LCDP integrates case-based learning sessions to build capacity for direct service staff. These sessions contextualize diabetes management by outlining food insecurity, poverty, and immigration status as social determinants of health that constrain access to resources and opportunities to support health and well-being.

Implementation experiences with social needs screening and case-based learning have supported multidisciplinary teams with developing recommendations to guide LCDP’s future work and build Partnerships and Advocacy Strategies to impact structural and policy issues.
Developing Social Determinants of Health Teaching Cases Using a Structural Competency Framework

Iman Hassan, MD, MS¹; Thuy Bui, MD²
¹Division of General Internal Medicine, Albert Einstein College of Medicine, Montefiore Health System
²Division of General Internal Medicine, University of Pittsburgh School of Medicine

INTRODUCTION

Structural competency recognizes the impact of policies, economic systems and institutions in producing and maintaining systemic social inequities and health disparities. A structural differential delineates the social, political and economic factors that contribute to a patient's health. Despite the demonstrated impact of social determinants of health on health outcomes, medical trainees are often not prompted to think about these factors when providing clinical care. To help facilitate identification of a structural differential in patients, faculty and community mentors are working with medical trainees from multiple disciplines to developed social determinants teaching cases using a structural analysis technique.

PRESENTATION DESCRIPTION

Undergraduate medical students and pharmacy students identified real patient cases from their clinical rotations and formulated them into social determinants teaching cases using a novel structural analysis method that applies quality improvement techniques to develop a structural differential. The components of structural analysis are: (1) creating a prioritized clinical problem list (2) identifying root causes for at least one clinical problem using a fishbone diagram (3) creating a prioritized structural problem list derived from the root cause analysis, and (4) brainstorming and planning individual level, community level and policy/societal level interventions for each problem on the structural differential. Faculty guides were developed with sample answers and supporting evidence for each step of structural analysis. Teaching cases and associated faculty guides were reviewed by both a faculty mentor and a community mentor. Completed teaching cases can be found at: https://www.socialmedcases.pitt.edu/

IMPLEMENTATION

Each teaching case took approximately three months to develop. Case writing and revision was a learning process for medical trainees. Using the structural analysis method encouraged trainees to think of the broader institutional and societal context when caring for patients, and promoted advocacy. Our community mentors played an integral role in case development and offered an important perspective, enhancing both the educational value of the cases and the real world applicability.

CONCLUSIONS/NEXT STEPS:

Structural analysis can be applied to teaching cases as a method of enhancing structural competency. Next steps will include administering social determinants teaching cases to learners and assessing their impact as a means of teaching social determinants of health.
Weaving Social Determinants of Health Into Case-based Teaching

Thuy Bui, MD1; Iman Hassan, MD, MS2; Jared Chiarchiaro, MD1
1University of Pittsburgh
2Albert Einstein College of Medicine, Montefiore Health System

NEEDS AND OBJECTIVES
Social determinants of health (SDH) have been identified as important yet the topic is challenging to integrate into medical education. Recent efforts have focused on didactics and community experiences including home visits and service-learning curricula. SDH are integral to health systems science and all clinical encounters and should be continuously woven into undergraduate medical education and beyond. Case-based learning provides ideal opportunities to infuse SDH concepts in the traditional teaching of proximal health determinants.

SETTINGS AND PARTICIPANTS
Problem-based learning (PBL) cases were sought from course directors in the Organ Systems Block at the University of Pittsburgh School of Medicine. 21 PBL cases currently utilized in the preclinical years were submitted for review by 2 faculty with expertise in SDH teaching.

PRESENTATION DESCRIPTION
Each case is reviewed thoroughly with attention to sociodemographic identities and scientific evidence regarding socio-economic, environmental and/or behavioral contribution to the diagnosis, management and outcomes of the disease or condition in question. Suggestions to course directors include 1) discussion of racial disparities and structural racism affecting the diagnosis, treatment and/or morbidity-mortality of that condition, 2) discussion of treatment nonadherence as signs or symptoms of psychosocial influences, 3) social needs screening and healthcare interventions, 4) attention to patients with limited English proficiency and cultural factors, 5) the health impacts of housing, environmental factors or built environment, 6) the interaction between social disadvantage and stress, 7) how behaviors are shaped by social forces, and 8) healthcare access, navigation and high cost of healthcare. SDH discussion questions, answers and references are incorporated into the faculty facilitator’s guide.

EVALUATION
Positive preliminary feedback was received from course and organ block directors. The academic 2019-20 year will be the first year when these SDH-enhanced PBL cases will be utilized. Student feedback will be sought through course evaluations as well as a survey of faculty facilitators.

DISCUSSION/REFLECTION/LESSONS LEARNED
It is feasible to infuse SDH concepts into case-based teaching. Course directors favor adding one point or one question related to SDH per case discussion. Providing explanation and references in the facilitator guide is important to prepare faculty who are less experienced with this topic.
A Novel, Trauma-Informed Curriculum for History Taking from Refugee Patients for Second Year Medical Students

Suzanne Sarfaty, MD
Boston University School of Medicine

ABSTRACT
Health care providers, especially those in inner cities, increasingly are caring for the growing worldwide influx of refugees and are often unprepared. At Boston University School of Medicine (BUSM), we have a major focus on addressing the social determinants of health (SDoH) for all patients and have identified a set of additional knowledge and skills and competencies that are needed to care for refugee patient. We developed a longitudinal education program to meet the complex healthcare needs of refugee patients starting in year two.

PRESENTATION DESCRIPTION
All second year medical students at BUSM participated in curriculum aimed at teaching them how to take a trauma-informed medical history from refugee patients. There were two parts: 1. students watched a play with trained actors taking a medical history from a patient seeking asylum, and participated in a Q&A session with an expert patient panel, 2. students met in small group breakout sessions with facilitators and patient actors where students had the opportunity to practice taking a history.

180 evaluation surveys were distributed with an 82.7% response rate. Of those, 75% of students agreed the training would help them take care of refugee patients, 78% of students agreed the training would help them take care of patients with trauma, 79% of students agreed the training will benefit their future patients, and 85% of students agreed the training is relevant to their future career. Overall, 77.1% of students found the training to have enhanced their skills in taking histories from refugee patients. Students found the expert panel beneficial since it allowed them to hear about experiences in the real world and ask directed questions.

Noted areas for improvement include making objectives clearer, demonstrating an expert interview, and incorporating patient feedback into the session. This curriculum equips second year medical students with an introduction to refugee health.
Poster Presentations
Housing First: An Innovative Approach to Addressing the SEDH Contributing to the Ongoing Opioid Epidemic in Economically Disadvantaged Service Areas

Denise Vigliotti, BS; Michael Brown, M.Eng
The Wright Center

ABSTRACT

This presentation will describe the development and implementation of a successful collaborative pilot housing program to support the recovery of individuals with Opioid Use Disorder (OUD) in Lackawanna and Luzerne counties in Northeastern Pennsylvania using innovative, evidence-based case management and the Housing First philosophy.

Nearly 80% of people experiencing opioid dependence do not receive treatment because of limited treatment capacity, financial obstacles, social stigma, and other barriers to care (Drug Policy Alliance, 2017). Many individuals with OUD lose family support, their home, their job, and their savings; without wraparound recovery support services (RSS), they are at high risk of relapse upon discharge from an inpatient recovery facility or incarceration. Many have no plans to enter a sober house or even a job to return to, leaving them lacking resources to pay for housing and living expenses. Long wait times for sober housing along with recent closure more than three sober house in Lackawanna County have left many with no reliable source of shelter as they transition back into community life. Additionally, without a car or access to regular bus service, patients have no reliable transportation between the sober house and workplace. These gaps are preventing financial self-sufficiency among individuals with OUD.

The Wright Center for Community Health (TWCCH), a well-established but newly minted, HRSA-designated Federally Qualified Health Center Look-Alike (FQLA) and established Center of Excellence for Opioid Use Disorder (COE OUD) located in Northeastern Pennsylvania, provides medical care to vulnerable populations in five counties. Services are delivered primarily in the urban counties of Lackawanna and Luzerne, which have a combined population of 535,355 individuals, as well as Wayne, Susquehanna and Pike counties. Lackawanna and Luzerne counties occupied the top spots of the 2015 MAT Underserved Areas list with Total Rank Scores of 35 and 63 respectively, where a Total Rank Score of 328 represents the least underserved county in Pennsylvania. Lackawanna County had the lowest and therefore worst Total Rank Score of all 67 counties in Pennsylvania.

