37TH ANNUAL UCLA MULTI-CAMPUS FAMILY MEDICINE RESEARCH FORUM

May 12, 2021

Conducted virtually via Zoom
Meeting ID: 942 2336 6201

Keynote Speaker
Geoffrey Leung, MD
Quantifying Health and Strategizing Care with the Whole Person Health Score

Sponsored by the UCLA Family Medicine Multi-Campus Research Committee
uclahealth.org/FMResearchDay

AGENDA

Faculty Development (Morning Session)

(Invitation Only)

Time	Description
8:00-8:30am	Meet and Mingle
8:30- 10:00am	Mitigating Implicit Bias in Clinical Practice
10:00- 10:30am	Break and Networking
10:30-11:30am	Discrimination in Research and Medical Practice

Research Day (Afternoon Session)

Zoom Meeting ID: 942 2336 6201
Password: Research

Time	Description	Speaker
12:30-12:45	Introduction and Welcome	Patrick Dowling, MD MPH
12:45-12:50	Brief explanation of schedule/format	Laura Sheehan
12:50-1:30	Session 1 of Research Presentations	Pre-recorded
1:30-1:40	Session 1 Q&A	Moderator: Bruno Lewin, MD DTMH
1:40-2:30	Keynote: Quantifying Health and Strategizing Care with the Whole Person Health Score	Geoffrey W. Leung, MD
2:30-2:40	Keynote Q&A	Moderator: Parastou Farhadian, MD
2:40-3:20	Session 2 of Research Presentations	Pre-recorded
3:20-3:30	Session 2 Q&A	Moderator: Tipu Khan, MD
3:30-4:10	Session 3 of Research Presentations	Pre-recorded
4:10-4:20	Session 3 Q&A	Moderator: Steven Shoptaw, PhD
4:20-4:30	Wrap up and Gift Card Raffle	Laura Sheehan

About the Committee

Central to family medicine training programs is developing family physicians who will embody a number of specific virtues including: excellence in clinical medicine, patient centered practice, and critical skills to enable them to maintain a practice consistent with evidence-based medicine. Scholarly activities, including research, foster a more active, individually driven element in family medicine residencies. Research reflects the knowledge derived from working with primary care, practice-based populations and is increasingly viewed as a key component of family medicine training, education, and practice. The UCLA Department of Family Medicine has a commitment to promoting research on important issues related to improving care provided to patients seen in family medicine and primary care settings.

The UCLA Family Medicine Multi-Campus Research Committee (MRC) was established over 37 years ago to help promote this commitment. Formed by the UCLA Department of Family Medicine and affiliated residency programs, the MRC has held annual research forums to facilitate the exchange of scholarly activities among the residency programs and highlight the creative work conducted by residents, fellows, faculty, staff, and medical students. This forum fosters the understanding that the best practice of Family Medicine and pursuit of health demands an active engagement with one's community - a role of leadership with respect to a community of colleagues, of patients, and of the population at large.

UCLA Family Medicine Multi-Campus Research Committee Members:

Lisa Barkley, MD
Charles R. Drew University of Medicine and Science

John Cheng, MD
Harbor-UCLA Medical Center

Parastou Farhadian, MD
Riverside County Medical Center

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University of California Los Angeles, Division of Sports Medicine

Steve Shoptaw, PhD
University of California Los Angeles

Laura W. Sheehan (Administrative Coordinator)
University of California Los Angeles

SESSION 1

(12:50PM – 1:30PM)

1

Fever and Lymphadenopathy: A Differential Dilemma

Lindsey Anderson, D.O., Amber Williams, D.O.
Dignity Health - Northridge Family Medicine

INTRODUCTION: Histiocytic necrotizing lymphadenitis or Kikuchi Fujimoto disease, is a rare, self limiting disease with unknown etiology, though there is some evidence for an association with EBV or autoimmune disease. Our patient was a 27 year old male with past medical history of genital herpes and high risk sexual behavior who presented to the ED with 3 weeks of fevers, night sweats, weight loss and painful cervical lymphadenopathy.

METHODS: A 27 year old male presented to the ED with painful cervical lymphadenopathy, confirmed with CT neck. Labs and blood cultures were performed, and the patient was discharged from ED with oral antibiotics and outpatient follow up. He was called back five days later and admitted due to a positive blood culture growing anaerobic gram positive rods. Admission labs were significant for neutropenia with ANC of 1.0. He was started on broad spectrum antibiotics, which were eventually discontinued due to likely skin procurement in the original blood culture. Extensive malignancy, autoimmune and infectious work up was preformed with negative results. Due to continued fevers during hospitalization, enlarging lymphadenopathy and worsening neutropenia, the patient received a core lymph node biopsy with concern for possible undiagnosed malignancy. Biopsy returned significant for histiocytic necrotizing lymphadenitis or Kikuchi Fujimoto disease. Patient was discharged with close outpatient follow up.

DISCUSSION: Kikuchi disease normally presents with fever and cervical lymphadenopathy. The challenge of this case is the extensive differential which could be broken down into three different categories: infectious, oncologic, and autoimmune. Infection was highly suspected in this patient due to the positive blood culture. As this turned out to be a contaminant, the differential once again needed to be expanded. Although the final diagnosis was a benign condition that should resolve in 1-4 months, this patient's nonspecific symptoms mimic other more concerning conditions. Infection and malignancy needed to be ruled out before proceeding with expectant management. This case highlights the importance of developing a broad differential for a nonspecific complaint.

2

Caregiver Attitudes Towards Choosing between Operative and Nonoperative Management of Pediatric Acute Appendicitis

Massoumi RL, DeUgarte D, Dubrovsky G, Cho C, Nguyen M, Gomez C, Blahut M, Sacks G, Lee SL, Jen HC, Shekherdimian S.
University of California Los Angeles, Department of General Surgery

INTRODUCTION: Making healthcare decisions for their children can be challenging for caregivers. Our aim was to characterize the decision-making preferences and stress level of caregivers who were offered both appendectomy or nonoperative management (NOM) with antibiotics for children with acute appendicitis.

METHODS: A pathway was developed with criteria for offering operative or NOM for patients with acute appendicitis and used by a group of pediatric surgeons across four hospitals. At the time of decision, caregivers completed a survey assessing their understanding of treatment options, stress level and preferences in being given the choice. A follow-up survey was later administered as an outpatient to evaluate post-decision satisfaction.

RESULTS: A total of 45 respondents were included in the study. Over 95% of parents endorsed understanding of the risks/benefits of the options and felt supported and satisfied with their decision. Half felt the process was more than minimally stressful, 77% felt the decision was easy to make, 89% liked being asked and 95% preferred to make the decision themselves with varying degrees of input from their physician. Of the 62% of parents who completed the follow-up survey, >90% were satisfied with their decision and one respondent regretted their choice.

CONCLUSIONS: When offered the choice between operative and NOM of acute appendicitis, half of parents felt significant stress. The majority endorsed adequate understanding of the options, felt it was an easy decision, and maintained the desire to be the primary decision maker for their child. Our study provides preliminary data on parental attitudes towards shared decision-making in the surgical setting. Follow-up studies should focus on identifying predictors for those who feel increased stress and difficulty with decision-making.

3

Improving Family Medicine Resident Confidence in Administering ACEs Questionnaire in an Outpatient Setting through Education and Identification of Resident Perceived Barriers

Siri Chirumamilla, MS, DO (1), Colleen Warnesky, PsyD (1), Pamela Davis, MD (1)
(1) Department of Family Medicine at Dignity Health-Northridge Medical Center

INTRODUCTION: Adverse Childhood Experiences (ACEs) questionnaire is a screening tool that is given in clinic by primary care physicians to identify traumatic experiences that can have longitudinal effects on negative health outcomes. In 2018, only 23% of pediatric patients in our clinic were screened due to lack of clarity and physician confidence with ACEs. In order to address the identified barriers, a 1 hour lecture on ACEs will be given as well as a pre/post lecture survey to assess resident confidence.

METHODS: Family medicine resident (FMR) physicians present for noon didactics were recruited for the study. An ACEs knowledge/confidence pre-survey was administered. Next, a 60 minute presentation was given discussing the history of ACEs and screening tool, trauma-informed care and toxic stress, and mitigation of ACEs with resilience tools. Lastly, an ACEs knowledge/confidence post-survey was administered as well identification of barriers to ACEs administration in clinic. Statistical analyses were conducted on survey information to assess confidence in education intervention as well identify barriers to administering ACEs screening tool in clinic.

RESULTS: A total of 14 residents (FMR-1 6, FMR-2 4, FMR-3) of 17 available residents consented to pre/post survey in addition to ACEs lecture. Resident ACEs knowledge and confidence increased by 16% and 16% respectively with education intervention with highest resident confidence increase at 29% with first year residents. 92% of residents found the lecture to be effective in changing clinical decisions and considering patient's ACEs during visit, and 100% of residents recommended lecture. The top 3 resident perceived barriers to ACEs administration were length of visit (33%), retraumatization of patients (19%), and lack of patient resources (16%).

CONCLUSIONS: Resident education on ACEs especially during first year is an essential component of increasing confidence in administering ACEs screening questionnaires in an outpatient setting. By identifying barriers to administration of ACE screening, future studies can target education to resident perceived barriers to further increase confidence for physicians as well assess patient confidence for trauma care with physicians.

4

17 Year Old Female with Acute Renal Failure

Ashton Garbutt, MD; William Yang, MD; Catherine Cho, MD
Dignity Health Northridge Family Medicine Program

INTRODUCTION: C3 Glomerulonephritis is a rare form of glomerulonephritis that can affect both the pediatric and adult patient Populations. Our patient is a 17 year old female, with no significant past medical history, who presented to the emergency department with nausea, vomiting for 6 days and shortness of breath who was found to be in acute renal failure secondary to C3 Glomerulonephritis.

METHODS: A 17 year old female with no significant past medical history presented to the ED with nausea and vomiting for 6 days and shortness of breath for 3 days. Pt was tachycardic to 120s with BP of 195/136, Hgb of 6, creatine of 13.72, with an elevated troponin. Patient was fluid overloaded on physical exam, pale and diaphoretic. Of note mother reported that in 2017 patient was seen in the emergency department for abdominal pain that was thought to be appendicitis. However, during appendectomy patient was found to have normal appendix but did have hematuria. After the resolution of the abdominal pain the hematuria was never worked up. Patient was determined to be in acute renal failure. Patient was subsequently started on emergent hemodialysis and then transitioned to peritoneal dialysis. Admission labs were should normal ANA and low C3. Renal biopsy showed proliferative glomerular nephritis with glomerular deposits and focal crescents with 50% sclerosis of the kidney's bilaterally.

DISCUSSION: C3 Glomerulonephritis is a rare form of glomerulonephritis. This case in particular shows the progression of the disease when unchecked. Prior to the patient having the first event in 2017 she had a viral illness that progressed with early signs C3GN with significant hematuria. This should have been followed up in the outpatient setting. This could have led to the prevention of 50% glomerular sclerosis of her bilateral kidneys. Pathology finding in this case were also unique with low C3, thrombotic microangiopathy seen on biopsy and although not fully seen secondary to the immense sclerosis, likely C3 deposition in the stain of the sample. This case shows the importance of monitoring findings in the primary care setting such as hematuria on UA and following up for resolution.

5

Patient and Resident Physician Concerns for Continuity in Outpatient Family Medicine

Clint Mower, DO, Chris Kuhlman, MD
Dignity Health Family Medicine Residency Program

INTRODUCTION: Continuity is the cornerstone of Family Medicine is a common saying with good reason as continuity is known to have an inverse association with patient morbidity and mortality. The aim of this study was to assess the frequency of patients citing continuity as a concern when requesting a change of physician as well as the nature of that concern. A survey of current Resident Physicians was done to identify which resident rotations impede outpatient continuity the greatest.

METHODS: Change of Physician Request Forms filled out by patients from the early 2000s to early 2018 in an outpatient Family Medicine Residency were assessed for references to continuity and categorized by the nature of their concern. In addition an anonymous survey of current Resident Physicians was done identifying the top 3 most difficult rotations to maintain continuity and justifications for this were inquired.

RESULTS: Concern for continuity was cited by 185 out of 667 or 28% of patients requesting a change of assigned physician. Of those, the most common concern was seeing too many Resident Physicians with request for a permanent Attending Physician (28%), followed closely by requesting the same Physician as other family (26%), seeing a Physician they had seen previously in general (23%), and others.
21 out of 23 Resident surveys were returned overwhelmingly showing that the top 2 rotations in order of difficulty to maintain continuity were Inpatient Float (overnight shifts) and Inpatient Medicine. The most common justification for both was "high work hours".

CONCLUSIONS: A significant number of patients directly cite continuity of care when requesting a change of physician, highlighting this important shared value. Resident Physicians cite the common inpatient overnight float and inpatient medicine rotations overwhelmingly as the most difficult rotations to maintain continuity in the outpatient setting. Approaches to improve continuity would arguably best be spent in these areas.

6

Brief Report: Family Medicine Residency Response to Global Pandemic

Matthew Martinez, MD, Timothy Nieh, DO, Nancy Robles, DO
Dignity Health Family Medicine Residency at Northridge

INTRODUCTION: As a consequence to the COVID-19 pandemic, trainees are being confronted with learning how to adjust. Los Angeles County became one of the hardest hit locations in the country. Dignity Health Family Medicine Residency at Northridge rose up to meet the needs of the community, including working with sponsoring hospital in the Mayo Clinic Expanded Access Program utilizing COVID-19 Convalescent Plasma as treatment for patients.

METHODS: Dignity Health Family Medicine Residency at Northridge partnered with the county to set up an onsite testing facility. Through their work with the infection control department, our Residents learned the nuances of reporting positive test results, including delivering difficult news, counseling on disease course, and providing anticipatory guidance with regards to prevention and expectant management.
Residents work with the hospital in the Mayo Clinic Expanded Access Program to investigate the safety and efficacy of transfusing convalescent plasma in patients with severe or life-threatening disease. Residents and other hospital departments were able to solicit over 40 potential donors. Ultimately, 17 units of plasma were transfused to treat critically ill patients. Residents are also collaborating with the hospital quality metrics team to study the various demographics and interventions in an effort to observe the best treatment approaches to our patients on a local level.

DISCUSSION: Family Medicine Physicians, as a whole, have a longstanding tradition of responding to disaster and needs of community. In the past, residency programs have responded by increasing shift hours, volunteering in the community and implementing new training educational protocols. The pandemic is ongoing and our roles are rapidly changing. Much work is still ahead. We see it as our responsibility as Family Physicians and as a Family Medicine Residency program to be leaders in the hospital and in the community, to advocate for our patients, and to adapt our practices to the ever-changing environment we encounter.

7

Understanding Patient Hesitancy to Receiving the Influenza Vaccine

Christine Vu, DO and Kathy Cairo, MD
Dignity Health Family Medicine Residency Program

INTRODUCTION: Vaccinations are often cited as one of the most important achievements of public health. However, this success has always been challenged by individuals/groups who question and sometimes refuse vaccines. Influenza vaccine acceptance in particular continues to remain suboptimal despite reinforcement by the CDC. Influenza can result in substantial disease and significant morbidity/mortality. This study aimed to identify the reasons that patients may have for refusing the influenza vaccine.

