# HEALTH EQUITY DAY

MAY 11, 2021 | 9:00 AM - 2:00 PM





## **ABOUT HEALTH EQUITY DAY**

This half-day conference aims to raise awareness and encourage action around the systemic health disparities that exist across racial, ethnic, cultural, and social groups, while also recognizing interventions and research across the Department of Medicine centered on health equity and advanced by our DOM community members. The event brings together stakeholders from all divisions and ranks, providing a platform to share compelling new findings, facilitate scientific exchange, and identify opportunities for collaboration.

Health Equity Day focuses on the latest trends, challenges, and opportunities in both healthcare and our academic medicine workplace, with a specific focus on how to best serve increasingly diverse patients, learners, faculty and staff.





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## **Heath Equity Day 2021 Schedule of Events**

9:00 am - 9:10 am Welcome

David Stephens M.D., Chair, Department of Medicine

9:10 am - 9:15 am Introduction

Jada Bussey-Jones, MD, Vice Chair for DEI, Department of Medicine

9:15 am - 10:00 am **Featured Presentations I** 

> 9:15 am - 9:25 am **Featured Narrative Presentation**

9:25 am - 9:35 am Featured DEI Professional Development Presentation

9:35 am - 9:45 am Featured Education Presentation

9:45 - 10:15 am **Concurrent Poster Session I** 

> **Group 1:** Research Group 5: Community, Advocacy, Policy Group 2: Research Group 6: Community, Advocacy, Policy **Group 3:** Clinical Quality **Group 7:** DEI Professional Development

**Group 4:** Education **Group 8:** Case Competition

10:15 am - 10:30 am: **Break** 

10:30 am - 11:25 am Featured Presentations II

> 10:30 am - 10:40 am Featured Research Presentation

10:40 am - 10:50 am Featured Clinical Quality Presentation

10:50 am - 11:00 am Featured Community, Advocacy, Policy Presentation

11:00 am - 11:30 am **Concurrent Poster Session II** 

> **Group 9:** Research **Group 13:** Clinical Quality

Group 10: Research Group 14: Community, Advocacy, Policy Group 15: Community, Advocacy, Policy Group 11: Research Group 12: Clinical Quality Group 16: DEI Professional Development

11:30 am - 12:00 pm: Lunch

12:00 pm - 1:00 pm **Keynote Presentation** 

Lisa Cooper, M.D., MPH

Bloomberg Distinguished Professor, Equity in Health and Healthcare

James F. Fries Professor of Medicine

Director, Johns Hopkins Center for Health Equity

1:00 pm - 1:30 pm **Awards Presentation and Final Remarks** 

David Stephens, M.D.

## **Session Access**

Main Session: Welcome, Introduction, Featured <u>Join Session</u>

Presentations, Keynote, Awards

## **Concurrent Poster Presentations**

Group 1: Research	Join Session
Group 2: Research	Join Session
Group 3: Clinical/ Quality	Join Session
Group 4: Education	Join Session
Group 5: Community, Advocacy, Policy	Join Session
Group 6: Community, Advocacy, Policy	Join Session
Group 7: DEI Professional Development	Join Session
Group 8: Case Competition	Join Session
Group 9: Research	Join Session
Group 10: Research	Join Session
Group 11: Research	Join Session
Group 12: Clinical/ Quality	Join Session
Group 13: Clinical/ Quality	Join Session
Group 14: Community, Advocacy, Policy	Join Session
Group 15: Community, Advocacy, Policy	Join Session
Group 16: DEI Professional Development	Join Session

## **Keynote Speaker**

## Lisa Cooper, MD 12:00 pm - 1:00 pm



Dr. Lisa A. Cooper is a Bloomberg Distinguished Professor at Johns Hopkins University School of Medicine and Bloomberg School of Public Health. She is also the James F. Fries Professor of Medicine in the Division of General Internal Medicine and a core faculty member in the Welch Center for Prevention, Epidemiology, and Clinical Research, and she holds a joint appointment in the School of Nursing. Dr. Cooper was born in Liberia, West Africa, where she witnessed the effects of social deprivation on the health of many of her fellow citizens and developed the passion for her career in medicine and public health.

A general internist, social epidemiologist, and health services researcher, Dr. Cooper was one of the first scientists to document disparities in the quality of relationships between physicians and patients from socially at-risk groups. She then designed innovative interventions targeting physicians' communication skills.

patients' self-management skills, and healthcare organizations' ability to address needs of populations experiencing health disparities. She is the author of over 180 publications and has been the principal investigator of more than 15 federal and private foundation grants. She has also been a devoted mentor to more than 60 individuals seeking careers in medicine, nursing, and public health.

Currently, Dr. Cooper directs The Johns Hopkins Center for Health Equity, where she and her transdisciplinary team work with stakeholders from healthcare and the community to implement rigorous clinical trials. identifying interventions that alleviate racial and income disparities in social determinants and health outcomes. The Center also provides training to a new generation of health equity scholars and advocates for social change with policymakers.

A compassionate physician, prolific researcher, and devoted mentor, Dr. Cooper has received several honors for her pioneering work. These include a prestigious 2007 MacArthur Fellowship, elected membership in the National Academy of Medicine, the American Society for Clinical Investigation, the Association of American Physicians, and Delta Omega Public Health Honor Society. She has been listed on Thomson Reuters' top 1 percent "most cited" list for Social Sciences several times. Dr. Cooper has received the George Engel Award from the American Academy on Communication in Healthcare, the James D. Bruce Memorial Award for Distinguished Contributions to Preventive Medicine from the American College of Physicians, the Herbert Nickens Award from the American Association of Medical Colleges for outstanding contributions to promoting social justice in medical education and health care equity, and the Helen Rodriguez-Trias Social Justice Award from the American Public Health Association.

In 2011, Dr. Cooper was appointed by Governor Martin O'Malley to the Maryland Health Care Quality and Costs Council where a special workgroup on disparities made recommendations leading to the passage of the Maryland Health Improvement and Disparities Reduction Act of 2012. She has testified at U.S. Congressional hearings regarding health disparities, diversity in the healthcare workforce, cultural competency training of health professionals, and funding for biomedical research.

Dr. Cooper received her B.A. in Chemistry from Emory University and her M.D. from the University of North Carolina at Chapel Hill. She completed her internship and residency in Internal Medicine at the University of Maryland Medical Center.

## **Category Groupings**

	Presenting Author		Group	
Category	Last Name	Title	#	Zoom Access
	Apata	COVID-19 infection control measures and outcomes in urban dialysis centers in predominantly African American communities	3	<u>Join Session</u>
	Bhatia	Effects of COVID-19 on the Emergency-Only Hemodialysis Cohort at Grady Health System	3	
	Claudio-Gonzalez	Initiation of a Hepatitis B Vaccination Program in the Emergency-Only Hemodialysis Population at Grady Memorial Hospital	3	
	Cobb	Eliminating Race-Based eGFR Reporting at Emory Healthcare	3	
	Dantes	Comparison of hospitalization burden and outcomes by gender and racial groups during the early COVID-19 pandemic in four Emory Healthcare hospitals	12	
uality	Haynes	Outcomes of a Med-Psych Co-Management Clinic in an Urban Academic Safety-Net Primary Care Center	12	Join Session
Clinical Quality	Haynes	System-Based Approaches to Depression Remission in the Grady Primary Care Center: Early Successes and Challenges	12	
Ö	Pangulur	How limited access to water triggered life- threatening illness and death	12	
	Quigley	The Effect of an Algorithmic Approach to Patients Who Refuse Care But Lack Medical Decision- Making Capacity on Physician Decision-Making and Moral Distress	13	Join Session
	Rainer	Systemic Infection with a chance for Systemic Improvement	13	
	Schmidt	Ethics and Trauma Informed Care for Challenging Outpatient Encounters	13	
	Schneider	The Gender Center: Providing Healthcare for Trans and Gender Non-Binary Patients in the South	13	
	Smith	The provision of nutrition therapy to improve outcomes in patients with congestive heart failure	-	-
Community, Advocacy, & Policy	Alam	Dismantling social barriers as healthcare: building bridges with the Healthcare Community Coalition app	5	Join Session
	Belak	Enhancing Children's Access to Health Education Through the Elementary Pediatric Health Curriculum (EPHC)	5	
	Beriwal	A student-led outreach program to build trust in COVID-19 vaccination and increase uptake among patients at Grady Hospital	5	
	Chang	Navigating social and socioeconomic barriers to care through Atlanta Interprofessional Student Hotspotting: A case report	5	
un u	Edelson	Understanding and Addressing Food Insecurity in Pediatric Patients Living with HIV Infection	6	
Com	Gold	Atlanta Interprofessional Student Hotspotting: Connecting Patients with Community Resources; A Case Report	6	Join Session

	Gourisankar	Voting is Healthy: Medical student voter and	6	
Community, Policy, & Advocacy		volunteer mobilization effort		<b>Join Session</b>
	Han	Establishing a Centralized, Multidisciplinary Post- COVID Clinic in a High-risk, Underserved Population	6	
	Hong	Lessons Learned from Organizing Georgia's Healthcare Community in the Fight for Voting Rights	14	
	Lue	Physician expert declarations: a pathway to release for migrants in detention centers	-	Join Session
	Marcovitch	Recognizing Heterogeneity Within the High Need, High Cost Patient Population is Central to Developing Targeted Interventions	14	
	T. Olsen	Atlanta Interprofessional Student Hotspotting: Addressing Social Isolation during COVID-19 at Grady Memorial; A Case Report	14	
n www	E. Olsen	Voting is Healthy: Grady Hospital's Voter Engagement Campaign	15	
Ö	Pinzon	COVID in Spanish for the Latinx community	15	
	Taghvaei	How Limited English Proficiency Led to Limb Amputation	15	Join Session
	Treiman	"Ableism in Medical School Admissions: Recommendations for Inclusive Technical Standards"	15	
_	Alvarez	Expanding the Pipeline of URiM Investigators: The Work of the DOM Research Affinity Group	7	Join Session
DEI Interventions for Professional Development	Bussey-Jones	A Call to Action During Twin Pandemics:  Mobilizing URiM Faculty in a Faculty  Development Program	7	
	Bussey-Jones	Shattering the glass ceiling: An Innovative Approach to Career Development of Diverse Faculty	7	
s for	Franks	Increasing the Ranks of Black, Indigenous, People of Color and Women in Research	7	
entions for Pr	Henry	Making an Impact with E.M.P.A.C.T.: A New Pilot Mentoring Program for URiM Learners	-	
erver D	Hijab	Developing an Anti-Racism Medical Education Curriculum	16	Join Session
DEI Inte	Kleber	The Young Physicians Initiative: A Sustainable Model of Mentorship to Increase Diversity in Medicine	16	
	Taylor	Novel Curriculum to Combat Healthcare Disparities	16	
Education	Al-Atassi	You4Prevent: Bridging COVID-19 Health Disparities in Clarkston with Pre-Medical and Medical Students	-	Join Session
	Bennett	Teddy Bears and Tykes: Health Promotion to Children of Immigrants	4	
	Greenhouse	Exploring Health Systems Science: Turning High- Risk Patient Outreach into Interprofessional Curricula	4	
	Munye	Promoting Increased Patient Engagement with Management of Their Health	4	
	Murugan	Hack Your Way Through Health Systems Science	4	
	Olsen	Leveraging Medical Student Strengths for Community Outreach: Virtual COVID-19	4	

		Education for Underrepresented High School		
	_	Youth		
	Bess	Lipid Profile Differences Among Premenopausal	1	
		And Postmenopausal African American Women		
	Dharrai	And Implications For Treatment Per Guideline		
	Bhavani	Simulation of Scarce Resource Allocation in	-	
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	Chou	scoring systems across different ethnicities in	1	
		MIMIC-IV		
	Cobb	Calciphylaxis in a Predominantly African-	1	
	0000	American Urban US Patient Population	•	
	Collins	Barriers to Using Medication Assisted Treatment	1	
		for Alcohol Use Disorder		
	Daniel	Associations between Menstrual Hygiene Product	2	
		Use and Vaginal pH levels in Black Women		
	Doraivelu	Parenting intentions and desires among young	2	
		Black gay and bisexual men living with HIV		
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		Identification of Refugees & Immigrants in		Join Session
		Electronic Health Records		
	Fatade	Advancing Equity For Patients with Heart Failure	2	
		in the Covid-19 Pandemic: A Case Study for		
	Fluker	Team-Based Care and Innovation Successful Large-Scale, Primary Care-Based	2	
	riukei	Hepatitis C Treatment in an Urban, Underserved	2	
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<del>č</del>	Fonseca	Antiretroviral Regimen Changes and	9	
arc	1 0113000	Contraception Use Among Reproductive-Aged	3	
Ö		Women with HIV Receiving Dolutegravir-based		
Research		Treatment, 2018-2019		
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		stewardship?		
	Franks	Beyond Collection of Demographic Data:	9	
		Stratification of Outcomes as a First Step to		loin Session
		Address Health Disparities in a Health System		Join Session
	Hong	Literature review of adverse childhood	9	
		experiences and their association with healthcare		
	ALWong	utilization and social determinants of health Hidden hypoxaemia associated with higher	9	
	Al Wong	mortality and organ dysfunction: Pulse oximetry	9	
		misrepresents hypoxemia in critical illness,		
		especially in Hispanic and Black patients		
	Lea	Racial and Ethnic Disparities in Renal	10	
		Replacement Therapies and Patient Age		
	McDaniel	Maintenance of an HCV Treatment Program in a	10	
		Safety-Net Health System at the Onset of the		
		COVID-19 Pandemic Using a Telehealth Model		Join Session
	Smothers	Racial and Ethnic Differences and Clinical	10	<u> </u>
		Outcomes of COVID-19 Patients Presenting to		
		the Emergency Department		
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		Cohort of African American Women Attending a		
	Cubromonyo	Community Blood Pressure Screening Program  A Mixed-methods Approach to Understanding the	11	Join Session
	Subramanya	Perspectives, Experiences and Attitudes of	11	Join Session
		1 010pootivoo, Exponentees and Attitudes of		

		Cognitive Behavioral Therapy for African Americans with Type-2 Diabetes		
	Trammell	Protective Factors Associated with Normal	11	
		Cognition in Persons Age 80 Years and Older		
	Vasta	Cardiovascular Risk Factors in Younger Black	11	
چ		Women: Results from the 10,000 Women		Join Session
2		Community Screening Project		Julii Sessiuli
Resea	Veeramachaneni	Inpatient HCV Testing, Linkage to Care and	11	
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ď		Screening Program		
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## **Featured Presentations**

#### **Narrative**

9:15 am - 9:25 am

### **DEI Professional Development**

9:25 am - 9:35 am

## Making an Impact with E.M.P.A.C.T.: A New Pilot Mentoring Program for URiM Learners Henry TL, Freeman C, Adeagbo S, Hood YS

Background: The purpose of the EMPACT (Engage, Mentor, Prepare, Advocate for, Cultivate, and Teach) is to provide students who self-identify as an underrepresented in medicine (URiM) and/or those who may come from disadvantaged backgrounds, with experiences that foster timely and successful matriculation through medical school in a supportive and inclusive learning environment. Methods: The EMPACT Pilot Program was conducted 2019-2020 academic year. A total of 19 EMPACT mentorship groups were created consisting of two resident/fellow/faculty mentors and three-four medical students for a total of 68 medical students and 38 mentors. The mentoring groups met separately an average of 3 times during the program. Additionally, four workshops were held: Microaggressions and Bystander, Wellness during COVID-19, Overcoming the Imposter Phenomenon and a CV building. A final EMPACT Wrap-up and Awards event was held in May 2020 in which outstanding mentors and students were recognized. Outcomes: When comparing before and after the EMPACT program, there was a significant increase for mentors or students in feeling that there is a good social support system at Emory SOM and there was a significant decrease in the amount of medical students that feel they need an advocate at the Emory SOM. The majority of students were satisfied or very satisfied with the EMPACT educational experience (79%) and the program overall (85%), 94% students would recommend the EMPACT program to other students. 93% of mentors would recommend the EMPACT program to other mentors. Conclusions: Overall a successful program. We met our program goals to foster a sense of community, strengthen social support with structured mentoring relationships for URiM students and fostered personal and professional growth.