TWCCH, in collaboration with longstanding community partner, United Way of Wyoming Valley (UWWV), has replicated an established and successful model for providing housing and case management to people living with HIV/AIDS (PLWH), to address service gaps affecting individuals with OUD. Using existing infrastructure and leveraging extensive experience, TWCCH quickly and efficiently implemented a successful housing and case management program using evidence-based practices and the Housing First philosophy.

As of March 1st 2020, TWCCH has assisted 249 individuals in received housing resources including education related to budgeting, referrals for jobs, referrals for furthering education and referrals to any need to help maintain sobriety. 156 individuals have received rental assistance, 90 clients have been supported with transportation needs (bus/Uber) and 92 clients were provided employment coaching to maintain employment.
Adapting a Patient Engagement Intervention for Spinal Cord Injury Rehabilitation: Modifying Enhanced Medical Rehabilitation to Address Social Determinants of Health

Ryan J. Walsh, MSOT, OTR/L, PhD (c); Virginia R. McKay, PhD; Piper E. Hansen, OTD, OTR/L, BCPR; Peggy Barco, OTD, OTR/L, SCDCM, CDRS, FAOTA; Yejin Lee, MSOT; Kayla Jones, BS; Alex Wong, PhD, DPhil

1Washington University in St. Louis, St. Louis, MO
2University of Illinois at Chicago, Chicago, IL
3Shirley Ryan AbilityLab, Chicago, IL

INTRODUCTION
Enhanced Medical Rehabilitation (E-MR) is an evidence-based patient engagement intervention that may increase the quality of spinal cord injury (SCI) rehabilitation. More engaged patients enjoy better outcomes and are better prepared to manage inequities, disability, and social determinants of health that impact return to valued life roles upon discharge. However, E-MR was designed for older adults in nursing homes, a population with characteristics and discharge needs different from those of patients with SCI. Thus, in collaboration with stakeholders, we adapted E-MR for a SCI rehabilitation context. Our aim is to describe applying an adaptation framework to optimize acceptability, feasibility, and effectiveness of E-MR among SCI patients.

METHOD
We applied the collaborative intervention planning framework to form a community advisory board of clinicians and a patient advocate at a rehabilitation hospital. We used intervention mapping to identify and implement surface- and deep-level modifications to optimize acceptability, feasibility, and effectiveness. Surface-level modifications addressed E-MR's appearance and face validity. Deep-level modifications addressed patients' preferences, understandings, and values that impact core intervention elements.

RESULTS
Surface-level modifications increased E-MR's fit with the interests and demographics of patients more likely to be male, younger, and ethnically diverse. For example, we altered the intervention's discharge goals to better represent those of patients with SCI, and we increased diversity of individuals with SCI depicted in examples, images, and text. Deep-level modifications involved redefining engagement to better prepare patients managing impacts of long-term disability and social determinants of health after discharge. For example, we altered the measurement and construct of engagement to include education about community resources, training caregivers, and returning to productive roles.

CONCLUSION
We generated an adapted E-MR that we will pilot between January and July 2020. When transporting interventions to new contexts, rehabilitation researchers may consider applying an adaptation framework to optimize its acceptability, feasibility, and effectiveness. Tailoring interventions facilitates more effective management of disability and social determinants of health that impact patients' engagement with valued life roles before and after discharge.
ABSTRACT
The World Health Organization (WHO) defines social determinants of health (SDH) as the circumstances, in which people are born, grow up, live, work, and age, along with the systems put in place to deal with illness. These determinants are in turn shaped by a broader set of forces that include the local environment, economics, educational, social and community context, and access to healthcare. Only about 20-30% of the impact of SDH can be attributed to healthcare alone. The rising per capita health care costs in the United States, lagging health indicators relative to other developed nations, and persistent health disparities in morbidity and mortality reflect the urgency to address SDH. Significant strides over the years have been made to eliminate health disparities at the national, local, and individual levels, yet future healthcare professionals and frontline clinicians training on SDH is lagging behind. Understanding social determinants of health has become a key element of medical practice; however, many providers feel that they do not have enough experience and training to screen for and address these important issues. Therefore, a renewed emphasis must be placed on learning about the communities where patients live and work, expanding attention to include population health and evaluation of community health problems.

Detroit is the largest and most populous city in the state of Michigan, with a population of over 4.3 million. Thirty one percent of the population is under 18 years of age, and a predominantly African American ethnicity comprising 82% and has a relatively large Mexican-American, European and Middle Eastern population. The median household income in the city was $25,787 with 32.3% of families having income at or below the federally defined poverty level (53.6% of those under the age of 18 years). The loss of industrial and working-class jobs in the city has resulted in high rates of poverty and associated problems, given Detroit’s history is racially-charged and rooted in the effects of structural and individualized systemic discrimination. Despite the hardships the city has faced, Detroit continues to be regarded as a major cultural center, known for its contributions to music and as a repository for art, architecture and design.

Our health care facility, Detroit Medical Center, is the largest in Metro Detroit area. It is an academic, safety-net hospital which employs a diverse group of over 1200 residents and fellows with over 80 specialty programs. Also medical students from Wayne State University, the 4th largest medical school nationally, rotate at our facility. Starting in September 2019, a group of attending physicians, residents, and fellows collaborated to develop a SDH toolkit and education program. The program consists of training “champions” from each specialty at our institution who will in turn train the residents and fellows in their departments on how to screen and identify patients for social risk factors that affect their health and well-being and use a shared decision-making model to develop a culturally sensitive care plan to help address the disparities in health that exist in our communities. The champions will also receive mentorship from our group to help develop quality improvement and research projects involving SDH, with the goal of providing education to all of the graduate medical trainees in our institution.

Initial results of our intervention have shown some success. Prior to our initial workshops, only 40% of “champions” screened patients frequently for SDH although 100% felt it was important to screen for it. Forty percent felt comfortable or very comfortable with screening for social determinants of health. Thirty three percent felt comfortable or very comfortable with teaching their peers about screening for and addressing social determinants of health. After the workshop, 78% felt comfortable or very comfortable with teaching peers and colleagues how to screen for and address SDH and 89% of respondents found the presentation very or extremely helpful.

Based on these promising results, we believe that this program will be effective in educating medical trainees and faculty alike regarding SDH and inspiring physicians to address them regularly in their practice.
High Five: A Process to Reduce High Utilizers’ 30-Day Readmission Rate

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BACKGROUND

Our department’s hospital service is located in a local, community hospital that has a long and respected history in our city. More recently, this facility was purchased by and integrated into our large academic medical center. Although now under the medical center’s auspices, it continues to be known as a facility that cares for all. Additionally, our healthcare enterprise has stratified the patient population such that patients from across the state who require higher level quaternary care remain at the medical center hospital, while patients with lower acuity are admitted to our Family Medicine service. Not surprisingly, the patients on our service are equally challenging due to multiple co-morbidities and significant social needs. Due to our patient’s needs, we have dealt with high 30-day readmission rates and it became imperative to reduce these rates.

INTERVENTION

Our department embarked on a transformation of care agenda a few years ago, the first step was to establish a chronic care management program. At the same time our department had new leadership, who made the decision to broaden our transformation of care to include several other initiatives, and reduction of our 30-day readmission rates became a priority.

Our interprofessional care team consists of 3 RNs, 2 social workers, and one community health worker. Each member of this team has a workstation in “Care Central” (a large workspace) so that communication and coordination between members can be optimal. The High Five process begins by identifying the top 10% of patients who were earmarked as high utilizers on our service and then from that group, the five highest utilizers are evaluated. Patients with a cancer diagnosis or other long term care need are excluded from the high utilizer group. Each member of the care team reviews the patient’s hospital re-admission data and hospitalization summaries to identify patient problems and challenges. Each care team member submits via email their recommendations to mitigate a range of social and medical needs. This allows for efficient, time-saving assembly all recommendations prior to face-to-face deliberation.

The High Five meetings occur every 3 to 4 weeks and include each care team member as well as our vice-chair for clinical affairs. Typically, time permits only one or two patients to be considered during the meeting. Each team member presents a brief review of their recommendations and then the entire group deliberates to finalize components of care that may contribute to a lower 30-day readmission rate for each patient. Our vice chair of clinical affairs makes recommendations on specific medical care issues, and then sends those suggestions directly to the patient’s PCP.