METHODS: The enrollment period for this study was during the Influenza season (September 2020-January 2021). Participates included adults over the age of 18 who declined the Influenza vaccine during their routine office visit. They were provided with a five question survey relating to their demographics, whether they had received the Influenza vaccine the previous and current year, and if not, what the primary reason was for declining the vaccine.

RESULTS: Of the total number of respondents, 27% of the patients declined the vaccine due to the belief that they did not get the flu, 23% declined because they thought the vaccine would make them sick, 17% responded under the Other category, 16% preferred not to answer, and 10% stated they declined because they did not like needles.

CONCLUSIONS: Influenza vaccine hesitancy is common and our study determined that 50% of hesitancy was due to patient's misconception that the vaccine would make them sick or because they had no previous flu history. Our next goal is to address these barriers by providing targeted education through information pamphlets with the hope of decreasing Influenza vaccine hesitancy in clinic.

8

Case of HIV Transmission on Pre-Exposure Prophylaxis

Johan Clarke, Jennifer Chang
Kaiser Permanente Los Angeles Medical Center

INTRODUCTION: Patient is a 29 year old male who had been on HIV Pre-Exposure Prophylaxis (PrEP) for three years prior with self-reported good adherence. He reported 5 sex partners in the past three months with 30% condom use when routine HIV screening returned positive for both HIV antigen and antibody.

METHODS: Prior to confirmation of HIV-1 RNA levels, the decision was made to treat as a presumptive positive transmission of HIV while on PrEP. As he was already on two NRTIs as part of the typical HAART triple-therapy regimen (tenofovir disoproxil fumarate and emtricitabine), there was concern for possible viral resistance. Patient was started on darunavir/cobicistat and dolutegravir for additional coverage. Initial HIV RNA was positive to 744 copies/mL and undetectable after one week of quadruple therapy. Resistance studies showed M184V mutation showing resistance to emtricitabine though hypersensitivity to tenofovir. Adequate levels of PrEP were confirmed with dry blood spot. The patient remained undetectable on regimen and was successfully transitioned to TAF/FTC/DTG.

DISCUSSION: This case depicts the extremely uncommon but highly feared possibility of PrEP failure. While access to this medication has reduced rates of HIV transmission particularly among serodiscordant couples, it is not 100% efficacious and transmission is a possible outcome. Routine PrEP management partially addresses this concern with quarterly HIV screening though there is little published on guidelines for how to manage PrEP failure or associated resistance patterns. This case provides an example of a possible drug regimen to choose in the case of encountering PrEP failure in future encounters. This case also brings into question modes of transmission of HIV while on PrEP therapy and recognizes that further research should be done to possibly reduce rates of PrEP failure.

9

Wellness Curriculum Development & Evaluation in Family Medicine Residency Program During COVID-19 Pandemic

Erica Tukiainen, MD MPH (1), Veronica Aguilar, MD (2), Brian Gandara, MD (3), Davida Becker PhD (4) April Soto, MD (5), Rebecca Crane, MD (6), Nzinga Graham, MD (7), Maya Mitchell, MD (8)
Department of Family Medicine at Kaiser Permanente Los Angeles Medical Center

INTRODUCTION: The COVID-19 pandemic has notably increased burnout among family medicine trainees and faculty through increased sense of loneliness and anxiety. However, residency programs lack practical individual and organizational strategies to identify burnout and adopt wellness initiatives during the pandemic. In response, this study characterizes feedback about wellness curriculum and burnout survey implemented during the COVID-19 pandemic by the Kaiser Permanente Family Medicine Program in Los Angeles.

METHODS: Wellness Curriculum - Two to three wellness sessions took place each month between July 2020 and April 2021 which were led by resident and/or faculty for the entire residency. Wellness sessions included various topics including gratitude letters, anti-racism discussions, Balint, narrative medicine, sound bath, hiking and guided meditation.
Burnout Survey - In Fall 2020 and Spring 2021, we collected data from both residents and faculty via anonymized survey that included 16-item validated burnout survey called Professional Fulfillment Index and open and closed ended questions about satisfaction and perceptions about the wellness curriculum.

RESULTS: Wellness Curriculum - The wellness curriculum was well received with high satisfaction ratings for all sessions and experiences working with faculty and residents wellness champions leading the sessions. Open ended feedback emphasized need for less lecturing and more time for bonding especially with increased levels of social isolation during the pandemic. Burnout Survey - In Fall 2020, total of 24 family medicine residents and 16 faculty responded to the Professional Fulfillment Index. Burnout rate among faculty was 12% while prevalence of burnout among PGY1 was 20%, PGY2 was 20% and PGY3 was 44%. Spring 2021 data collection currently in process.

CONCLUSIONS: A meaningful wellness curriculum can be integrated into a family medicine program during COVID-19 pandemic that includes both residents and faculty and offers multiple creative initiatives without lectures. Burnout rates were higher with residents, especially among 3rd years, compared to the faculty. More information required to understand the difference in wellness needs and burnout rates between residents and faculty.

10

Feasibility of Adopting an Innovative Digital Wellbeing Tool to Improve Physician Wellness

Erica Tukiainen, MD MPH (1), Katarina Segerstahl, PhD (2), Davida Becker PhD (3), April Soto, MD (4)
(1) Department of Family Medicine at Kaiser Permanente Los Angeles Medical Center; (2) Aava Medical Center, Finland

INTRODUCTION: Little research exists on physician wellness interventions that explore feasibility of adopting new digital wellbeing tools to enhance physician wellness. Our study will investigate the feasibility of Kaiser Permanente LAMC Family Medicine Residency program implementing a digital wellness assessment for physicians called Aava Wellbeing Survey which was developed by Nordic medical center to assess wellbeing. Our goal is to investigate the perceptions of adopting a digital wellbeing survey to improve physician wellness.

METHODS: In this cross sectional study, we will administer the Aava Wellbeing Survey to Kaiser Permanente Family Medicine residents and faculty during a wellness session at Los Angeles Medical Center in Spring 2021. The participant can volunteer to receive a link to the anonymous and free survey which does not collect personal identifiable information. The survey is comprehensive, covering nine areas of wellbeing along with immediate feedback about wellbeing results. Afterwards, an anonymous feedback assessment and optional short group interview are offered to share perceptions about feasibility and utility of Aava Wellbeing Survey for physicians.

RESULTS: Preliminary findings are available for nine participants but data collection is currently underway (April 2021). Based on preliminary results, the Aava assessment was well received and 100% participants strongly agreed or agreed that the Aava Wellbeing Survey was useful to reflect different areas of wellbeing and participants found at least one area to take action. Participants recommended that digital tools explore physician specific stressors and that feedback should take into consideration cultural and ethnic background. Additional results are pending further analysis.

CONCLUSIONS: Because little research has been done in exploring implementation of innovative digital wellbeing tools to enhance physician wellness, we hope to show that adopting a digital wellbeing survey like the Aava Wellbeing Survey is feasible among physicians. We hope that this study can contribute to innovative and feasible wellbeing interventions for training programs to assess physician wellbeing and reduce burnout.

11

Safety of Tizanidine and Baclofen in Elders (STaBE): A Retrospective Cohort Study

Dania Bitar, PharmD. Erin Adams, MD PGY3. Brian Dickey, MD PGY1. Sunha Lee, MD PGY1. Robert Deamer, PharmD. Monique George, MD.
Kaiser Permanente Woodland Hills

INTRODUCTION: If you are over 65, there are few options for musculoskeletal pain. To avoid opioids, skeletal muscle relaxants (SMRs) can be used, despite risks including falls with fractures. The American Geriatrics Society 2019 "Beers List" prohibits most SMRs but does not include tizanidine or baclofen in this guidance, implying less risk. Using a retrospective cohort design, our study evaluates serious falls in patients taking tizanidine or baclofen compared to the most prescribed SMR, cyclobenzaprine.

METHODS: STaBE is a retrospective cohort study of Kaiser Permanente Southern California (KPSC) members who were ages 65-100 years old, with a "drug exposure" (dispensation) with tizanidine, baclofen, or cyclobenzaprine, in the KPSC enterprise Pharmacy Information Management System (ePIMS) from 1/1/2008 to 12/31/2018. Index date is the first prescription date. Outcomes episodes are KPHC-documented hospitalizations, emergency department, or urgent care visits, associated with injury outcome ICD 9/10 codes for falls, fractures, or dislocations.

RESULTS: Our study began with 953,697 included patients with a drug exposure from 1/1/2008 to 12/31/2018. Patients may have up to 3 outcome episodes, treated as a separate record, resulting in 1,366,582 episodes. These were then narrowed by 1 year of membership before index date, age 65-100, and no SNF/hospice/palliative care admissions during the study period and 1 year prior. This resulted in 87,898 patients with 118,430 episodes. Results will be given in weighted hazard ratios (adjusted 95% CI) for injury among the 3 SMR groups, with cyclobenzaprine as the reference range.

CONCLUSIONS: TBD, full results not yet compiled.

12

Importance of H. Pylori Eradication Testing

Chloe Su, MD; Tina Barjasteh, MD
Department of Family Medicine at Kaiser Permanente Woodland Hills

INTRODUCTION: H. pylori is the most common chronic bacterial infection in humans globally. Confirmation of eradication should be performed in all patients treated for H. pylori because of increasing antibiotic resistance and its association with gastric cancer. This study identified that 73% of FP physicians at KWH Medical Center ordered stool eradication testing. Our aim was to increase clinician knowledge regarding H. pylori, with the ultimate goal of further improving rates of stool eradication testing.

METHODS: Baseline statistics on rates of stool eradication testing by the KWH Family Medicine Department were obtained from 10/2018-11/2020. 123 patients were identified as having positive H. pylori tests. Of these, 73% had stool eradication tests ordered. At 1 month, 57% of patients completed stool eradication tests, with a 94% rate of successful eradication after treatment. Subsequently, a 1 hour lecture on H pylori diagnosis and treatment was given to the KWH Family Medicine residents. A pre- and post-test survey with 8 multiple choice questions was administered to assess knowledge and self-rated comfort regarding H. pylori diagnosis and treatment.

RESULTS: Our data highlighted the importance of follow-up for H. pylori treatment. This study focused on the physician's role in ordering eradication testing. Nine resident physicians participated in the study. The didactic session led to an increase in knowledge regarding H. pylori testing and treatment with improvement of pre-to-post test scores by 26% (p <0.05 by paired t-test analysis). Surprisingly, this did not correlate with a significant increase in self-rated comfort in diagnosing and treating H. pylori, with only a 16% increase (p < 0.3 by paired t-test analysis).

CONCLUSIONS: Our study identified a lapse in completion of H. pylori stool eradication testing after initial diagnosis and treatment. This may be due to a knowledge gap regarding the need for re-testing. Simple interventions such as didactic sessions effectively increase clinician knowledge, which may improve clinical outcomes. Future areas of quality improvement might focus on barriers to completing stool eradication tests.

13

Pre-Exposure Prophylaxis (PrEP) for HIV Prevention in a Large Integrated Health Care System in Southern California: An Observational Study Evaluating Renal Safety and Discontinuation Rates

Christine Yi PharmD, Erika Priestley MD, Michael Zhang DO, Sandra Chiang PharmD, Robert Deamer PharmD, Monique George MD
Kaiser Permanente Woodland Hills

INTRODUCTION: Daily pre-exposure prophylaxis (PrEP) with tenofovir disoproxil fumarate/emtricitabine (TDF/FTC) is safe and highly effective against preventing HIV infection. Usage of PrEP with TDF/FTC is expected to increase in the coming years but the associated risk of deterioration in renal function persists. The purpose of this study is to determine discontinuation rates associated with renal impairment in Kaiser Permanente Southern California (KPSC) over a 7.5 year period, July 2012 - December 2019.

METHODS: A retrospective observational study of KPSC adult members identified through the KPSC electronic Pharmacy Information Management System (ePIMS) as having received two or more prescriptions for TDF/FTC during the study period. Further analysis to determine percentage of patients that develop renal impairment, as determined by the reduction in the estimated glomerular filtration rate (eGFR) to <70 mL/min/1.73 m2 as well

as the discontinuation rate of TDF/FTC due to TDF/FTC-induced renal toxicity. The reason for discontinuation will be determined through review of electronic medical records (KP HealthConnect) by investigators.

RESULTS: Final results still pending statistical analysis; working to identify: baseline characteristics of the patients, percentage of patient who develop renal impairment, percentage of patients who discontinued PrEP with TDF/FTC, percentage of patients who discontinue PrEP due to renal impairment, percentage of patients with eGFR<70 mL/min/1.73 m2 on two or more occasions, and adherence rates on PrEP with TDF/FTC.

CONCLUSIONS: To be based upon final results.

14

How Effective is Our Residency at Preventing Burnout?

Lauren Kim, MD
UCLA Family Medicine Residency

INTRODUCTION: In intern year, rates of burnout rise drastically from 4% to 55% by the end. Burnout remains high through the rest of residency, and is associated with depression, medical errors and adverse effects on patient safety, and can last beyond residency as well. Thus wellness programs to prevent resident burnout become essential, along with treatment resources. This study's purpose is to assess the efficacy of the Wellness Curriculum at the UCLA Family Medicine residency.

METHODS: 36 residents were surveyed using the Maslach Burnout Inventory (MBI), prior to starting the Wellness Curriculum in the fall, and again in the spring. The survey includes questions assessing year in residency, ethnicity, level of social support and which wellness activities people participated in throughout the year. The Wellness Curriculum included monthly emails with mental health information, monthly social activities, virtual discussion sessions during didactic days, and virtual dinners with a behavioral health psychologist. Primary outcomes were differences in mean MBI scores (measures Emotional Exhaustion [EE], Depersonalization [DP] and Personal Accomplishment [PA], analyzed with paired t-tests.

RESULTS: Data is in the process of ongoing analysis. Pre-intervention and post-intervention mean scores will be analyzed using paired t-testes. Mean change from baseline will be analyzed in the three categories of EE, DP and PA, and compared to number of wellness activities participated in throughout the year. Other factors such as ethnicity, year of residency and level of social support will be analyzed for associations as well.

CONCLUSIONS: As results are sill in the process of analysis, conclusions are pending. This will include a discussion of whether the change in burnout from baseline was correlated with an individual's involvement in the Wellness Curriculum throughout the year, along with any associations found between burnout and other factors. Specific factors thought to contribute to burnout during the COVID pandemic will be addressed, along with suggestions for future directions for research and how to better develop the residency's Wellness program.

15

Hey Epic! Investigating AI Digital Assistant Use to Decrease Documentation Burden

Michael Ohkura, MD[1]
1 – Department of Family Medicine, University of California Los Angeles

INTRODUCTION: Clinic documentation burden is a major cause of burnout with little headway in improvement. While other settings use scribes to great benefit, this may not be financially viable for primary care practices. Recent improvements natural-language AI (i.e. Apple iPhone's "Siri") have made interacting with digital assistants much more intuitive. We explore EPIC's "Hey Epic!" feature in its application to primary care as a promising tool to decrease clinic documentation burden.

