# 38th Annual UCLA Multi-Campus Family Medicine Research Forum

## May 11, 2022

Conducted virtually via Zoom
Meeting ID: 984 3974 9786
Registration required

Keynote Speaker

**Jerry P. Abraham, MD MPH CMQ**

The Democratization of Health: What COVID-19 Has Taught Us and Where We Go From Here

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

# AGENDA

| Time | Description | Speaker/Topic |
|---|---|---|
| 12:00-12:10 | Welcome Message | Gerardo Moreno, MD MS |
| 12:10-1:00 | Keynote Speech | The Democratization of Health: What COVID-19 Has Taught Us and Where We Go From Here (Jerry P. Abraham, MD MPH CMQ) |
| 1:00-1:10 | Keynote Q&A | Moderator: Tipu Khan, MD |
| 1:10-1:15 | Introduction | Laura Sheehan |
| 1:15-1:30 | Session 1: Lecterns and Q&A | Physical activity, quality of life, symptoms of depression, severity of pain, and perceived health status among underserved Latino older adults (Diaz et al.) |
| | | Exploring System, Site, and Patient Level Factors Affecting Implementation of Dementia Care Support Program in a Safety Net Health System (Hedmann et al.) |
| 1:30-2:00 | Session 2: Video Presentations | Pre-recorded |
| 2:00-2:05 | Q&A for Session 2 | Moderator: Bruno Lewin, MD DTMH |
| 2:05-2:15 | BREAK | Includes 5-minute stretch break with Laura Sheehan (Optional) |
| 2:15-2:30 | Session 3: Lecterns and Q&A | Association Between Physical Activity And Hospital Utilization (Merchant et al.) |
| | | Examining Prior Screening and Differences in Rates of Sexual Violence and Associated Abuse Among Collegiate Athletes (DeStefano et al.) |
| 2:30-3:00 | Session 4: Video Presentations | Pre-recorded |
| 3:00-3:05 | Q&A for Session 4 | Moderator: Parastou Farhadian, MD |
| 3:05-3:25 | Session 5: Lecterns and Q&A | Trends in Total Neonatal Phototherapy Use From 2010 to 2020 in a Large Integrated Healthcare System (Jan et al.) |
| | | Overcoming COVID-19 Vaccine Hesitancy – 'One Size Does Not Fit All' (Salari et al.) |
| | | Patient-centered comparative effectiveness randomized controlled trial of two federally recommended weight loss strategies in overweight, low-income primary care patients: MyPlate.gov versus Calorie Counting (Rico et al.) |
| 3:25-4:00 | Session 6: Video Presentations | Pre-recorded |
| 4:00-4:05 | Q&A for Session 6 | Moderator: Jesse Cheung, MD |
| 4:05-4:15 | Wrap up / Raffle | Laura Sheehan |
| 4:15-4:30 | Open discussion | (Optional) Everyone invited to unmute and mingle |

# 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 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 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 was established over 38 years ago to help promote this commitment. Formed by the UCLA Department of Family Medicine and affiliated residency programs, the committee has held annual research forums to facilitate the exchange of scholarly activities among residency programs and highlight the creative work conducted by residents, fellows, faculty, staff, and medical students. This forum fosters the understanding that the 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

Rebecca Bertin, MD
Kaiser Permanente Los Angeles

John Cheng, MD
Harbor-UCLA Medical Center

Jesse Cheung, MD
Pomona Valley Hospital Medical Center

Kathleen Dor, MD
Kaiser Permanente Woodland Hills

Carol Evans
Dignity Health – Northridge Medical Center

Parastou Farhadian, MD
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Lillian Gelberg, MD MSPH
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Dignity Health – Northridge Medical Center

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Aurelia Nattiv, MD
UCLA, Division of Sports Medicine