OUTCOMES

Each High Five patient is monitored for a six month period to determine their rate of 30-day readmission. Members of the care team document all direct interactions with each patient as well as additional problems that may have developed during the measurement period. Readmission rates for the initial group of High Five patients will be determined in April, 2020.
Sociodemographic Predictors of Health-Related Internet Use Among US Adults; an Analysis of the Health Information National Trends Survey

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BACKGROUND
The ubiquity of the internet and the widespread adoption of smartphones have made health information more attainable across all racial and ethnic groups, potentially serving as a resource for addressing observed cancer inequities. Data from the Pew Research Center showed that reported internet use among all racial and ethnic groups has increased within the last decade, thus nearing the reported internet use of non-Hispanic whites, but digital health and health informational gaps remain.

OBJECTIVE
While several studies have previously documented differences in eHealth usage, updated analyses are warranted within the context of an increasingly diverse US population against the backdrop of a rapidly evolving communication landscape. The study aims to identify social and demographic patterns of HRIU among U.S. adults.

METHODS
Using data from the Health Information National Trends Survey (HINTS) 4 cycle 3 and HINTS 5 cycle 2, we examined HRIU across 3 domains: To assess differences in health-related internet use (HRIU), our primary predictors are 8 HINTS variables across 3 domains relevant to health communication. These questions were asked to respondents who answered yes to ever going online to access the internet (N = 2284 and 2533 respectively). The 8 HRIU tasks are divided into 3 domains relevant to health communication, consistent with prior HINTS analyses.

Domain 1: Healthcare use - Includes use of the internet to look for a healthcare provider, use of email or the internet to communicate with a healthcare provider, and purchase of medicine or vitamins online.

Domain 2: Health information seeking - Includes use of the internet to look for health or medical information for self and use of the internet to look for health or medical information for someone else.

Domain 3: User generated content/sharing - Includes visiting a social networking site to read and share about medical topics, writing in an online diary or blog about a health-related topic, and participating in a health or medical online support group.

Primary predictors of interest were gender, race/ethnicity, age, education, income, and nativity with adjustments for smoking, health insurance and access, and survey year. We conducted a series of multivariable logistic regression models to identify independent predictors of HRIU. All analyses were conducted using SAS 9.4® using complex survey methodology with jackknife replicate weights for accurate standard errors, with all analyses weighted to provide nationally representative estimates.

continued
RESULTS

Of the 4,817 respondents, 43% had used the internet to find a doctor, 80% had looked online for health information for themselves. Only 20% had visited a social media site for a health issue; 7% participated in an online health support group. In multivariable models, older and low SES participants were significantly less likely to use the internet to look for a provider, use the internet to look for health information for themselves or someone else, and less likely to use social media for health issues. No racial disparities in healthcare communication or health information seeking were observed.

CONCLUSIONS

Use of HRIU is vast but varies significantly by demographics and intended use. Implications for tailoring health messages around modality accessibility should be considered.
Designing and Implementing a Social Determinants of Health Curricula in Pre-Clinical Medical Education: A Scoping Literature Review

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BACKGROUND
Within medical schools in the United States, social determinants of health (SDOH) curricula and educational approaches are increasingly being integrated into medical education to train more competent physicians. In 2016, the National Academy of Sciences published a framework for educating health professionals in SDOH, presenting different approaches such as experiential learning, collaborative learning, and an integrated curriculum. An important question is which approach has been adopted in medical schools across the country and how students experienced the implementation of SDOH curricula and training, particularly student members who are historically underrepresented in medicine. We conducted a scoping review of literature focused on how SDOH are integrated into pre-clinical medical education and how these curricula relate to the student learning environment and/or experiences.

METHODS
We conducted literature searches in PubMed and the following journals: Academic Medicine, Medical Education, BMC Medical Education, Medical Teacher, Advances in Health Sciences Education, and Journal of Continuing Education in Health Professions. Search phrases were developed for three domains: content, context, and targets/outcomes:

- The content domain search terms were: “social determinants of health” “health disparity/ies” “health equity/ies” “health inequity/ies” “structural competency”
- The context domain search terms were: “medical education” and “curriculum”
- The target/outcomes domain search terms were: “student learning environment” “student learning” and “student climate”

To identify relevant articles, we limited our search to 1996 to 2019, combining terms to SDOH curricula influence the student learning environment.

RESULTS
Between 1996-2006, there were less than 200 published articles across all search terms. Beginning approximately in 2006, there was a rapid increase in published education. By 2010, over 700 articles were published including SDOH and medical education terms. There were significantly fewer articles published containing the terms ‘health equity’ as compared to ‘SDOH’ or “health inequalities.” Publications with phrases that explicitly incorporated systems of power (e.g. structural competency, racism) were significantly less common across all time periods. Publications which incorporated student assessment or evaluation of student experiences accounted for less than 5% of all SDOH and medical education articles. In our named journal search, we found a total of 228 articles with the term “health disparity/ies,” 92 with “health equity/ies,” 14 with “health inequity/ies,” 281 with “health inequalities,” 103 with “social determinants of health,” and 65 with “structural competence.”

CONCLUSION
We recommend further research focused in these areas, as well as explicit evaluation of how the design and delivery of SDOH curricula are influenced by the following institutional factors: policies on diversity and inclusion; practices around consistent assessment of the student learning environment, the sociodemographic composition of the administration, staff, faculty and students; and the school's mission. As medical schools continue to focus on SDOH and attempt to increase representation of historically underrepresented in medicine students, it is important to understand the impact that SDOH curricula has on these students.
Nutrition Education Training through Service-Learning: Auntie Na's Student Organization Healthy Oasis Corner Store Program

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ABSTRACT

Literature on nutrition counseling prevalence among physicians shows that many do not feel prepared to provide nutrition counseling. This low confidence may be attributed to limited education in basic nutrition science and poor understanding of potential nutrition interventions during basic medical education. Our corner store program addresses this by helping medical students make connections between nutrition education and healthcare. Auntie Na's Student Organization Healthy Oasis Corner Store Program is a student-led program that develops medical student nutrition counseling and community rapport-building skills; providing an engaging method for delivering and expanding nutrition education.

The present investigation aims to determine how medical student volunteers assess their own skills in nutrition advising before and after participating in the program. In addition, we will evaluate the effectiveness of this program through feedback from medical student volunteers and corner store patrons in Nardin Park, a neighborhood in west Detroit. This area is a known food desert with a median household income of $23,869, with more than 50% of individuals using food Stamps/SNAP benefits (City of Detroit, 2018). The study is conducted as follows: health screening centers are placed at a corner store in the Nardin Park neighborhood on a weekly basis. Out of five stores, two were selected based on location, zip code, foot traffic, proximity to public transportation and parking. Volunteer medical students from Wayne State University School of Medicine measure blood pressure, blood glucose, and cholesterol. Students discuss the participants’ diets and educate them on healthy alternatives. Following nutrition counseling, patrons are administered a survey and provided $6 to purchase healthy produce from the corner store. Students are administered a survey before and after participation to assess effectiveness of the program as a teaching tool.

Preliminary data from students who have participated in the program between May 2019 to August 2019 (N=6) shows that 50% of students somewhat agree or strongly agree that program participation has improved their understanding of a healthy diet. 83% agree or strongly agree that participation has improved their ability to provide nutrition education. Furthermore, 83% of participants indicated that engaging in the program improved their approach when discussing nutrition with patients. Data collection is currently ongoing. Both pre and post surveys will be given to students during the next cycle of the program. With the growing need for nutrition education within the population, this program can be replicated and further developed by other medical schools and institutions.
Perception of Trust and Empathy Towards Physicians among Families Experiencing Developmental Disabilities

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ABSTRACT
Patients and families experiencing developmental disabilities (PFEDD) lack trust in physicians.[1] To improve medical students’ interpersonal skills and patient trust, a service learning model was created to foster interactions between future physicians and PFEDD.

BACKGROUND
ARIE-Developmental Disabilities Institute (ARIE-DDI) is a program at Wayne State University School of Medicine (WSUSOM) that allows medical students to interact with PFEDD. ARIE-DDI attempts to fill a gap in medical education that does not train students in the special needs of this population, often leaving them underserved in healthcare.

METHODS
In ARIE-DDI, 40 first- and second-year medical students conducted in-home visits and interviews with PFEDD. At the first two-hour visit, students administered the pre-visit surveys, including a 5-point 16-question Jefferson Scale of patients’ perceptions of physician empathy (JSPP) Likert scale for trust of families towards physicians. The second visit focused on gaining a greater understanding of the challenges these families faced and building relationships. All families were invited to an end-of-program celebration to interact with other families and medical students in the program. At this time, the families completed the post-visit surveys, which were the same JSPP they completed at the first visit.