METHODS: A qualitative survey was conducted of resident physicians in all levels of training at the UCLA Santa Monica Family Health Center. Information collected included self-assessments of total and per-patient documentation times, perceived stress due to documentation burden, omission of documentation time in ACGME work hour reporting, personal use of digital assistants, and use of currently available electronic medical record assistive technologies.

RESULTS: A total of 35 respondents were included. In-clinic workflow (23%) and post-clinic documentation (54%) were reported the most stressful part of the day, with 23% noting 3-4 hours and 31% noting 4+ hours of post-clinic documentation time per half day of clinic. 1/3 of respondents felt documentation burden was "overwhelming", and over half felt it was "quite burdensome. 17% were not currently using available dictation software because current software is "too frustrating", while 67% cited lack of familiarity. Importantly, 39% of residents "always" and 23% "often" under-reported ACGME work hours by omitting documentation time.

CONCLUSIONS: In-clinic workflow and post-clinic documentation are key targets where digital assistants can help by pending/signing orders and completing notes by natural-language commands. An important sequela of efficiency includes reduced ACGME work hour violations. Activation of the Hey Epic! assistant is a potential key tool to reduce work burden and follow-up qualitative surveys will assess improvements in these key domains.

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Joint Hypermobility as a Risk Factor for Injury in Adolescent Long-Distance Runners

Katherine Fahy MD (1,2), Daniel Harris Brown (3), Teresita Gomez MD (2), Joshua Goldman MD MBA (1,2,4), Summer Runestad ATC (4), Jeffrey Gornbein DrPH (5), Emily M. Miller, MD (1,2,4)
1. UCLA Division of Sports Medicine, Department of Family Medicine; 2. UCLA Department of Family Medicine; 3. UCLA David Geffen School of Medicine; 4. Orthopedic Institute for Children; 5. UCLA Department of Biostatistics

INTRODUCTION: Generalized joint hypermobility (GJH) is defined as increased mobility in multiple joints when compared to other individuals of the same age and sex. Prior research has demonstrated an association between GJH and knee and ankle injuries. Little research has focused on GJH as a risk factor for running-related injuries particularly in an adolescent population. This pilot study examines if GJH increases the risk for running-related injury in adolescent long-distance runners.

METHODS: Students Run Los Angeles (SRLA) partners with middle and high schools to help students train for the Los Angeles Marathon. SRLA runners between the ages of 14 and 18 years old were enrolled in this study, and their joint flexibility was assessed through a video visit using a Beighton score. A Beighton score greater than 4 was defined as GJH for the purposes of the study. The Beighton scores were compared to previously collected injury data from the 2019-2020 season using a Poisson multivariable regression model to assess for correlation between joint hypermobility and injury rate per 1000 miles run. This study was approved by the IRB.

RESULTS: Runners were randomly selected from 1422 students who participated from 2019-2020 (51.7% female, 48.3% male, mean age 15, SD 1.94). 16.2% experienced injuries with an overall injury rate of 0.97 per 1000 miles run (SE 0.05). After controlling for age, female gender was a significant risk factor for injury (1.12 vs 0.84, RR 1.34, p=0.86). The Spearman correlation of observed vs predicted injuries was r=0.26.
Data collection for GJH is underway (N=37: 17 females, 20 males, mean age = 16). Beighton scores range 0-8 (mean=3.29) with GJH identified in 29.7% (N=11). GJH was more prevalent in females (55% vs 45%).

CONCLUSIONS: The prevalence of GJH was 29.7% with a higher rate in female participants compared to male. The injury rate was also notably higher in females than males with a Spearman correlation indicating that risk factors other than gender play a role. This pilot study is ongoing, and it will help determine if GJH is one such additional risk factor for injury in adolescent long-distance runners.

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The effect of sleep extension and sleep consistency on athletic performance in NCAA Division I collegiate athletes

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INTRODUCTION: Sleep has many benefits to health. Increased attention has been placed on the role of sleep on athletic performance and shown some improvements in specific tasks. However, less is known about the broader applicability of sleep extension across multiple sports. This study explores the role of sleep extension and consistency on athletic performance in a large cohort of collegiate athletes in multiple sports. We hypothesize that sleep extension and consistency will improve athletic performance.

METHODS: This is a multiphase crossover study using 210 NCAA Division I collegiate athletes across multiple sports, including soccer, tennis, basketball, cross-country, baseball, softball and swimming. Baseline data will be collected followed by three, two-week intervention phases: 1) sleep consistency (same time in bed each night) 2) washout period 3) sleep extension intervention (min. 10 hours in bed). Statistical analysis performed using univariate t-test.

RESULTS: The study is in Phase I of data collection with anticipated completion in 4-weeks. The following metrics are assessed in each phase:
1) Sleep & Biometric Data: Total sleep time, sleep latency, sleep architecture, resting HR, HR variability are monitored using a validated activity tracking device. Subjective sleep is assessed with a self-reported sleep diary, a validated sleep-quality survey, and the Epworth Sleep Scale.
2) Performance Testing: running speed, eye tracking, and reaction time is tested for all athletes along with additional sport-specific accuracy measures.
3) Mood: via the Profile of Mood States questionnaire.

CONCLUSIONS: We anticipate that both sleep extension and sleep consistency will improve athletic performance tasks, sports-specific accuracy, perceived mood state, and biomarkers of recovery. Both interventions will also lead to longer total sleep time, decreased daytime sleepiness, and improved sleep architecture (increase in REM and slow wave sleep (SWS) time).

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Accuracy of Ultrasound for Diagnosis of Salter-Harris Type I Distal Fibula Fracture

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INTRODUCTION: The nondisplaced Salter-Harris Type I distal fibula fracture (SH1DFF) is challenging to differentiate from a lateral ankle sprain given their similar presentations and absence of visible fracture on XR. This study sought to determine the diagnostic accuracy of US to acutely identify SH1DFF.

METHODS: This prospective cohort study evaluated children presenting within 72 hours of ankle injury with tenderness over the distal fibula (DF) physis and XR demonstrating an open DF physis without bony injury. Each subject underwent US evaluation of their injured and uninjured DF physes. The affected extremity was immobilized per standard of care. Follow-up XR 3-4 weeks post-injury confirmed presence or absence of SH1DFF. All images were interpreted by blinded investigators.

RESULTS: Seven subjects have completed the study (3 M, 4 F; mean age 10.8 years, range 5-13). All were evaluated with physical exam, XR and US 1 day after acute inversion ankle injury. Follow up XR was obtained at a mean 28 days post-injury (range 23-33 days), confirming SH1DFF for 4 subjects. There was 100% correlation between confirmed SH1DFF and initial US demonstrating periosteal elevation, periosteal fluid collection, bone fragmentation within the injured physis and subtle growth plate widening compared to the uninjured side (mean difference 0.21mm; range 0.16-0.25mm). None of these US findings were present in the 3 non-SH1DFF cases.

CONCLUSIONS: Preliminary results suggest US can acutely diagnose SH1DFF based on the presence of periosteal elevation, periosteal fluid collection, bone fragmentation and growth plate widening compared to the uninjured side. Validating US for identification of SH1DFF would significantly improve management of pediatric patients by optimizing timely, accurate diagnosis, thus decreasing unnecessary immobilization and associated morbidity.

19

Collegiate Athletic Clearance in the Era of COVID-19

Marissa Vasquez, MD, MBA, FAAFP (1), Janet Y. Kwok, MD (2)
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INTRODUCTION: A collegiate women's lacrosse athlete presents for pre-participation exam with abnormal routine studies. This cases highlights atypical findings and a challenging diagnosis during the COVID-19 pandemic. It underscores a clinician’s need to obtain a detailed history and collaborate with consultants serving as an important puzzle piece.

METHODS: A 20-year-old collegiate women's lacrosse athlete presents for pre-participation exam. She had abnormal liver enzymes 3 weeks prior. Patient is well with no recent COVID-19 illness. No recent travel, new medications or vaccines. Past medical history includes ADHD and treatment 6 weeks ago for bacterial vaginosis and vaginal candidiasis. She was treated with topical metronidazole and oral fluconazole single dose. Medications include lisdexamfetamine (long-term use) with no sequela. Currently has IUD. She reports ibuprofen use 3 months ago. She has no significant family or surgical history. Consumed intermittent alcohol over last 2 years. Review of systems is negative.
Physical Exam Normal
Studies

AST 157/163/45
ALT 280/364/69
ALK 67/74/66
T bili 0.9/0.6/0.6
AFP 8.2
Lipid/Iron/TSH/CBC/BMP nl
INR 1.1
Hcg Neg
Celiac Ab neg
Alpha-1-antitrypsin neg
COVID-19 PCR neg
Hep B neg
HIV neg
US Abdomen: Moderate hepatic steatosis
Liver Biopsy: Suggestive of drug/supplement induced liver injury. No steatosis

DISCUSSION: This case demonstrates drug-induced liver injury (DILI) due to fluconazole. The athlete underwent extensive workup including biopsy. Currently, there are no published cases of healthy athletes with DILI after a single dose of fluconazole. DILI has a wide range of clinical presentation from mild elevations of serum aminotransferases to fulminant liver failure. Consequently, diagnosis may be challenging, imitating other diseases. Notably, 1% of patients on fluconazole develop ALT elevations 8 times the upper limit of normal. Liver injury is typically hepatocellular and arises within the first few weeks of therapy. Most cases are self-limited after stopping the offending agent. Anticipatory guidance was provided regarding hepatotoxic medications, herbal supplements and alcohol.

KEYNOTE

(1:40PM – 2:30PM)

Quantifying Health and Strategizing Care with the Whole Person Health Score

Geoffrey Leung, MD

Dr. Geoffrey Leung serves as the Riverside University Health System (RUHS) Ambulatory Medical Director and supports teams at 13 RUHS Community Health Center Sites and at the RUHS Medical Center Clinics. At RUHS Medical Center, Dr. Leung serves as the Chair of Family Medicine. More recently, Dr. Leung has been working closely with RUHS Public Health in supporting COVID efforts across Riverside County. Dr. Leung is passionate about Clinical Excellence, Education, Community, and Population Health. He enjoys working on the integration and transformation of care delivery in order to provide our community and residents with the best care possible. Dr. Leung completed his medical degree at Baylor College of Medicine, his training in Family Medicine at Kaiser Orange County, and his Master of Education at Harvard. On a personal note, Dr. Leung is married and has two children who help ground and inspire him on a daily basis.

SESSION 2

(2:40PM – 3:20PM)

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Community health foundations: A community-based education for first year family medicine residents

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INTRODUCTION: The mission of the CDU residency programs is to train diverse physician leaders who are dedicated to social justice and health equity for underserved and under resourced communities. One of the unique features of family medicine residency program is that it infuses social medicine (improving health through the combination of clinical care, activism and advocacy) and the CDU Advantage into community and behavioral health training. The CDU Advantage is based on institutional learning outcomes that build student knowledge, skills and attitudes in these five pillars - 1) excellence in specialized knowledge, 2) social justice, 3) global-international experience, 4) community experiential education and 5) health policy. The first block of PGY1 combines an introduction to key components of the specialty as well as foundational concepts in community/behavioral health and social medicine. There may be similar disease processes and behaviors in communities; but disease prevalence, health outcomes, and access to health care disparities are persistent in South Los Angeles. Addressing these disparities requires a better understanding of the patient's context (social, political, cultural, economic, and physical environments), and delivering culturally responsive health care. In contrast to the challenges that South Los Angeles communities face, individuals and communities still manifest strength by fostering resilience, connectedness, and survival. Hence, the family medicine intern's task is not just to understand the community's risk, but also to map its assets. As the balance of community challenges and their strengths becomes better known, physicians are able to work in partnership with patients and the community - helping them achieve optimal success in health and wellness. Our hypothesis is that by immersing all CDU interns in learning foundational principles of community medicine, social medicine and the CDU Advantage educational principles, interns will be better equipped to address social needs in their clinical rotations.

METHODS: Using COVID-19 Pandemic safety precautions, residents trained in sessions related to each of the pillars of the CDU advantage using virtual platforms and orientated to their clinical training sites. They engaged in service learning by volunteering at the COVID-19 testing site and observing relevant patient-provider encounters including counseling patients that tested positive at our COVID-19 testing site. They completed in-depth written reflections about their ideas, feelings, CDU's mission, and their future Family Medicine Practice and processed emotionally charged topics in small groups. They completed training in ACEs, X waiver, and SUD. Finally, they listened to the stories of local community members in the form of panel discussions and completed their own serve learning projects. The capstone project for the rotation was a photovoice presentation of community challenges, strengths and how they will impact the community as a resident physician.

RESULTS: Both outcomes and formative evaluation methods were utilized. Our quantitative data was collected through resident ratings of the training using a 5-point Likert scale for each CDU Advantage Pillar. Excellence in specialized knowledge and research was rated 4.8, Social Justice was rated 4.9; Global-International Experience was rated 4.7; Community and Experiential education was rated 4.7; Health Policy was rated 4.77. Qualitative data was also collected. A S.O.A.R. Analysis (Strengths, Opportunities, Aspirations, and Results) model was incorporated to assess the curriculums impact and ensure continuous quality improvement.

CONCLUSIONS: Medical residency training tends to focus on enhancing skills, versus understanding community health and social medicine foundations. Our findings are promising that engaging community stakeholders in relationship with interns early can solidify a robust residency program and community connection. Primary care physicians especially in urban and community clinics benefit from an enhanced understanding of the proximate and distal factors that lead to disproportionate disease burden in the communities. Further study is needed to determine if training in community and social medicine will improve physician competence, compassion, and combat burnout in these high need communities.

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Implicit Bias: Addressing self-awareness to improve systemic bias

Adena Hicks, Lisa Barkley
Charles Drew University Family Medicine Residency

INTRODUCTION: Residents enter residency training having had many different educational experiences in cultural competence and implicit bias. Residents who seek out training with underserved populations may have more experience with cultural competency topics. Yet, there is a continued need to train physicians to be more aware of and address implicit bias to provide equitable health care to all populations. This educational activity aims to cater to residents who have surpassed a basic level of bias training and consolidate their educational experiences to allow for further insight into their personal perspective. Learning objectives for this session are: 1) Evaluate personal experiences with bias 2) Evaluate professional experiences with bias 3) Build an awareness of perspective in personal and professional roles. Our hypothesis is that training in implicit bias that allows learners to reflect and actively process their own bias will lead to better introspection and ability to provide equitable healthcare.

METHODS: This learning activity was delivered as a workshop in July 2020 with a cohort of 14 interns starting family medicine (n=8) and psychiatry (n=6) residency programs at Charles Drew University as part of the Community and Behavioral Health rotations. The session was a 3-hour session split into 4 parts. Part 1: Assess the level of experience with bias training of the participants. Part 2: Definitions Activity. Part 3: Showing the role of bias. Part 4 – Clinical Relevance. Sample discussion questions: Is bias in your differential? Discuss how we will have biases and the need to acknowledge them as the clinician, so facts are used to diagnose, not opinions. Do you have methods or suggestions for addressing personal bias? What evidence-based tools are there for addressing implicit bias?

RESULTS: Both outcomes and formative evaluations methods were utilized. Our quantitative data was collected through resident ratings of the training using a 5-point Likert scale. The workshop scored an average of 4.93. Qualitative data was also collected.