#### Education

9:35 am - 9:45 am

## You4Prevent: Bridging COVID-19 Health Disparities in Clarkston with Pre-Medical and Medical Students

Kim AE, Al-Atassi R, George M, Schmidt SR, Kelli HM

Background and Aims: Members of the underserved community of Clarkston. Georgia face disparities in healthcare that have been exacerbated by the COVID-19 pandemic, whose social restrictions pose challenges for community-based programming. Meanwhile, pre-medical students aspiring to serve in needy communities often lack resources for a medical school acceptance. You4Prevent hopes to promote health and prevention in Clarkston while mentoring underrepresented pre-medical students. By training pre-medical students to volunteer alongside medical students, we aim to decrease health disparities, diversify the physician workforce, and inspire members to serve needy communities. *Interventions*: After training members in Motivational Interviewing and the importance of healthy living, we have two pre-medical students and one medical student lead "COVID for Kids" sessions via Zoom to elementary school students. They also conduct webinars with parents on COVID-19 vaccination. They have created informational videos and handouts on COVID-19 and healthy living, which are available on our website in several languages. Medical students provide mentorship sessions to pre-medical students on topics like MCAT preparation. Results/Outcomes: Since September 2020, we have taught COVID for Kids to all 3rd, 4th, and 5th grade students at a Clarkston elementary school. We have led one Vaccine Info/Q&A session with parents, with four more in April. We have presented three mentorship sessions, with one more in April. Conclusion: Community-based interventions promoting preventive health, particularly as it relates to the COVID-19 pandemic, can be successfully implemented in a virtual

format. Using underrepresented pre-medical students as volunteers assists and inspires them on their journeys to be...

#### Research

10:30 am - 10:40 am

### Simulation of scarce resource allocation in critically III patients with COVID-19

Bhavani SV; Luo Y; Miller WD; Sanchez-Pinto LN; Han X; Mao C; Sandıkçı B; Peek ME; Coopersmith CM; Michelson KN; Parker WF

Objective: The coronavirus disease 2019 (COVID-19) pandemic has prompted policymakers to develop widely varying protocols to allocate critical care resources to prepare for a crisis of extreme shortage. The inefficiencies and disparities that could result from implementing critical care allocation protocols are unknown. The objective of the study was to determine the intended and unintended consequences of these critical care resource allocation protocols. Methods: Critically ill adult patients hospitalized with COVID-19 from 8 hospitals were included in this study. Six critical care allocation protocols were tested using Monte Carlo simulation applied to real patient data. The primary outcome evaluated was survival to hospital discharge for patients allocated ICU beds under each of these protocols. Results: The combined cohort (n=2,363) had a median age of 64 years (IQR 52-75) and was 32% Black, 35% White, and 25% Hispanic. Simulating a 50% ICU bed shortage, survival of patients allocated ICU care was higher with lottery allocation than treating the sickest-first (80% vs. 69%). The New York (87%), Maryland (91%), and Pennsylvania (91%) protocols improved survival compared to a lottery. The Maryland and Pennsylvania protocols did not allocate any ICU beds to patients with severe pre-existing medical conditions. Compared with the outcomes under a lottery protocol, Black patients were significantly less likely to receive ICU beds under the Pennsylvania protocol, and less likely to receive a ventilator under all state protocols. Conclusion: State allocation protocols could save more lives than a lottery but could create disparities in allocation. Simulation modeling can inform policymakers balancing the inherent ethical tradeoffs in scarce resource allocation.

### **Clinical Quality**

10:40 am - 10:50 am

The provision of nutrition therapy to improve outcomes in patients with congestive heart failure Smith M, Belak L, Samnadda L, Mooney K, McLean A, Egwuogu H, Blemur D, Schmidt SR

Background: A well balanced, low-sodium diet is essential for the health of patients with congestive heart failure (CHF). Open Hand Atlanta is a social service organization dedicated to helping members of the community better manage chronic illnesses like CHF through Comprehensive Nutrition Care. Aim: To determine if medically tailored meals and Medical Nutrition Therapy (MNT) following discharge improve health outcomes for patients hospitalized with CHF. Test of change: Open Hand Atlanta partnered with Grady Hospital to provide medically tailored meals and MNT to patients following hospitalization for an acute exacerbation of CHF. Participants were eligible if they were at high risk for readmission and food insecure. Participants who completed the program received 3 meals a day for 3 months, and 3 counseling sessions with a Registered Dietitian Nutritionist. Patients' readmission rate, cardiology appointment adherence, anthropometric data, and nutrition metrics were evaluated throughout the intervention. Results: Of the 38 patients who enrolled, 15 completed 3 months of MNT and daily medically tailored meals. Among these patients, 73% avoided hospital readmission and 47% adhered to their cardiology follow up appointments. Patients also saw a 53% increase in fruit/vegetable consumption, a 48% decrease in sodium intake, and a 12% decrease in saturated fat intake. Ultimately, 9153 medically tailored meals were delivered along with MNT to high-risk patients with CHF. This intervention may improve health status, promote health equity, and prevent re-hospitalization among this patient population. Metrics for a matched retrospective cohort of controls are currently being analyzed to better assess the efficacy of this intervention.

Community, Advocacy, & Policy

10:50 am - 11:00 am

## Physician expert declarations: a pathway to release for migrants in detention centers Lue N, Goodall H, Beriwal S, Rebolledo PA, Khoury M, Zeidan A

Problem: The immigration/asylum system in Georgia is particularly unwelcoming, holding among the nation's highest numbers of detained immigrants in notoriously harsh conditions with an asylum grant rate of less than two percent. In 2019, The Georgia Human Right Clinic (GHRC) was founded to ensure all Georgia residents, regardless of legal status, have access to basic rights, including: healthcare, legal representation, and personal and familial support. This mission is accomplished by conducting asylum evaluations, reviewing medical records and providing expert declarations for individuals detained, and advocating for adequate medical care in detention facilities. Approach: To address unmet medical needs of individuals in detention, the GHRC partnered with Southern Poverty Law Center Southeast Immigrant Freedom Initiative (SPLC SIFI) to support release of individuals with chronic and acute medical conditions. The GHRC receives referrals directly from SPLC SIFI and volunteer physicians then review records and craft expert declarations that outline the client's health conditions, identify medical mismanagement (if applicable), and highlight how ongoing detention may exacerbate specific health conditions. Outcomes: Since initiation, we have recruited over 30 volunteer physicians, provided over 40 expert declarations for individuals detained, and have expanded our referral sources. Additionally, at least seven individuals have been released from detention after resubmission of their requests with medical declarations. The COVID19 pandemic and lack of proven mitigation strategies in detention centers makes this work more important than ever. This process is an imperfect solution to a deeprooted systemic issue: the existence of detention centers that deny basic rights.

## **Poster Presentations**

## **Clinical Quality**

(1) COVID-19 infection control measures and outcomes in urban dialysis centers in predominantly African American communities

<u>Ibironke W. Apata</u>, Jason Cobb, Jose Navarrete, John Burkart, Laura Plantinga and Janice P. Lea

Background: Emory Dialysis serves an urban and predominantly African American population at its four outpatient dialysis facilities. We describe COVID-19 infection control measures implemented and clinical characteristics of patients with COVID-19 in the facilities. Methods: Implementation of COVID-19 infection procedures commenced in February 2020. COVID-19 preparedness assessments were conducted. Patients with COVID-19 from March 1-May 31, 2020 were included; with a follow-up period spanning March-June 30, 2020. Percentages of patients diagnosed with COVID-19 were calculated, and characteristics of COVID-19 patients were summarized as medians or percentage. Results: Of 751 dialysis patients, 23 (3.1%) were diagnosed with COVID-19. The median age was 67.0 years and 13 patients (56.6%) were female. Eleven patients (47.8%) were residents of nursing homes. Nineteen patients (82.6%) required hospitalization and 6 patients (26.1%) died; the average number of days from a positive SARS-CoV-2 (COVID) test to death was 16.8 days (range 1–34). Two patients dialyzing at adjacent dialysis stations and a dialysis staff who cared for them, were diagnosed with COVID-19 in a time frame that may suggest transmission in the dialysis facility. In response, universal masking in the facility was implemented (prior to national guidelines recommending universal masking), infection control audits and re-trainings of PPE were also done to bolster infection control practices. Conclusion: We successfully implemented recommended COVID-19 infection control me measures aimed at mitigating the spread of SARS-CoV-2 . Most of the patients with COVID-19 required hospitalizations. Dialysis facilities should remain vigilant and monitor for possible transmission of COVID-19 in the facility.

(2) Effects of COVID-19 on the Emergency-Only Hemodialysis Cohort at Grady Health System Bhatia R, Kasper L, Johnson S

Background: The COVID-19 pandemic has shown a disproportionate effect on certain

populations highlighting health, economic, and social disparities. An especially vulnerable group is the emergency-only hemodialysis (EoHD) patients at Grady Health System, 91% of whom are Hispanic with a median age of 51 years old. Due to the frequency (1-3x/weekly) of visits to the ER and high potential risk of infection, a screening program was established to monitor cases and minimize the exposure and spread of COVID-19 amongst this high-risk group. Methods: From April 2020 through present day, COVID PCR tests have been collected as screening at regular intervals or for diagnostic reasons with positive patients being isolated per health department and hospital policy recommendations. Data was collected and analyzed using statistical software. Results: A total of 102 patients comprised the EoHD cohort as of 4/2020, and 56 patients have tested positive for COVID (55%) at time of report. The majority (57%) of positive cases were detected with screening versus symptomatic diagnostic testing, and 23% of these COVID cases required hospitalization. The majority of the cohort have ESRD due to diabetes and hypertension (56%), but notably, the prevalence of COVID infection in this group was non-significant (p=0.2). Eleven patient deaths occurred during the study (10.8%), but only two were due to COVID illness (2%). Discussion: The risk of COVID-19 in EoHD patients is an issue that requires a coordinated effort to prevent further spread of disease. Though the mortality rate of this cohort matches that of the general population, further investigation is needed to determine exposure source and asymptomatic spread and disease.

(3) Initiation of a Hepatitis B Vaccination
Program in the Emergency-Only
Hemodialysis Population at Grady Memorial
Hospital

Walsh C, Walton EJ, Johnson S MD

Background Undocumented immigrants represent 3% of the US population, 27% of the uninsured and an estimated 6,500 patients are reliant on emergency-only hemodialysis (EoHD) with 97 patients at Grady Memorial Hospital (GMH). There is a lack of policy for provision of care for these vulnerable patients leading to reduced quality of life and increased mortality¹. Hepatitis B virus (HBV) infection is a major issue among dialysis patients. Greater than 90% of EoHD patients at GMH were noted to be unvaccinated against HBV which is standard of

care. AIM Statement Vaccinate seronegative HBV EoHD patients against hepatitis B with a goal of > 80% seroconversion consistent with data in ESRD populations<sup>2</sup>. Test of Change A cohort of 15 EoHD patients received HEPLISAV-B 20 mcg vaccine in 3 doses at 0, 4 and 24 weeks. Anti-HBs concentrations are checked at 28 weeks and seroconversion is an anti-HBs serum concentration ≥10 mIU/mL. If nonimmune, a 4th dose will be given and Anti-HBs titers rechecked after 4 weeks. Outcomes A total of 15 seronegative patients with an average age of 47 years and 8 were male were vaccinated. Twelve patients (80%) completed the dosing while 3 patients transferred to HD centers. Eight patients (67%) had HbsAb titers >10mIU/ml and four patients did not and were given a booster dose with 1 of 4 patients converting. Overall seroconversion rate of 75% in the group. Discussion Undocumented immigrants face an array of barriers to equitable heath care.3 Our project highlights another disparity in which this vulnerable population is at risk of dialysis-related complications. With a 3-dose regimen our sample demonstrated 75% seroconversion. A goal to reach > 80% seroconversion will require more patients vaccinated and addition of booster vaccine when...

#### (4) Eliminating Race-Based eGFR Reporting at **Emory Healthcare**

Cobb J, Ridley E, Bussey-Jones J

BACKGROUND: The estimated glomerular filtration rate (eGFR) is determined by the Modification of Diet in Renal Disease (MDRD) and the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equations which both use a race coefficient for African-American (AA) patients, resulting in a higher reported eGFR in this population. This coefficient has been criticized for its reliance on studies with small sample sizes, questionable anthropometric measurements, and lack of reproducibility in Black populations in other continents. Since AA patients have higher reported eGFR with these equations, this creates the potential of delaying nephrology specialist referral and kidney transplant evaluation which rely on eGFR cutoffs. This exacerbates existing healthcare disparities in a population that experiences kidney failure at a rate 3-4 times that of whites and receives kidney transplants at a substantially lower rate. AIM: Our goal is to eliminate race-based eGFR reporting at Emory Healthcare by the end of the 2020-2021 academic year and report all patients eGFR using the current non-AA value. TEST OF CHANGE/ACTION: Initial meeting with Emory Renal Medicine Division Faculty (August 2020).

Engagement with various stakeholders at Emory University (Kidney Disease Screening and Awareness Program, School of Medicine student groups, Internal Medicine Residency Program, Nephrology Fellowship Program, Department of Medicine Diversity, Equity, and Inclusion Council) to build a larger coalition of advocates and hear concerns. RESULTS/OUTCOME: Presentation to the **Emory Healthcare Clinical Practice Committee** on February 17, 2021 with a vote to remove raced based eGFR reporting for Emory Healthcare.

#### (5) Comparison of hospitalization burden and outcomes by gender and racial groups during the early COVID-19 pandemic in four **Emory Healthcare hospitals** Dantes R, Nave J, Crichlow V

Background: We examined Emory Healthcare hospitalizations (EHH) in the early COVID-19 pandemic to identify local opportunities for reducing gender and racial disparities in healthcare outcomes. Methods: We analyzed a retrospective cohort of adults admitted to four EHH (EUH, EUHM, ESJH, EJCH) during the Early Pandemic (March 1 - September 30, 2020) and a historical Pre-pandemic period (March 1 -September 30, 2019). The presence of COVID-19 was identified using ICD-10 codes. Data were extracted from the Emory Clinical Data Warehouse and analyzed in Stata/IC 16.1. Results: There were 41,035 patients admitted in the early pandemic period, a 14% decrease compared to the pre-pandemic period (47,842). Forty-six percent of patients were identified as white, and 45% as black. Of 2,724 COVID-19 admissions, black females and black males were highly overrepresented (37% and 32% of admissions, respectively. Table 2), Non-COVID-19 admissions in the pandemic period decreased substantially for white males (-22%) and white females (-25%), but less so for black males (-7%) and black females (-8%). Across both periods, hospitalized black males and females were on average 6-10 years younger than their white counterparts. Black males had the highest rates of cardiovascular disease (40%), diabetes (33%), and chronic kidney disease (41%). Black males and white males had higher COVID-19 mortality than females (Table 2). Among patients without COVID-19, mortality decreased slightly during the pandemic period for most gender/race groups, except for black males, where mortality increased by 12%. Conclusions: This study highlights local racial and gender differences and disparities in hospitalizations for patients with and without

COVID-19 during the early pandemic at Emory Healthcare.

## (6) Outcomes of a Med-Psych Co-Management Clinic in an Urban Academic Safety-Net Primary Care Center

Haynes, TZ Clearo K, Bussey-Jones J

Preliminary studies into the rates of mental health problems such as depression and posttraumatic disorder in the Grady Health System primary care population show that as a many as one third of patients meet criteria for clinically significant psychiatric disorders. Despite the demand and need for mental health services, there were multiple significant challenges historically to the access of this population to mental health care. We describe the outcomes of an innovative Mental Health Support Clinic (MHSC) staffed by faculty physician duallytrained in Psychiatry and Internal Medicine to provide psychiatric services to the primary care population. This clinic was funded in 2013 and is co-located in the primary care center. The primary purpose of the clinic was to provide access to mental health care for Grady primary care patients at this location. In 5 years the MHSC received greater than 600 referrals from primary care providers. Psychiatric services are prioritized during the encounter and include both medication management and brief psychotherapy. Medical services are also provided depending on the clinical presentation of the patient and patient's preferences. Medical services include chronic medical disease management of diabetes and HTN. The encounter is documented in EMR through which the primary care physician can access the recommendations and tools for measurementbased care are utilized. The outcomes of 250 patients with moderate to severe depression (PHQ>9) on intake are summarized including depression response and remission.