RESULTS
In the ARIE cohort of fall 2018, PFEDD completed surveys regarding their attitudes towards their physician and the general healthcare system. Sixteen families filled out a survey in the first visit, and 11 of those families filled out the same survey afterward. Family trust in the healthcare system was lower than their perception of their physician’s empathy towards them. On pre-survey, trust in the health care system was measured on average at 3.39 ± 0.25 while perceived empathy averaged 4.30 ± 0.27. On post-survey, trust and perceived empathy were not significantly different than pre-visit with values of 3.09 ± 0.26 and 4.25 ± 0.21, respectively.

DISCUSSION
PFEDD seem to hold a higher opinion of their own physician’s empathy; on the other hand, patients with developmental disabilities generally distrust the healthcare system. Medical students are often not exposed to this vulnerable population, and having interactions with patients with disabilities may translate into skills necessary to gain the trust of this underserved population in the healthcare community. To facilitate the development of these skills, a service learning model like ARIE-DDI can be incorporated in other medical schools across the country. In future cohorts, we hope to include more WSUSOM students in this program and include more families for our continued observance of families’ attitudes towards their physicians. We will adjust our follow up methods with the families in future cohorts to assure more responses are considered in our studies.

continued
REFERENCE

New Jersey Health Collaborative Better Understands Social Determinants of Health Barriers at Community Health Screenings

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ABSTRACT

Trenton Health Team (THT) is a non-profit, multi-sector health improvement collaborative and is one of four regional health hubs in the state of New Jersey, which seek to address various community and health-related issues. Trenton has a diverse population of 84,034, with 48.6% identifying as African-American, 12% White, and 34% Hispanic. Trenton also has high levels of poverty where 23.1% live below the poverty line, which is almost double the state’s rate of 10.7%. The community also contends with a high prevalence of chronic diseases including obesity and diabetes. Thirty-nine percent of the population are obese, compared to 29.6% at the county level. Lastly, 13% of Trentonians have diabetes, which exceeds the state and national rates of 11% and 10.8%, respectively.

To address chronic conditions Trentonians face, and address barriers in receiving health care services, THT provides health screenings in community-based settings (e.g., faith-based organizations, senior housing buildings, barbershops and community centers). Types of screenings include A1C, blood pressure, BMI, and social needs. Participants are offered navigation services at screenings events so that they can be connected to both health care and social services. The navigator finds tailored resources and follows-up with participants and providers to ensure that timely care is received. Biometric and social needs data generated from screening events are stored in the Trenton Health Information Exchange (HIE) to facilitate care coordination for providers across Trenton.

Among 150 participants, 135 individuals received a blood pressure screening, 110 individuals had their BMI calculated, and 101 individuals had their A1C checked. Among these participants, 12 had an A1C greater than 7.0%, 70 had an elevated blood pressure, and 83 had a BMI greater than 25. Initial program data also yielded helpful information about social determinants, with 142 participants receiving a social needs screening and 109 of these screenings identifying at least one social need. Dental care was the greatest area of need, with 23% of respondents indicating a lack of dental care. The second most prevalent needs were medical assistance and food insecurity (13%), followed by housing (10%). The navigators provided 897 social service resources to participants to help address any need that was identified during the screening.

The program is in its infancy and continues to improve and evolve. In 2020, it will also provide mental and behavioral health screenings. THT will analyze social needs screening data at the neighborhood level as well as in the aggregate to inform mid- and upstream approaches and identify additional resources needed to address the social determinants of health in Trenton.
Lessons Learned: Using Client/Patient Stories to Teach Interprofessional Learners about Social Determinants of Health (SDOH)

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ABSTRACT
Launched in Fall 2019, the Introduction to Interprofessional Collaboration curriculum is a multifaceted approach for first-year health profession learners to understand how SDOH impact client/patients’ health outcomes, practice collaborative communication skills, and meet interprofessional team members.

DESIGN
620 learners from six health profession programs (audiology, medicine, nursing, occupational therapy, pharmacy and physical therapy) representing 3 institutions participated in the sessions. The primary SDOH components of the three-session curriculum are: a pre-module lecture, poverty simulation, case-panel presentation, small-group brainstorming, and client/patient video, presentation, and feedback. Seven client/patients were recruited from the community and participated in a 3-hour storytelling training to learn how to clearly and authentically communicate a structured story around select SDOH. Each client/patient was un/underinsured and shared their story about navigating the healthcare system to large groups of 100 learners (in 10 interprofessional teams of 10 learners). Each team brainstormed and presented strategies for an assigned SDOH topic to address the client/patient's primary concerns. Clients/patients also shared feedback after the session.

EVALUATION
Learners completed pre/post surveys, including items assessing learning objectives, satisfaction, attitudes toward poverty, and knowledge about SDOH. Client/patients also shared feedback after the session.

RESULTS
Preliminary results provided evidence that the curriculum was effective at increasing learners’ knowledge about SDOH and their ability to identify SDOH that affect health outcomes. Specifically, paired-samples t-tests were conducted to compare learner scores from prior to the sessions to after the sessions on SDOH knowledge items. SDOH items are scored on a scale from 1 (strongly disagree) to 5 (strongly agree). Learners reported significantly greater agreement after the sessions (M_post = 4.67, SD = 0.58) than before (M_pre = 4.37, SD = 0.68, t(545) = 9.01, p <.001) that health risks and quality of life are affected by SDOH (M_pre = 4.43, SD = 0.66, M_post = 4.68, SD = 0.54, t(543) = 8.17, p <.001) indicating learning occurred in the expected direction. In the post survey, 93% of learners (N = 554) reported that as a result of their participation they can identify SDOH that affect client/patient health outcomes, and 95% agreed with the statement that they demonstrated the ability to actively listen to feedback from a client/patient.

LESSONS LEARNED
Inclusion of clients/patients is a powerful teaching method to help learners understand SDOH. Based on stakeholder feedback, the design team is considering how to standardize the experience of each large group of learners and norm the baseline knowledge of learners from different professions, in addition to improving the content, evaluation, and implementation.
Structural Competency in Health Professions Education: A Scoping Review

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ABSTRACT

Structural competency is an emerging medical education framework to teach clinical learners about the social determinants of health, as well as the upstream structural policies that impact health care delivery, access, and quality. Defined by five specific competencies, the framework bridges research on social determinants of health to clinical interventions, and prepares clinical trainees to act on systemic causes of health inequalities. However, it is unclear to what degree structural competency is being incorporated into health professions education curricula. Therefore, our team of clinicians and informationists sought to conduct a scoping review of the current literature, evaluating publications on health professions curricula and educational interventions employing structural competency in the United States. Through a presentation of our preliminary findings, we aim to 1) describe the overall process of conducting a scoping review; 2) define structural competency; 3) describe areas of strength in methods for teaching structural competency cited in the literature (e.g., how is structural competency most often taught and applied); and 4) identify knowledge gaps in terms of the teaching and clinical application of structural competency, as well as future directions of research on the topic.
Innovations in Undergraduate Medical Education Aboard a Mobile Health Unit

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ABSTRACT

Founded in 1992, The Family Van (TFV) is a mobile health clinic that works with residents of low-income Boston neighborhoods to improve the health and well-being of residents and their families. TFV is a well-recognized, integrated safety net program that travels directly to underserved populations and makes care available to those with the greatest need, frequently serving as clients’ primary source of preventive and medical care.

The Family Van is operated by Community Health Workers (CHWs), who are trained lay people trusted by the community to conduct health screenings and provide health information. Volunteers, primarily pre-medical undergraduate students, work alongside CHWs to screen for HIV, STDs, hypertension, diabetes, and other chronic diseases. Through this opportunity to actively engage one-on-one with members of underserved communities, undergraduates develop skills that contribute to their development into culturally competent health care professionals.

Students develop the ability to deliver effective, understandable, and respectful care and health education, which are all key attributes of cultural competency. Their understanding of disparities in the health care system and the effects of social determinants of health deepen. Additionally, students develop empathy for people different from themselves, an important trait for health care professionals who wish to advance health equity.

Furthermore, The Family Van offers a multi-faceted approach to tackling health disparities—undergraduates are also exposed to community engagement, activism and outreach, and resource navigation within the communities they serve. The level of exposure and involvement gained through TFV not only allows students to learn more about the network of local resources but also introduces them to action and change at a larger scale. Working within the “non-traditional” mode of health care delivery of a mobile health clinic instills in volunteers the importance of approaching health inequities and systemic healthcare issues from a novel perspective.