CONCLUSIONS: While incoming residents have often had some exposure to explicit and implicit bias curriculum in medical school training, a more in-depth course is needed to provide providers with the opportunity for personal reflection, depth, and guidance to truly address the role we play in bias in medicine. This learning activity is a 3-hour workshop designed as a pilot to show the benefit an interactive curriculum can have for bias content. Limitations of the study were lack of benchmark data or pre-/post- surveys to provide more evidence of skills gained from the content. Although reflection and rating from students suggested the content was effective in engaging residents in the topics, more conclusive data could be collected in future projects to capture the impact of the content on skill building, application to clinical care delivery, and self-efficacy. Future projects could develop longitudinal programs to deliver the content to a larger number of students, as this project was also limited to a small cohort for a 1 day 3 hour session. Despite the limitations, this project has shown positive data towards the use of interactive curriculum to impact racial disparities and bias at the level of the physician provider.

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Unilateral Lumbar Facet Arthropathy in Golfers – A case series

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1 - Harbor/UCLA Sports Medicine Fellowship, 2 - Ronald Reagan UCLA Medical Center, UCLA Santa Monica Medical Center, 3 - Source Health Care, 4 - VA Greater Los Angeles Interventional Pain Med

INTRODUCTION: Lumbar facet arthropathy is a common cause of low back pain. Located between the articular processes of adjacent vertebrae, zygapophyseal (z-joint) or facet joints, provide support, stability and mobility to the spine. Over time, repetitive compressive forces, including lumbar loading, bending or twisting, may lead to joint degeneration and localized lumbar pain. Competitive swinging sports, such as golf, may increase the risk. Despite numerous studies discussing low back pain with golfing, unilateral facet arthropathy has not been well-described. The aim of our study is to report this unique pathology observed in amateur golfers, assess for potential risk factors related to golfing, and propose an interventional spine treatment to help reduce refractory, facet-mediated pain.

METHODS: Methods: This case series reports on 5 amateur golfers with MRI-confirmed unilateral facet arthropathy. Patients underwent 2 unilateral L3, L4 medial branch and L5 dorsal ramus blocks. Patients reporting greater than 80% pain relief with both procedures underwent subsequent lumbosacral L3, L4 medial branch and L5 dorsal ramus rhizotomy under fluoroscopy. Pain relief at 3 months was the primary outcome. Results: 1 patient improved with conservative treatments, including medications and physical therapy. The 4 remaining patients each underwent 2 diagnostic, unilateral L3, L4 medial branch and L5 dorsal ramus blocks under fluoroscopy. Each of these four patients reported greater than 80% pain relief with the initial procedure. These four patients subsequently underwent lumbosacral L3, L4 medial branch and L5 dorsal ramus rhizotomy under fluoroscopy. At 3-month follow-up, each patient reported sustained reduction in pain levels by more than 80% compared to baseline, and each patient was able to resume golfing with reduced pain. No adverse events were noted.

DISCUSSION: Discussion: Golfers experiencing facet arthropathy may initially attempt conservative treatments including physical therapy and anti-inflammatory medications. If conventional measures are ineffective, lumbar radiofreqency neurotomies (RFN) have been shown to be effective. A study by Dreyfuss et al in 2000 treated 15 patients with RFN and observed 60% of patients had 90% pain relief and 87% had 60% pain relief. A similar study observed 68% of 174 patients with facet arthropathy treated with RFN had greater than 6 months of pain relief. Clinical Significance: Unilateral medial branch rhizotomies may be a safe and effective treatment option for golfers with unilateral facet arthropathy on the trailing side of their swing.

23

Partnerships for the Common Good: A Labor Union Led Public-Private Partnership To Increase Diversity in Medicine through a Mentorship Pipeline Program.

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Harbor UCLA Medical Center, Committee of Interns and Residents

INTRODUCTION: Lack of diversity in medicine and increasing the physician-to-population ratio in medically marginalized communities are active areas to address health disparities. In response, Public-Private Partnerships (PPP) offer opportunities to address these social justice goals and reduce institutional risks. We outline the MEDToros Mentorship Program (MMP) which follows a PPP model between a public university, county medical center, and physician union to establish a health professions pipeline program.

METHODS: The objective was to blueprint a Labor-led PPP framework, outline a medical school preparation curriculum, and formulate a replicable mentorship program. Phase 1 included the development of a social justice rooted medical school preparation curriculum. Phase 2 we organized meetings with stakeholders from labor, academics, and medicine following the seven C's of strategic collaboration. Phase 3 focused on participant identification through an application process and will match mentorships based on common characteristics. Phase 4 will include the evaluation of the program's success based on pre and post-program surveys and alumni tracking.

RESULTS: The MMP developed successful components of a sustainable pipeline program. Strategic partnerships were formed with pre-health student organizations and university leadership securing a self-replenishing participant pool. Access to clinical exposure was secured through the local partnering medical center. Formalized agreements were created and a Memorandum of Understanding was drafted. MMP Applicants: identified as Latinx (54.8%), Black (19.4%), Asian (12.4%). Popular careers: Medical Doctor (74%), Physician Assistants (35.5%), Physical Therapist (6.5%). Pre-health applicants disclosed not having previous mentors (80.7%).

CONCLUSIONS: The MEDToros Mentorship Program displays how Physician Labor Unions can utilize Public-Private Partnerships to offset risks and responsibilities between institutions. By re-directing the organizing strengths of unions, a sustainable health professions pipeline program with desired applicant demographics was developed. The next steps will include the implementation of the curriculum and assessment of the program's impact.

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Rare Cause of Bilateral Knee Pain Following an Injury

George Le, M.D.; Bernadette Pendergraph, M.D.
Department of Family Medicine at Harbor-UCLA

INTRODUCTION: As family physicians, we often are the first providers to initially evaluate a patient after an injury. Although focusing on the most common etiologies of muscle and joint pain, such as strains, sprains, and joint pathologies, are usually sufficient, rare injuries are also important to consider. Here we will present a rare diagnosis for a case of bilateral knee pain in a middle-aged man after an injury.

METHODS: 56-year-old man with a past medical history of HTN, HLD, and empty sella syndrome, presented with bilateral knee pain. While playing basketball with his kids 11 days ago, he landed on his flexed right knee, heard a pop, and then landed on his flexed left knee. He had immediate pain in both knees and was unable to ambulate. He has a known partial ACL tear, patellar tendinopathy, and medial meniscal tear of the right knee from an MRI 13 months ago. His exam showed ecchymosis of both thighs, large effusions of bilateral knees and decreased range of motion. Bilateral joint lines were tender. Lachman test was positive in the right knee and negative in the left. Extensor lag was present in both knees. X-rays were negative. MRI confirmed diagnosis of bilateral near complete high-grade partial tears of the quadriceps tendons and partial tear of both ACLs. Patient opted and did well with conservative management with bilateral knee immobilizers followed by a course of physical therapy.

DISCUSSION: Complete quadriceps tendon tears are rare injuries. Case reports have described bilateral tears occurring in patients with minimal trauma in the setting of predisposing medical conditions or prior tendinopathy. Our patient's risk factors include age, gender, testosterone replacement therapy, and prior tendinopathy. His mechanism of injury, landing on flexed knees after a jump, is consistent with eccentric contraction of the quadriceps and then tendon tear.

Given his degree of swelling, it was difficult to appreciate a defect in his quadricep tendons. Checking for extensor lag by having him actively extend his knees helped rule in a defect in his extensor mechanism, leading to the diagnosis of bilateral quadriceps tendon rupture.

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New "Public Charge" Rules and its Impact on Immigrants' Utilization of Public Programs and Health Services

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INTRODUCTION: Public Charge is a designation given by the US CIS to immigrants seeking to advance their immigration status if they are deemed likely to become dependent on government services. Recent changes to criteria included use of non-cash benefits, which caused patients at our clinic to disenroll from public health plans and pay cash for health services over fear of deportation. We conducted focus groups to understand immigrants' views of Public Charge and its impact on their use of public services.

METHODS: Focus group interviews of non-citizen immigrants were conducted at local community centers. After obtaining consent and completion of a brief demographic survey, individuals participated in a focus group meeting regarding their thoughts and attitudes about current and impending "Public Charge" rules. Focus group questions also explored where participants obtained their information about the new rules as well as their use of public health insurance programs such as Medicaid. Participants were also asked about their general feelings about present anti-immigrant rhetoric and laws that have been passed.

RESULTS: Preliminary results are based on 39 subjects who have participated in the focus groups thus far. Participants reported widespread fear and confusion as to which programs, and who would be impacted under the new "Public Charge" rules. Most participants were quite concerned about utilizing any public programs including health insurance plans, and some were disenrolling even their eligible citizen children from such public programs. Most received their information from local television stations, friends and family.

CONCLUSIONS: Fear of impending "Public Charge" rules, especially amongst our Latino Immigrant populations, is having a strong chilling effect on the use of much needed public programs, including Medicaid. This fear may result in millions of immigrants' not utilizing much needed public assistance programs, leading to poorer health outcomes.

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Primary Care Cards as a Tool to Enhance Resident Learning in the Outpatient Setting

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INTRODUCTION: As resident educational requirements evolve, medical educators are constantly exploring techniques that can enhance learning for trainees. Few studies have analyzed the educational impact of teaching tools in the outpatient setting, and if these tools cater to the varied learning styles of residents. This study aims to determine the impact of primary care cards on residents' self-perceived competence and confidence in the evidence-based outpatient management of common chronic diseases.

METHODS: The primary care cards were created by a team comprising of residents, fellows, and faculty. The cards focused on highlighting the diagnosis and management of specific chronic conditions that were pre-selected based on a list of medical conditions commonly seen in the outpatient setting. The cards were distributed monthly to 32 residents during continuity clinic. Pre-test and post-test surveys were administered to elicit preferred learning

styles of residents, and to assess for change in self-perceived competence and confidence in the evidence-based management of commonly treated chronic conditions after the distribution of the cards.

RESULTS: We received completed pre-test surveys from 75% of the residents (n=24), with 87% of respondents identifying both UpToDate and AAFP articles as resources referenced in clinic. Additionally, all respondents identified time limitations as a barrier to learning. The post-test survey is ongoing. We have collected 14 surveys thus far. Preliminary data reveal that the primary care cards were utilized by 75% of respondents at least 1-2 times per month, with nearly 50% finding them helpful. More residents expressed increased confidence in managing the five conditions covered by the primary care cards over five months.

CONCLUSIONS: The study is in progress. We hypothesize that residents will report an increase in self-perceived competence and confidence in the evidence-based management of common chronic diseases in the primary care setting, gained through the use of the primary care cards. We also anticipate obtaining valuable feedback to tailor future cards and educational tools to better serve residents' learning needs.

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Unilateral Chondroblastoma of the Knee in an Adolescent Male

Bernadette Pendergraph, MD, Marvin Ambriz, MD
Department of Family Medicine, Harbor-UCLA Medical Center

INTRODUCTION: A 14-year-old soccer player presented with left knee pain and swelling for 1 year. In addition to considering internal derangement of the knee, one must also consider tumors in the long bones. Most common malignant tumors presenting in the distal femur include osteosarcoma and Ewing sarcoma. Our athlete was diagnosed with a benign chondroblastoma which accounts for only 1% of all bone tumors.

METHODS: The athlete's left knee pain initially worsened with weight bearing activities but then became constant and sharp in the anterior and medial aspect of the left knee. He denied any inciting event, giving way, locking, fevers, weight loss, night sweats, night pain, or back pain. Vital signs were normal. He had a moderate effusion of the left knee with range of motion from 5 to 100 degrees. He had no tenderness of the patellar facets, quadriceps tendon, or joint line, but had tenderness at the inferior pole of the patella and medial femoral condyle. His gait was antalgic. No erythema or warmth of his knee. X-rays were initially negative. MRI had a well-marginated 1.8 x 1.6 x 2.2 cm epiphyseal lesion, perilesional marrow edema, and moderate-sized joint effusion. Diagnosis was proven by CT guided biopsy and treated with radiofrequency ablation. Subsequent imaging showed decrease in the size of the tumor, and the athlete had improvement in pain and range of motion of the knee.

DISCUSSION: The initial diagnosis for our athlete did not include tumor but focused on the causes of internal derangement of the knee. Due to persistent effusion, advance imaging was performed which discovered the tumor. Because of the significant surrounding edema and large joint effusion, we needed to rule out malignant tumors such as osteosarcoma and Ewing sarcoma. Fortunately, he had a benign chondroblastoma which accounts for only 1% of all bone tumors. Chondroblastomas occur in the distal femur, proximal tibia and humerus at the epiphysis. After radiofrequency ablation therapy, most can return to regular activities in a matter of weeks. Local recurrence is 10% within the first 3 years. Malignant chondroblastomas are rare, have poor prognosis and may occur years after the original lesion.

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Implementation of a Virtual Geriatrics Navigation Program in Urban Safety-Net Primary Care Clinics

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INTRODUCTION: The Geri eConsult was launched in 2018 to provide an online hub for older adult community resources and offer telephonic resource navigation support. Despite a growing older adult population, its utilization is low among community partner MyHealthLA (MHLA) clinics, a no-cost healthcare program for uninsured low-income adults. We will examine the impact of provider outreach, collaborative workflow development, and patient engagement in using the Geri eConsult service among partner MHLA clinics.

METHODS: This is a multi-site prospective study set in MHLA community partner clinics. Our population is patients aged 60 years and older served by the MHLA clinics. The intervention will include Geri eConsult service education, promotion, and training to clinic staff, collaborative workflow development to support its use, and engagement with patients referred to the service. The number of referrals to navigators will measure service use pre/post-intervention and paired t-test will determine significance. Online surveys will assess providers' experiences with the service and telephonic surveys will evaluate patients' resource access success rate.

RESULTS: We have obtained IRB approval and support from the Los Angeles County Department of Health Services and MHLA leadership. We have established a partnership with Northeast Valley Health Corporation (NEVHC) in San Fernando, CA – a MHLA community partner clinic – and we are in the process of designing Geri eConsult workflows with NEVHC clinic leads. Results are pending implementation.

CONCLUSIONS: In the setting of COVID-19, the social determinants of health coupled with higher risk for older adults create an imperative for clinics to address social needs. Successful adoption of the Geri eConsult service may help strengthen the safety net of urban FQHC primary care clinics serving the growing uninsured, low-income geriatric population.

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Progressive Proximal Muscle Weakness and Not Missing The Rare Inflammatory Myopathy: Polymyositis

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INTRODUCTION: Progressive muscle weakness is a nonspecific symptom requiring a thoughtful history and physical exam. A rare but not to miss cause of proximal weakness, polymyositis (PM), is an inflammatory myopathy with incidence of 0.4 to 22 cases per 100,000. The treatment and prognosis can be highly variable. We describe an elderly patient that presented with classic, textbook findings of polymyositis.

METHODS: 70-year-old female with COPD presented to ED with generalized weakness, bilateral lower extremity pitting edema up to groin, and dysphagia worsening for 6 months. Exam revealed 3/5 strength in proximal muscles and erythematous, blanching macular rash on upper arms. Labs showed elevated CK, AST/ALT, ESR/CRP, and ANA, dsDNA, SSA, Jo-1 titers. MRI showed T2 hyperintensity of pelvic and thigh muscles. High dose steroids improved symptoms within days. Later, elevated aldolase confirmed polymyositis.