## (7) System-Based Approaches to Depression Remission in the Grady Primary Care Center: Early Successes and Challenges Haynes, TZ Bussey-Jones J

Depression is a mood disorder identified as an important determinant of health outcomes including quality of life, disability and mortality. Depressive disorders can often be treated to remission by interventions such as antidepressant treatment and behavioral health services. In 2016, the United States Preventive Services Task Force recommended universal depression screening to all adults >18 years old with adequate systems in place to ensure accurate diagnosis, effective treatment and

appropriate follow-up. The Grady Health System is a safety-net health care system that serves a predominantly African American population in Atlanta Georgia where access to quality mental health treatment has historically been limited. Since the implementation of the Patient Health Questionnaire (PHQ2/9) for depression screening with the ambulatory electronic medical record encounter in 2018 more than 20% of primary care patients screened were identified as having moderate to severe depression. We describe the implementation of the depression remission as a metric for system-wide tracking and quality improvement efforts around the effective clinical care of moderately depressed ambulatory patients and the impact of interventions such as integrated behavioral health services on this health outcome.

## (8) How limited access to water triggered lifethreatening illness and death

<u>Pangulur P</u>, Xu JW, Kebbel KBS, Johnson D, Kobaidze K

The lack of access to clean running water and stable housing remains a serious issue in the US that can lead to poor health outcomes. A 21year-old African American female with a past medical history of type-1-diabetes, depression, and poor mobility presented with diabetic ketoacidosis (DKA) and fever. The patient stated she didn't have running water at home and had used lavender soap in an attempt to clean her vaginal area. At admission she was septic: T 380C, WBC 14, 000 c/mm3 and hyperglycemic with BG >1000, HgA1C was >16. Physical exam revealed significant labial swelling, thick white discharge, and vesicular lesions. CT abdomen/pelvis showed extensive perineal inflammation extending into pelvic organs and kidneys. She was diagnosed with pyelonephritis, acute renal failure, and neurogenic bladder requiring suprapubic catheter placement. A 9x6cm vulvar abscess was aspirated, culture grew ESBL K. pneumoniae and Candida Albicans; Meropenem and fluconazole were administered. DKA was successfully treated with insulin. Her hospitalization further was complicated by COVID-19 pneumonia leading to hypoxic respiratory failure, pulmonary embolus (treated with tPA), and shock requiring intubation, pressor support, and anticoagulation therapy. She was extubated and transferred out of ICU, but unfortunately developed PEA arrest and died despite ACLS. Lack of access to running water is a serious public health concern that disproportionately affects minority populations and rural communities. Our case study demonstrates how limited access to clean running water resulted in poor hygiene, severe

infections, and ultimately complications from a prolonged hospitalization.

(9) The Effect of an Algorithmic Approach to **Patients Who Refuse Care But Lack Medical Decision-Making Capacity on Physician Decision-Making and Moral Distress** Quigley PC, Wack K, Sivertsen E, George M

> Background Patients who refuse indicated treatments but lack decision-making capacity pose ethical challenges. These patients are a vulnerable population and should receive standard of care in line with their authentic self's values. But forcing treatment carries medical and psychological risks to the patient and the staff involved in their care, and is simply impractical in some situations. We developed a novel algorithm that can help clinicians with ethical and practical decision making, with the goals of achieving the best outcomes for patients and reducing moral distress for their caretakers and clinicians. This was published recently in the Winter 2019 edition of the Journal of Clinical Ethics (Larson et al. An Algorithmic Approach to Patients Who Refuse Care But Lack Medical Decision-Making Capacity. The Journal of Clinical Ethics 30, no. 4 (Winter 2019): 331-7.) Aims: Using our algorithm, we can help clinicians think through these questions and arrive at the most ethical and practical decision, achieving best outcomes for patients and reduced moral distress for their caretakers and clinicians. Action: While our ethics consult team has utilized this algorithm clinically for years, evidence is lacking in its effectiveness with individual providers. As such, we are testing the algorithm with hypothetical clinical vignettes amongst physicians, fellows, and residents. Results A control group will make clinical decisions with only the vignette, and a test group will be given the algorithm as a tool alongside the vignette. Comparing the responses between groups will show the effectiveness of the tool at getting the "right" answer (compared to a gold standard), the confidence clinicians feel in their decisions, and the moral distress they might experience.

#### (10) Systemic Infection with a chance for **Systemic Improvement** Rainer K, Di Francesco, L

Long-term dialysis using tunneled, cuffed catheters increases a patient's risk of serious infection 5- to 10-fold compared with dialysis using arteriovenous fistulas (AVF). Thus, a patient who has a catheter, will often undergo creation of a fistula for hemodialysis to reduce not only morbidity but also mortality. However, the creation, maintenance, and salvage of a functional AVF with minimal complications starts with educating the patient and is optimized by a multidisciplinary vascular access team. Our case highlights an instance where both gaps in care in the hospital system and language barrier played a significant role in the quality of care, and ultimately patient outcomes.

#### (11) **Ethics and Trauma Informed Care for Challenging Outpatient Encounters** Schmidt S, Stern M, Lott A, Sexson W, McCord L, Kasper L, Wooten J, Bussey-Jones J

Issue at hand: PCC providers (Residents and Faculty) and clinic staff (Nurses and CMAs) often encounter challenging patient encounters that at times leave all parties (patient, clinicians, and clinic staf) dissatisfied and distressed. These encounters may involve use of derogatory language, subtle, and overt threats by patients, with the clinic staff and / or provider being the recipient of patient anger, frustration, or stress from the societal or systems issues impacting their health and their care. These encounters can also take up a significant amount of clinic time and staff energy to resolve and meet the needs of the patient. Such patient interactions can lead to provider / staff burnout and increased turnover--particularly among nurses and CMAs who often work hard to "protect" providers from experiencing the brunt of these patient behaviors. Given that it often costs upwards of \$60K to train a new nurse hire, strategies to mitigate nursing and CMA turnover in the PCC--by assisting providers and PCC staff in discussing and developing plans to proactively plan for and address challenging patient encounters--could prove helpful and financially viable for Grady Health system. Additionally, helping providers and clinic staff become more trauma-informed can lead to more empathic patient-provider encounters that recognize the mental, physical, and emotional issues patients may bring with them to the clinic encounter. We created a longitudinal virtual venue for providers and staff to discuss challenging clinical encounters, with intent to proactively promote provider and staff resilience in caring for the patient during future visits, and empathically identify and address the mental, physical, and emotional patient issues at hand.

#### (12)The Gender Center: Providing Healthcare for Trans and Gender Non-Binary Patients in the South

Cook S, Schneider JS, Haw JS, Braden A, Herbert S, Yeung H

Background: Providing care for transgender and non-conforming (TGNC) individuals is becoming more mainstream. A remaining challenge is identifying best practices for care delivery. Additionally, not every health system is alike nor has the same resources, financial or otherwise, to meet the needs of unique populations. Advantages of multidisciplinary clinics have been described for several populations: people with Parkinson's disease, people living with HIV/AIDS, mental health providers supporting primary care providers in caring for those with mental illness, and transgender and gender nonbinary youth and adults. Past healthcare experiences make many TGNC people wary or loathe to seek medical care. Aim statement: Improve the delivery of healthcare services to TGNC patients utilizing expert care delivery in a respectful, inclusive environment Tests of change: The Gender Center was launched in August 2017 after multiple tests of change including focus groups with community stakeholders, comprehensive staff training, and seeking feedback routinely from patients, among others. Results: After nearly 4 years of operation the Gender Center has served nearly 300 unique patients. Our clinic serves a distinctly underserved population with many being underor uninsured from communities of color. From an analysis of post-visit surveys our patients shared uniformly positive feedback about the affirming, inclusive experience in the Gender Center.

## (13) The provision of nutrition therapy to improve outcomes in patients with congestive heart failure

Smith M, Belak L, Samnadda L, Mooney K, McLean A, Egwuogu H, Blemur D, Schmidt SR

Background: A well balanced, low-sodium diet is essential for the health of patients with congestive heart failure (CHF). Open Hand Atlanta is a social service organization dedicated to helping members of the community better manage chronic illnesses like CHF through Comprehensive Nutrition Care. Aim: To determine if medically tailored meals and Medical Nutrition Therapy (MNT) following discharge improve health outcomes for patients hospitalized with CHF. Test of change: Open Hand Atlanta partnered with Grady Hospital to provide medically tailored meals and MNT to patients following hospitalization for an acute exacerbation of CHF. Participants were eligible if they were at high risk for readmission and food insecure. Participants who completed the program received 3 meals a day for 3 months, and 3 counseling sessions with a Registered Dietitian Nutritionist. Patients' readmission rate, cardiology appointment adherence,

anthropometric data, and nutrition metrics were evaluated throughout the intervention. Results: Of the 38 patients who enrolled, 15 completed 3 months of MNT and daily medically tailored meals. Among these patients, 73% avoided hospital readmission and 47% adhered to their cardiology follow up appointments. Patients also saw a 53% increase in fruit/vegetable consumption, a 48% decrease in sodium intake, and a 12% decrease in saturated fat intake. Ultimately, 9153 medically tailored meals were delivered along with MNT to highrisk patients with CHF. This intervention may improve health status, promote health equity, and prevent re-hospitalization among this patient population. Metrics for a matched retrospective cohort of controls are currently being analyzed to better assess the efficacy of this intervention.

## Community, Advocacy, & Policy

# (1) Dismantling social barriers as healthcare: building bridges with the Healthcare Community Coalition app

Alam F, Kaminski C, Kanangat S, Mohammad U, Ohanele C, Rejimon A, Spell N, George M

Social determinants of health disenfranchise minority communities, stripping them from human rights, resources, and agency. The manufacturing of these harmful social and economic conditions aid in the development of acute and chronic conditions seen in healthcare. While many of the efforts surrounding these social determinants study their impacts, few initiatives work toward addressing their causes. Additionally, 95% of physicians describe community engagement as important, yet only 54% participate due to limited awareness of needs. We aim to create an app, the Healthcare Community Coalition, that connects both healthcare workers and community organizers to the needs of patients. These demands would be set by community members, providing them agency to reframe what they need from healthcare providers. Through the app, patients can report needing assistance with transportation to appointments, medication delivery, stable housing, and more. Healthcare workers can then complete these tasks while also earning redeemable points for various rewards. The data collected through developing the app will be used to show the short and long term improvements in health outcomes necessitating the involvement of physicians in intervening in healthcare barriers. By participating in such a program, physicians can work towards creating an equal partnership with their communities to deliver a form of healthcare that is defined by their patients. This is more

than an app; it is a step towards dismantling structures that harm our communities as a form of healthcare. We hope to empower patients to voice their healthcare concerns while enabling physicians to take action, providing patients with more leadership and agency to shape their treatment in and out of the hospital.

# (2) Enhancing Children's Access to Health Education Through the Elementary Pediatric Health Curriculum (EPHC)

Belak L, Lemmas A, Pendley A

Background: While promoting a healthy lifestyle among children is critical for our nation's wellbeing, health behaviors are rarely taught in primary education, especially in poorer communities. Rather than channeling funds into preventing disease by teaching during formative vears, resources in US healthcare are devoted to managing chronic disease in adulthood. Clinicians and medical students at Emory and Morehouse have collaborated to develop the EPHC to address this need and empower children with health knowledge. Intervention: EPHC is a novel, longitudinal curriculum of over 60 health-education classes spanning the K to 5 experience. In line with Georgia National Health standards, topics include hydration, healthy eating, exercise, avoiding illness, emotional health, injury prevention and dental and sleep hygiene. Student volunteers offer a dynamic and engaging experience, leveraging entry/exit tickets to monitor comprehension, habit tracker charts, and takeaway messages to solidify content. Outcomes: Prior to COVID, EPHC was successfully implemented at Burgess Peterson Academy, where 45% of students live below the federal poverty level. Both children and teachers alike reflected positively on their experience. This year, EPHC collaborators developed an interdisciplinary advisory board and amplified the entire curriculum. Conclusions: EPHC is a low-cost, preventative intervention to promote health equity among disadvantaged communities. In collaboration with CHOA and Rollins, we are applying for grants to formally assess this intervention's impact, expand across Atlanta, and create a national program scalable to other communities in need. By teaching children essential health behaviors today, we are fostering the development of healthier leaders for tomorrow.

(3) A student-led outreach program to build trust in COVID-19 vaccination and increase uptake among patients at Grady Hospital Beriwal S, Hong R, Goldstein R, Greenhouse A, Quigley P, Hsu A, Ahuja A, George M

Background: Public health officials estimate 70-85% of the U.S. population must be vaccinated to approach herd immunity, yet over 30% of adults express reluctance to the vaccine. Reasons for hesitancy are complex, correlated with race, political ideology, and gender. While no perfect solutions exist to address hesitancy, motivational interviewing by healthcare workers has shown promise. This is salient given nurses and doctors rank among the nation's most trusted professionals. Aim: By the end of vaccine rollout, we aim to build trust in COVID-19 vaccination and help patients who desire the vaccine to access it. Those patients who indicated "probably not" or "unsure" when first asked by our team if they would get the vaccine will make a plan to get the vaccine. Action: To address vaccine hesitancy among Grady patients, we have built a COVID-19 vaccine calls program. The inequities in vaccine rollout disproportionately impact underserved communities, especially at Grady where a majority of patients are Black and about a third are uninsured. We partner with a student-run program that is proactively calling Grady patients at highest risk of hospitalization or death from COVID-19 infection. Our callers are health students trained in motivational interviewing. To reduce technological and health literacy barriers in vaccine access, they will use patient-centered scripts to address questions and schedule patients for vaccination. Outcome: Through our partnership, we receive contact information for patients who express hesitancy when asked if they will receive COVID-19 vaccination—currently about 51% of the unvaccinated patients. We will begin calls to these patients in mid-April. By the date of presentation, we anticipate sharing initial results from these informational calls.

# (4) Navigating social and socioeconomic barriers to care through Atlanta Interprofessional Student Hotspotting: A case report

Chang PL, Belak L, Turbow S

High-need, high-cost patients (HNHCPs) have complex medical and social problems that lead to excess utilization of health care services. Social inequities and fragmentation of care disproportionately affect these populations. Atlanta Interprofessional Student Hotspotting (AISH) is a service-based volunteer program that empowers interprofessional students to collaborate with HNHCPs to address their social determinants of health and promote health equity. Here we describe our work with MR to illustrate how AISH can help patients navigate social and socioeconomic barriers to their

health. MR is a 57 year old African-American male living with osteoarthritis and chronic pain that has led to unemployment for over a year. Unfortunately, MR was deemed ineligible for partial hip replacement surgery due to unstable housing. AISH volunteers communicated with providers at Grady to clarify requirements to undergo this much needed procedure. AISH volunteers have also partnered with clinicians and MR to complete medication reconciliation to promote medication adherence. A volunteer joined MR at several outpatient appointments to facilitate discussion and encourage MR to advocate for himself. This enabled MR to discuss his urinary symptoms with the clinician more openly, which led his physician to prescribe a medication that may not have been prescribed otherwise. Despite MR's ongoing struggle with medication non-adherence due to financial instability, AISH has remained committed to helping him navigate social and emotional barriers to care. Future interventions involve collaborating with social workers to brainstorm novel solutions for the socioeconomic challenges that prevent his access to care.

### (5) Understanding and Addressing Food Insecurity in Pediatric Patients Living with HIV Infection

Edelson HC, Robinson S, Park J, Owens C, Webb Girard A, Schmidt S, Cook M, Johnson K

Background & Aims: Atlanta has a high incidence and prevalence of HIV/AIDS that extends to the pediatric population. The majority of the ~650 patients at the Family and Youth Clinic within the Infectious Diseases Program (IDP) of Grady Health System are on antiretroviral (ARV) therapy. Our patient population faces many barriers to ARV adherence, including food insecurity. Research shows that greater food insecurity predicts lower ARV adherence1. Furthermore, malnutrition exacerbates adverse health outcomes of immunosuppression from HIV infection2. This project aims to: • identify barriers to food security among patients • implement universal food insecurity screening in clinic • identify community resources to strategically address food insecurity for patients & families Methods: • Qualitative assessment of nutrition needs & food insecurity screening logistics via focus groups and in-depth interviews with clinic staff and patients • Perform community mapping to create a user-friendly food resource guide Results: Two themes were identified from our first staff focus group. Clinical providers are unlikely candidates to perform screening secondary to time pressure and providers lack of food resource knowledge.