Heather Bennett Schickedanz, MD
Harbor-UCLA Medical Center

Steve Shoptaw, PhD
University of California Los Angeles

Carol Stewart, MD
Rio Bravo – Clinica Sierra Vista

Denise Sur, MD
University of California Los Angeles

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

# KEYNOTE

**(12:10pm – 1:00pm)**

## The Democratization of Health: What COVID-19 Has Taught Us and Where We Go From Here

Photo credit: *LA Times*

## Jerry P. Abraham, MD MPH CMQ

Director, Kedren Vaccines

**Dr. Jerry P. Abraham** serves as an advocate for equal access to public health and healthcare for all people across Los Angeles. Throughout his time working as the director of Kedren Vaccines, he has fought for the rights of several minority groups such as black, Hispanic, Asian, and LGBT communities, specifically their right to reliable and nondiscriminatory care. Through a mixture of avid social activism and an extensive history of medical experience, Dr. Abraham has spent his career working to prioritize those who are often abused and neglected within the medical sector.

Dr. Abraham is a graduate of multiple medical institutions such as the Emory University Rollins School of Public Health, Harvard University School of Public Health, The University of Texas School of Medicine, and the University of Southern California Keck School of Medicine. On top of his educational history, he is also a leader of several prestigious organizations such as Councilor of the American Medical Association, member of the American Public Health Association, Delegate of the United States Pharmacopeia, Trustee of the California Medical Association, Treasurer of the Los Angeles County Medical Association, and many more.

He serves on the Faculty of the Charles Drew University School of Medicine, the UCLA David Geffen School of Medicine, and the USC Keck School of Medicine.

During COVID-19 pandemic, Dr. Abraham has taken admirable initiatives to ensure that as many members of the Los Angeles community as possible are properly vaccinated and protected from coronavirus. He has created a program in which residents of underprivileged neighborhoods, those without reliable transportation, and people experiencing homelessness could not only be provided access to the vaccine itself but also a reliable patient education on vaccination safety. Dr. Abraham and his team has vaccinated over 300,000 members of the South Los Angeles Community, saving countless lives, and further keeping the community safe.

Dr. Abraham was awarded the 2021 Hero of Family Medicine Award for his passionate advocacy for patients, colleagues, and the family medicine specialty. He was also recently awarded the 2021 Compassionate Physician of the Year award by the California Medical Association. He fought for equitable COVID-19 vaccine distribution in his community as well as the democratization of healthcare everywhere.

His passion for furthering the rights of underprivileged communities and expanding the bounds of traditional medical care as well as his deep love for the people of Los Angeles has shaped his career. Dr. Abraham will continue to be one of the driving forces in the overall efforts to improve the public access to healthcare.

# SESSION 1 - Lecterns

**(1:15pm – 1:30pm)**

## 1

**Physical activity, quality of life, symptoms of depression, severity of pain, and perceived health status among underserved Latino older adults**

Wuilly Diaz, MD; Lisa Barkley, MD, FAAFP, FACSM, FSAHM; Edward Adinkrah, PhD; Mohsen Bazargan, PhD.
Charles R. Drew University of Medicine and Science

INTRODUCTION: There is an increasing amount of research on Physical Activity (PA) among older adults in the U.S, but it has largely left out under-resourced and underserved Latino older adults in research and interventional studies. This study examined the association between PA and several layers of potential outcome variables, including Quality of Life (QoL), symptoms of depression, level of pain, and self-perceived health status among underserved Latino older adults.

METHODS: One-hundred fifty-three (153) Latinos aged 55 years and older from an underserved urban community participated in this face-to-face structured cross-sectional study. Participants completed a short version of Yale physical activity measures, QoL survey (SF-12), a Short-Form McGill Pain Questionnaire-2 (SF-MPQ-2), and Geriatric Depression Scale (GDS). Multiple simple linear regression models were performed.