Education of undergraduate premedical students needs to extend beyond the curricular content needed for medical school, to the fundamental experiences that shape skills in interacting with patients and intentions for future clinical practice. Declines in intentions for primary care practice and attitudes towards underserved patients over the course of medical training are widely documented, representing an important target for medical education. In this way, mobile health clinics are uniquely positioned not only to provide students with invaluable experiences and skills for their future healthcare professions, but also to shape their perceptions of underserved communities and the health inequities inherent to such an environment.

“I thought I had understood all that healthcare can look like. I was wrong...on the The Family Van, the relationship between service providers and clients is dramatically altered.” - Volunteer
Understanding Disparities in Rates of Successful Infant Follow Up (IFUP) Visit After NICU Discharge

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IMPORTANCE
Racial and ethnic disparities exist in neonatal care, quality, and outcomes. Specialized infant follow up programs (IFUP) serve as an important component of increased monitoring, diagnosis, and coordination of care among infants discharged from neonatal intensive care units (NICUs) at high risk for neurodevelopmental and functional impairments. Program participation is variable and few studies have examined the impact of race and ethnicity on IFUP visit attendance.

OBJECTIVE
To determine the role of race and ethnicity in attending IFUP appointment and identify factors associated with successful follow up.

METHODS
A retrospective cohort study in a single large academic center with a Level III NICU of 477 infants discharged between 1 January 2015 and 6 June 2017 eligible for referral to IFUP. Primary outcome was at least one visit to IFUP clinic among those who met criteria to be referred. We examined the association of maternal factors (primary English speaking, maternal partnered status), infant factors (gestational age, birthweight, race, NICU co-morbidities (chronic lung disease/bronchopulmonary dysplasia or intraventricular hemorrhage) need for durable medical equipment (home oxygen or G-tube), out-born status (in-hospital birth v. transfer), discharge disposition (home vs. transfer) and social factors (distance from hospital, child opportunity index) with successful follow up by t-test and Fisher Exact Test (for continuous or categorical variables respectively) with a p-value<0.05 to determine significance.

RESULTS
Mean GA and BW was 29w4d and 1,249g respectively. 41.1% were White, 13.8% were Black, 6.9% were Asian, 4.4% were non-White Hispanic/Latino, 5.7% were American Indian/Hawaiian/Pacific Islander/Alaskan and 28.1% were unknown/other. 29.6% had the presence of either CLD or BPD. 18.7% were discharged with a need for durable medical equipment. Univariate analysis found that there was a significant association between all covariables and outcome (p<0.05) except infant sex, out-born status, maternal partner status, distance from hospital and primary English speaking. Multivariable logistic regression ongoing to identify the independent effects of social and health factors associated with successful follow up.

CONCLUSION AND RELEVANCE
Multiple maternal, infant, and social factors are associated with successful IFUP visit and wide racial and ethnic disparities exist in program participation. Identification of modifiable factors associated with successful follow up that are amenable to intervention provide opportunity for meaningful approaches to optimizing successful infant follow up of high-risk preterm infants.
A Systematic Approach to Unveiling the Hidden Curriculum in Medical Education: Using Computer Science to Detect and Reduce Bias

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BACKGROUND
Although physicians strive to give individualized care to their patients, biases continue to exist in healthcare, leading to diminished patient outcomes. A number of these biases develop from the implementation of outdated information regarding the role of social determinants of health such as race, gender, ethnicity, and socioeconomic inequalities in the medical school curriculum.

OBJECTIVE OF EDUCATION INNOVATION
We aim to develop, implement, utilize and evaluate a systematic, computer-based, Bias Reduction in Curricula Content (BRICC) software to 1) effectively identify and 2) decrease bias in medical curricula content.

RESULTS
Through a Quality Improvement (QI) approach via the Plan-Do-Study-Act (PDSA) Cycle, we are currently analyzing the first two years of curricula content text for the University of Washington School of Medicine by manually reviewing every page of text and coding the content with the use of qualitative research software (Atlas.ti). This approach helps 1) identify and 2) quantify the instances of bias in curricula content while at the same time 3) obtaining the data required for computer scientists to develop BRICC software with the use of text extraction and Natural Language Processing (NLP) strategies. These subsequent results will undergo a concurrent analysis by trained research assistants to assess whether bias is accurately being detected by BRICC software. Preliminary data show that our BRICC process has identified numerous instances of ongoing bias in curricula content.

APPLICATION/SIGNIFICANCE
We aim to develop software that will efficiently analyze large corpuses of data to identify bias in medical curricula content. The identification of bias in curricula content will lead to modifications such as addressing racism, gender bias, and the absence of pertinent social and structural determinants of health content. This will help establish an equitable and inclusive education, ultimately improving outcomes for patients and future physicians.

LIMITATIONS
A limitation to our BRICC approach and use of technology and computer science strategies (NLP and text extraction) is that language and social identifiers are constantly evolving—BRICC will, therefore, require ongoing updates. Curricula content creators will also need to be open to altering their content in order to reduce bias. The BRICC computer software, once finalized, can be easily disseminated and adopted by institutions looking to de-bias their curriculum and improve medical education. Our computer program will also be web-based to promote a user-friendly interface.

CONCLUSION
The application of BRICC to reduce bias in medical education (and other health science fields) can play a major role in improving healthcare outcomes for patients in diverse clinical settings and can potentially lead to increased equity for many underserved and vulnerable populations.
Interprofessional Student-Run Free Clinic for the Homeless: Evaluation of a Patient Intervention Capture Survey Process

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PURPOSE

In order to determine interventions completed by students at an interprofessional student-run free clinic Community Homeless Interprofessional Program (CHIP) serving the homeless, underserved, and minority populations, a patient intervention capture survey (PICS) was developed. The PICS generates data shows types of educational interventions and services were provided. Patient records and student interview data were evaluated to ascertain the types of interventions made during the clinic, as well as determine any gaps in documentation of the patient's visit. The purpose of this study was to evaluate the impact PICS has made to improve interventions and the efficiency of the clinic itself.

METHODS

An initial PICS developed in 2016 captured medical education, medications, physical assessments, referrals to other providers, and other services provided by students during the clinic. Patient charts were reviewed retrospectively over an 11-month period. Results were evaluated and the survey was modified twice for easier data capture and better alignment with interventions with the intention of capturing prospectively. The results of this study are from the original PICS and two modified PICS. While comparing the three versions, the values presented below are from original PICS, PICS1, and PICS2.

RESULTS

The number of patients seen at the student-run free clinic was 101 in the original PICS, from January 2016 to December 2016, and 161 in PICS1, from August 2017 to February 2019, and 92 in PICS2, from April 2019 to November 2019. Based on the number of patients seen in PICS2, 95% of patients received some intervention overall. With the original PICS and PICS1, patients who were provided with medical and pharmacy education interventions increased from 58% to 94% with an average of 5.4 to 8.3 patients per month. With PICS2, medical and pharmacy education interventions remained at 94%, with an increased average of 10.6 patients per month. 18% of patients received a prescription from the physician and 10% received over-the-counter medication. Social work interventions increased from 3.2 interventions and 3.8 referrals in the original PICS, to 4.5 and 4.67 respectively in PICS1, to 10.6 and 7.6 respectively in PICS2. PICS2 also introduced a new set of questions regarding physical therapy education, in which 83% of patients were provided intervention with an average of 8.9 patients per month.

DISCUSSION

Overall, modifications made to the PICS survey and clinic assessment forms have increased the quality of documentation. The most important shortcoming of PICS2 was the discrepancy between prescription and over-the-counter dispensing data. The information collected about prescriptions written was not accurate, as some over-the-counter medications were included and some of the medications did not match the over-the-counter formulary. Improvements can be made by cross-referencing the over-the-counter formulary and making future PICS easier to understand. A major increase in social work interventions and referrals was due to increased social work student participation, which was addressed since implementation of PICS1. Since the PICS2 was introduced, a fourth discipline, physical therapy, joined the clinic; additional data regarding interventions will be documented accordingly. Continued follow-up and evaluations of interventions captured during clinic will need to be made given these changes, and student education regarding potential shortcomings will be implemented.
SIGNIFICANCE

As the clinic continues to expand and address the need for quality care for the homeless population, constant changes in evaluation must be implemented in order to assess the education and services provided. Conversely, data and changes made to PICS can be used to assess efficiency of the clinic. Due to its ease of implementation, PICS could be replicated at other student-run free clinics around the country, allowing further improvement in patient care.