A focus group & training session with medical assistants is scheduled. Community mapping has been completed in 2 areas. Conclusions: Consistent access to nutritious food to support health is a fundamental right for all children and adolescents and is critically important to disease management and quality of life in serious pediatric illness. Using a mixed methods approach, we aim to implement universal food insecurity screening & provide linkages to community resources to address patients' needs. Refs: 1) Singeretal.2015AIDSBehav 2)Anemaetal.2009HIV/AIDSResp

# (6) Atlanta Interprofessional Student Hotspotting: Connecting Patients with Community Resources; A Case Report Gold HB, Belak L, Turbow SD

Grady Memorial Hospital, Atlanta's safety-net hospital, cares primarily for low-income and uninsured patients throughout the city. Due to complex medical and social issues, many Grady patients become what are considered highneed, high-cost patients (HNHCPs) requiring frequent healthcare utilization for otherwise preventable problems. Atlanta is home to several institutions that train health professionals, providing a strong foundation for interprofessional collaboration to address the barriers to health afflicting the city's HNHCPs. Atlanta Interprofessional Student Hotspotting (AISH) has developed a service-based learning program which empowers students to identify unmet patient needs and brainstorm solutions. Our experience with Mr. AE reflects AISH's ability to connect patients with medical care and community resources. Mr. AE is a 57 year old male with debilitating arthritis that precludes him from using the stairs in his home and from attending his regular follow-up appointments at Grady. Our team of Hotspotters helped schedule a telehealth appointment for him so that he could be referred for physical therapy. We also connected him with Georgia's Aging and Disability Resource Center (ADRC), which offers resources to make his home more accessible. Time constraints and a limited understanding of available community resources may prevent physicians from addressing the social barriers to their patients' health. Mr. AE's providers might not be aware of the ADRC, however students in AISH are uniquely positioned to seek out community resources, refer eligible patients, and provide consistent follow-up. Mr. AE's case is a testament to the impact that resource awareness through AISH can have at an individual level.

## (7) Voting is Healthy: Medical student voter and volunteer mobilization effort

<u>Gourisankar, A</u>, Beriwal S, Biermann H, Hong R, Khatir H, Rab F, George MR

Background: Barriers to student voting are plentiful and well-documented: the need to update voter registrations ahead of deadlines, limited time given classes and exams, lack of transportation to off-campus voting sites, and incomplete knowledge of an electoral system that may be unfamiliar. During the 2020 election cycle, Georgia faced two contentious statewide elections with unprecedented national scrutiny. Aims Statement: As medical students, we aimed to prioritize voter mobilization and re-envision Election Day at Emory University School of Medicine as a day of civic action for both November 2020 general and January 2021 federal run-off elections. Interventions: We launched a non-partisan voter engagement campaign called "Voting is Healthy", with a core mission of increasing medical student voter turnout and volunteer engagement. We know patient health is intimately tied to policy that determines their social context, such as the availability of adequate, healthy nutrition and safe housing. Despite the impact social determinants of health have on patient health outcomes, physicians vote at rates lower than the general population. We aimed to build a culture of civic engagement at the start of students' medical careers. To that end, we worked with administration to clear student schedules on Election Day in November and January. During early voting, we scheduled group voting sessions called "poll parties" and encouraged a social media campaign: #EmoryVotes. Closer to each election, we launched a school-wide voting competition, encouraging students to volunteer. Outcomes: Through these efforts, in November, 81 students volunteered on election day, and 56% of medical students voted. Over 50% of the entire school of medicine participated in the com...

# (8) Establishing a Centralized, Multidisciplinary Post-COVID Clinic in a High-risk, Underserved Population

<u>Han JE</u>, Summers A, Echols MR, Goldstein FC, Hajjar I, Cook S, Lee E, Lim S, Akbashev M, Tekwani S, Henriquez O, Carroll KRW, Walker TA

Introduction: The coronavirus disease 2019 (COVID-19) has affected over 29 million US citizens resulting in greater than 536,000 deaths. Increasing evidence demonstrates that Black and Hispanic communities experience disproportionate morbidity and mortality and

COVID-19 symptoms may persist. We aim to establish a specialty clinic providing targeted care to high-risk, underserved COVD-19 patients experiencing long-term sequelae. Methods: The Grady Post-COVID Care Clinic was established in January 2021 by a multidisciplinary research group comprised of Pulmonology, Cardiology, Neurology, Psychiatry, Anticoagulation, Rheumatology, ENT, Family and Internal Medicine specialists from Emory and Morehouse Schools of Medicine and Grady Health System. We devised standardized protocols for clinical management of COVID-19 long haulers. Patients not adequately managed by these protocols were discussed in multidisciplinary cases conferences. Results: One hundred and twenty patients were scheduled, and 88 (73%) presented to clinic. Of those, 61 (69%) were female with a median age of 54 (range 19-89) years. Sixty-six (75%) were Black, 15 (17%) Hispanic, and 7 (8%) White. Thirty-seven (42%) were uninsured, 9 (10%) had Medicare, and 7 (8%) had Medicaid. Seventy-one (81%) had ≥1 high-risk underlying medical condition and 27 (31%) had ≥3. Five cases not conforming to protocols were discussed in case conference, resulting in additional diagnostic management in 3 (60%) patients. In addition to clinical care, we are enrolling patients into a registry and biorepository. Conclusions: We describe the successful implementation of a centralized, multidisciplinary Post-COVID Clinic with exemplary patient show rates providing targeted care to a diverse, high-risk, and underserved population.

# (9) Lessons Learned from Organizing Georgia's Healthcare Community in the Fight for Voting Rights

Hong R, Beriwal S, Whitelaw M, Schmidt S, Gensler L, Henry TL, Heiman E, Baker D and George M

Background: In 2021, the Georgia State Assembly introduced dozens of bills to limit voting access. These efforts were largely in response to false claims of voter fraud during the November 2020 and January 2021 elections. In recent years, healthcare professionals have become more vocal about voting as a health equity issue. Research shows that civic engagement is linked with better health, and that low voter participation is associated with health inequities. More broadly, voting affects policy, and policy shapes the systems that impact health and wellbeing. As such, efforts to reduce patient barriers to voting and to encourage healthcare professionals to vote are on the rise. Aim: Between Feb. - Mar. 2021, a group of

physicians and students at Emory University School of Medicine aimed to organize Georgia's healthcare community to oppose voter suppression bills proposed by state lawmakers. Our goal was to highlight the link between medicine and civic engagement and to encourage civic action. Intervention: We executed a state-wide petition, social media campaign, newspaper editorial, and partnerships with community organizers. This poster describes lessons learned from these efforts. Conclusion: We encountered challenges in contacting and engaging Georgia's healthcare professionals and students. More coalitionbuilding is needed to mobilize this community on issues that are not traditionally viewed as health issues. We also saw the benefit of engaging with community organizers to align our efforts with established and growing coalitions. Relationships with organizers allowed students to participate in peaceful demonstrations and be directly tapped into local politics. As the 2022 midterm elections approach, we will use these lessons to enhance future voting efforts.

(10) Physician expert declarations: a pathway to release for migrants in detention centers

<u>Lue N</u>, Goodall H, Beriwal S, Rebolledo PA, Khoury M, Zeidan A

Problem: The immigration/asylum system in Georgia is particularly unwelcoming, holding among the nation's highest numbers of detained immigrants in notoriously harsh conditions with an asylum grant rate of less than two percent. In 2019, The Georgia Human Right Clinic (GHRC) was founded to ensure all Georgia residents, regardless of legal status, have access to basic rights, including: healthcare, legal representation, and personal and familial support. This mission is accomplished by conducting asylum evaluations, reviewing medical records and providing expert declarations for individuals detained, and advocating for adequate medical care in detention facilities. Approach: To address unmet medical needs of individuals in detention, the GHRC partnered with Southern Poverty Law Center Southeast Immigrant Freedom Initiative (SPLC SIFI) to support release of individuals with chronic and acute medical conditions. The GHRC receives referrals directly from SPLC SIFI and volunteer physicians then review records and craft expert declarations that outline the client's health conditions, identify medical mismanagement (if applicable), and highlight how ongoing detention may exacerbate specific health conditions. Outcomes: Since initiation, we have recruited over 30 volunteer physicians, provided over 40 expert declarations for

individuals detained, and have expanded our referral sources. Additionally, at least seven individuals have been released from detention after resubmission of their requests with medical declarations. The COVID19 pandemic and lack of proven mitigation strategies in detention centers makes this work more important than ever. This process is an imperfect solution to a deep-rooted systemic issue: the existence of detention centers that deny basic rights.

## (11) Recognizing Heterogeneity Within the High Need, High Cost Patient Population is Central to Developing Targeted Interventions Marcovitch H, Goldstein R, Sarda S

Background: Healthcare costs in the US are concentrated among a small group of high-need, high-cost (HNHC) patients. Five percent of patients account for 50% of healthcare costs. Atlanta Interprofessional Student Hotspotting (AISH) is a multi-institutional service-based learning program composed of 80 students from ten health professional programs at four Atlantaarea institutions. Interdisciplinary student teams partner with HNHC patients at Grady Memorial Hospital (Grady) to address the socio-contextual determinants of their health. AISH supplements direct patient support with community-level initiatives to address challenges identified by participants and their communities. Historically, AISH has recruited patients in-person at Grady's Chronic Care Clinic (CCC). The 2020-21 model shifted to phone-based recruitment. Prospective patients are identified either through the Transitions of Care Clinic (TOC) or via a predictive analytics tool identifying patients who are at highest risk of having at least six emergency department (ED) visits over the next six months. Methods: We descriptively compared the 2019-20 patient cohort to the 2020-21 cohort to evaluate key demographic differences and understand implications for AISH interventions. Results: The 2020-21 cohort exhibited notably more housing stability and car ownership than the 2019-20 cohort. Medication instability was consistent between cohorts but anecdotally due to differing root causes. Conclusions: AISH's change in recruitment strategies offers an opportunity to explore the heterogeneity of the HNHCP population. However, changing the demographic of the patient cohort could impact the relevance of the patient- and community-level interventions proposed based on root-cause-analyses performed in prior cohorts.

## (12) Atlanta Interprofessional Student Hotspotting: Addressing Social Isolation

## during COVID-19 at Grady Memorial; A Case Report

Olsen TA, Munye M, Gold H, Marcovitch H, Chang T, Belak L, Manhan A, Goldstein R, Reiss H, Sarda S, Okeke O, Turbow S MD MPH

Background High-utilizer patients (HUPs) are individuals who experience complex circumstances when managing their health. The disjointed nature of US healthcare and tenuous social safety-nets further contribute to the health disparities that impact the most vulnerable patient populations. Atlanta Interprofessional Student Hotspotting (AISH) has developed a service-based learning program composed of eighty graduate students from four Atlanta institutions. Interdisciplinary teams of students partner with HUPs from the Grady Memorial Hospital. Working with these individuals, AISH develops patient-centered care plans that are comprehensive for their needs. AISH actively teaches students about social determinants with the ultimate goal of empowering students to address health inequity early in their training and enhance patient self-efficacy. Case JG is a 46 year-old transgender patient who receives routine care at Grady. Hotspotters reached out to JG after their discharge from the emergency department for a heart failure exacerbation. When contacted, JG expressed feeling socially isolated due to numerous reasons including the pandemic, their health deterioration and their gender-affirming care. JG disclosed that the loneliness was negatively impacting their ability to continue managing their health. After formulating an individualized plan, AISH provided biweekly phone calls focused on emotional support. JG expressed an improved sense of connection with Grady through AISH stating "Sometimes you were the only supportive people I spoke with all week." While managing a number of medical ailments, JG's story offers a unique example of how AISH addressed the specific needs of the underserved by providing social support to a patient experiencing social and emotional isolation.

## (13) Voting is Healthy: Grady Hospital's Voter Engagement Campaign

Olsen E, Marcovitch H

Background: Research reveals that policy interventions are more effective ways to address social determinants of health and improve health outcomes than interventions limited to the healthcare sector. One major way to effect change in policy is to vote. Despite the direct impact these social determinants of health have on patients and the community, physicians consistently vote at lower rates than the general

population. In addition, the voting landscape in Georgia is fraught with voter suppression. The same people disenfranchised from voting disproportionately suffer from health disparities. Methods: Our interdisciplinary team designed a campaign to increase voter registration at Grady Memorial Hospital. This team included nurses, residents, marketing staff, physicians, and students as well as the voter outreach manager from Georgia Equality, a nonprofit involved in nonpartisan voter advocacy. Results: We created a website and promotional materials to increase voter registration among Grady staff and patients. Our team created a website for the Voting is Healthy campaign that provides a nonpartisan landing page for patients. In addition, we established a voter registration hotline for Grady patients and staff, as well as badges for Grady faculty to wear and discharge messaging to encourage voting. Conclusions: In a short amount of time, the Voting is Healthy campaign mobilized to deliver several effective materials to increase voter registration at Grady. Given the proven association between public policy and population health, this voting campaign should be replicated in future elections to increase voter registration and civic engagement at Grady Memorial Hospital.

# (14) COVID in Spanish for the Latinx community Pinzon I, Angular Alvarado M, Alfonso S, Del Rio C, Patino A, Rebolledo P, Cantos Lucio V

The available data shows that, while Hispanics are not more likely to die from the coronavirus. they are more likely to contract the virus. In the US Hispanic population there is more prevalence for type 2 diabetes and obesity, both of which put the patient at higher risk for COVID-19. According to the US Census Bureau, Hispanics make up 18.5% of the U.S. population, and the CDC's COVID Data Tracker estimates they make up nearly 20.7% of U.S. COVID-19 cases and 12.2% of mortality. The numbers in Georgia are similar: Hispanics make 9% of the state's population, and 18% of cases, according to the non-profit COVID Tracking Project. We have observed that the increase in cases in this population is related to not following the outlined protocols. Without social distancing, it is very difficult to stop the spread of the virus among family members and friends. We believe that one of the most important factors for the rise in COVID-19 cases in the Latinx community is the lack of education. Patients come to our hospital and once we talk with them and hear their stories, we are surprised by their lack of knowledge about the coronavirus and the ways they can get infected. Studies have shown that poor communication

leads to worse quality of care, and a language barrier is one manifestation of this. Education in Spanish is top priority for the Latinx population we work with. We have to share the knowledge about COVID-19 and how to prevent it in order to decrease the spread of this virus in our population. We are teaching them how to wear the masks, how to social distance, how to wash their hands and currently helping them to understand the COVID-19 vaccine and its effects. COVID showed us how difficult is for the Latinx community to understand instructions in English.

## (15) How Limited English Proficiency Led to Limb Amputation

Introduction: There are many hurdles to adequate healthcare delivery, perhaps none more consequential than language barrier. For patients with limited English proficiency (LEP) who have combined disparities with health illiteracy and poor social support, the consequences can be life changing. Case Description 55 years old homeless Hispanic male with NIDDM and HTN initially presented to the ER complaining of left ankle pain after twisting his ankle. He was found to have swelling and tenderness. Patient had a previous fracture with hardware fixation many years prior to this presentation. MRI of the foot showed significant deformity, consistent with Charcot foot. Patient was treated with short leg cast, but eventually needed external fixation, which was removed early as he was unable to find day handyman jobs. He was readmitted to the hospital 15 months later with severe sepsis and bacteremia, due to the infection of the left ankle. Patient underwent emergent amputation for source control. Eventually, with the help of social worker, he was discharged with oral antibiotics to a personal care home, for further community support. Discussion: In review of this case, patient had been compliant with his medical care; however, he had extremely limited community resources and insight of his ailments. including his request for early removal of external fixation. During his last hospitalization, he exhibited best comprehension when inperson translator was used. Although many regulations to use acceptable forms of translators for LEP patients are in place, numerous reports of discrepancies can be found, including speaking as a non-proficient provider, and using family members. In this case, it led to an eventual amputation that may have been prevented with proper communication.