RESULTS: Adjusting for gender, age, education, and financial strains, this study revealed an association between various domains of PA and 1) physical QoL, 2) level of depression symptoms; 3) perceived health status, and 4) the severity of pain. Several multivariate liner regression models specifically, showed significant negative correlations between excessive sitting and lack of moving on most of the above-mentioned outcome variables.

CONCLUSIONS: Lack of physical activity for underserved Latino older adults contributed to lower quality of life, depressive symptoms, level of pain, and perceived health status. Longitudinal multi-faceted, multi-disciplinary, culturally sensitive, both clinic- and community-based participatory interventions are needed to determine effective messaging to promote PA, in order to enhance the quality of life and well-being among these underserved communities.

## 2

### Exploring System, Site, and Patient Level Factors Affecting Implementation of Dementia Care Support Program in a Safety Net Health System

Monique Hedmann, MD MPH (1), Ezequiel Andrade, MD MPH (1), Heather Schickedanz MD (1), Katherine Ward MD (2), Freddi Segal-Gidan PhD (3), Mailee Hess MD (2)
(1) Department of Family Medicine, Harbor-UCLA Medical Center; (2) Department of Internal Medicine, Harbor-UCLA Medical Center**;** (3) Department of Neurology and Family Medicine, University of Southern California

INTRODUCTION: The LA County Department of Health Services (LAC DHS) implemented The Care Ecosystem, a phone-based dementia care support and education program utilizing Dementia Navigators (DNs) to address unmet needs of patients with dementia and their caregivers (dyads). We used the Replicating Effective Programs (REP) framework to identify implementation barriers at multiple levels including patient, staff, system and external barriers. Barriers not identified by REP were captured by the Practical, Robust Implementation and Sustainability Model (PRISM).

METHODS: The program was implemented in 4 distinct DHS clinical sites over 18 months. Dyads were enrolled in months 11-18. Monthly meetings were used to track enrollment data and staff engagement as well as to identify barriers at the patient, site, and systems levels.

RESULTS: One hundred and three patients were referred to the program across all 4 sites, and 47 were enrolled (45.6%). The site with the highest PI engagement had the highest number of referrals (N = 63) and patients enrolled (N=22). The site with the highest DN engagement had the highest percentage (78.3%) of enrolled patients (N=18) from those referred (N = 23). REP-PRISM factors impacting staff engagement, patient referral, and enrollment identified include staff turnover, competing obligations, and administrative support. Other factors include dyad health status, stigma of dementia diagnosis, and access to communication technology. COVID-19 also greatly impacted the implementation process.

CONCLUSIONS: The REP-PRISM framework helped identify implementation barriers at multiple levels while establishing a dementia support program in a safety net health system, and will help inform future implementation projects within this population. Engagement by all study personnel in regular meetings improved program implementation by enhancing communication, support, and problem-solving.

# SESSION 2 - Videos

**(1:30 – 2:00pm)**

## 3

**Isolated PCL Injury in a High School Football Player**

Abayomi Adeyemi, MD; John Corletto, MD; Lisa Barkley MD, FAAFP, FACSM, FSAHM
Charles R. Drew University of Medicine and Science

INTRODUCTION: Knee injuries are common in sports and can have long term impact on mobility and physical activity. This patient is an 18 year old high school linebacker. This case unique as it represents an uncommon knee ligamentous injury.

METHODS: A linebacker presented to the athletic trainer during a football game with complaint of right knee pain and instability. The athlete denied any knee injury during the game, but recalled a previous injury 2 weeks before in which his right knee sustained a direct hit from an opposing player's helmet to his anterior tibia while his knee was in a fully flexed position. His right knee exam revealed a positive posterior drawer test (PCL), the rest of the knee exam was normal. On functional mobility assessment, his knee felt unstable when making quick direction changes with short runs. The athlete was pulled from active play. He was evaluated by an orthopedic surgeon who diagnosed Grade 1 Posterior Cruciate ligament (PCL) tear. He was prescribed physical therapy (PT) and a knee brace. He attended 2 sessions of PT and was reportedly unable to continue treatment due to insurance concerns. He did not return to play for the rest of the season and was lost to further follow-up.