REFERENCES


HR-HPV Prevalence by Zip Codes in Chicago, Illinois

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BACKGROUND
The National Health and Nutrition Examination Survey (NHANES) indicates that 20.4% of adult women have High-Risk Human Papilloma Virus (HR-HPV). This indicator has been used as the basis for national guidelines for HR-HPV care. However, new research in New York City and the Midwest shows higher rates of HR-HPV as well as neighborhood level variation of HR-HPV types compared to national samples.

METHODS
As part of a larger study to correlate the effects of structural violence on prevalence of HR-HPV and higher rates of cervical cancer among African American (AA) and Hispanic populations, we identified 13,466 patients residing within the University of Illinois Health Network’s 24 Chicago neighborhood service areas that received Pap smears between January 2014 and December 2018. A retrospective chart review is ongoing, with 9,055 completed.

RESULTS
A preliminary look of the data reveals that 6,555 patients received both Paps and HR-HPV testing. Of these patients, 1,317 had a positive HR-HPV test within our 5-year study period. The overall prevalence in adult women within UI Health Network is 20.09%, comparable to NHANES data. However, some zip codes have HR-HPV rates as high as 27%.

CONCLUSION
Areas within UI Health Network have higher percentages of African American and Hispanic residents, poverty, and structural violence. By further studying indicators like rates of homicide and sexually transmitted infections as potential contributors to HR-HPV prevalence, we aim to improve care across the city and lower the rate of HR-HPV and cervical cancer incidence and mortality in specific geospatial locations.
Universal Screening for Social Determinants of Health and Unmet Social Needs During Well Child Visits at the Internal Medicine-Pediatrics Primary Care Group (PCG MP) Practice

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OBJECTIVES
University of Chicago Medical Center (UCMC) is located in the south side of Chicago, surrounded by some of the lowest-income neighborhoods in Chicago. Children raised in poverty commonly face unmet basic needs such as food insecurity and unstable housing as well as are at higher likelihood of exposure to violence. As a result of these unmet social needs, they are more likely to experience poorer health than children from more advantageous backgrounds. The AAP recommends universal screening for social determinants of health at all well child checks, however there was no standardized system for screening at the University of Chicago Primary Care Group (PCG) med-peds clinic. We designed and implemented a protocol for universal screening for social determinants of health at every well child visit within PCG’s med-peds clinic.

DESIGN
We modified the validated WE CARE and IHELLP social determinants of health screening tools to create a UCMC specific survey. Our screening tool specifically focused on housing insecurity, food insecurity, and difficulty paying for utilities or transportation to medical appointments, need for childcare and exposure to domestic or community violence. We ensured all modifications maintained appropriate language for families with low health literacy. This was distributed at every well child check by the medical assistants during rooming. Providers would share with the family a standardized resource that compiled a list of community services that addressed the specific need that screened positive.

RESULTS
In our initial sample, nineteen percent of our social determinants of health screeners were positive in one or more category. Of the positives, 44% were positive in two or more categories. Need for affordable childcare was the most common insecurity and difficulty paying for utilities was the second most common. Five percent of our population screened positive for food insecurity and two percent positive for housing insecurity. Nearly all families that screened positive in one or more area were then interested in receiving resources to address their needs.

DISCUSSION
The link between adverse childhood experiences, including unmet basic needs, and health is well-known. Pediatricians have the capability to intervene by referring families to the appropriate community service. However, the first step is identifying patients with unmet basic needs and identifying the resources available in our community. We found the patient population at University of Chicago PCG med-peds clinic has an unacceptable rate of positive social determinants of health and are working to appropriately refer with a compiled list of community services. We are currently in the process of calling a randomized sample of families that screened positive to determine the efficacy of our intervention.
The Urban and Community Health Pathway; Celebrating 10 Years as a Longitudinal Curricular Concentration

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ABSTRACT
The Urban and Community Health Pathway (UCH) is one of eight scholarly concentrations, or “pathways,” that students at the Medical College of Wisconsin can select. It is a two to three-year longitudinal curriculum which prepares students to effectively care for patients in underserved settings, engage partners to promote community health, and reduce health disparities. Initially developed within the medical school, the UCH pathway has included both medical and pharmacy students since 2017.

The UCH curriculum consists of monthly interactive workshops termed “core sessions” and a half-day per week of protected “non-core” time in which students participate in enrichment activities, community engaged service-learning and scholarship, culminating in a required scholarly project by the end of year 3. Core sessions use a variety of teaching modalities to address topics such as health literacy, trauma informed care, opioid addiction, and the use of medical interpreters. Students completing 3 years in the pathway attend 24 core sessions, which progress from introduction to community engagement to advanced topics in health disparities. During non-core time, students complete an individualized learning program guided by a faculty advisor to develop civic engagement and leadership skills, experience cultural exchange and personal growth, and translating students’ growing scientific knowledge to real world settings.

To date, 295 students have completed the UCH pathway and 108 (including 22 pharmacy students) are currently enrolled. Program evaluation has previously focused on process outcomes and student satisfaction, which has been strong. For example, in 2016, 63% of UCH students compared with 40% students in all other pathways felt the pathway activities were very valuable to them as future physicians and 65% of students strongly agreed that the UCH pathway activities enhanced their professional growth and development as physicians (versus 41% all other pathways). UCH pathway medical students were more likely to match into family medicine (13% vs 9%), pediatrics (18% vs 2%), and internal medicine (19% vs 13%) than non-UCH pathway students. Future planned evaluation will examine 1) the ways in which students integrate what they have learned in the pathways with their clinical work with patients and 2) the career outcomes (e.g. care for underserved patients) of students who have graduated from the UCH pathway.

In our presentation we will highlight examples of core sessions, service-learning partnerships, and student scholarship to illustrate the work of the UCH pathway. We will discuss lessons learned in this curriculum and welcome the opportunity to share resources and collaborate with other medical educators teaching about social determinants of health and health disparities.
Increasing Gender Awareness and Inclusivity in the Hospital Through the Use of Pronoun Identification Badges

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BACKGROUND
Our transgender and gender-nonconforming community members face significant barriers to healthcare, especially among communities of color. Yet, medical students and residents receive little to no training in transgender healthcare. Additionally, in the age of EMR, a patient’s preferred pronoun is often confused with what is written in the chart or used by a different provider. Research has shown that misgendering youth in a healthcare setting can be incredibly distressing for transgender and non-conforming patients. One effective method to decrease misgendering is to ask patients for their preferred pronouns (1). We would like to propose an initiative to increase preferred pronoun usage as well as raise awareness for community resources for our LGBTQIA patients, many of whom have been systematically marginalized by the medical community.

DESCRIPTION
Residents and faculty will be provided with ID badges (Figure 1), declaring that individual’s pronoun in order to create a more inclusive atmosphere for the hospital LGBTQIA community. It will remind healthcare workers to address preferred pronouns with patients and spread awareness about their use. On the reverse side of the badge we will include a QR code linking to a website with curated resources in Chicago relating to LGBTQIA health and wellness. The website will also incorporate resources for other issues that LGBTQIA youth are disproportionally affected by including housing and food insecurity, mental health, legal resources, and employment opportunities.

OUTCOMES
The IDs will be distributed December 9th along with pre-surveys. We will distribute repeat surveys 12 weeks from launch date. The pre and post intervention surveys will assess the following: 1) faculty and staff perceptions of how inclusive and welcoming our institution is towards LGBTQ+ staff and patients. 2) perceptions of how the IDs will positively or negatively affect workplace environment and patient care. 3) comfort with using gender-neutral pronouns with colleagues and patients 4) knowledge about Chicago area resources for LGBTQ individuals. We also will use analytics to track website use over time to ascertain how often physicians and staff are referring to it.