#### (16) "Ableism in Medical School Admissions: Recommendations for Inclusive Technical Standards"

Treiman G, Adhyaru B

Many prospective medical school applicants with disabilities would make fantastic doctors and deserve support, Technical Standards (TS) are one barrier to the matriculation of these applicants into medical school (Zasove 2016). Each MD and DO school in the country publishes its own TS, which list the nonacademic skills required for their program. The emphasis on physical and sensory ability is especially exclusive to applicants who have hearing, visual, or motor disabilities. TS requirements can be successfully completed with available assistive technologies, yet a majority of schools in the country fail to even mention accommodations in their TS (Zasove 2016). This project summarizes current research surrounding TS and recommendations for making them more inclusive. Using the "Accessibility, Inclusion, and Action in Medical Education" report published jointly by UCSF and the AAMC in 2018 as a framework, the authors provide recommendations to medical schools looking to revise their TS. Other resources include recently revised TS from several top US medical schools, perspectives from current and prospective medical students with disabilities, and studies focusing on Technical Standards in undergraduate medical education. Based on this research, a TS should be "functional" rather than "organic", focusing on the outcome itself rather than the method used to achieve it (Mckee 2016). Additionally, the TS should explicitly mention the availability of accommodations and provide detailed directions for requesting them. In the interest of equity in the medical field and improved patient care, it is time for all US medical schools to reflect on their TS and rewrite them with all applicants in mind.

## Diversity, Equity, & Inclusion Interventions for Professional Development

(1) Expanding the Pipeline of URiM Investigators: The Work of the DOM Research Affinity Group

Alvarez JA, Blanding JO, Han J, Henry T, Bussey-Jones J, Mitchell N, Morris A

Background: To advance discovery in multiple health problems, the research workforce must reflect the full diversity of the nation. There is a paucity of scientists from backgrounds underrepresented in medicine (URiM), in part due to limited mentoring and networking opportunities. NIH diversity supplements enable

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URiM investigators to be supported and mentored in research, with the potential to enhance the pipeline and diversify the research workforce. Intervention: We developed a research affinity group to address this need. Our objectives are to 1) support DOM efforts to attract and retain talented URiM investigators, 2) promote training and support among URiM researchers, and 3) encourage diversity and inclusion at all levels of research. To start, we developed a database of grants within the DOM eligible for NIH diversity supplements and administered a questionnaire to eligible PIs to ascertain their knowledge of and interest in this program. We also established an Outstanding Publication award to provide financial support to URiM investigators. Outcomes: Thirteen faculty responded to our inquiry. 23% were unfamiliar with NIH diversity supplements. A majority (92%) reported interest in supporting URiM investigators and learning more about the program. Potential barriers identified were time commitment and identifying mentees. Conclusions: Our preliminary results suggest a large number of grants eligible for diversity supplements and senior investigators interested in mentoring URiM faculty. Going forward, we will match potential junior and senior investigators, and prospectively analyze the outcomes of this intervention including the number of new diversity supplements, as well as grant applications submitted and funding for URiM investigators over time.

## (2) A Call to Action During Twin Pandemics: Mobilizing URiM Faculty in a Faculty Development Program

Schmidt SR, Lee ED, Wiley Z, Olufade OA, Hill CC, Bussey-Jones JC

Background: Despite increasing diversity in the United States, diversity has not been similarly reflected in academic medicine. Studies suggest that mentorship and engagement increase retention and promotion. However, mentorship programs to address the unique needs of URiM faculty remain uncommon. Intervention: Emory SOM and DOM collaborated to develop a 5month longitudinal URiM Faculty Development Program to 1) augment peer mentoring and sense of community, 2) enhance career development skills, 3) facilitate discussions about navigating academia as a URiM faculty member, and 4) support a diverse and inclusive environment. Faculty were provided with institutional leader coaches, experiential seminars, and peer review and support for individual projects. Results: 50 applications were submitted, 15 were selected, and 14 completed all the requirements of the program. 100%

strongly agreed that they were satisfied with the program and 90% expect to be at Emory in 5 years. Qualitative interviews and pre and posttests demonstrate program impact in areas including "navigating the organizational culture, understanding promotion criteria, and ability to identify and approach individuals for mentorship". Conclusion: A faculty development program that includes peer mentoring and coaching elements can increase diversity and promote the advancement participants collectively and individually. Additionally, stronger social and collegial bonds within the academic medicine community may also result. The Emory University School of Medicine URiM Faculty Development Program approached this challenge and cultivated a collaborative and supportive environment for fostering professional growth, self-actualization, and inclusion.

# (3) Shattering the glass ceiling: An Innovative Approach to Career Development of Diverse Faculty

<u>Jones D</u>, Bernstein L, Fluker S, Trammell A, Kho A, Manning KD, Bussey-Jones, JC

Background: Women and URiM faculty are less likely to achieve senior promotion and more likely to leave academia. We describe an initiative of structural change to mitigate the potential impact of limited mentorship, structural bias, and imposter syndrome on diverse faculty through a proactive, standardized, and transparent review and development process. Intervention: In 2013, we developed an innovative program to regularly review faculty profiles and identify opportunities for 1) faculty development, 2) service, leadership, and teaching roles, and 3) recognition and reward. The faculty review committee systematically identifies areas of excellence and provides specific recommendations for growth opportunities for each faculty, along with an individualized pathway and timeline to promotion. The program includes promotion packet preparation and potential nomination for institutional, regional and national leadership positions and awards. Outcomes: This program began in 2013 and has a remarkable track record. We have one of the most diverse divisions in the department/ school (24% URiM, 62% women). Through 2019, we have had 100% of our packets approved for promotion. Importantly, 50% (6 of 12) of our URiM and 61% (17 of 31) of our women faculty have achieved a senior academic rank. These results compare favorably to the school of medicine and academic medicine as a whole. Conclusions: This standardized process demonstrates that

diverse faculty are capable of academic advancement when provided with early clear guidelines and support. By proactively mapping out an individualized plan for career advancement, those who historically have been less likely to be propelled towards promotion or themselves seek it are more likely to successfully navigate promotion.

# (4) Increasing the Ranks of Black, Indigenous, People of Color and Women in Research Franks N, Hannah J, Kobaidze K, Wiley Z and the CROSS Collaborative

Innovative discovery begins with diverse perspectives, and research teams should harness this model. Black, Indigenous, People of Color (BIPOC) and women are underrepresented as researchers that should reflect the diversity of our patient population. Team science provides an opportunity to leverage a collaborative and cross-disciplinary approach to increasing representation. We aimed to increase the participation of BIPOC and women in research through intentional recruitment and planned participation of an integrated research team. A team investigating COVID-19 characteristics, readmissions, outcomes, and social determinants of health led by BIPOC and women researchers was established in June 2020. We intentionally recruited BIPOC and women from specialties involved in the direct care of COVID-19 patients affiliated with 4 institutions, all medical school ranks and levels of research experience. Surveys were conducted to catalogue team demographics and desired levels of participation. 78.38% of research team members identify as BIPOC, 78.38% identify as women, and 59.46% identify as BIPOC women. Besides English.18 languages are spoken by team members. Affiliations include 81.08% Emory Healthcare/University, 10.81% Morehouse School of Medicine. 5.41% Kaiser Permanente. 2.70% Atlanta VAHCS. Medical school ranks represented are 2.70% Professor, 32.43% Assistant Professor, 16.22% Associate Professor, 13.51% learners, 35.14% other roles. Desired participation of respondents, >50% of time, reported as 35.29% data collection, 17.65% data analytics, 29.41% abstracts, 32.35% manuscripts, 17.65% consultant. Intentional recruitment and planned participation of an integrated research team is an effective strategy to engage BIPOC and women in team science.

(5) Making an Impact with E.M.P.A.C.T.: A New Pilot Mentoring Program for URiM Learners Henry TL, Freeman C, Adeagbo S, Hood YS

Background The purpose of the EMPACT (Engage, Mentor, Prepare, Advocate for, Cultivate, and Teach) is to provide students who self-identify as an underrepresented in medicine (URiM) and/or those who may come from disadvantaged backgrounds, with experiences that foster timely and successful matriculation through medical school in a supportive and inclusive learning environment. Methods The EMPACT Pilot Program was conducted 2019-2020 academic year. A total of 19 EMPACT mentorship groups were created consisting of two resident/fellow/faculty mentors and threefour medical students for a total of 68 medical students and 38 mentors. The mentoring groups met separately an average of 3 times during the program. Additionally, four workshops were held: Microaggressions and Bystander, Wellness during COVID-19, Overcoming the Imposter Phenomenon and a CV building. A final EMPACT Wrap-up and Awards event was held in May 2020 in which outstanding mentors and students were recognized. Outcomes When comparing before and after the EMPACT program, there was a significant increase for mentors or students in feeling that there is a good social support system at Emory SOM and there was a significant decrease in the amount of medical students that feel they need an advocate at the Emory SOM. The majority of students were satisfied or very satisfied with the EMPACT educational experience (79%) and the program overall (85%). 94% students would recommend the EMPACT program to other students, 93% of mentors would recommend the EMPACT program to other mentors. Conclusions Overall a successful program. We met our program goals to foster a sense of community, strengthen social support with structured mentoring relationships for URiM students and fostered personal and professional growth.

## (6) Developing an Anti-Racism Medical Education Curriculum

<u>Hijab E, Kim A, Hamm D, Brownfield E, Chung YG</u>

Background: Current literature demonstrates a need for racial advocacy in medicine. Academic institutions have the responsibility to recognize and dismantle racist frameworks in healthcare and medical education. As physicians, it is imperative that we understand the systemic presence of racism in medicine and learn how to advocate for those affected within the medical community and for our patients. Important work surrounding matter has already been started at other institutions. Aims: To educate on how to

develop a well-rounded, anti-racism curriculum and to inspire others to create similar curriculums within their respective divisions Methods: An anti-racism curriculum proposal was created by a cohort of students passionate about promoting diversity, equity, and inclusion (DEI). There were 2 main aims to the proposal: To create a Student Committee for Racial Advocacy (SCRA) and to propose curriculum additions (i.e. cultural competency OSCE, implicit bias/upstander training for faculty and students, etc.) Creation of the proposal involved curriculum development guided by research on effective interventions implemented at other institutions, engagement with minority faculty, and working within institutional frameworks to implement changes. Outcomes: The proposal resulted in the establishment of elected Diversity, Equity and Inclusion (DEI) student representatives to each medical school class and the creation of a Diversity, Equity, Inclusion and Racial Advocacy (DEIRA) thread. Conclusion: This proposal required a tremendous amount of collaboration, thoughtfulness, reflection, and dedication which ultimately resulted in curriculum changes that will lead to sustained, positive, and meaningful impact. We hope to inspire others to create similar curricula.

# (7) The Young Physicians Initiative: A Sustainable Model of Mentorship to Increase Diversity in Medicine

<u>Kleber T</u>, Newman N, Douglas M, Gullickson C, Lundberg G, Kelli H

Introduction: Underrepresented minority (URM) patients experience worse health outcomes compared to white and socioeconomically privileged patients. This is believed to be in large part due to a lack of URM physicians, who are more likely to serve minority communities. Increasing URM physicians may lead to improved health disparities and create an inclusive collaborative climate in medicine. Aim: The low volume of URM physicians may be explained by the "leaky pipeline" concept, whereby many URM students have limited support, resources, and mentorship, impeding the path to a medical career. To address this problem, we developed the Young Physicians Initiative (YPI), an organization that facilitates mentorship between current medical student and aspiring physicians, particularly those from underserved and racially diverse communities. YPI launched in 2016 at Emory University School of Medicine but has since spread to five other medical schools, providing mentorship for hundreds of future physicians. Methods: YPI strategies ensure effective mentorship. Medical

students host monthly sessions using an established curriculum based on collaboration and discussion, improved annually based on feedback. Faculty member partners help with recruitment, communication, and logistics. Additionally, a free annual conference gathers hundreds of prospective medical students and mentors to promote medical careers. Virtual mentorship groups, webinars, and resources are shared through our robust social media presence. Conclusion: YPI has established a successful model for effective and sustainable mentorship to promote longitudinal diversity and inclusion in the medical workforce. This framework is easily adaptable by other medical institutions and physician groups.

## (8) Novel Curriculum to Combat Healthcare Disparities

<u>Taylor, A. MD, MPH; Nylander, Z. MD; Graham, A. MD; DeSousa, N. PhD, MPH</u>

Background: A 2017 report by the Accreditation Council for Graduate Medical Education (ACGME) evaluating 297 ACGME-accredited residency and fellowship programs reported that there is a deficiency in preparing residents and fellows to address healthcare disparities. Thus, a novel curriculum approach tailored for medical providers, trainees, and staff is needed. Methods/Interventions: We created a Diversity, Equity, and Inclusion curriculum to address this gap based on the AAMC Antiracism collection. The curriculum consists of 8 topic areas separated into 12 different interactive lectures occurring during a 50minute didactic session each month. Lecture topics include microaggressions, implicit bias, social determinants of health, race in Science & medicine, etc. Sessions are taught by trained DEI staff and physicians at accredited medical institutions and are attended primarily by residents but also include faculty and clinic staff. Effectiveness of individual lectures are assessed via evaluation surveys and we will conduct a comprehensive pilot program assessment after the completion of the full curriculum at the end of the academic year. Results/Outcomes: Objective results on the effectiveness of this curriculum are pending and will be finalized following the completion of the 1-year program. Intermittent data show that the majority of residents found the sessions informative and believe it will help them improve their medical practice in a way that decreases healthcare disparities. Conclusions: There is a need for more training on combating healthcare disparities. Incorporating DEI issues into existing curricula in residency training programs may be a good way to address this issue.

#### Education

# (1) You4Prevent: Bridging COVID-19 Health Disparities in Clarkston with Pre-Medical and Medical Students

<u>Kim AE</u>, Al-Atassi R, George M, Schmidt SR, Kelli HM

Background and Aims: Members of the underserved community of Clarkston, Georgia face disparities in healthcare that have been exacerbated by the COVID-19 pandemic, whose social restrictions pose challenges for community-based programming. Meanwhile, pre-medical students aspiring to serve in needy communities often lack resources for a medical school acceptance. You4Prevent hopes to promote health and prevention in Clarkston while mentoring underrepresented pre-medical students. By training pre-medical students to volunteer alongside medical students, we aim to decrease health disparities, diversify the physician workforce, and inspire members to serve needy communities. Interventions: After training members in Motivational Interviewing and the importance of healthy living, we have two pre-medical students and one medical student lead "COVID for Kids" sessions via Zoom to elementary school students. They also conduct webinars with parents on COVID-19 vaccination. They have created informational videos and handouts on COVID-19 and healthy living, which are available on our website in several languages. Medical students provide mentorship sessions to pre-medical students on topics like MCAT preparation. Results/Outcomes: Since September 2020, we have taught COVID for Kids to all 3rd, 4th, and 5th grade students at a Clarkston elementary school. We have led one Vaccine Info/Q&A session with parents, with four more in April. We have presented three mentorship sessions, with one more in April. Conclusion: Communitybased interventions promoting preventive health, particularly as it relates to the COVID-19 pandemic, can be successfully implemented in a virtual format. Using underrepresented premedical students as volunteers assists and inspires them on their journeys to be...

## (2) Teddy Bears and Tykes: Health Promotion to Children of Immigrants

Bennett M, Caleon R, Gangavelli A, Loretan C, Thompson T

La Amistad is an organization working to prepare Latino students and families for success through academic and life enrichment programs. The location at Clairmont Presbyterian Church focuses on afterschool tutoring for children in grades K-5.For our CLSM project, we organized a "Teddy Bear Hospital" session for the students at La Amistad. We developed this project with the intention of normalizing medical instruments and practitioners, promoting healthy habits and basic hygiene, providing health education, and the opportunity for parents and kids to ask questions in a non-intimidating and nonjudgmental environment. We divided the children into groups based on age, the groups then rotated through 3 stations: the Teddy Bear Hospital, the Skeleton, and the Health Promotion station. At the Teddy Bear Hospital, volunteer medical students helped the kids triage and treat their sick stuffed animal friends. Participants used stethoscopes, blood pressure cuffs, gauze, Band-Aids, and an "X-ray" machine to take care of their stuffed animals. At the Skeleton station, a plastic skeleton was laid out and the participants named bones themselves and on the skeleton, learning both the common and anatomical name. The third station was the Health Promotion station, with a hand-washing demonstration, posters, a question and answer session about safety, and a healthy snack.We evaluated the initiative by collecting surveys from the children, asking each child to identify one new thing they learned that day. Each child presented with their own unique set of challenges- ranging from transportation, delayed reading level, to behavioral issues, but every student was able to identify one new thing they learned that day, and the health fair was well received by children and parents alike.