DISCUSSION: Polymyositis is a rare immune-mediated myopathy, usually beginning over the age of 20. Typical presentation includes gradual, subacute progression over months of symmetric proximal muscle weakness, myalgias, joint pains, and edema. Lab findings of PM include positive ANA, other autoantibodies, and inflammatory muscle breakdown markers. Specific for PM is anti-Jo-1. Diagnostic studies include EMG, MRI, and muscle biopsy. The mainstay of treatment is long-term steroids. Fortunately, our "textbook" patient presented with the classic findings of PM with immediate response to steroids. However, PM is often not diagnosed until months or years later. PM is life altering, and even life threatening, and should be on the differential radar in any patient with progressive muscle weakness.

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PCP seen in COVID patients due to long-term steroid and immune-modulator use

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INTRODUCTION: Pneumocystis carinii pneumonia (PCP) is a fungal infection most commonly seen in immunocompromised patients including those with HIV. In patients with a suppressed immune system it can cause opportunistic infections (1). Patients on high-dose steroids are at increased risk for developing PCP due to a suppressed immune system. Similarly, IL-6 blockade by tocilizumab also increase risk of opportunistic infection. (3).

METHODS: A 47 year old obese male with history of dyslipidemia and NAFLD presents with dyspnea. He was recently hospitalized for acute hypoxic respiratory failure and treated for COVID pneumonia and CRS with dexamethasone, Remdesevir, and tocilizumab. He was discharged on dexamethasone for 30 days and total of 53 days of steroid use. On presentation, he was febrile, tachycardic, tachypneic with O2 saturation of 87% on RA. He was diaphoretic with diffuse rhonchi and bilateral lower extremity edema. A CT showed diffuse bilateral interstitial thickening. He was admitted for acute hypoxic respiratory failure due to recent COVID-19 infection. Bacterial and fungal infection in the setting of prolonged steroid use was also considered, including TB, HIV, histoplasmosis, coccidiomycosis and aspergillosis. He was positive for Beta D glucan and sputum stain showed Pneumocystis carinii. He was treated with Bactrim and showed significant improvement. On follow up visit, he had resolution of symptoms.

DISCUSSION: The use of high dose or prolonged courses of steroids are proven to reduce mortality rates in hospitalized patients with COVID-19 infection and respiratory failure who required supplemental oxygen (4). Given that their mechanism involves suppression of the immune system, they can weaken the body's ability to fight opportunistic infections such as PCP with greater risk with conjunctive use of immune modulators such as tocilizumab. Pneumocystis pneumonia should be considered on the differential for a patient who has been treated for COVID-19 with dexamethasone or tocilizumab and presents with worsening or recurrent symptoms.

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What are the effects of follow up telephone visits with patients who are given a prescription for medicine to treat depression?

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Riverside University Health System FM Residency. Moreno Valley Community Health Center .

INTRODUCTION: In 2016, ~45 million adults in the U.S. were affected by mental illness. Patients often rely on PCPs for mental health services rather than psychiatrists due to many factors. However, 40-67% of patients discontinue

their antidepressant within the first 3 months, and lack of proper follow up after starting an SSRI occurs in almost 70% of cases. A successful treatment with SSRI often requires significant support to patients. A follow up call in 2, 4, and 6 weeks of diagnosis may improve compliance

METHODS: We are selecting patients who have received care with a PCP at Moreno Valley Community Health Center, ages 25-65, who were diagnosed with initial or recurrent mild-moderate depression (PHQ9 score 10-19) and started on an SSRI. We are excluding those already on SSRIs, pregnant patients, history of other psychiatric disorders or substance use, severe depression, history of suicidal tendencies, and patients on palliative or hospice care, or currently grieving. Participants are randomly assigned to the control or experimental group, and data will be collected on adherence to medication as well as depression symptoms and severity measured by PHQ9.

RESULTS: Pending collection and analysis of data for currently enrolled patients, as well as continued enrollment of additional patients. At this time, we have 8 patients enrolled in our study, and plan to enroll at least 10 total by the end of April to do a preliminary analysis of our results to present at the research symposium. Our ultimate goal is to enroll 60 participants to complete the study by 2022.

CONCLUSIONS: Pending data collection as above

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Role of Vitamin-D in Reducing Need for Supplemental Oxygen Among COVID-19 Patients

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INTRODUCTION: This research focuses on exploring the beneficial effects, if any, of Vitamin-D in reducing need for supplemental oxygen among hospitalized Covid-19 patients. We conducted a comprehensive, retrospective, observational study of all COVID-19 inpatients at RUHS during 2020. Two questions are investigated – Q1) Does having healthy level of baseline Vitamin-D 25-OH (≥ 30ng/ml) help, and Q2) does administering Vitamin-D therapy after-the-fact during inpatient hospitalization help?

METHODS: For Q1, we looked at N1=182 patients whose baseline Vitamin-D was known and who needed supplemental oxygen. Of this, 121 had healthy Vitamin-D level of ≥ 30 ng/ml while the remaining 61 did not. For Q2, we looked at N2=893 patients who were given oxygen, of which 180 were given Vitamin-D and 713 were not. Maximum oxygen flow rate (dependent variable) was recorded for each patient. The mean values and associated standard deviations were calculated. These data served as the basis for independent, two-sample t-Test analysis. To accommodate any reasonable benefit, a p-value of 0.10 was set as cutoff point for statistical significance.

RESULTS: For Q1, the mean value for maximum oxygen flow rate for patients with healthy baseline was 8.6 L/min vs. 12.6L/min for others, yielding a p-value of 0.07 (p < 0.10) with the conclusion that those with healthy baseline Vitamin-D needed statistically significant lower levels of supplemental oxygen.
For Q2, the mean value for maximum oxygen flow rate for those not administered Vitamin-D was 12.5 L/min vs 12.8L/min for those given Vitamin-D, yielding a p-value of 0.87 (p > 0.10). We found no statistically significant difference in use of oxygen therapy between those were or were not administered Vitamin-D after-the-fact in the hospital.

CONCLUSIONS: Our finding that patients with healthy levels of Vitamin-D at baseline needed lower levels of supplemental oxygen is consistent with published benefits of Vitamin-D. While some researchers recommend the use of Vitamin-D after-the-fact for hospitalized patients, we found no statistically significant advantage for it. This may be a case of "too little too late" since any marginal benefits may not have materialized promptly.

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My face is melting: A rare presentation of Pyoderma Gangrenosum

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INTRODUCTION: Pyoderma Gangrenosum (PG) is a rare non-infectious ulcerative skin condition that is part of the spectrum of Neutrophilic dermatoses. Although pathogenesis is unknown, it is believed to be immune dysregulation. PG is a diagnosis of exclusion with no definitive laboratory or histopathological criteria for PG. 50% of PG have underlying systemic conditions and the case that we will report is PG with superimposed skin infection of bilateral cheeks which is a rare presentation of PG in the setting of ulcerative colitis (UC) in remission.

METHODS: 34 yo male with prediabetes, ulcerative colitis in remission who presented for sepsis, believed to be due to facial pustules that worsened into draining ulcers within 1 week. Onset was sudden. Things started out with pimples that later erupted into draining ulcers of bilateral cheeks. CT of face demonstrated facial abscesses and cellulitis. Patient was initially started on Vancomycin and Unasyn, however did not have significant improvement. Abscesses continued to have active drainage and patient continued to have persistent tachycardia despite being on IVF. ID and dermatology were consulted with clinical concern for PG and systemic steroids were initiated empirically. During the stay, the patient also developed ulcers to right groin and back. Wound biopsies from his right face and right groin ruled out other causes and demonstrated neutrophilic infiltrate suggestive of PG. Wound cultures grew MRSA, diagnosing him with PG with superimposed cellulitis. Rheumatology was consulted; Solumedrol was continued, Methotrexate and IVIG was started with significant improvement of ulcer drainage and decrease in ulcer size. GI was consulted for diarrhea due to history of UC and a flexible sigmoidoscopy was performed, which showed normal rectal mucosa, ruled out an active UC flare. Stool studies including C.diff, Shigatoxin and fungal cultures were negative. Patient was discharged with oral pain medications and prednisone taper, with close follow-up with rheumatology, dermatology, GI, and ENT for future cosmetic repair.

DISCUSSION: This case illustrates that PG can happen even when a patient does not have UC flare. Most common site of PG is on lower extremities, but it can present anywhere on the body, face not excluded. It can present similar to infections or other skin conditions making diagnosis difficult. If a patient does not respond to broad spectrum antibiotics, then we need to consider other differential diagnoses, one of which should be PG, as it progresses quickly and can be deadly. Main treatment is systemic corticosteroids. To be able to make this diagnosis and treatment requires close teamwork between primary team and consulting specialists. Time is essential in this case as prompt treatment can help minimize scarring and pain from PG.

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Acute Painless Jaundice in an Adult

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INTRODUCTION: A 32 year old female with morbid obesity presented with vomiting and overnight jaundice found to be due to nonalcoholic steatosis (NASH) and autoimmune hepatitis (AIH). NASH is inflammation from fat buildup in the liver. AIH is caused by autoimmune damage. It is important to consider the diagnosis of AIH in patients with NASH as both present similarly, can lead to fulminant liver failure, and require different treatment.

METHODS: On presentation she was afebrile and hemodynamically stable with scleral icterus and diffuse jaundice. Lab work was significant for ALT 2,923, AST 1,735, GGT 198. Abdominal ultrasound showed fatty, 16cm liver with negative additional imaging. Patient was admitted for impending liver failure. Gastroenterology recommended N-

Acetylcysteine protocol which was completed without improvement of her liver enzymes. Subsequent labs were negative for HIV, viral hepatitis, and toxicity. ANA, Ceruloplasmin, Alpha 1 antitrypsin, antimitochondrial antibodies were also negative however anti-smooth muscle antibodies returned positive with a titer of 1:20. Given concern for AIH a trial of Prednisone 40 mg PO was given and her jaundice and liver enzymes markedly improved. Liver biopsy later indicated chronic active hepatitis which favored steatohepatitis. She was continued on prednisone 40mg daily with continued improvement of jaundice and liver function with planned follow-up with GI outpatient.

DISCUSSION: Jaundice in adults is caused by elevated bilirubin levels due to intrahepatic (hepatocellular) vs extrahepatic disease (1). Hepatocellular injury accounts for 55% of acute jaundice cases, including damage from viruses, drugs, AIH and NASH. NASH has a prevalence of 5% in adults (3) compared to AIH, incidence 2 per 100,000 (2). Our patient had an overlapping picture of NASH and AIH. She was treated with prednisone for concern for AIH and her jaundice improved even though she did not meet the full criteria for AIH (Titer >1:40) (2). Previous research has shown that 10% of patients with NASH can present with overlapping AIH (4). Distinguish between these two etiologies is crucial as steroids may worsen NASH making NASH-AIH difficult to treat as no treatment guidelines currently exist (5).

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Race and Gender Disparities in Residency Training Outcomes

Jacob David MD FAAFP, Ryan Arams MD MS, Tamra Travers MD
Ventura County Medical Center Family Medicine Residency Program

INTRODUCTION: Training underrepresented minority physicians in Family Medicine is a STFM and AAFP priority. In 2020 the VCMC FMRP formed a committee to investigate and pursue equity in training. Explicit strategies to overcome implicit bias and structural racism and sexism do not presently exist. We suspected that that inequities in training outcomes exist and could be measured by examining ACGME milestone assignments at graduation.

METHODS: Milestone assignments were collected from graduating classes 2016 through 2020; the Clinical Competency Committee scores each PGY3 resident annually from Level 1 to Level 5 (high) in 22 milestones across six core competencies. This method included a sample size of 71 graduates and 1562 milestones. Self-identified race and gender were obtained from each resident's ERAS application; racial identity was available for 66 residents and gender identity for all 71. Names and years of graduation were removed for anonymity. The total average and average in each core competency were calculated by resident, then grouped and compared by race and gender.

RESULTS: The following are average milestones assignments by race and gender: white 3.68 (95% CI 3.65-3.72), nonwhite 3.58 (3.52-3.93), males 3.67 (3.63-3.71), females 3.63 (3.59-3.68), nonwhite males 3.70 (3.61-3.79), nonwhite females 3.48 (3.42-3.54). The sample size did not carry adequate power to test statistical significance (power 21% with alpha=0.05), but the data suggest that the average assignments in the core competencies Medical Knowledge, Professionalism, and Patient Care largely drove the discrepancy in averages between white and nonwhite groups.

CONCLUSIONS: Nonwhite females have lower milestone assignments than their peers. These results are not statistically significant, but suggest disparities in training outcomes or biases in scoring, or both. Future efforts can improve sample size and statistical power while cross-comparing qualitative data from residents and faculty. Bias in training physicians, however identified and measured, is worth exploring as a barrier to equity.

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Integrating Community Medicine and Health Equity Training in a Full-Spectrum Family Medicine Residency Program

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Ventura County Family Medicine Residency

INTRODUCTION: Upstream structural and social determinants of health have a significant role in health in the United States. However, traditional graduate medical education focuses on downstream determinants such as direct patient care and clinical medicine. Increasing attention on consequential health disparities creates a need for effective approaches to teaching knowledge, skills, and attitudes about health equity and community medicine in a full-spectrum, family medicine residency setting.

METHODS: Ventura Family Medicine Residency (VFMR) is a prominent family medicine program dedicated to training full spectrum physicians. Starting in 2020, VFMR began restructuring its curriculum to include community-based health equity training for its 45 residents. The didactic content explores topics like structural competency, structural racism, and social medicine. Experiential learning partners trainees with local organizations working with structurally vulnerable communities, such as farmworkers and the homeless. Finally, the curriculum provides time for reflection encouraging learners to examine how health equity influences their own practice.

RESULTS: Together through didactic, experiential, and reflective experiences, VFMR restructured its curriculum to train and challenge physicians to understand and confront structural and social determinants of health. Residents who participate in this new curriculum have engaged more with these influences on the health and feel better prepared to confront the social challenges facing their patients and communities. Current challenges include finding balance between the need for this education and other necessary training priorities and finding opportunities for safe, sustainable, and meaningful community outreach during the COVID-19 pandemic.

CONCLUSIONS: VFMR demonstrated a method to incorporate community medicine and health equity curriculum into a traditional, full-spectrum family medicine residency. The challenge is to prioritize time and dedicated resources for this type of training. With growing health inequities, it is imperative to integrate this type of curriculum providing physicians with an equity lens and skills to collaborate and advocate for their community.

[NOTE: There is no abstract 37]

SESSION 3

(3:30PM – 4:10PM)

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A Pulsatile Headache Caused By Cavernous Sinus-Dural Arteriovenous Fistula

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INTRODUCTION: Dural arteriovenous fistulas (DAVFs) are shunts between artery and vein within the dura. Although rare, high-grade variants have annual mortality rates of about 10%. The diagnosis is difficult with varied idiopathic presentations. We present a 56-year-old female with months of throbbing headache, pulsatile tinnitus, and eye swelling, requiring embolization of a cavernous sinus-dural arteriovenous fistula (CS-DAVF).