DISCUSSION: PCL tears are uncommon, accounting for about 3% of ligamentous knee injuries. It is more common in trauma (such as a dashboard injury in car accidents). In sports, the mechanism of injury is usually due to a direct blow to the anterior tibia, severe hyperextension or hyperflexion. Athletes with this injury are more likely to develop osteoarthritis in the medial and patellofemoral compartments due to persistent anterior subluxation. A three phase program for PT is recommended. Phase I focuses on partial weight-bearing, hamstring and gastrocnemius stretching, quadriceps strengthening, and prone range of motion exercises. Phase II, focuses on progressive strengthening and return to full range of motion. Phase III, focuses on running and performing sport specific activities.

## 4

### A Cutaneous Cue for HIV: A Cryptococcosis in Primary Care Case Report

Hector Arreaza, MD (1) and Amy Arreaza, MSN, FNP-BC (2)
(1) Rio Bravo Family Medicine Residency Program; (2) Clinica Sierra Vista

INTRODUCTION: Cryptococcus neoformans is an encapsulated yeast that in the case of immunosuppression causes an opportunistic infection. While most commonly affecting the pulmonary and/or central nervous system, it can present cutaneously. Recognizing the skin presentation of cutaneous cryptococcus should lead the investigator to assess immune status. This is key for early treatment and successful outcomes. This is a case of cutaneous cryptococcosis manifesting in a patient with no prior known immunosuppression

METHODS: A 52-year-old generally healthy female presented to her primary care clinic with complaint of a facial skin lesion for 20 days. She reported a new male sexual partner for the last 7 months, with 2 previous partners. A review of systems was negative except for the facial skin lesion. The physical exam was normal except for a sole facial lesion located adjacent to the left nasolabial fold. It was flesh colored, 1 cm in diameter, and umbilicated. Initial lab work divulged a positive HIV 1 antibody, CD4 count of 77 cell/uL, and HIV viral load of 312 copies/mL. Shave biopsy of the lesion and tissue culture revealed Cryptococcus neoformans. Treatment was initiated with fluconazole 400 mg daily to target Cryptococcus neoformans and with bictegravir-emtricitabine-tenofovir alafenamide 50-200-25 mg daily for AIDS. The patient's skin lesion resolved within 2 months of beginning treatment and by that time her CD4 count increased to 82 cell/uL and HIV viral load decreased to 44 copies/mL.

DISCUSSION: In this case, the patient's cutaneous presentation was a cue for the primary care provider to conduct a thorough investigation into the immune status of the patient. The investigation resulted in a diagnosis of AIDS as well as cutaneous cryptococcosis. Treatment was initiated promptly with anti-retroviral therapy and antifungal therapy. This provided for a successful patient outcome, including resolution of the skin lesion all the while reducing risk for further AIDS related morbidity or disability. Immunosuppression is a critical underlying factor involved in the development of cryptococcal disease. Early evaluation of the immune status in a patient presenting with cutaneous cryptococcal lesions is key in achieving a successful patient outcome.

## 5

### Differences in reaction time and dynamic visuomotor synchronization in NCAA Division I baseball and softball athletes

Fernando Avila-Garibay, MD, Brian Donohoe, MD, Nelson Boland, MD, Calvin Duffaut, MD, Joshua Goldman, MD MBA
University of California, Los Angeles - Division of Sports Medicine; Santa Monica, CA

INTRODUCTION: Reaction time and visuomotor synchronization are integral components of tracking a moving target in space and time. However, less is known about the applicability of these parameters across multiple sports that employ different targets. This study aims to determine differences in clinical reaction time and dynamic visuomotor synchronization in athletes who engage in bat-and-ball sports (baseball and softball) compared to their non-bat-and-ball peers (basketball, soccer, and cross country) in NCAA Division I collegiate athletics.