CONCLUSIONS
We hope to find that this intervention will increase the visual perception that the institution fosters an inclusive environment for LGBTQIA youth in the hospital. By wearing our pronouns visibly on our ID badges, we also hope that this will increase the comfort of the faculty and staff with discussing gender pronouns with their patients as well as with each other. Lastly, we hope that including a link to our resource page on the ID card will give providers a streamlined way to access knowledge about local organizations and resources for the LGBTQIA community in the South Side of Chicago for their patients that require it.
**Caring for Chicago's Kids: Development of Needs-Based Programming for Pediatric Shelters**

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**ABSTRACT**

Kids Shelter Health Improvement Project (KidsSHIP) provides free, quality healthcare to children and adolescents who stay in 9 homeless shelters throughout the Chicagoland area. Residents and attendings from the Division of General Pediatrics at Rush University Medical Center provide healthcare screenings, medications, and weekly appointments to meet patient needs while simultaneously having the opportunity to serve patients in unique social circumstances. With patient needs as the first priority and accessibility in mind, we sought to expand this program to include graduate students from Rush University via Rush Community Service Initiatives Program (RCSIP), a well-established route for future providers to get involved in the diverse urban community surrounding campus. However, from a student and training perspective at Rush, clinical exposure to the pediatric homeless population is largely absent. With this student led branch of KidsSHIP, we sought to connect Rush resources and student energy to this vulnerable and underserved population.

In line with Rush's community-centered approach, we completed a Needs Assessment with a longstanding administrator at a shelter in Lincoln Park.* Our targeted survey was adapted from The Administration for Children and Families 2015 Assessment Tool, magnifying areas of interest: Health and Safety, Wellness and Development, Training, Programming, and Food and Nutrition. In partnership with shelter leaders, we identified specific areas of improvement including safe sleeping habits and nutrition education. Shelter staff endorsed concerns about musculoskeletal growth and infant discomfort in current sleeping environments, and confirmed families may be interested in accessing safer portable cribs. With regards to nutrition, the shelter expressed interest in healthy and affordable eating recommendations, as well as food allergy prevention and breastfeeding education. Future areas of engagement include creating specific curricula and programming to meet the health needs of families in a transient situation.

The underlying goal of KidsSHIP as it grows is to promote wellness and build resiliency within the pediatric population. Data gathered in these initial stages highlights the many areas for potential student contribution — whether via advocacy, monetary support, or connecting graduate student volunteers to on-site opportunities — and reveals unique needs of this population that can be ameliorated in a variety of creative ways. The cohort of professional students involved with Rush KidsSHIP intend to continue these assessments in more locations, looking for patterns of needs and resource shortages across different Chicagoland shelters, and develop programming appropriately.

*Shelter name, location, and additional details kept private for family confidentiality.
Program Attributes and Perceived Effects of the Interprofessional Student Hotspotting Learning Collaborative (Student Hotspotting)

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BACKGROUND/OBJECTIVE
Driven in part by value-based payment policies, healthcare systems are implementing programs to address the medical and social needs of complex patients with high healthcare utilization. Health professions education curricula, however, do not adequately prepare future practitioners for the expanded responsibility of complex patient care. To address this gap, new interprofessional service learning models are emerging that train students in medicine and other health professions to address the needs of complex patients. To date, there is limited evidence regarding the lasting effects of these initiatives on students and the academic institutions they attend. In this qualitative study, we examined The Interprofessional Student Hotspotting Learning Collaborative (student hotspotting) to identify program attributes that may contribute to students' learning experiences and describe the lasting effects of program participation on alumni and host universities.

DATA/SETTING
Our principal source of data for perspectives on student hotspotting program attributes and effects was alumni interviews. Faculty interviews provided information on the institutional context in which student hotspotting was initiated and implemented in the first two cohort years and the program’s influence on university activities and initiatives in the years following participation.

DESIGN/METHODS
The study sample was purposefully limited to alumni and faculty from the first two program cohorts (2014-2015; 2015-2016) to glean long-term perspectives on program effects. Participants were recruited via email to take part in a 45-60 minute semi-structured interview. Transcribed interviews were coded and analyzed by the study authors to identify dominant program attributes and effects, with investigator triangulation utilized to compare findings and resolve discrepancies.

RESULTS
Twenty-one program alumni and 19 faculty members were interviewed. Program attributes identified as contributing to alumni’s learning experiences promoted student-patient relationship building, understanding of social determinants of health, interprofessional education, and familiarity with the healthcare system. These experiences had lasting effects on alumni’s professional outlook and practice. Half of alumni reported that program participation influenced their careers or education, including the decision to pursue primary care and work in community-based settings. Faculty-reported impacts of program participation on the host universities were modest. Faculty described challenges sustaining student hotspots and in scaling the program to reach more students.

CONCLUSIONS
Despite program sustainability challenges, student hotspots serve as a unique model in complex patient care training for medical and other health professions students. The program’s core attributes emphasizing patients’ social contexts, interprofessional education, and health systems exposure have lasting effects on program alumni’s professional practice, several years post-participation.
Community Partnership in Action: Stocking Asthma Rescue Medication in Illinois Schools

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BACKGROUND

Asthma is a critical health issue in Illinois, particularly for students. Only 25% of Illinois children with asthma have the disease under control. Many barriers prevent students from accessing albuterol in school. While Illinois previously passed stock epinephrine legislation, nothing existed for stock albuterol. Our goal was to pass a stock albuterol bill in Illinois and to provide access to potentially life-saving medications in the setting of an asthma emergency.

METHODS

Illinois public health organizations and lung health advocates partnered to improve asthma-related policy in Illinois. In 2017, the Legal Council for Health Justice (LCHJ) and Respiratory Health Association (RHA) began an advocacy process to amend a 2014 law providing stock epinephrine in schools to allow for stock albuterol. Ten other states passed similar legislation, providing a potential framework for stock asthma rescue medication policy in Illinois.

An advisory group of key stakeholders including healthcare providers, chronic disease coordinators from local and state health departments, nurses, Chicago Public Schools and other school district administrators, advocacy leadership, and legal counsel. The advisory group convened twice for in-person meetings, discussing gaps in school-based asthma in Illinois, lessons learned from similar asthma policy in other states, and key policy considerations for Illinois. LCHJ and RHA then developed and disseminated an Issue Brief on stock asthma rescue medication in schools. Legislation was drafted and then introduced to the Senate in March 2018.

Upon introduction to the Illinois legislature, a bill factsheet was created to provide elected officials an overview of the health issues and the benefits of the proposed bill. The advisory group secured diverse organizational support from school, health, and legal experts throughout Illinois. School nurses and a pediatrician testified in support of the bill to address health-related concerns of lawmakers.

RESULTS

Stock Asthma Rescue Medication in Schools (Public Act 100-0726) passed the Illinois Senate and House unanimously and was signed into law by Illinois’ Governor in August 2018. Implementing rules are currently being drafted. The policy allows for schools to store stock asthma rescue medication and stipulates that medication can be administered by any school nurse or trained school personnel. Those administering stock asthma medication are protected from liability by pre-existing laws in Illinois, ensuring that neither students nor staff have to worry about accessing or administering medication.

CONCLUSION

Access to life-saving medications for any chronic condition, especially asthma, is paramount. Legislation successes like Stock Asthma Rescue Medication in Schools serve to show the value of community-based advocacy and engagement and provides valuable lessons to groups in other states aspiring to pass similar legislation. “Preventing Asthma Emergencies in Schools” an Advocacy Case Study, was published in PEDIATRICS Volume 145, number 4, April 2020 and can be open accessed at: https://pediatrics.aappublications.org/content/pediatrics/early/2020/03/18/peds.2019-1995.full.pdf
Patient and Caregiver Reported Knowledge Gap of Assistive Technology Utilization and Access by Physicians in Latinos with Disabilities

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ABSTRACT
A key player in the implementation and access to interventions, like assistive technology (AT), in young children and persons with disabilities (PWD) is the physician. However, it is important to note that the physician has to consider cultural values and parental beliefs, as family members and caregivers play a critical role in the service provision process. Unfortunately, access to AT is not readily available for everyone, especially people in underserved communities such as Latinos. One of the biggest barriers of Latinos seeking and obtaining AT services is a lack of information about the availability of these services. The literature suggests that persons with disabilities (PWDs) from culturally and linguistically diverse (CLD) populations experience barriers to accessing AT services (Lindsay & Tsybina, 2011). Research and clinical experience indicates that PWDs from CLD populations are less likely to have AT and are more likely to report unmet AT needs.

This project focused on delivering culturally competent information as the recognition of cultural and social factors improve the effectiveness of clinical and educational services to minority populations (Soto et al, 1997). We questioned if the barriers to access were based on low health literacy or provider referral practices. The investigators conducted educational seminars at various community organizations that serve the Latino population. Participants were given information on the purpose, risk, and benefits of the study on the subject information sheet. After obtaining consent through the subject information sheet, participants were provided with a pre-seminar questionnaire to measure their current knowledge of AT prior to the presentation. Afterward, participants listened to a presentation on AT which included general background information, who will benefit, information on how to access AT and utilize AT in multiple settings, and where to access services in the community. The presentations were conducted in Spanish or English, given by native or proficient speakers. At the end of the session, participants provided written feedback via a post-seminary questionnaire.