METHODS: A healthy 56-year-old female presented to the emergency room for 6 months of intermittent throbbing headaches. Initial symptoms included double vision and eye redness. First visit to the ophthalmologist yielded no diagnosis, with some improving symptoms. She then developed right eyelid swelling and pulsatile tinnitus, prompting a return to the ophthalmologist. With the finding of increased intraocular pressure, she was directed to seek emergent medical attention. Upon arrival, the exam was remarkable for additional right eye findings of proptosis, chemosis, and ocular bruit with stethoscope bell over closed eye. MRI Brain initially was unremarkable. MRI Face/Neck/Orbit showed an enlarged right superior orbital vein, suspicious for cavernous-carotid fistula. A neurointerventionalist performed cerebral angiography diagnosing the CS-DAVF, requiring embolization. Patient was expected to have improvement of eye symptoms and appearance with decreased risk of intracranial hemorrhage.

DISCUSSION: DAVFs are rare, with incidence 0.15-0.29 per 100,000 persons/year. Most commonly, diagnosed from ages 40-60. Presentations vary depending on location of fistula including pulsatile tinnitus, cranial nerve palsies, seizures, orbital and stroke-like symptoms. Etiologies can be trauma, intracranial procedures or processes, but mostly are idiopathic. Complications include hemorrhage, venous hypertension, and visual loss. Gold standard diagnosis is digital subtraction angiography. Diagnosis is difficult by CT or MRI. Low-grade fistulas can be conservatively managed based on benefits vs. risks of treatment. Invasive treatments include endovascular, surgical resection, or stereotaxic radiosurgery, which can improve eye symptoms, pulsatile tinnitus, seizures, but neurologic deficits may persist.

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Creating an Inpatient Opioid Withdrawal Protocol at UCLA Santa Monica Hospital: Quality Improvement Initiative

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UCLA

INTRODUCTION: Patients with substance use disorders are among the highest users of hospital services. With the United States spending the more on healthcare than any other developed country and the escalation of the current opioid epidemic due to COVID-19, hospitals must be willing to look at more cost-effective and evidence-based ways of providing care. Recent studies have concluded that addiction-specific interventions for opioid use disorder

during admission and at discharge are underused. Medication-assisted treatment with methadone or buprenorphine has been shown to result in more positive outcomes, yet the approach of medication-assisted treatment has yet to adapt at the level of hospital care.

METHODS: Our purpose is to: 1. To develop an inpatient withdrawal protocol utilizing the Clinical Opiate Withdrawal Scale (COWS) and Medication-Assisted Treatment (MAT) with buprenorphine and clonidine to address withdrawal in opiate addicted patients during treatment of a primary medical condition. 2. To measure the efficacy of the above intervention after at least 6 months of application. Here, we focus on Aim 1.

RESULTS: Creating and implementing an inpatient opioid withdrawal protocol is an interdisciplinary effort comprised of nursing, pharmacy, and case management. The protocol consists of order sets detailing appropriate medication orders, labs, consults, and nursing orders that can be selected in the EMR once the proper patient is identified. Nursing's role involves scoring the patient's level of withdrawal, administering the appropriate medications in response, and monitoring the patient's clinical progress. Providers may evaluate the treatment response based on trending the scores and clinically assessing the patient. Inpatient pharmacy is instrumental in providing the supply of medications and checking for interactions and inappropriate dosing. On discharge, a provider with a DEA-X waiver must provide an outpatient supply of buprenorphine if needed and determine the appropriate discharge plan based on the patient's condition. Case management's role requires coordination with the appropriate clinic referral or outpatient treatment sites, facilitating access to buprenorphine, and offering pertinent educational resources. At the time of discharge, nursing may also provide education to the patient on the proper administration of medications like buprenorphine and Narcan.

CONCLUSIONS: We developed a standardized opiate withdrawal protocol using buprenorphine and clonidine for the inpatient setting. The outcomes we seek to measure are number of individuals leaving Against Medical Advice and number of readmissions for a total period of 6 months. One challenge to developing the protocol is determining a cost-effective discharge plan. Insurance coverage for MAT is not mandated and is variable. Minimizing costs will require exploring options with case management and connections with local providers. Potential challenges to moving the project forward are the stigma towards addicted individuals and the lack of education surrounding comprehensive care in addiction. We propose addressing these obstacles through hospital-wide education initiatives, clear delineation of roles in the treatment process, and support through the in-hospital addiction medicine team or off-site experts through the cost-free Providers Clinical Support System (PCSS) program.

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Cannabis use, comorbidities, and polypharmacy among older adults receiving care in a large urban healthcare system 2019-2020

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INTRODUCTION: To describe the prevalence of cannabis use and co-use with prescription medications among patients ≥50 years of age attending primary care (PC) clinics in a large urban healthcare system in Los Angeles, CA, after legalization of recreational cannabis use.

METHODS: We used electronic health record (EHR) data from over 60 PC clinics of patients' ≥ 50 years of age who had an annual physical examination between July 2019 and May 2020. Cannabis use was assessed by clinical staff at the time of the visit. We also used EHR data on clinical characteristics including current prescriptions and comorbidities (ICD-10).

RESULTS: 42,455 patients were included: median age 63 years (range: 50-101), 56% female; 66% identified as white/Caucasian, 10% Asian, 9% Hispanic/Latinx, and 5% black/African American. Current cannabis use was reported by 7.6% and higher than tobacco use (4.0%). Prevalence of cannabis use was higher among those with a current diagnosis of respiratory (9.1% vs. 7.6%; p value=0.03) or psychiatric condition (9.7% vs. 7.3%; p value<.01). Cannabis use was also higher among those prescribed inhaled short-acting beta agonists/anticholinergics (8.6% vs. 7.5%; p value<.01), benzodiazepines (10.9% vs. 7.3%; p value<.01), antiepileptics (13.6% vs. 7.6%), opioids (12.0% vs. 7.5%; p value<.01), or muscle relaxants (10.3% vs. 7.5%; p value<.01). After adjusting for age, sex, race/ethnicity, and comorbidities (Charlson Comorbidity Index), those prescribed medications for psychiatric (adjusted OR=1.5; 95% CI 1.4-1.7), respiratory (adjusted OR=1.2; 95% CI 1.1-1.3), or neurologic conditions (adjusted OR=1.4; 95% CI 1.2-1.5) had increased odds of cannabis use compared to those not prescribed these medications.

CONCLUSIONS: The prevalence of cannabis use among older adults in PC is high and higher among those prescribed medications which may interact with cannabis. Older patients may benefit from routine PC screening for cannabis use and brief advice regarding cannabis use and other prescription medications.

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Reproductive Healthcare Access Quality Improvement Study at UCLA Family Health Center (UFHC) in Santa Monica, California

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UCLA Santa Monica

INTRODUCTION: U.S. women are sexually active on average by 17yo with many using contraception to meet their family planning goal. In a 2019 study at UFHC, 7% well women visits addressed the one key question (OKQ) of desired pregnancy, 83% provided 12mo birth control (BC) refill, 71% started the BC same day it was prescribed, and 24% provided patient education on BC. We aim to improve reproductive healthcare screening via use of a uniform smartphrase and overall address our patient's family planning goal.

METHODS: We implemented visual prompts in clinic reminding providers to utilize a sharable, uniform smartphrase created for well women visits. A chart review was performed of all the reproductive age (aged 15-45) well woman visits between 5/22/20 and 10/15/2020. Our aim statement was four-fold: 1) Asking OKQ 2) Providing 12-month prescription refills 3) Initiating same day oral contraception (OCP) and 4) Providing documentation of birth control education. We will run process mapping and root cause analysis to assess where implementations can be made to improve our interventions.

RESULTS: Our data thus far include N = 109 patients. Thirty of patients (28%) had well women visits that addressed the OKQ of desired pregnancy. Seventy-one patients (65%) demonstrated desire for contraception at their well women visit. Of those desiring contraception, twenty-six (37%) had their OCP prescribed the same day, eighteen (25%) had sufficient refill previously prescribed, and twenty-seven (38%) opted for alternatives such as long-acting reversible contraception (LARC). Of all the patients, thirty-eight (35%) preferred no birth control method. Sixty-three (58%) of the patients were given a form of patient education on birth control.

CONCLUSIONS: Our study demonstrates a successful use of the smartphrase as seen by an increase in addressing the OKQ from 7% to 28% and patient education administration from 24% to 58%. However, there is a decline in BC refill from 83% to 37% that could be due to confounding aspect of patients who opted for LARC. Thus, our next step in this quality improvement is to perform analysis of this potential confounding by assessing the number of reproductive age agents who presented to procedure clinic for LARC placement. We additionally plan to

incorporate the use of visual smartphrase reminders on the computers in every clinic room, not just the shared work space.

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A Qualitative Study of Primary Care Physicians' Experiences With Telemedicine During COVID-19

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INTRODUCTION: The rapid adoption of telemedicine visits due to the COVID-19 pandemic has transformed primary care practices, but information is lacking on the perspectives of primary care physicians regarding telemedicine visits. The objective of this study was to determine physician perspectives regarding the benefits and challenges of telemedicine visits.

METHODS: Semi-structured interviews conducted between March 2020 and May 2020. Setting included primary care practices affiliated with an academic health system or with a group-model HMO. Eleven practicing primary care physicians and four physicians-in-training participated in this study. The main measures were perceptions regarding the benefits of telemedicine visits and challenges to caring for patients via telemedicine.

RESULTS: Physicians indicated that telemedicine improved patient access to care by providing greater convenience, though some expressed concern that certain groups of vulnerable patients were unable to navigate or did not possess the technology required to participate in telemedicine visits. Physicians noted that telemedicine visits offered more time for patient counseling, opportunities for better medication reconciliations, and the ability to see and evaluate patient home environments and connect with patient families. Challenges existed when visits required a physical examination. Physicians were very concerned about the loss of personal connections and touch, which they believed diminished expected rituals that typically strengthen physician-patient relationships. Physicians also observed that careful consideration to physician workflows may be needed to avoid physician burnout.

CONCLUSIONS: Physicians reported that telemedicine visits offer new opportunities to improve the quality of patient care, but noted changes to their interactions with patients. Many of these changes are positive, but it remains to be seen whether others such as lack of physical examination and loss of physical presence and touch adversely influence provider-patient communication, patient willingness to disclose concerns that may affect their care, and ultimately, patient health outcomes.

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Post-Visit Patient Understanding about Newly Prescribed Medications

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INTRODUCTION: Good patient understanding of basic medication-related information such as directions for use and side effects promotes medication adherence, but information is lacking about how well patients understand basic medication-related information after their office visits. The purpose of this study is to investigate post-visit patient understanding about newly prescribed medications.

METHODS: A secondary mixed-methods analysis comparing patient survey responses about newly prescribed medications to information conveyed by physicians during office visits (from audio-recordings of office visits) was conducted on eighty-one patients aged 50 and older who discussed newly prescribed medications during an

outpatient office visit. The main measures that we analyzed include accurate patient identification of medication dose, number of pills, frequency of use, duration of use, and potential side effects.

RESULTS: The 81 patients studied were newly prescribed 111 medications. For over 70%, patients correctly identified the number of pills, frequency and duration of use, and dose, regardless of whether the physician mentioned the information. But for 34 of 62 medications (55%) for which side effects were not conveyed and 11 of 49 (22%) for which physicians discussed side effects, patients reported that the medication lacked side effects. Analysis of office visits showed that potential reasons for this finding included physician failure to use the term "side effects," prescription of multiple medications during the visit, and poor patient engagement.

CONCLUSIONS: Many patients correctly identified information related to directions for taking a newly prescribed medication, even without counseling, but when physicians did not convey potential medication side effects, many assumed that a medication had no side effects. It may be valid for physicians to provide written information about medication directions and dosing, and use their limited time to discuss medication side effects.

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COVID-19 perceptions and experiences among undocumented Latino Residents in California

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INTRODUCTION: The coronavirus (COVID-19) pandemic has had a disproportionate burden on the Latino community. In California, Latinos account for 55% of positive cases and 47% of deaths from COVID-19. Undocumented residents are more vulnerable to the effects of the COVID-19 pandemic because many are essential workers and/or and have a high-risk exposure to viral transmission due to their employment in essential industries and they face additional barriers to accessing care due to language and literacy barriers, as well as limited insurance coverage. Despite the severe impact of COVID-19 on undocumented Latinos, there is underreporting about the experiences and perspectives with the COVID-19 pandemic.

METHODS: We recruited participants in partnership with community health center staff who played a critical role in successful recruitment. To ensure we captured the full range of views and perspectives, we intentionally recruited from multiple clinics that represented different non-urban regions in Northern California. We conducted one-on-one interviews in Spanish with a sample of undocumented Latinos. Due to travel restrictions during the COVID-19 pandemic, we conducted all our hour-long, semi-structured interviews by phone. The interviews protocol included a short list of general demographic questions and the following domains: experiences with COVID-19 testing, prevention behaviors, and the overall impact on the COVID-19 pandemic in their access to care.

RESULTS: We interviewed a total of n=30 participants. Among interview participants, 97% were Latino (n=29); 73% were female (n=22), 50% were unemployed due to the pandemic (n=15), and 33% self-identified as domestic laborers (n=10). Using the coded discrete statements from the focus group transcripts, we identified seven major themes. These include Preventive Behavior, Fear of seeking care, Access to care, Vaccine attitudes, Testing experiences, Economic impact and competing demands, and Undocumented Latinos and COVID-19. Overall, participants expressed emotional stress, fear, and anxiety related to the impact of the COVID-19 pandemic.

CONCLUSIONS: This study identifies issues that explain the disproportionate impact of COVID-19 on the undocumented Latino community. We explore barriers to adopting preventive behaviors, vaccine hesitancy, and experiences with COVID-19, which can inform policy stakeholders and health system leaders when developing

policies and programs needed to mitigate the burden of COVID-19 to meet the needs of the undocumented Latino community, a particularly vulnerable population.

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Preparing for long-acting injectable treatment for HIV: Challenges and Opportunities

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INTRODUCTION: Long acting injectable (LAI) antiretroviral therapy (ART) is a novel HIV treatment option that demonstrated HIV suppression in people living with HIV in two-phase III clinical trials. LAI ART is a promising intervention to close the viral suppression gap in Los Angeles County (LAC). Potential advantages of LAI ART to users may include convenience, privacy and increased adherence. However, major implementation challenges may hinder the potential impact of LAI ART. This formative study aimed to assess the policy, systems, financial, operational and clinical level barriers and facilitators to rollout and scale up LAI ART. The study assessed the perspective of clinical and non-clinical HIV providers, healthcare administrators, and other key stakeholders, as well as potential consumers in LAC. The study highlights findings and recommendations to inform efforts in preparation for implementation of LAI ART in LAC.

METHODS: Focus group/interview sessions were conducted in February 2020 at three locations throughout Los Angeles County. One focus group session included consumers aged 18 years or older who were enrolled in the Los Angeles County Division of HIV and STD Programs (DHSP) Medical Care Coordination (MCC) program. Two focus group sessions and one semi-structured interview session included clinical and non-clinical stakeholders from healthcare clinics, community-based organizations, and government organizations. The session activities were audio recorded and transcribed. Inductive thematic analysis methods were used to analyze the data.