METHODS: This is a cross-sectional study in 90 NCAA division I athletes. A clinical reaction time apparatus was used to measure individual reaction time. Smooth pursuit eye tracking was conducted using EYE-SYNC® goggles. Reaction times were compared between athletes in baseball and softball (n=51), and those in soccer, basketball, and cross country (n=39). Visuomotor synchronization was compared between baseball and softball (n=51) and all other sports (n=38), using tangential variability, radial variability, and mean phase error (reported in degrees +/- SD). Paired T-tests were used to assess for differences in between both groups.

RESULTS: Reaction time was calculated for each athlete and the aggregated data were used to calculate the means and standard deviations (SD) within each group. Mean clinical reaction time (reported in seconds +/- SD) was 0.1999 +/- 0.0224 in baseball/softball and 0.2075 +/- 0.0272 (p=0.1594) in all other sports. Tangential variability was 1.069 +/- 0.6410 for baseball/softball, and 1.367 +/- 0.7207 for all other sports (p=0.0446). Radial variability was 0.8451 +/- 0.3147 for baseball/softball, and 1.219 +/- 1.739 for all other sports (p=0.1986). Mean phase error was -0.2421 +/- 2.829 for baseball/softball, and 1.692 +/- 4.928 for all other sports (p=0.0346).

CONCLUSIONS: There was no statistically significant difference in mean clinical reaction time among student athletes in baseball and softball, compared to those in other sports. Athletes in baseball and softball demonstrated superiority in temporal accuracy and in sustaining synchronization between the eye and the target. As such, athletes who engage in bat-and-ball sports, which employ a small moving target, demonstrated better visuomotor synchronization than their non-bat-and-ball collegiate athlete peers.

# 6

## Improving Retention at a Medication-Assisted Treatment Street Clinic for Opioid Use Disorder

Duc Doan, DO, Manuel Cruz, MD, Tiffany Kilbas, DO, Jesse Cheung, MD, Daniel Blocker, PhD LMFT, Jose Ramos, MD
Pomona Valley Hospital Medical Center Family Medicine Residency Program

INTRODUCTION: Opioid use disorder (OUD) is a deadly epidemic in the U.S. with over 2 million people meeting OUD criteria. Among those with housing vulnerability, OUD is much higher and access to high-quality medication-assisted treatment (MAT) with proper psychosocial support is limited. Prior studies quantified treatment retention but did not examine barriers. This qualitative survey-based study explores this population's experience and barriers faced while pursuing treatment, aiming to improve retention and decrease emergency department utilization.

METHODS: This 1-year prospective qualitative study will recruit 30-40 participants over age 18 with OUD in a MAT street clinic at a local mental health center. If able to provide informed consent, participants will be given a survey assessing perceived barriers, prior experiences, satisfaction/feedback of care, and a follow-up survey if seen at subsequent visit(s). Two investigators will independently report results utilizing pattern thematic analysis and meet to reach a consensus, employing a third investigator if necessary. Retention will be tracked at 1, 3, and 6 month marks. Retrospective chart review of participants' emergency department utilization will be a long-term secondary outcome.

RESULTS: Reported patient identified barriers to care, include but are not limited to: Unsure of where to seek help (perceived lack of options), no PCP, mistrust in system and other needs like shelter/safety taking priority. Surveys noted a high appreciation for providing MAT services, for the compassionate as well as nonjudgmental approach and services improving access to treatment. Of 11 total participants, 64% are retained in services at 5 months. We plan to recruit 30-40 total participants over 1 year and retain greater than 44%. We will determine impacts on frequency/usage of emergency department visits and hospitalizations at our local hospital 1 year prior to and after start of MAT clinic.