# (3) Exploring Health Systems Science: Turning High-Risk Patient Outreach into Interprofessional Curricula

<u>Greenhouse AR</u>, Goldstein RS, Quigley PC, George MR, Bradley CD, Spell NO

Background/Aims: In the wake of the COVID-19 pandemic, health professional students at Emory and Morehouse Schools of Medicine joined faculty and hospital advisors to develop a proactive outreach initiative for high-risk patients within Grady Health System. Faculty advisors recognized the authentic application of Health Systems Science (HSS) and opportunity to integrate curricular components. Methods: The four-week elective curriculum involved group and independent learning components to supplement the completion of 30 outreach calls. Didactic sessions introduced the HSS framework while an interdisciplinary session engaged pharmacy and social work to answer questions from patient experiences. Students critically reviewed articles related to HSS in a journal club and completed the American

Medical Association HSS Learning Series. Students presented a final HSS project proposal based on their outreach experiences. Results Thirty-eight MD and PA students from Emory and Morehouse have completed the elective. Feedback indicated value in the authentic learning experience that directly applied HSS principles. Students encountered a wide breadth of medical, social, and health systems issues for Grady's predominately African American and underserved patient population. Students deepened their understanding of healthcare barriers and gained skills in eliciting these obstacles from patients and connecting them with resources. Conclusions: The course utilized an experiential curriculum to teach HSS in an authentic, value-added way for learners and patients. By incorporating patient care, this curriculum motivated students from both Emory and Morehouse, often separate institutions, to learn from and participate in HSS together and expand care for Atlanta's most vulnerable patients.

(4) Promoting Increased Patient Engagement with Management of Their Health
Olsen A, Goldstein R, Belak L, Gold H, Chang T,
Okeke O, Sarda S, Turbow S, MD

Atlanta Interprofessional Student Hotspotting (AISH) is a service-based learning program comprising an interdisciplinary team of health professions students. AISH is designed to help students better identify and address social determinants of health that contribute to health inequity. From direct conversations with our high-need, high-cost patients (HNHCP), we've identified that many have difficulty navigating the landscape of healthcare. For example, MJ is a 34 yo male who recently underwent an amputation of one toe due to gangrene. Upon initial contact, MJ demonstrated interest in joining our program to improve his health. He shared with us that he had a history of diabetes mellitus and hypertension; however, he did not have an established primary care provider (PCP). We provided MJ with guidance on how to call and schedule an appointment with a PCP at Grady. Upon follow up, we discovered he was unable to do so due to extended wait times. AISH students assisted MJ with navigating through the scheduling system to schedule an appointment. "I will do this not for you, but for my health." This quote from MJ highlights how the impact of AISH goes beyond assisting patients with scheduling needs. As we continue to develop our relationship with MJ, we hope to build upon his motivation in managing his care. Our aim is to motivate, educate, and empower our patients to take control of and actively

manage their health. The value of AISH derives from our ability to identify, understand, and effectively address the specific needs and barriers of each of our HNHCPs through an interprofessional team. Through this experience, AISH's ultimate goal is to help health professional students become leaders in promoting health-equity among Atlanta's most vulnerable populations and beyond.

## (5) Hack Your Way Through Health Systems Science

Murugan A, Gooding H, Spell N, George M

In March 2021, the Class of 2023 at Emory SOM began a new, six-week curriculum prior to the start of their clerkships, with two weeks dedicated for students to learn the principles of the Health Systems Sciences (HSS). The core educational intervention was a two-week long design-thinking based hackathon, with clinical and medical education tracks. Students formed teams and completed inspiration, ideation, and prototyping exercises. Teams were paired with physician mentors, and were encouraged to leverage user insights in their designs. As part of their exercises, every team was required to identify and explain health equity issues with their solutions and implementation plans, such as the impact of their solutions on the care of diverse patients. 148 students grouped into 29 different teams, participated in and successfully completed the hackathon activities, with 21 teams in the clinical track and 8 teams in the medical education track. Many teams specifically worked on health equity topics, such as the impact of patients' SDoH on care, COVID vaccine distribution, connecting patients with kidney transplant evaluations, and reporting student mistreatment. Every team completed a detailed design-thinking exercise; through peer voting, six teams were selected as presenters for the final round with an extended presentation of their solution and prototype as well as a question and answer session with the whole class and invited mentors. A design-thinking hackathon can be effectively utilized to teach medical students the principles of HSS. Crafting educational activities that require application of new knowledge to address questions on health equity and diversity can encourage creation of novel healthcare solutions that are intentionally inclusive and user-centered.

(6) Leveraging Medical Student Strengths for Community Outreach: Virtual COVID-19
Education for Underrepresented High School Youth

Olsen E, Kuehl S

Background: The COVID-19 pandemic worsened inequities, including access to public health information. COVID-19 information is inaccessible for many high school learners. This education empowers youth to become community health advocates. Methods: In 2020, 25 medical students at Emory University developed and delivered a five-session, synchronous, virtual, COVID-19 curriculum to 25 high school students enrolled in an after-school pipeline program in metro Atlanta. Topics included epidemiology, safety measures, vaccines, at-risk communities, and mental health. Presentations were standardized and presenters received feedback through a virtual rehearsal. Homework encouraged students to share lessons with their communities. The curriculum was evaluated with a 23-item survey assessing students' COVID-19 knowledge, attitudes, and practices one week pre-curriculum and immediately after the final lesson. Pre- and post-curriculum scores were compared using paired samples t-tests. Results: 9/25 students completed both pre- and post-surveys. Students' mean knowledge score increased from 67% to 90% (p < 0.001), driven by an improved ability to identify severe COVID-19 risk factors, understand how socioeconomic status affects infection risk, define "herd immunity", and recognize vaccines do not cause autism. Students' perceptions of vaccines being "very safe" increased (pre-curriculum: 0%; postcurriculum: 67%), and the percentage of learners "very confident" in knowing where and how to get COVID-19 testing increased from 67% to 100%. Conclusion: This curriculum was associated with increased COVID-19 knowledge and vaccine acceptance. This initiative leveraged an academic-community partnership to provide COVID-19 information to high school students from underrepresented communities.

#### Research

(1) Lipid Profile Differences Among
Premenopausal And Postmenopausal
African American Women And Implications
For Treatment Per Guideline
Bess CR, Mehta PK, Lundberg GP

Background: Literature demonstrates a relationship between abnormal cardiovascular disease (CVD) risk factor patterns, namely lipids, and menopause. However, less is known about this association in minority racial and ethnic groups. Examining this association in African American (AA) women is important due to their disproportionate poorer CVD outcomes. Methods: A cohort of 962 women from the 10,000 Women Project were categorized into

self-declared premenopausal (n = 475, mean age 40 ± 9.8 years) and postmenopausal (n= 487, mean age 61 ± 9.1 years) groups. Data was obtained at community health screening events through health history surveys. Lipid profiles were obtained through a non-fasting point-of-care cholesterol test. Several CVD risk factors were compared among these groups that include serum total cholesterol (TC), low density lipoprotein cholesterol (LDL), high density lipoprotein cholesterol (HDL), triglycerides (TG), pooled cohort Atherosclerotic Cardiovascular Disease (ASCVD) 10-year risk of heart disease or stroke score, BMI, waist circumference, and blood pressure. Student's T test was utilized for statistical analysis. Results: Cholesterol testing revealed a significant increase in serum TC (p < 0.0001), LDL (p = 0.0001), HDL (p = 0.0081), and TG (p = 0.001) in the postmenopausal group compared to the premenopausal group. Additionally, the ASCVD risk score, which is heavily weighted on age, was significantly higher in the postmenopausal group (p < 0.0001). Conclusion: Menopause is associated with a more abnormal lipid profile and an elevated ASCVD risk score in AA women which places this group at a higher risk of CVD. Prioritizing lipid management, by adhering to cholesterol treatment guidelines, may assist with CVD risk reduction in this high-risk group

(2) Simulation of Scarce Resource Allocation in Critically III Patients with COVID-19

Bhavani SV; Luo Y; Miller WD; Sanchez-Pinto LN; Han X; Mao C; Sandıkçı B; Peek ME; Coopersmith CM; Michelson KN; Parker WF

Objective: The coronavirus disease 2019 (COVID-19) pandemic has prompted policymakers to develop widely varying protocols to allocate critical care resources to prepare for a crisis of extreme shortage. The inefficiencies and disparities that could result from implementing critical care allocation protocols are unknown. The objective of the study was to determine the intended and unintended consequences of these critical care resource allocation protocols. Methods: Critically ill adult patients hospitalized with COVID-19 from 8 hospitals were included in this study. Six critical care allocation protocols were tested using Monte Carlo simulation applied to real patient data. The primary outcome evaluated was survival to hospital discharge for patients allocated ICU beds under each of these protocols. Results: The combined cohort (n=2,363) had a median age of 64 years (IQR 52-75) and was 32% Black, 35% White, and 25% Hispanic. Simulating a 50% ICU bed shortage, survival of patients allocated ICU care

was higher with lottery allocation than treating the sickest-first (80% vs. 69%). The New York (87%), Maryland (91%), and Pennsylvania (91%) protocols improved survival compared to a lottery. The Maryland and Pennsylvania protocols did not allocate any ICU beds to patients with severe pre-existing medical conditions. Compared with the outcomes under a lottery protocol, Black patients were significantly less likely to receive ICU beds under the Pennsylvania protocol, and less likely to receive a ventilator under all state protocols. Conclusion: State allocation protocols could save more lives than a lottery but could create disparities in allocation. Simulation modeling can inform policymakers balancing the inherent ethical tradeoffs in scarce resource allocation.

## (3) Performance of intensive care unit severity scoring systems across different ethnicities in MIMIC-IV

Gichoya JW, Banerjee I, Chou E

Background/Aims: Recent guidelines on the use of illness severity scores to inform triage decisions for allocation of scarce resources such as mechanical ventilation during the current COVID-19 pandemic warrant examination for possible bias in ICU severity scoring systems. In this study, we investigate the performance of two severity scoring systems (specifically OASIS, SOFA, and the first-day SOFA derivative) across ethnic groups in an ICU database to identify possible ethnicity-based bias. Methods: Data from the Medical Information Mart for Intensive Care (MIMIC-IV) were analyzed for score performance in African Americans, Asians, Hispanics and Whites after appropriate exclusions. Discrimination and calibration were determined for both scoring systems in all four groups. Results: We have similar findings to prior studies, whereby the area under the receiver operating characteristic curve (AUROC), our measurement of discrimination, did not display any discernible systematic patterns of bias across racial groups. In contrast, the standardized mortality ratios (SMR), our measurement of calibration, indicated consistent and significant patterns of difference between Hispanics, African Americans, and Whites versus Asians. While calibrations were imperfect for all groups, the scores consistently demonstrated a pattern of over-predicting mortality for Hispanics, African Americans, and Whites compared to Asians. SOFA derivatives like first-day SOFA also demonstrate similar calibration problems. Conclusion: The systematic differences in calibration across ethnic groups suggest that the illness severity scores reflect bias in their

prediction of mortality. These scores should be used with caution for clinical decision support when faced with shortage of resources.

## (4) Calciphylaxis in a Predominantly African-American Urban US Patient Population Mudunuru S, Navarrete J, Armour D, Cobb J

Background: Calciphylaxis is a rare and serious condition characterized by painful skin ulcerations due to ischemia with necrosis of the skin. The disorder carries a mortality rate > 50% in the first year. Risk factors for calciphylaxis includes end-stage renal disease, a history of diabetes, obesity, female gender, Caucasian race, and the use of medications such as warfarin. We present clinical characteristics of calciphylaxis patients admitted to a large academic medical center. Methods: Retrospective chart review of CUA patients from 2001-2019 in our single center academic hospital. Results: There were 110 patients included. Patient identified racial (n=108) makeup included African-American (n=89), Caucasian (n=18), and Asian (n=1). Average age was 56±14 years and 80% of patients were female (n=88). Also, 59% (n=65) of patients were diabetic. Dialysis modalities included hemodialysis (n=82) and peritoneal dialysis (n=24). Also 4 patients with CKD not yet on dialysis at the time of diagnosis. Average calcium levels of 8.9±1.1 mg/dL and phosphorus of 5.1±1.9 mg/dL. The average PTH was 569.6±714.9 pg/mL, albumin 2.5±0.7 g/dL, and hemoglobin 9.8±1.7 g/dL. Approximately 50% of patients received hyperbaric oxygen therapy as inpatient. Approximately 33% of patients were currently or recently on warfarin therapy, and approximately 25% were currently or recently exposed to high dose steroids. Conclusions: In comparison to other reported calciphylaxis series our average PTH was lower, a high percentage of our patients were using warfarin or steroids, and our patients were predominantly African-American (81%). African-Americans are likely at high risk of developing calciphylaxis but understudied.

# (5) Barriers to Using Medication Assisted Treatment for Alcohol Use Disorder Collins SM, McCord, EO, Nuveen N, Heiman E

Introduction: Alcohol use disorder (AUD) causes an immense burden of morbidity, mortality, and health care costs. However, less than 8% of adults diagnosed with AUD within the last year will receive treatment. Despite the impact of AUD and the availability of pharmacological treatments, many patients do not feel comfortable with using Medication Assisted

Treatment (MAT) for AUD. There is limited data exploring patient perspectives regarding MAT. We conducted a qualitative analysis of patientreported barriers to MAT among Grady patients enrolled in the REACH Program (Reducing Alcohol: Committing to Health), a novel program that aims to treat AUD via a Collaborative Care Model. Methods: We designed a questionnaire to assess barriers to the use of MAT as an aid to alcohol cessation. Sixteen REACH patients were contacted via telephone with a total of 12 surveys completed. One patient declined, 2 were unable to be reached, and 1 was deceased at the time of the study. Results: Seven of 12 patients were using the prescribed MAT. Of the 5 patients who declined MAT, 3 were concerned about side effects, 3 feared polypharmacy, 2 felt they could guit without MAT, and 1 cited lack of knowledge about MAT. Interestingly, none of our patients reported cost or transportation as a barrier to starting MAT. 57% of patients on MAT used Grady's pharmacy assistance program. Discussion: Concern for side effects and lack of patient self-assessed knowledge were common barriers to MAT. The absence of financial barriers in our patients highlights the importance of financial assistance programs for MAT. Limitations include the small sample size currently enrolled in the pilot program.

# (6) Associations between Menstrual Hygiene Product Use and Vaginal pH levels in Black Women

<u>Daniel GA</u>, Mehta CC, Brown N, Thompson LM, Barr DB, Sheth AN

Background: Endocrine disrupting chemicals (EDCs) have been found in menstrual hygiene products (e.g. pads, tampons) and recent studies have shown higher systemic levels of EDCs in Black compared to white women. EDCs mimic hormonal activity and may be harmful to the reproductive system. However, the effect of menstrual hygiene product use on the vaginal environment is not known. The aim of this study was to assess the association between Black women's use of menstrual hygiene products and their vaginal pH levels (≤4.5=healthy pH; >4.5=abnormal pH suggestive of vaginal dvsbiosis). Methods: We conducted a secondary analysis of data from a prospective, observational cohort study with HIV seronegative women 18-44 years old who completed at least 5 study visits in Atlanta, GA. Menstrual hygiene product use was characterized, and a longitudinal logistic model was used to assess associations between menstrual hygiene product use and vaginal pH. Results: Among 24 Black women contributing 123 study visits, use of pads only for menstrual

hygiene products and use of both pads and tampons during a menstrual cycle occurred at 91 (74.0%) and 32 (24.4%) visits, respectively. The odds of having an abnormal pH is 2.9 times higher (Odds ratio=2.872, 95% Cl=1.009 – 8.177, p=0.048) if both pads and tampons are used during a menstrual cycle as opposed to use of pads only. Conclusions: Cumulative exposure to menstrual hygiene products may alter vaginal ph. Future studies should explore potential mediators of this association, such as exposures to EDCs from menstrual hygiene product use, in diverse populations of women.