RESULTS: Qualitative content analyses revealed several salient themes and subthemes across focus groups, including: (1) Consumer-Level Facilitators/Barriers to LAI ART Use, (2) Organizational/Provider-Level Facilitators/Barriers to LAI ART Use, (3) LAI ART Promotion/Marketing Recommendations, and (4) Implementation Recommendations. We found that the sub themes that characterized facilitators for consumers were: overall acceptability influenced by LAI ART's potential to increase adherence to treatment; improve treatment management burden; and reduce stigma. Subthemes that characterized barriers included concerns around adherence and resistance; discomfort with shots and side effects; medical mistrust of the health system; insurance coverage; LAI ART eligibility criteria; and psychosocial and structural barriers. Organizational/Provider level barriers/facilitators that influence willingness to adopt and implement LAI ART as a treatment option included: insurance cost and billing; staff capacity; medication storage and procurement; and staff preparedness to deliver LAI. Recommendations from consumer, clinical and non-clinical stakeholders provided innovative solutions to address some of the barriers to implementation.

CONCLUSIONS: This study provides critical information about a range of factors that will contribute to understanding the anticipated barriers to LAI ART implementation, and highlights the facilitators that are likely to aid its acceptability and implementation in LAC. The diverse geography and racial/ethnic profile of LAC can serve as a microcosm of the larger US epidemic.

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Augmentation of the UCLA Family Medicine Residency Psychiatry Curriculum

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1) UCLA Department Family Medicine, PGY-3 2) Assistant Clinical Professor, UCLA Department of Family Medicine

INTRODUCTION: In the U.S. it is estimated that over one third of mental health care is provided by primary care providers.(1,2) To prepare trainees for this role, the American Academy of Family Physicians issues recommended guidelines on mental health in residency curriculum.(3) The goal of this project is to create a sustainable outpatient psychiatry didactic curriculum to cover these AAFP recommended topics in order to augment outpatient behavioral health training for UCLA family medicine trainees.

METHODS: Both authors of this paper are current participating in the UC Irvine Train New Trainers Primary Care Psychiatry Fellowship. Using knowledge gained during this fellowship, they are creating didactic lectures on AAFP recommended psychiatry topics to be administered to residents or available for self-study. In order to gauge current UCLA family medicine residents' comfort in managing common outpatient psychiatric disorders and to provide a baseline against which to judge success of the new didactics, a survey was sent to current residents in advance of the curriculum implementation.

RESULTS: A 22-question survey was sent to all UCLA family medicine residents assessing their comfort with the diagnosis and management of common outpatient psychiatric conditions. Nineteen residents responded, including 7 interns, 5 second years, and 7 third years. Over half of respondents, including graduating seniors, said they felt somewhat or very uncomfortable with managing psychiatric illness in an outpatient setting. Curriculum development is ongoing with the goal of implementation starting in the 2021 – 2022 academic year.

CONCLUSIONS: Primary care providers play a large role in delivery of mental health care and many UCLA residents feel their training in outpatient psychiatry could be improved. This project aims to augment the UCLA Family Medicine Residency behavioral health curriculum through the development of didactics on a variety of outpatient psychiatry topics using AAFP residency curriculum guidelines.

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Influence of Primary Care Telemedicine versus In-Person Visit on Diabetes, Hypertension, and Hyperlipidemia Outcomes: A Systematic Review

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INTRODUCTION: Telemedicine can be effectively used to manage various health conditions, but there is a need to investigate its effectiveness for chronic disease management in the primary care setting. This study compares the effect of telemedicine versus in-person primary care visits on patient clinical outcomes.

METHODS: A systematic review of studies published in PubMed and Web of Science between 1996 and January 19, 2021 was performed using keywords relating to telemedicine, diabetes, hypertension, and hyperlipidemia. We included studies comparing telemedicine versus in-person primary care office visits that examined outcomes of changes in hemoglobin A1c (HbA1c), blood pressure, and lipid levels.

RESULTS: Of 1692 citations screened, 7 publications met our inclusion criteria. The studies were published between 2000 and 2018. Each included a synchronous telemedicine encounter with a primary care provider. Three

studies had interventions involving telemedicine platforms with patient data transmission. Five studies reported HbA1c changes, 5 reported blood pressure changes, and 3 reported LDL-C changes. Compared to usual care with in-person visits, telemedicine was associated with greater improvements in HbA1c at 6 months and similar HbA1c outcomes at 12 months. Telemedicine conferred similar changes in blood pressure and lipid levels compared to in-person clinic visits.

CONCLUSIONS: A systematic review of the literature found few studies comparing clinical outcomes resulting from telemedicine versus in-person office visits, but the existing literature showed that in the primary care setting, telemedicine was not inferior to in-person visits. These results hold promise for increased use of telemedicine for chronic disease management.

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A Case of Pericardial Calcification and Constrictive Pericarditis in an Asymptomatic Patient

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INTRODUCTION: Constrictive pericarditis occurs when the pericardial sac becomes inflamed and fibrosed. The incidence and prevalence have not been well established. Patients may present with a range of clinical symptoms. Idiopathic constrictive pericarditis is a diagnosis of exclusion after comprehensive evaluation. We present a 38-year-old male presented with "fluttering in the chest".

METHODS: The patient's symptoms were sporadic and resolved spontaneously. His physical examination included unremarkable vital signs. He had elevated jugular venous pressure, but no hepatic congestion, peripheral edema, or chest crackles. His resting EKG showed normal sinus rhythm, without ectopy. The patient underwent TTE which showed pericardial calcification and findings concerning for constrictive pericarditis. Cardiac CT confirmed extensive pericardial calcification, and cardiac MRI showed calcified and thickened pericardium with constrictive cardiac physiology. The etiology for pericardial calcification and constrictive pericarditis remained undetermined despite infectious and rheumatologic evaluation. After consultation with CT surgery, the patient deferred surgical intervention as he remained essentially asymptomatic at the time.

DISCUSSION: Not infrequently, patients with constrictive pericarditis may be undiagnosed or misdiagnosed. While pericardial calcification is not always seen in patients with constrictive pericarditis, its presence is highly suggestive in the correct clinical context. Some patients may be asymptomatic, presenting with occult constrictive pericarditis on imaging. Elevated jugular venous pressure is seen in the majority of patients. Conservative treatment should be attempted for several months before considering surgery. Constrictive pericarditis is typically chronic and progressive. Definitive treatment is pericardiectomy to remove all thickened pericardium.

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Addressing Food Insecurity Through Quality Improvement at a Teaching Family Medicine Clinic

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INTRODUCTION: According to the USDA's Food Security Status, more than 13 million U.S. households were food insecure during 2019. Studies have shown food insecurity (FI) is associated with psychological distress, hypertension, hyperlipidemia, and self-reported chronic diseases and obesity. Our project aims to improve access

to food resources via various modalities, reduce barriers to food access, and over time, decrease the number of Mid-Valley Family Medicine Clinic patients screening positive for FI.

METHODS: Patients are screened during clinic visits with the Hunger Vital Sign, a validated screening tool for FI. Those who screen positive are provided handouts with maps of various food banks and interested patients are connected to our CalFresh coordinator for assistance with enrollment. To further improve access to resources, patient-centered QR codes will be implemented, which directly link patients to maps of various food banks as well as instructions on how to sign up for CalFresh benefits. Surveys will be collected to evaluate patient satisfaction with these methods and to assess for future areas of improvement.

RESULTS: Baseline surveys demonstrated food insecurity in 37.4% of patients sampled, and 84.4% were without SNAP benefits. Current satisfaction survey results demonstrate that 90% of patients had a positive experience with assistance provided and 60% were able to obtain benefits after applying with assistance of a community partner CalFresh coordinator.

CONCLUSIONS: Because of the COVID-19 pandemic, distribution of QR code-based resources had been placed on hold. However, implementation is planned for Spring 2021. We are hopeful to see how QR code-based resources will help our patient population as data from the Pew Research Center demonstrates some minority racial/ethnic groups have similar shares of smart phone ownership, which bridges some digital gaps for these populations.

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Integration of Collaborative Care for AUD treatment in conjunction with a sub-specialist group.

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INTRODUCTION: In patients with substance use disorders, care is often disjointed and un-coordinated. Even within a large quaternary academic medical center, resources are generally allocated to resolving end organ damage problems, and are scarce in preventive methodology. As the treatment of Hep C improves, ALD is the leading indication for liver transplantation in the US. We created a model of integrated SUD care to address patients with AUD. We constructed a new wrap around service within a tertiary care center.

METHODS: Our pilot study is a quality improvement project that looks to add wrap around services for patients receiving hepatology care for end stage liver damage due to alcohol use disorder. We generated automated workflows within EPIC which will serve as the registry for our patients. Providers will refer patients with ALD, and they will be assessed by our intake coordinator. The coordinator does an initial assessment using screening questionnaires (CAGE) and interval questionnaires (AUDIT-C). Every month, the intake coordinator will continue to administer interval questionnaires to assess for changes in the patient's current use pattern.

RESULTS: We will use a quasi-experimental design with pre-tests and control groups, 25 patients will receive usual care (pre-intervention) and 25 patients will receive CoCM (post-intervention). We are currently in open enrollment and we are gathering meaningful outcomes in the patients who are referred to our CoCM pilot. Preliminary data has shown both satisfaction and engagement with patients. We have proven finacial sustanability as we have received reimbursement from medicare. We aim to follow outcomes data for these patients with the hope that our pilot study may lead to a future randomized-controlled trial.

CONCLUSIONS: Our work in the integration of alcohol use into a sub-specialty group has been important and impactful. We launched this pilot program in the course of three to four months. Our pilot is still growing, we recruit new patients daily and the feedback from both patients and physicians has been outstanding. We comphrensively reach more patients and utilize the funds generated to hire more ancillary support staff.

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Attitudes and Perceptions About COVID-19 Vaccine Uptake Among Healthcare Workers at a Substance Use Disorder Treatment Organization

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INTRODUCTION: Black, Indigenous, Latinx, and People of Color (BILPOC) have been disproportionately impacted by COVID-19. The risk of COVID-19 exposure is magnified for those who work in healthcare. Given the high risk factors and low rates of vaccine uptake in BILPOC communities, it is important to understand patterns of vaccine uptake. This study characterizes attitudes and perceptions towards receiving the COVID-19 vaccine among diverse healthcare workers before COVID-19 vaccine availability.

METHODS: This is a retrospective cross-sectional survey conducted between Dec 22nd, 2020 – Jan 1st, 2021, before COVID-19 vaccine availability among healthcare workers at the Asian American Drug Abuse Program (AADAP), a community agency providing substance use disorder treatment services to underserved communities in Los Angeles. Survey questions from the National Institutes of Health Community Engagement Alliance Against COVID-19 Disparities characterized demographics, intentions and reasons to accept or refuse vaccination, among other variables. Descriptive statistics of study variables are presented using mean, standard deviation, and frequencies.

RESULTS: A total of 82 surveys were completed and statistical analyses are underway. Common reasons to get the COVID-19 vaccine were to keep family, community, and oneself safe. The top three reasons for not getting the COVID-19 vaccine were concerns about its side effects, effectiveness, and safety. 42.6% of Asian staff reported they were "very likely" to get the COVID-19 vaccine once available, compared to only 31.2% of Black staff. Black participants were more likely than any other ethnic group to report that they were "not at all likely" to get the COVID-19 vaccine. 87.8% of the participants trust doctors "a great deal" for COVID-19 information.

CONCLUSIONS: Primary care doctors and healthcare providers are key trusted sources of COVID-19 information for healthcare workers and hold an important role in addressing vaccine hesitancy. The low rates of COVID-19 vaccine acceptance among Black healthcare workers are concerning and need to be addressed. This study can help inform healthcare organizations to increase information and uptake of the vaccine in BILPOC communities.

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"Bridging the Gap:" How a Novel Pipeline Program taught by Physician Residents can Promote High School Student Interest in Healthcare and Beyond

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INTRODUCTION: Minority groups continue to be underrepresented amongst both practicing physicians and amongst the youngest cohort of new physicians. Mentorship and pipeline programs have been utilized to promote the recruitment of students from racially and ethnically diverse backgrounds into medical careers. However, there remains a dearth of information on how school-based mentorship and pipeline programs can affect tertiary school attendance or career trajectories. This study examines a novel pipeline program: "Bridging the Gap," a high school-

based curriculum conducted through a Family Medicine Residency program to encourage minority high school students to pursue careers in healthcare.

METHODS: UCLA Family Medicine residents deliver monthly sessions to high school students in Van Nuys, CA, with the goal to build behavioral capacity and self-efficacy skills. Student participants undergo pre & post-program surveys to assess student barriers, impact, and areas for program improvement. Resident participants are surveyed before participation and at the end of the academic year. Students are also surveyed prior to high school graduation. The current analysis compares a group of graduating seniors who were not exposed to the program (n=42), to two graduating senior cohorts that underwent the yearlong, interactive didactics taught during their 9th grade year (n=23). Descriptive statistics will be used to analyze for significant differences between the two groups.

RESULTS: Analysis of physician resident data demonstrated a significant change between before and after the program in knowledge/experience in providing mentorship as a physician role model (p<0.5). Prior qualitative analysis on student participants (n=107) has demonstrated that 47% of students endorsed having a good understanding of how to pay for college compared to 82% after and that 72% of students were more interested in pursuing a medical career post-program. The current analysis will assess for significant differences in plans for tertiary education, interest in healthcare careers, and measures of confidence and self-efficacy.

CONCLUSIONS: To be determined.

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Ureteral endometriosis as a cause of hydroureteronephrosis and functional loss of one kidney

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INTRODUCTION: It is estimated that endometriosis affects 10% of women of reproductive age. It is a difficult diagnosis to make given nonspecific symptoms, which can lead to a delayed diagnosis. Endometriosis involving the urinary tract makes up 0.3-6% of cases, and ureteral endometriosis makes up 1% or less. We present a case of left ureteral endometriosis leading to hydroureteronephrosis and functional loss of a kidney.

METHODS: 47yo female with pmhx of HTN, infertility, and irregular menses presented to the ED with worsening pelvic pain. Patient had experienced intermittent pain for years, which had been attributed to a ureteral stone, but was lost to follow up. A prior CT KUB had demonstrated severe left hydronephrosis with an enhancing soft tissue mass in the left distal ureter. Prior biopsy was only notable for bland glandular proliferation.
Patient's vital signs were stable and labs were overall unremarkable with stable GFR. A repeat CT demonstrated worsening of hydronephrosis, and an MRI demonstrated an 8cm mass. Patient was discharged with follow up with urology. She underwent a robotic laparoscopic left nephroureterctomy, partial cystectomy and partial hysterectomy. Final pathology was significant for endometriosis.

DISCUSSION: Ureteral endometriosis is rare, and can be difficult to diagnosis. A high level of suspicion is required for diagnosis. Renal function should be evaluated via bloodwork and urinalysis. A renal US should be obtained to evaluate for hydronephrosis, and may detect a ureteral mass. Further evaluation is done with MRI of the pelvis and urinary tract, with a sensitivity of 91% compared to histologic diagnosis. There are both intrinsic and extrinsic versions of ureteral endometriosis, and it is important to note that ureteroscopy will miss the diagnosis of extrinsic endometriosis. There is no clear diagnostic pathway for ureteral endometriosis. It can have detrimental effects to patients with regards to both pain and renal function, and is an important diagnosis to consider.