CONCLUSIONS: Based on our analysis, access and stigma are major obstacles and can be addressed with properly directed resources. The vast majority are very receptive to MAT but lack accessible and compassionate care. Our findings support the shortcomings in the current OUD care model can be addressed by destigmatizing OUD treatment and bringing treatment directly to the most vulnerable populations. We hope that our findings emphasize that treatment failure is not due to a weakness of our patient's will.

# 7

**Baseline Sleep Characteristics in NCAA Division I Collegiate Athletes.**

Brian Donohoe, MD (1), Nelson Boland, MD (1), Fernando Avila-Garibay, MD (1), Calvin Duffaut, MD (1), Joshua Goldman MD MBA (1), and David Presby (2)
(1) Department of Family Medicine at UCLA; (2) Department of Data Science and Research, Whoop, Inc.

INTRODUCTION: The role of sleep on health has been well-studied in the general population. More recently, increased attention has been placed on the role of sleep in athletes and its effect on performance. However, there are no current studies looking at sleep architecture in a large cohort of NCAA athletes. This study's purpose was to determine baseline sleep characteristics, including sleep duration and architecture (light, slow wave, and rapid eye movement sleep), as well as daytime sleepiness and subjective sleep quality of NCAA Division I collegiate athletes.

METHODS: This is a longitudinal study with 42 NCAA Division I athletes from multiple sports (basketball, soccer, baseball, softball, swimming). Athletes wore a validated sleep monitor during the offseason that collected total sleep and sleep architecture (light sleep, REM, slow wave sleep, and time awake). Subjective sleep quality was assessed with the Single-Item Sleep Quality Scale and daytime sleepiness with the Epworth Sleepiness Scale. Only athletes with more than seven recorded sleeps (n=42) were considered for data analysis. Data were first averaged across the individual, so each athlete was only represented once, and these aggregated data were used to calculate means and standard deviations.

RESULTS: Mean total sleep duration (reported in minutes +/- SD) across all sports was 383.3 +/- 61.4 with sleep cycle breakdown as follows: light sleep (208.0 +/- 47.5), slow-wave sleep (72.1 +/- 16.9), REM sleep: (103.2 +/- 26.8), and wake time (42.1 +/- 12.7). Mean total sleep duration by sport was: men's basketball (n=3, 332.5 +/- 112.0), women's basketball (n=8, 381.1 +/- 57.2), softball (n=7, 395.0 +/- 48.9), women's soccer (n=11, 359.9 +/- 52.4), and women's swimming (358.9 +/- 53.7). The mean Epworth Sleepiness Scale score (for daytime sleepiness) was 7.4 +/- 3.6 (n=41), and the mean Single-Item Sleep Quality Scale score (for subjective sleep quality on a scale of 1-10) was 6.8 +/- 1.8 (n=41).

CONCLUSIONS: Collegiate student-athletes in our study demonstrated inadequate sleep habits. Whereas the American Academy of Sleep Medicine recommends adults obtain 7-9 hours and adolescents obtain 8-10 hours of sleep per night for optimal health, our athletes averaged 6 hours and 23 minutes per night. Despite this, athletes reported "good" subjective sleep quality (on the SISQ scale) and had "normal" daytime sleepiness scores (on the ESS), on average.

# 8

## Chart Review of Prenatal Care Visits and Pregnancy Outcomes: A Retrospective Study at DHS Lomita and Wilmington Clinics

Lorna Joy Echipare, DO MS, Amanda Dupre, DO MPH MS, Yvette Osei-Akosa, MD MPH, Saya Yusa, MD, Karen Olmos MD MPH
Harbor UCLA Family Medicine Residency Program

INTRODUCTION: Early prenatal care has been shown to improve birth outcomes. The CDC defines inadequate prenatal care as care that begins after 12 weeks of gestation. Our goal is to determine the average gestational age at onset of prenatal care and frequency of visits at the Harbor-UCLA Family Medicine Residency-affiliated clinics. By performing a chart review of patients, we hope to identify adverse outcomes and comorbidities in prenatal care among our patients to identify ways in which we can improve prenatal care continuity amongst this patient population.