Our pre and post-survey analysis indicated that 64% of our participants have heard of AT. In addition, 88% of the participants reported that AT would greatly improve the lives of PWD while 92% indicated that AT would greatly improve the lives of their support networks. Nevertheless, 80% of our participants reported that their primary care physician (PCP) did not inform them about AT services. Lastly, 60% considered our educational sessions to greatly improved their knowledge of AT.

Considerable evidence supports the importance of culturally and linguistically relevant educational sessions about AT to Latino communities. Many vulnerable families rely on guidance and referrals to services like AT by their PCP. In addition, future projects will involve further research of the PCP’s knowledge of AT and their role as the primary source of information about AT in order to address possible communication gaps between the health care provider and the PWD and their family.
An Exploration of the Narratives of Black Female Physicians’ Experiences of Race and Gender-Based Discrimination

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BACKGROUND
Recently, there has been a strong effort to increase racial and ethnic diversity in medical school enrollment in order to increase diversity within the medical professional overall. Black physicians are underrepresented in medicine and face discrimination as people of color in their training, clinical and everyday life experiences. Furthermore, Black female physicians face intersectional discrimination related to identifying as women as well as being people of color, with negative impacts on well-being, physically and mentally, as well as socially. The focus of this study was to explore and describe the experiences of race- and gender-based discrimination among Black female physicians, both in medical education and in the practice of medicine.

PURPOSE
We aim to describe Black female physicians’ lived experiences of race and gender-based discrimination and the intersectionality of the two throughout their careers in the medical field.

METHODS
A trained interviewer conducted semi-structured qualitative, in-depth interviews with twenty Black, cis-gender, female physicians working within various fields of medicine. All interviews were digitally recorded and professionally transcribed. Using a pragmatic analytic approach, all transcripts were read and coded with the primary analyst identifying key emergent themes.

RESULTS
Two overlapping themes emerged across participants: 1) experiencing and managing microaggressions and biases in the workplace; and 2) strategies to overcome experiences of intersectional discrimination. Each theme contained several subthemes. Our main findings indicate that Black female physicians continue to experience significant discrimination in the medical care workplace not just from patients but also colleagues and other medical professionals; furthermore, while participants described some attempts to mitigate discrimination, overall they did not identify adequate discussions or interventions taking place at any level of the medical careers.

CONCLUSIONS
Black female physicians who experience race and gender-based discrimination find ways to overcome discrimination, including both trying to prevent it in the first place, which is the most effective way to address this serious social and health problem. There is need for more interventions at all levels of training to prevent racial and gender discrimination from occurring in the future.
Why Promoting Families’ Home Languages is Good for Public Health

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ABSTRACT

Rich interactions in the home language are imperative for children’s early brain development. Unfortunately, language ideology and language policies that discourage the use of home languages can reduce health equity. Recognizing this as health care providers means implementing policies and practices that honor home language use, support dual language acquisition, and give evidence-based strategies for parents.

Infants have the innate capacity to acquire two languages and can easily separate the sounds of each language. Language nutrition is about rich exchanges between caregivers and babies. These exchanges are richest when they happen in the language the child first hears and the language the parent or caregiver is most comfortable speaking and for many American families, this is not English. By reinforcing the primacy of the home language, children will be exposed to more complex ideas, abstract thoughts, and expanded vocabulary, which are crucial for children to develop important cognitive and language skills.

In this paper, we argue that language use—and thus recommendations by health professionals—is a critical determinant of health. We review language policy in society, and discuss the theoretical tenets of why and how families’ language use affects their children’s early brain development. We then review key empirical findings that show why families’ home languages and cultures must be supported and encouraged by the pediatric healthcare workforce. The paper concludes with recommendations for clinicians who serve families and young children including interprofessional workforce training with community partners such as librarians and early educators.
**Diabetes Perspectives: A Qualitative Study Among Hispanics in Cleveland**

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**INTRODUCTION**

Type 2 diabetes mellitus (T2DM) disproportionately affects Hispanics. Previous community surveys reported low diabetes literacy and numeracy in the community, and underscored the need to investigate barriers and strategies for management. This study examines the Cleveland Hispanic community’s perceptions of diabetes, barriers to health, resources available, and strategies for T2DM prevention and management.

**METHODS**

Using community engagement strategies, we partnered with local organizations to recruit Hispanic adults to participate in in-depth focus groups (FGs) in Spanish. We analyzed the qualitative data with iterative coding and theme analysis using ATLAS.ti 8, revising overarching themes until consensus was achieved. The Cleveland Clinic Foundation IRB granted approval for the study.

**RESULTS**

Two focus groups with 19 participants (16 women and 3 men) from the Cleveland Hispanic community were held, from December 2018 to March 2019. Participants demonstrated general knowledge about T2DM and its association with lifestyle and genetic factors. The most commonly identified barriers to T2DM prevention and management were time constraints, high cost of healthy food and medical supplies, and lack of motivation. Participants described bilingual care and community-based programming as assets and expressed interest in group activities focused on healthy eating and exercise for the whole family.

**CONCLUSION**

This exploratory study clarifies the perspectives of the Cleveland Hispanic community regarding the role of medical professionals and community resources in managing T2DM. Structural and personal barriers and desire for group and family-based interventions emerged and informs future clinic and community-based initiatives and advocacy among Hispanics with T2DM.
Online Blogs in Medical Education: Bridging Community and Clinical Experiences

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BACKGROUND
In response to the American Medical Association mission to achieve health equity, medical education is tasked with creating opportunities to teach the complexities of societal factors affecting health outcomes. Online blogs can facilitate student discussion and bridge learning community and clinical experiences. We created a blog space with the objectives to: 1. Demonstrate the application of an online blog to promote discussion of social determinants of health (SDH); 2. Apply a scoring system to assess blog posts for reflection on personal experience.

METHODS
75, 3rd year medical students participated in a longitudinal didactic series on health systems science and focused one session on visiting various community organizations geared to assist underserved populations. Students blogged their experiences and application of learning objectives to their future careers as physicians, and discussions were facilitated by Internal Medicine Resident reviewers. 2 reviewers scored the blogs (1-4) for personal reflection and for comprehension of core principles. The project was approved by the Cleveland Clinic IRB.

RESULTS
45 blog posts were written by medical students on the topic of SDH, and 57 resident responses were posted. The average score for personal reflection was 3.04/4. The average score for comprehension of core principles was 3.69/4.

CONCLUSIONS
The CCLC blog provides an adaptive learning tool to facilitate reflection on SDH, group discussion, and application to clinical care in the clerkship. The platform required limited faculty time and encouraged personal reflection and discourse among medical students and residents. The scoring system used allows for objective feedback for students.
Syrian Refugee Self-Reported Health Status and Experiences of Care

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BACKGROUND
The Syrian conflict has displaced 12 million Syrians, with 6 million seeking refuge elsewhere. Approximately 18,000 Syrian asylees are in U.S.A., with Illinois hosting one of the largest populations. Effectively integrating refugees into the U.S.A. healthcare system is a critical challenge.

STUDY PURPOSE
Explore perspectives of Syrian refugees in Chicago regarding preventative health to identify priorities for improving their health and well-being.

METHODS
Cross-sectional survey of Syrian refugees (N=49) recruited from the Syrian Community Network, a non-profit organization.

RESULTS
Participants were 53% female; average age 37 years. PROMIS Health measures: mean physical health score - 3.05 (SD=0.77); mean mental health score - 3.11 (SD=0.91). Hypertension, anemia, ear-nose-throat diseases, arthritis, and depression were most prevalent chronic diseases. Overall, participants reported more contact with primary care providers (PCPs) in U.S.A. (43% seeing a PCP more than five times/year) versus in Syria (25%). Participants reported similar levels of satisfaction with PCP in U.S.A. (12% very satisfied) versus in Syria (10%). Participants valued the importance of preventative care with 55% disagreeing with “if they do not have a chronic disease, then they do not need to see a doctor regularly” and 65% disagreeing with “if they do not have symptoms, then they do not need regular screening.”

CONCLUSIONS
The findings of our study shed light on Syrian refugees’ self-reported health-status and experiences of care in their country of origin and their country of adoption. These findings can inform development of interventions and health policy to address health equity for this particularly vulnerable population.
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