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Marijuana and mood disorders-an analysis of it's moderating effects on HIV treatment adherence and viral load

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INTRODUCTION: Prior research has suggested that substance use leads to poor viral suppression, a key outcome in managing HIV. By contrast, some studies show marijuana links with viral suppression. Research has examined the effects of mood disorders on virologic response, and suggests that access to mental health care leads to increased HIV treatment adherence. This project aimed to determine if cannabis use moderates the association between depression symptoms with treatment adherence and viral load in HIV.

METHODS: Data was collected from the Mstudy database, which includes MSM who are both HIV + and substance users. In this initial study, baseline data from each participant's intake questionnaire was used. HIV positive status, HIV viral load (biologically verified), marijuana use (via urine test), and CESD scores (depression questionnaire scores) were obtained. The data analysis program STATA was used to test relationships between marijuana use, viral suppression (defined as viral load less than 200 copies/mL), and CESD scores. The student's ttest and chi square test were used in data analysis.

RESULTS: No significant difference was seen in viral suppression between marijuana users (n= 70) and those that did not (n=123). Those who did not use marijuana had significantly lower CESD scores (MJ+ = 22.6, MJ- =19.5, p=0.04), but these scores were not significantly different between patients with viral suppression (n=98) and those without viral suppression (n=97). Missing HAART (highly active anti-retroviral therapy) therapy was also taken into account. CESD scores were higher in subjects who missed at least one dose of medication (p=0.0007). There was no statistically significant association between marijuana use and missing HAART.

CONCLUSIONS: Marijuana use does not correspond to viral suppression. Higher CESD scores were seen in subjects who used marijuana. This implies a component of self-medication as well as increased access to care via mental health services. However, only baseline data was analyzed, and many subjects were polysubstance users, which could confound results. Further investigation into long term effects of marijuana use on viral suppression and HIV treatment is needed.

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Patient And Provider Voices In The Geriatrics Navigator Program

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INTRODUCTION: Health systems must optimize access to community resources to address a diverse urban aging population's complex needs. Since 2018, providers in the Los Angeles County Department of Health Services have used the Geriatrics Navigator Program (Geri eConsult) for telephonic navigation of geolocated, culturally appropriate, low-cost community resources for older patients and caregivers. Feedback from stakeholders can ensure the service meets the needs of vulnerable older adults as intended.

METHODS: Our retrospective qualitative cohort study collected feedback from 1) participating patients, through telephonic interviews, and 2) participating providers, through online surveys, regarding their experience with the

Geri eConsult. By convenience sampling, focus groups explored perceived strengths and barriers of the service with 3) providers new to the Geri eConsult service, and 4) social workers as potential Navigators.

RESULTS: 15 patients (87% ≥ 80 years old, 73% female, 73% Spanish-speaking), 16 providers, and 8 social workers participated. 100% of patients reported that they would receive the service again despite a 53% linkage rate. While 38% of participating providers reported ease of use, all emphasized its usefulness in caring for older adult patients. Focus groups of program-naive providers and social workers noted positive enhancement of patient care and integration into the electronic health record from the online portal. Barriers included concerns regarding resource capacity and in integrating the program into existing clinic workflows.

CONCLUSIONS: Through addressing concerns regarding workflow integration and sustainability, these results may help expand the program to new clinical sites with improved workflows and Navigator support. In the era of COVID-19, user-friendly virtual linkage programs for community resources may support innovative, patient-centered, and coordinated geriatrics care to better address the social determinants of health in underserved older adult populations.

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Barriers and Facilitators for FQHCs to Adopt and Implement a Screening and Brief Intervention to Reduce Moderate Risk Drug Use among Primary Care Patients in the COVID-19 Era

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INTRODUCTION: QUIT-Mobile is a hybrid effectiveness-implementation RCT of SBIRT to prevent SUD among FQHC primary care patients with moderate risk drug use. Prior iterations of this research used in-person patient engagement in clinic waiting rooms. Due to COVID-19, QUIT-Mobile had to adapt to increased telehealth services. The purpose of this analysis is to determine barriers and facilitators to adopting and implementing QUIT-M in FQHCs in the context of COVID-19 and increase telehealth services.

METHODS: Weekly and ad hoc meetings are conducted with stakeholders at FQHCs, managed care organizations, county department of health services, and community clinic associations. Stakeholders discussed the current landscape of screening and brief intervention for SUD and processes for partnering on the research and adopting the program, with emphasis on telehealth engagement. Dedoose mixed-methods analysis software is used to conduct thematic content analysis of meeting notes. The Consolidated Framework for Implementation Research (CFIR) guides analysis through iterative rounds of coding and discussion with the study team.

RESULTS: Various barriers and facilitators were found, categorized by the CFIR domains: Intervention Characteristics, Outer Setting, Inner Setting, Characteristics of Individuals, and Process. To adjust for telehealth, we integrated our recruitment protocol with the clinic's workflow. Also, clinic champions, people advocating for the adoption of QUIT-M, were key facilitators that discussed methods to reduce disrupting workflow without changing the study's integrity. A crucial barrier was the clinic's relative priority of this study compared to the ongoing pandemic since clinics with severe COVID spikes lack resources for the implementation of QUIT-M.

CONCLUSIONS: The COVID-19 pandemic has catalyzed disruptive expansion of telehealth. Insights into facilitators and barriers provided by this study can serve as a framework for clinics to implement new evidence-based practices remotely and safely given this new era. QUIT-Mobile also fulfills the recommendation by the United States Preventive Services Task Force (USPSTF) to routinely screen patients for substance use.

Abstracts Not Included in Video Presentations

Longitudinal Point-Of-Care Ultrasound (POCUS) Curriculum and its Potential Impact on Family Medicine Residents' Level of Confidence With Ultrasound Technique and Utilization

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INTRODUCTION: Clinical data has proven the utility of a residency POCUS curriculum to guide a resident's diagnostic skills and clinical management, especially in an inpatient setting. Various studies have shown that the addition of a POCUS curriculum to resident education can have an impact on increasing residents' knowledge and confidence in using POCUS scans. However, there is a lack of research studies assessing a longitudinal FM POCUS curriculum on FM resident confidence in using various ultrasound scans and impact on POCUS utilization. Our aim was to create a longitudinal POCUS curriculum at the RUHS FM Residency and show its possible impact on Family Medicine resident's knowledge of, confidence in using, and actual usage of various POCUS scans.

METHODS: A POCUS curriculum was created from the 2018 AAFP POCUS guidelines on recommended topics for residency training. Our curriculum focused on clinical POCUS usage for ocular, cardiopulmonary, abdominal, genitourinary, musculoskeletal, and basic OB/GYN scans. A pre- and post- curriculum comfort survey and knowledge test were administered to all thirty four RUHS FM Residents PGY1-3.

RESULTS: Post-curriculum survey data and knowledge test will be administered on 4/22/21. Results pending after analysis after all data gathered.

CONCLUSIONS: Many Family Medicine residents feel that a POCUS curriculum can have an impact on their training in the outpatient setting. Results pending on whether current curriculum is sufficient or if it could be further expanded on in future projects.

A Qualitative Study of Hesitancy and Acceptability of COVID-19 Vaccines in Minority Communities in Los Angeles

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INTRODUCTION: The Coronavirus disease 2019 (COVID-19) pandemic has disproportionately affected minority communities, where pre-existing comorbidities and social determinants magnify these disparities. Given the increased risk of infection and adverse health outcomes among minority communities, understanding vaccine uptake is vital to narrowing COVID-19 related disparities. Using qualitative, community-engaged methods, we aimed to understand (1) barriers and facilitators for vaccine acceptability in high-risk minority groups within Los Angeles County, and (2) factors contributing to misinformation, hesitancy, and acceptability of a proposed COVID-19 vaccine in racial/ethnic groups with a history of medical mistrust or mistreatment.

METHODS: We conducted virtual 2-hour focus group interviews from November 2020 to January 2021 with ethnic groups in Los Angeles County, including residents in high poverty zip codes and essential workers. Focus groups were stratified by race/ethnicity and age: <50 and >50 years. A semi-structured interview guide, developed using previous vaccine hesitancy literature, was used to facilitate discussions on hesitancy and acceptability of COVID-19 vaccines. Trained facilitators and community representatives who self-identify with each ethnic group

led the focus groups. Participants were asked to contribute and reflect as individuals and experts from their communities to obtain broad views of each race/ethnic group. Transcripts and field notes were analyzed to develop prominent themes shared across ethnic groups and specific to each community.

RESULTS: Eight focus groups were conducted with Filipino, Native American, Pacific Islander, African-American, and Latinx adult participants (N=45). Four broad content areas emerged: (1) common questions, misinformation, and concerns; (2) social determinants of health, accessibility, and affordability; (3) population-specific considerations; and (4) requests in vaccine delivery. Minority communities perceived hesitancy in the COVID-19 vaccine due to a lack of information/misinformation about the development process, including data access and politicization, safety and efficacy, and socioeconomic/structural barriers in accessing the vaccine. In general, participants had skepticism about the vaccine's effectiveness and adverse effects. Most notably, participants expressed concern of mistreatment or mismanagement in receiving the vaccine, or getting "the short-end of the stick."

CONCLUSIONS: Although there is COVID-19 vaccine hesitancy among minority communities, many participants were hopeful that additional information and trusted community-based culturally congruent outreach would increase acceptability. Public health and vaccine readiness campaigns should include trusted sources of community outreach and population-specific considerations.

Acute Hypocalcemia in Acute Renal Failure: a possible case of Mesoamerican Nephropathy

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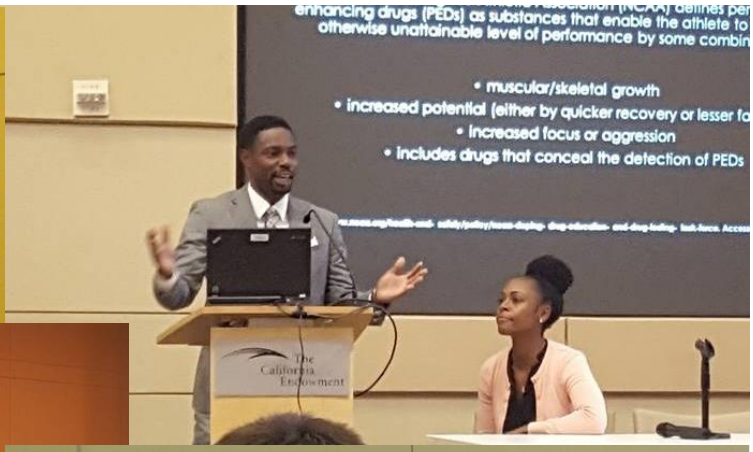
Harbor-UCLA Medical Center

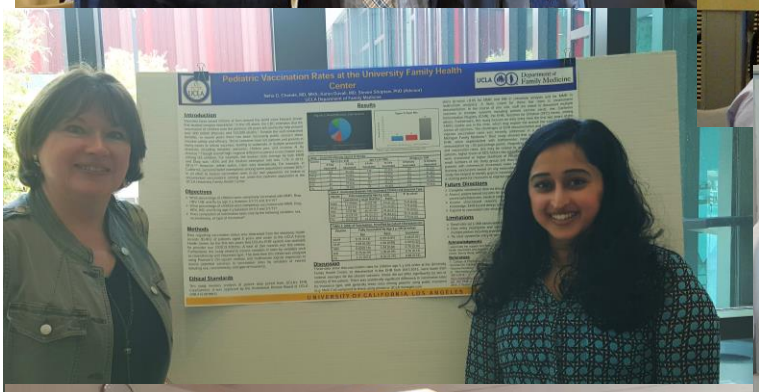
INTRODUCTION: Recently there has been the emergence of Mesoamerican endemic Nephropathy (MeN), in young males from Central America, with first reports in the early 2000s and recognition since the 1970s. Cases initially present with hypokalemia and hyperuricemia with rapid progression to end stage renal disease. Risk factors include exposure to heavy metals and pesticides and recurrent dehydration. Cause remains unknown with ongoing research.

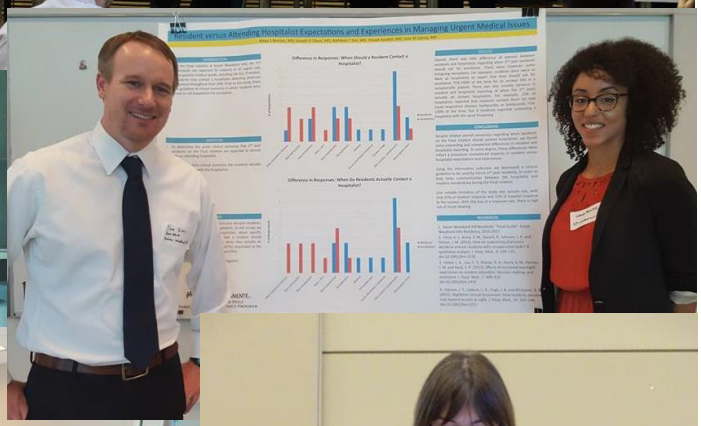
METHODS: 25yo male patient initially presented to the ED after a work-related accident. Intoxication and drug use was suspected due to slurred speech and presumed confusion. He was incidentally found to have a corrected calcium of 3.8mg/dL. He was also had a creatinine of 14.95, potassium of 3.4mmol/L, and BUN of 112. Patient reported no significant past medical history and endorsed muscle cramping, fatigue, and dizziness for three days prior to presentation. Social history revealed he was a recent immigrant from Guatemala with no previous agricultural work. Given acute renal failure and electrolyte derangements, patient was started on emergent dialysis. Work up of systemic, infectious, and autoimmune causes were found to be negative. Renal ultrasound demonstrated bilateral increased echogenicity of the renal cortices and atrophic kidneys. Given atrophic kidneys, renal biopsy was not performed due to concern for hemorrhage risk.

DISCUSSION: Though our patient has no definitive diagnosis, it is important for physicians to recognize Mesoamerican Nephropathy in the US. Especially with an increase of migrants from Central America. Data remains limited on this disease due to lack of health care infrastructure in Central American countries. Our patient was presumed to have systemic disease as the cause of his acute renal failure; however, his work up was negative. Mesoamerican Nephropathy progresses rapidly, thus recognition remains important to maintain kidney function in these patients. It is not associated with traditional causes of chronic kidney disease, instead its risk factors are environmental and social. Further research and recognition is imperative to prevent progression of disease and mortality.

Photos from Prior Events







Notes and Acknowledgements

- Please stay for the entirety of the event. **We will be raffling two $25 Amazon gift cards for two lucky attendees at the very end of Research Day**. You must be actively on the call to win, so please stay until the end of the event!

- If you have any **questions, comments, or concerns**, please contact the Multi-Campus Research Committee coordinator, Laura Sheehan, at LSheehan@mednet.ucla.edu.

- The Multi-Campus Research Committee expresses deep appreciation to **Dr. Patrick Dowling** and the **UCLA Department of Family Medicine** for their continued financial support of the Multi-Campus Research Forum.

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- Lastly, the Committee is sincerely thankful to **Laura W. Sheehan** for coordinating the majority of this event.