METHODS: A retrospective chart review was completed on 567 prenatal charts from Harbor-UCLA Family Medicine Residency Program-affiliated clinics, DHS Lomita and Wilmington Clinic. Inclusion criteria included pregnant women, aged 18-45 years old, regardless of gestational age from 2018-2020 who were seen for prenatal care for at least one visit at our clinics. Women under the age of 18 were excluded. Data was abstracted for basic demographics, initiation of prenatal care, chronic maternal medical diagnoses, pregnancy complications and adverse outcomes. Descriptive statistics were used to summarize data.

RESULTS: Results are pending as data is still being evaluated.

CONCLUSIONS: Benefits of analysis include awareness of common comorbidities that our prenatal patients develop, which will allow our residents to better counsel patients in prevention. Likewise, we hope to analyze prenatal continuity and discuss ways to improve continuity among this patient population. Full discussion pending as data is still being evaluated.

## 9

### How Nurse Directed Clinic (NDC) visits compare to usual care in blood pressure control outcomes in an academic training clinic

Authors: Itzayana Garcia Alejo MD, Monica Hau Le MD, John Cheng MD

Affiliations: Harbor UCLA, Department of Family Medicine

INTRODUCTION: Team-based hypertension management has been shown to help reduce systolic and diastolic blood pressure compared to usual care. Nurse directed hypertension treatment algorithms can not only improve blood pressure control but can also increase access to care and medication adherence, yet uptake is limited. The purpose of this retrospective chart review is to evaluate the effectiveness of the Department of Health Services (DHS) Nurse Directed Clinic (NDC) at the Lomita Family Health Center, the primary care site for Harbor UCLA Family Medicine.

METHODS: This retrospective chart review will help our clinic evaluate the effectiveness of team-based care as a medical intervention for patients with uncontrolled hypertension. Specifically, we will compare our clinic's NDC visit compared to usual care which is a nurse blood pressure check visit as a bridge to regular intervals of care. In the NDC clinic the nurse is able to titrate up hypertension medications using an algorithm. The traditional nurse blood pressure visit does not allow titration and instead requires the nurse consult with a provider to make recommendations. Individuals will be included if they participated in either visit from May to December 2021.

RESULTS: Pending IRB Approval. Expected soon, results will be available by the date of the symposium. Analyzed data to include demographic data, coronary risk factors, number of visits, time to blood pressure control, number of medication adjustments, and time to follow-up.

CONCLUSIONS: Pending

# 10

## Addressing Upstream Social Determinants of Health through Community Wealth Building Strategies

Geoff Gusoff (1) (2), David Zuckerman (3), Bich Ha Pham (3), Gery Ryan (4)
(1) Harbor-UCLA Department of Family Medicine (2) National Clinician Scholars Program – UCLA, (3) Healthcare Anchor Network (4) Kaiser Permanente School of Medicine

INTRODUCTION: Social determinants of health interventions respond to social needs but generally fail to address underlying wealth and power inequities generating those needs. To address this gap, some health systems are turning to community wealth building approaches that build assets and power among community residents. Two key approaches are community land trusts and worker-owned businesses. This study seeks to identify challenges, opportunities, and best practices for health systems partnering with these types of community wealth building initiatives.

METHODS: Twenty-six semi-structured interviews were conducted across ten different health system-supported community wealth building initiatives. Participants were identified through the Healthcare Anchor Network, a national consortium of health systems committed to supporting local community economic development. For each initiative, at least one healthcare representative and at least one staff member from the partnering community wealth building organization were interviewed. Each interview addressed the initiation, implementation, and evaluation stages of the initiative. Interviews were analyzed for common themes and variation on salient topics.