## (7) Parenting intentions and desires among young Black gay and bisexual men living with HIV

<u>Doraivelu K</u>, Mandani A, Sheth AN, Kawwass JF, Hussen SA

Background: Young Black gav. bisexual, and other men who have sex with men (YB-GBMSM) make up the largest group of youth impacted by HIV in the United States. Reproductive decisionmaking is a normative part of development in young adulthood; however, little is known about parenting desires and intentions among YB-GBMSM living with HIV. Methods: We conducted an exploratory cross-sectional survey study among 44 YB-GBMSM living with HIV in Atlanta, Georgia. Participants were asked to rate their desire and intention to have children, perceived likelihood of having children, childbearing methods they would be willing to use, and whether they had ever discussed future parenting with healthcare providers. Results: Mean age was 26 years (standard deviation=3.02). The majority of participants described their sexual orientation as gay (n=35; 79.6%). Most participants stated that they definitely want to have children (n=23, 52,3%). definitely intend to have children (n=20, 46.5%) and thought they would likely be able to have children (n=23, 52,3%). More patients preferred assistive reproductive technologies than adoption. However, only 20.5% (n=9) of participants reported ever discussing options for having children with their provider. Conclusions: Most of our participants desire and intend to have children in the future, but they had not discussed this issue with their medical care providers. Existing frameworks of reproductive justice and decision-making largely exclude YB-GBMSM living with HIV. Future research should further explore YB-GBMSM's conceptualizations of parenting, assess patient and provider knowledge of available reproductive and other parenting options, and develop models for effective patient-provider communication.

## (8) Achieving Research Justice and Inclusivity: Identification of Refugees & Immigrants in Electronic Health Records

Zeidan A, Dudgeon M, Smith M, Bogovic S, Yaffee A

Introduction: Refugees and immigrants face multiple barriers to healthcare and patterns of healthcare utilization are poorly understood. Difficulties in identifying refugees and immigrants in electronic health records (EHRs) and national data sets present obstacles to obtaining data on health outcomes. This study evaluates ethical and appropriate methods for identifying refugees and immigrants in EHRs within Emory and Grady healthcare systems. Methods: We conducted semi-structured qualitative interviews with key informants to explore methods of identification of refugees and immigrants in EHRs. Interviews were conducted via recorded video, transcribed, and coded by two independent study team members for thematic analysis. Results: 14 key informant interviews were completed. Key informants identified as community leaders (3), healthcare providers (7) and professors/researchers (4) with an average of ~13 years of experience working with refugee/immigrant communities. Participants reported a number of characteristics for identification including preferred language, country of origin, and time in the U.S. but noted that these may be inadequate for subgroup identification without additional attention to migration narratives. Themes also emerged around the approach for obtaining information. highlighting the need for trust and rapport building when recording information. Discussion: Key informant interviews characterized the complexity of using EHRs to identify refugees and immigrants but suggested a number of characteristics and approaches to consider. Further research with refugee and immigrant populations on identification using EHRs is ongoing and warranted.

(9) Advancing Equity For Patients with Heart Failure in the Covid-19 Pandemic: A Case Study for Team-Based Care and Innovation Fatade YA, Azobou Tonleu FH, Cafarelli A, Works-Fleming F, Bick A, Wirth DL, Ogunniyi MO

Background: The COVID-19 pandemic has disrupted healthcare delivery for patients with heart failure. Caring for these vulnerable patients presents some unique challenges but also immeasurable opportunities for innovative team-based care to achieve health equity. Aim: We describe our initial experience, using telemedicine and mobile integrated health (MIH)

home visits to provide effective care for at-riskpatients with heart failure. Methods: Patients hospitalized with decompensated heart failure are seen in the Grady Heart Failure Clinic postdischarge for follow-up and optimization of goaldirected medical therapy. Due to the rising COVID-19 cases and state-issued shelter-inplace orders, we implemented a modified clinic workflow, using telemedicine-based strategies and MIH home visits for patients with worsening heart failure symptoms. We describe virtual heart failure clinic visits and MIH home visits from March 23 to May 9, 2020. We compared readmission rates during the same 7-week period in 2019 vs. 2020. Results: There were 384 unique patients seen in our virtual heart failure clinic for a total of 601 visits during the initial 7-week period. Our cohort was predominantly male (62%), African American ( 95%), and aged less than 65 years (75%). Of these, 590 (98%) were virtual (94% via telephone, and 4% via video). MIH home visits were conducted for 18.8% of virtual visits. Comparing to a similar 7-week period in 2019, 382 patients had 677 unique face to face visits. Both cohorts had similar readmission rates (9.15% vs. 8.64%), despite difference in care delivery strategy. Conclusion: Our initial experience showed that virtual heart failure clinic for visits complemented with MIH home visits are effective for at-risk patients with heart failure.

(10) Successful Large-Scale, Primary Care-Based Hepatitis C Treatment in an Urban, Underserved Patient Population, 2002-2019
Fluker SA, Darby R, McDaniel K, Quairoli K, Mbonu C, Koumtouzoua S, Miller L

Background The Grady Liver Clinic (GLC) is a primary care-based HCV clinic at Grady Memorial Hospital, Since 2002, the GLC has expanded its capacity, using a multidisciplinary team, to respond to advances in HCV screening and treatment. Here we describe the growth and impact of the GLC over time by comparing patients treated from 2018 - 2019 with those treated from 2002 - 2007. Methods We performed a retrospective chart review of all patients who initiated HCV treatment in the GLC between January 1, 2018 and December 31, 2019. Charts were abstracted for demographic information, laboratory data, fibrosis staging, and details of treatment. We compared findings to those on the patients treated from 2002 -2007. Results From 2018 – 2019, 882 patients were initiated on HCV treatment as compared to 113 patients from 2002 – 2007. The mean age of those treated in 2018 – 2019 was 61, 67% were male, 82% were black, 48% were uninsured, and 27% had advanced fibrosis or

cirrhosis. 550 of the 882 patients (62%) completed treatment and were tested for cure, and 534 (97%) were cured. In comparison, the mean age of those treated in 2002 – 2007 was 49, 53% were male, 68% were black, 67% were uninsured, and 31% had advanced fibrosis or cirrhosis. 80 of the 113 patients (71%) completed treatment and were tested for cure, and 34 (43%) were cured. Conclusion The GLC demonstrated significant growth in treatment capacity from 2018 – 2019 as compared to 2002 - 2007. In addition, cure rates increased significantly as would be expected with the use of novel HCV medications. Building on a successful primary care-based treatment model, the GLC was able to respond to the changes in HCV screening and treatment guidelines that have occurred over the past 18 years.

(11) **Antiretroviral Regimen Changes and** Contraception Use Among Reproductive-Aged Women with HIV Receiving Dolutegravir-based Treatment, 2018-2019 Fonseca CA, Byrd R, Moncaleano D, Palmore MP, Armstrong WS, Sheth AN

> Background: In May 2018, the United States Food and Drug Administration (FDA) released a safety communication warning of a possible increased risk of neural tube defects (NTDs) in infants born to women taking dolutegravir (DTG), an HIV antiretroviral drug with high potency and tolerability. We sought to understand changes in antiretroviral therapy (ART) regimens and contraception methods that occurred amongst reproductive-aged women living with HIV (WLWH) in response to this warning. Methods: Data from a public healthcare system in Atlanta, Georgia were collected by chart review of WLWH ages 13-51 receiving DTG at the time of the FDA communication. Amongst women of reproductive potential, we examined frequency and types of changes in ART regimen. HIV viral load and CD4 count. changes of contraception methods, and pregnancy outcomes, during the year after the FDA communication. Results: Among 192 reproductive-aged women receiving DTG, 75.0% continued DTG-based ART throughout the study period. Of the 48 women who discontinued DTG, 85.4% switched to a different integrase inhibitor. Overall, 33 (16.8%) women changed their contraception method during the study period, with 50% switching from a less effective method to a more effective method. There were 17 pregnancies resulting in 15 live births during the study period; no NTDs or birth defects were identified. Conclusions: The majority of women receiving DTG-based ART regimens in May of 2018 maintained these

regimens after the FDA issued a warning about a possible link between the drug and NTDs, and very few utilized highly effective contraception methods. Effective contraception should be a focus of care for WLWH and can help maintain stability in an ART regimen that may cause concern for birth defects.

#### (12)What about race and ethnicity in antimicrobial stewardship? Fortin-Leung K, Wiley ZE

Background and Aims - While research on antimicrobial stewardship is on the rise, there is a dearth of research on disparities of antimicrobial resistance among different racial and ethnic populations. Further research is needed to better understand how race and ethnicity may affect antimicrobial prescribing practices and antimicrobial resistance development in various settings. Methods/Interventions – We identified gaps in the literature concerning how racial disparities affect antimicrobial stewardship in different settings. In particular, we reviewed research on how racial disparities differ between adult and pediatric patients along with inpatient versus outpatient settings. Results/Outcomes -Pediatric research tend to demonstrate similar antibiotic prescription patterns across racial and ethnic groups compared to research in adult healthcare settings, but pediatric settings have extra characteristics that must be considered. Much of these concerned the role parents played in the child's care, including parental anxiety and expectations. Meanwhile, we found that while many antimicrobial stewardship studies are conducted in the inpatient setting. more studies are needed to elucidate the role of race and ethnicity in outpatient antibiotic usage. Differences in nonprescription antibiotics and communication difficulties between racial and ethnic groups may drive disparities in antimicrobial stewardship. Conclusions - A review of the literature highlights a relationship between race/ethnicity and antibiotic use, yet there a major dearth in research exploring the link in different settings. Understand these differences will be crucial to improving physician training and patient outcomes with regards to antimicrobial stewardship.

#### **Beyond Collection of Demographic Data:** (13)Stratification of Outcomes as a First Step to Address Health Disparities in a Health System

Franks N, Kubes J, Overton E, Truss L, Shu J, Shabbir H

Advancing health equity requires the identification and elimination of health disparities. Meaningful use of collected demographic data to stratify prioritized quality outcomes is a strategy to identify health disparities. We aimed to stratify health system outcome data by race, ethnicity, gender, age, and insurance status to identify potential health disparities. Outcome data from the legacy Emory Healthcare system (Emory University Hospital, Emory University Hospital Midtown, Emory St. Joseph's Hospital, Emory Johns Creek Hospital) from 2018-2020 was stratified by race, ethnicity, gender, age, and insurance status. Outcomes chosen were Length of stay (LOS) index (ratio between the observed and expected LOS), mortality index (ratio between the observed and expected mortality), and 30day all-cause readmissions. LOS index and mortality index were analyzed using a Mid-p exact test based on the Poisson distribution. 30day all-cause readmissions were analyzed using Chi-squared or, when appropriate, Fisher's exact test. Statistically significant differences were identified for LOS index and readmissions. Females (1.039, p<0.0001), Hispanic (1.058, p<0.0001), Black (1.055, p<0.0001), IPOC (1.044, p<0.0001) and uninsured (1.070, p<0.0001) patients had a higher LOS index. Age >65 y/o patients had lower LOS index (1.017, p<0.0001). Age 34-65 y/o (26.3%, p<0.0001), Hispanic (26.1%, p<0.0001), IPOC (25.9%, p<0.0001) and uninsured (28.2%, p,0.0001) patients had higher readmissions. Female patients had lower readmissions (22.4. p<0.0001). No statistically significant differences were noted for mortality index. Stratification of health system data identified differences in readmissions and LOS index. Further gap analysis can inform targeted health disparities solutions.

# (14) Literature review of adverse childhood experiences and their association with healthcare utilization and social determinants of health Hong R, Fleurant M

Adverse Childhood Experiences (ACEs) are damaging childhood experiences of abuse, neglect, and household dysfunction that have been demonstrated to influence health in adulthood. Previous work has shown that greater exposure to ACEs relates to medical disease in a dose dependent fashion. ACEs have also been shown to be associated with various social determinants of health (SDOH) and measures of healthcare utilization. We performed a literature review to characterize healthcare utilization and SDOH variables that

have been shown to be associated with ACEs and to determine the direction of those associations. Due to the broad nature of SDOH, we limited our focus to 16 core SDOH as defined by the National Institute of Minority Health & Health Disparities PhenX Toolkit. A literature search in PubMed identified 868 papers; after limiting the search to English-only studies published in the last 20 years and conducting abstract and full-text review, we retained 11 papers. Eight of these papers studied associations between utilization and ACEs, and 10 studied associations between SDOH and ACEs. Higher ACE scores were associated with disordered patterns of utilization such as more ED and ambulatory care visits and more missed and cancelled appointments. Higher ACE scores were also associated younger age and female gender. Patients with higher ACEs tended to experience negative SDOH: they were more likely to have state or no insurance, and appear to be more likely to suffer from unemployment, food insecurity, and poverty. Studies like this are important to determine the pathway and mechanism linking ACEs to poor medical outcomes.

# (15) Hidden hypoxaemia associated with higher mortality and organ dysfunction: Pulse oximetry misrepresents hypoxemia in critical illness, especially in Hispanic and Black patients

Wong AI, Charpignon M, Kim H, Josef C, de Hond AAH, Fojas JJ, Mireles-Cabodevila E, Carvalho L, Kamaleswaran R, Madushani RWMA, Adhikari L, Holder AL, Steyerberg EW, Buchman TG, Lough ME, Celi LA

Background A recent publication suggests racial discrepancies in pulse oximetry (SpO2) as compared to arterial oxygen saturation (SaO2) by arterial blood gas (ABG) result in higher levels of hidden hypoxemia, reinforced by FDA warnings on pulse oximetry limitations. Methods We retrieved data from eICU-CRD, MIMIC-III, MIMIC-IV, Emory Healthcare, and Grady Memorial databases. Patients with ABGs were identified along with administratively documented race ('asian', 'black', 'hispanic', 'white'). The first ABG per encounter was paired with the most recent SpO2 value within 5 minutes. Distributions by race were compared according to percentiles and pairwise statistical testing. Finally, patients with hidden hypoxemia  $(SpO2 \ge 88\%, SaO2 < 88\%)$  were compared by bootstrapped clinical endpoints and organ dysfunction. Results 87,206 SpO2-SaO2 'first-ABG' pairs were examined from 271,367 SpO2-SaO2 ABG pairs with SpO2 ≥ 88%. There were small statistically significant differences between SpO2 and SaO2 in non-white races as compared to white race, unchanged by gender, age, and cardiovascular SOFA. Non-white races had higher SaO2 variance for any given SpO2 value, resulting in higher incidence of hidden hypoxemia for nonwhite races (asian 20.6%, black 23.4%, hispanic 21.2% vs white 18.8%). Despite similar demographics and initial organ dysfunction, hidden hypoxemia results in higher in-hospital mortality and organ dysfunction 24 hours after ABG. Conclusion Hidden hypoxemia is prevalent among all races; wider distributions of SaO2 values per SpO2 value for non-white races suggest that hidden hypoxemia is more prevalent among non-white races. Although similar when an ABG is drawn, hidden hypoxemia is associated with higher mortality and higher organ dysfunction 24 hours after.

(16) Racial and Ethnic Disparities in Renal Replacement Therapies and Patient Age Wilk AS, Cummings JR, Plantinga LC, Wang Z, Franch HA, Lea JP, Patzer RE

Background: Non-Hispanic (NH) Black and Hispanic adults present with kidney failure at younger ages than NH white adults. Younger patients are also more likely to receive preferred therapies, including transplants (Tx), peritoneal dialysis (PD), or home hemodialysis (HHD) versus in-center hemodialysis (ICHD). We compared these therapies' use between racial/ethnic groups among incident kidney failure patients, stratified by age, to assess whether racial/ethnic disparities in treatment are consistent among all ages. Methods: We used 2011-2017 national registry data to identify therapies at day 90 of treatment for all adult (>21 years) U.S. patients initiating kidney failure therapy. We used t tests to compare each therapy's use between racial/ethnic groups. overall and by age band (22-44, 45-64, 65-74, and 75-99). Cross-sectional log-binomial regression models were used to obtain adjusted relative risks (ARRs). Results: Overall, 81% of patients used ICHD, 10.5% used PD, 0.8% used HHD, and 2.9% underwent Tx. Absolute disparities in treatment were most pronounced among patients age 22-44: NH Black (unadjusted %s: 1.7%, 13.8%, and 0.6%, respectively) and Hispanic (4.3%, 16.8%, and 0.5%, respectively) patients were less likely to receive Tx, PD, or HHD than NH white patients (11.0%, 19.1%, and 1.2%, respectively; all p<0.001). After adjustment, the largest relative disparities were in Tx, also among age 22-44, for NH Black (ARR: 0.20, 95% CI [0.18, 0.22]) and Hispanic (ARR: 0.46, 95% CI [0.43, 0.50]) versus NH white patients. Conclusions: For adults with incident kidney failure, racial/ethnic

disparities in access to Tx, PD, and HHD are most pronounced among the youngest, those who gain the most in accumulated life expectancy and quality of life when receiving these therapies

# (17) Maintenance of an HCV Treatment Program in a Safety-Net Health System at the Onset of the COVID-19 Pandemic Using a Telehealth Model

McDaniel K, Quairoli K, Fluker S, Miller L

Background: The Grady Liver Clinic (GLC) offers primary care-based hepatitis C (HCV) treatment for Grady's underserved population. At the onset of the COVID-19 pandemic (C-19), the GLC converted to a telehealth treatment model that included couriering medications to patients and conducting telephone visits. We examined three cohorts of patients treated for HCV at different times relative to C-19 onset to determine the effect of telehealth treatment on treatment outcomes. Methods: We performed a retrospective chart review for patients who initiated treatment one year prior to C-19, 4 months prior to C-19, and for 4 months at the onset of C-19. Charts were reviewed to determine the number of treatment referrals, patients who initiated treatment, and those who were lost to follow-up (LFU). Results: Fewer patients were referred for HCV treatment during C-19, with 60 referrals vs. 133 during both pre-COVID time periods. Also, only 75 patients initiated treatment versus > 100 patients during both of the pre-C-19 time periods. Of the patients who initiated treatment, 7/149 (5%) were LFU prior to COVID, 14/104 (13%) were LFU 4 months before C-19 and 6/75 (8%) were LFU during C-19. Conclusions: C-19 led to fewer treatment referrals, which was expected due to a hold on treatment initiation in the first 2 months of C-19. Most patients who initiated treatment during C-19 remained on treatment despite transitioning from an in-person treatment model to a telehealth model. This retention in care is encouraging and supports the use of telehealth for HCV treatment visits going forward. Further study is needed to fully measure the impact of telehealth on treatment completion and cure rates.

# (18) Racial and Ethnic Differences and Clinical Outcomes of COVID-19 Patients Presenting to the Emergency Department Smothers I. Poss-Driggoll K. Wang 7. Mohto.

Smothers L, Ross-Driscoll K, Wang Z, Mehta AK, Patzer RE, Wiley Z

Background – Since the introduction of remdesivir and dexamethasone for severe COVID-19 treatment, few studies have

described clinical characteristics and outcomes of minority COVID-19 patients who present to the emergency department (ED). This study aims to evaluate differences in hospitalization of ED patients and racial/ethnic differences in clinical outcomes for patients hospitalized from the ED. Methods - This cohort study from the Cerner Real World Database (87 US health systems) from December 1, 2019 to September 30, 2020 included PCR-confirmed COVID-19 patients. The main outcomes were hospitalization among ED patients and inhospital mortality among inpatients. Outcomes were compared by racial/ethnic groups and geographic region using robust Poisson regression adjusted for sociodemographics, comorbidities, and receipt of remdesivir and dexamethasone. Results – 94,683 COVID-19 patients presented to EDs across 87 health systems. Blacks comprised 26.7% and Hispanics 33.6%. Nearly half (45.1%) of patients presented to EDs in the South, and 31.4% (n=29,687) were hospitalized. Lower proportions of Blacks were prescribed dexamethasone (29.4%) vs. Hispanics (40.9%) and Whites (37.5%). Hospitalization risks, compared to Whites, were similar in Blacks (Risk Ratio (RR)=0.94; 95% CI:0.82, 1.08)) and Hispanics RR=0.99 (95% CI:0.81, 1.21), but risk of inhospital mortality was higher in Blacks, RR=1.18 (95% CI:1.06, 1.31) and Hispanics, RR=1.28 (95% CI: 1.13, 1.44). Conclusions - Minority patients were overrepresented among COVID-19 ED patients. Despite similar risks of hospitalization as Whites, in-hospital mortality risk was higher among minorities. Interventions targeting upstream social determinants of health are needed to reduce racial/ethnic disparities in COVID-19.

# (19) Characteristics of a Socioeconomically Diverse Cohort of African American Women Attending a Community Blood Pressure Screening Program

Spikes TS, Isiadinso I, Mehta P, Lundberg GP

Background: Blood pressure (BP) screenings targeting African American (AA) women are considered a viable solution to increase cardiovascular (CV) risk assessment and awareness. Research suggests that racial disparities in cardiovascular disease (CVD) between AA and White women are due to a range of factors including socioeconomic adversity. However, less is known regarding the associations of socioeconomic status (SES) with BP outcomes among AA women attending community BP screenings. Aim: To examine whether SES is associated with worse CV health and elevated BP in AA women attending

community health screenings. Methods: AA women (n=972) attending community health screenings in the metropolitan Atlanta and surrounding communities were evaluated from 2015 to 2019 through the Emory Women's Heart Center 10,000 Women project. Sociodemographics, health histories, anthropometrics, point of care non-fasting lipids, and BP were collected. Hypertension (HTN) was defined as systolic BP (SBP) ≥130 or diastolic BP (DBP) ≥ 80 mmHg. Descriptive statistics, chisquare, and OLS linear regression were used to examine the associations of SES and BP after adjusting for age, body mass index (BMI), smoking, and lipids. Results: Mean age 51±14.1 years, SBP 132±19.6 mmHg and DBP 82±12 mmHg. Income of \$48K-\$96K (ß=4.1, se=2.0, p=<.04) was associated with a higher SBP compared to those earning \$96K and above unadjusted. After adjusting for covariates, income groups <\$24K ( $\beta$ =7.0, se=2.7, p=.01), \$24K-\$48K (ß=4.6, se=2.3, p=.05), & \$48K-\$96K (ß=5.5, se=2.1, p=.01) were associated with a higher SBP. Conclusions: High and low incomes were associated with elevated SBP among middle-aged AA women. Differences in CV risk for high and low SES is essential for culturally targeted interventions.

# (20) A Mixed-methods Approach to Understanding the Perspectives, Experiences and Attitudes of Cognitive Behavioral Therapy for African Americans with Type-2 Diabetes

<u>Subramanya V.</u>, Cornely R., Owen A., Pasquel F.J., McGee R.E., Kulshreshtha A.

Background: African American (AA) people are 60% more likely to be diagnosed with diabetes mellitus (DM) than non-Hispanic White adults and, experience more complications. Cognitive behavioral therapy (CBT) is a technique that combines traditional care with cognitive and psychosocial techniques. We aimed to assess the effects of CBT on glycemic control in AA participants and understand their perspectives. attitudes, and experiences toward CBT. Methods: Using a randomized, parallel design pilot study (web-based vs in person), 22 participants aged >18 years, identifying as AA. and having a glycosylated hemoglobin (HbA1c) > 8%, were recruited. CBT was administered in six sessions per platform. Post-CBT focus groups were conducted to determine patient perspectives. Participants completed baseline and follow-up assessments on measures for self-efficacy, generalized anxiety, depression, perceived stress, health-related quality of life and cognitive ability. Results: Fourteen participants completed the study, their mean

HbA1c improved from 8.5% to 7.7%. The Diabetes Distress Scale demonstrated decreased distress overall ( $\delta$  =2.62; p =0.02). The Generalized Anxiety Disorder Scale demonstrated decreased generalized anxiety across the group ( $\delta$ =2.22; p =0.04). Themes identified in focus groups included: social support through information sharing in groups and receptivity to CBT intervention positively impacting self-efficacy. Conclusion: Groupbased CBT intervention for type 2 DM care was positively received by AA participants. There were benefits of social support through group interactions and a stronger sense of self-efficacy due to health education. A comprehensive treatment plan like CBT, may be useful in promoting healthy diabetes self-management.

# (21) Protective Factors Associated with Normal Cognition in Persons Age 80 Years and Older Trammell AR, Hajjar IM, Parker M, Goldstein FC

Introduction: Identifying protective factors is critical to unraveling the development and progression of Alzheimer's disease (AD). Despite evidence of cognitive resilience, older African Americans (AA) are at increased risk for AD. Studies exploring cognitive resilience use predominantly white samples. In a biracial sample, we investigate factors related to normal cognition (NC) in persons over age 80. Methods: National Alzheimer's Coordinating Center data through November 2020 was requested. Using ANOVA or chi-square, demographic, functioning, and medical conditions were compared in persons age 80 and older by race and cognition [NC, mild cognitive impairment (MCI)]. Logistic regression evaluated factors related to cognition by race. The significance level for all tests was p < 0.05. Results: Data from 20,088 people was analyzed (85.7 years, 85.9% white, 57.8% female, and 36.2% NC). For AA/NC, female sex (80.6%), no diabetes (61.4%), no heart disease (7.4%), and married (4.95%) were significant. For white/NC, female sex (60.1%), no diabetes (59.5%), no stroke (59.4%), and married (28.9%) were significant. In AA, regression showed that no diabetes (OR:5.1,95% CI:1.38-18.7) or depression (OR:5.3, 95% CI:1.33-21.1) and no ACEinhibitor (OR 3.59, 95% CI:1.58-8.13) or diuretic (OR 3.51, 95% CI:1.71-7.22) use were more likely to have NC. In whites, female sex (OR:1.72, 95%CI: 1.41-2.11), no depression (OR:2.93, 95% CI: 2.06-1.14), married (OR:11.9, 95% CI:1.46-95.1), and no antidepressant use (OR:1.73, 95%CI:1.35-2.23) were more likely to have NC. Conclusion: Factors associated with NC vary by race. Further investigation is needed to prospectively replicate these findings.

# (22) Cardiovascular Risk Factors in Younger Black Women: Results from the 10,000 Women Community Screening Project Nishant Vatsa MD, Aneesha Thobani MD, Laura Buendia BSc, Karleigh Murphy BS, Senait Asier MPH, Zhenchao Chen BS, Yi-An Ko Ph.D., Puja K. Mehta MD, Gina P. Lundberg MD

Background: Cardiovascular Disease (CVD) risk factors are prevalent in Black women. We aimed to find when these risk factors arise in Black women within a community screening program. Methods: 945 Black women enrolled in the 10,000 Women community screening project in the metro Atlanta area were included. Socioeconomic, lifestyle, and CVD risk factors were collected. Data was separated into three 20-year age cohorts. Pairwise analysis was used to compare cohorts. Results: The mean body mass index was highest in the middle age group compared to the other groups (p-value <0.05), [20-39 yo: 30.7 (8.3); 40-59 yo: 32.4 (7.0); >60 yo: 31.0 (6.0) kg/m2]. Systolic blood pressure increased in older cohorts (p-value <0.001), [20-39 yo: 122(15.3); 40-59 yo: 132.7(19.1); >60 yo: 141.8(19.5) mmHg]. Young Black women had total cholesterol levels that were lower than older women (p-value <0.001), [20-39 yo: 173(33.3); 40-59 yo: 194.1(38.3); >60 yo: 196.8(39.7) mg/dl], and LDL levels that were higher than middle aged and old women (pvalue <0.001 and 0.01, respectively), [20-39 yo: 87.9(65.8); 40-59 yo: 66.7(60.5); >60 yo: 70.7(61.9) mg/dl]. Elderly Black women had higher HDL levels than younger cohorts (pvalue=0.03), [20-39 yo: 58.1(16.6); 40-59 yo: 59.3(16.8); >60 yo: 63.1(17.2) mg/dl]. More Black women >60 yo limited salt intake compared to younger women (p-value ≤0.001), [20-39 yo: 57.5%; 40-59 yo: 67.8%; >60 yo: 81.8%], and ate fast food less than three times a week compared to younger women (pvalue<0.001), [20-39 yo: 68.1%; 40-59 yo: 74.4%; >60 yo: 85.7%]. Conclusion: We report that CVD risk factors such as hypertension and obesity are prevalent at younger ages in Black women, likely due to diet habits. Thus, CVD preventive care should begin at younger ages in Black women.

# (23) Inpatient HCV Testing, Linkage to Care and Treatment in A Safety Net Hospital HCV Screening Program

<u>Veeramachaneni H</u>, Park B, McDaniel K, Blakely D, Darby R, Miller L

Background Screening for hepatitis C virus (HCV) infection is now recommended for all adults and is largely performed in the outpatient

setting. Given the high HCV prevalence at Grady Memorial Hospital (GMH), we launched inpatient HCV screening in 2017 and sought to evaluate HCV prevalence and care cascade outcomes. Methods We retrospectively reviewed charts of all inpatients identified with chronic HCV from January 2018 to December 2018 at GMH and evaluated HCV prevalence, linkage to care, antiviral treatment and SVR12 (cure) outcomes. Results Of 3,092 inpatients screened for HCV, 462 (14.9%) were anti-HCV positive and 244 (7.9% of total tested, 52.8% of anti-HCV population) had detectable HCV RNA. 156 (63.9%) of these were linked to care. Among linked patients, 46 (29.5%) were referred for antiviral treatment and the majority of those referred, 38 (82.6%), initiated treatment. 13 (34.2%) reached an SVR12 testing point and completed testing, and 100% achieved SVR12. Conclusions Inpatient HCV screening at GMH reveals a high prevalence of HCV but suboptimal linkage to care rates. Low linkage rates may be explained by the fact that many inpatients were not candidates for linkage or treatment due to their medical condition. However, despite comorbidities requiring inpatient admission, almost 25% of linked patients initiated HCV treatment and all of those tested achieved cure. Screening inpatients in a high prevalence setting reveals significant HCV burden and can lead to cure. Further investigation is warranted into best practices for improving linkage to care and treatment referral rates in this medically complex population.

# (24) COVID-19 Characteristics of Readmissions and Outcomes and Social Determinants of Health Study (CROSS) at Eight Atlanta Hospitals

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Background/Aims: COVID-19 disproportionately affects Black, Latin, and other minority populations, resulting in increased hospitalizations. It is important to identify clinical and sociodemographic factors that predict hospital readmission. Methods: In this retrospective prospective study, clinical characteristics and outcomes of COVID-19positive adults with 30-day readmissions will be extracted from the EMR of patients admitted to 8 Atlanta hospitals from March 1 to December 31, 2020. Patient demographics, comorbidities, clinical outcomes, and discharge characteristics will be extracted. This study will also describe social determinants of health (SDoH) associated with 30-day readmissions using patient-level zip

code data. Data from each hospital will be integrated within a central database to create a data repository. To predict risk factors for 30-day readmission, a machine learning-based prognostic model will be developed. Preliminary Results: Of 4,414 COVID-19 patients admitted to 4 Atlanta hospitals between March 1 and December 31, 2020, 207 were readmitted. 57% (n=118) were Black (non-Hispanic) and 8.2% (n=17) Hispanic. Comorbidities most associated with readmissions were HTN, DM, CKD, and ESRD (p-values 0.04, 0.01, 0.07, and < 0.001, respectively). Factors most associated with readmission (univariate analysis) were age > 79 (OR 1.5 (0.8-2.9, 95% CI), Black race (OR 1.3 (0.9-1.8, 95% CI), and high Charlson Co-Morbidity Index (CCI) 4.1(2.5-6.6, 95% CI). Conclusions. Preliminary data from 4 of 8 Atlanta hospitals found that most readmitted patients were Black or Hispanic (total 65%) with higher incidence of HTN, DM, CKD, and ESRD. Older age, Black race and high CCI were associated with increased odds of readmission.

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