RESULTS: There was a 100% response rate among the eligible initiatives identified. Preliminary findings reveal a variety of health system roles in initiatives ranging from contributors to conveners to catalyzers. Roles were determined by health system interest and capacity as well as the local institutional landscape. Impact measures focused on process outcomes (e.g. number of homeowners) as long time-horizons and externalities precluded traditional health outcome or return-on-investment analyses. Respondents from several health systems noted the potential of these interventions to transform upstream systems, but health systems generally focused on more downstream outcomes (e.g. housing stability).

CONCLUSIONS: Community wealth-building initiatives like community land trusts and worker-owned businesses provide health systems a unique opportunity to impact the root causes of social inequities while addressing immediate housing and employment needs. Effective partnerships take a variety of forms and health systems can tailor their role based on internal and external capacities. Demonstrating the long-term and broad benefits of these initiatives can help encourage increased health system investment.

# 11

**COVID-19 Trends at UCLA Santa Monica Medical Center in 2020**

Andrew MacQuarrie, MD
UCLA Family Medicine Residency

INTRODUCTION: In the early days of the COVID-19 pandemic there was a great deal of uncertainty regarding this emerging infectious disease. Without the benefit of prior research, management of this virus often relied on little more than supportive care and experimental treatments. In order to better understand the presentations, clinical courses, treatment, and potential complications of patients infected with COVID-19 at our institution, we compiled and tracked data from every COVID patient admitted to our hospital from the beginning of the pandemic onward.

METHODS: Clinical data was compiled using the UCLA CTSI Institutional COVID Data Repository, which is a database of information designed to collect patient level data to evaluate trends and outcomes of patients with COVID-19 at our institution. These data specifically focused on age and demographics, comorbidities, length of stay, clinical outcomes, and complications. We focused primarily on ICU admissions and outcomes, including need for intubation, rates of venous thromboembolism (VTE), and mortality. Additionally, we also investigated VTE prophylaxis strategies, as well as trends involving emergency response events with COVID-19 infected patients at UCLA Santa Monica Medical Center.

RESULTS: From the beginning of the pandemic through the end of 2020, there were 558 COVID-19 positive patients admitted to UCLA-SM. 153 of these patients were at one point admitted to the ICU, with 48 requiring intubation. 27 ICU patients with COVID, including 3 who were treated with treatment-dose anti-coagulation, eventually developed a VTE, consistent with what we now understand to be the pro-thrombotic nature of the COVID-19 virus. Of the 153 patients admitted to the ICU, 33 patients died, reflecting a higher mortality rate in those patients admitted to the ICU (21.5%) compared to those admitted to UCLA-SM who did not require ICU-level care (13%).

CONCLUSIONS: From March through December 2020, the increase in COVID-19 patients at UCLA-SM was stark, consistent with trends throughout the rest of the world. Early analysis of demographics, comorbidities, and outcomes of these patients revealed evidence of potential risk factors and clinical markers that may be predictive of more severe disease. Ongoing investigation into trends from January 2021 onward regarding vaccination status, anti-coagulation strategies, and long-term outcomes will be informative.

# 12

## Increasing Physician Utilization of Spiritual Counselors in Palliative Care

Angels Nguyen, DO. Cindy Yang, MD. Diana Naderi, MD.
Dignity Health Family Medicine Residency at Northridge

INTRODUCTION: In terminally ill patients, addressing spirituality reduces anxiety/depression, eases pain, and facilitates acceptance of death. Lack of spiritual care leads to poor QOL, care dissatisfaction, and aggressive treatment. Despite clear benefits, spiritual counselors are underutilized due to physicians' lack of knowledge, training, and misperception of spiritual care. This study assessed residents' knowledge/ attitudes about spiritual care before & after an educational workshop aimed to raise awareness and encourage use of these beneficial services.

METHODS: Residents attended a "Spiritual Care in Palliative Medicine" workshop (teaching importance of spiritual care, various spiritual models/assessment tools, role of spiritual counselors) followed by 2 case studies. Pre- & post-workshop surveys were conducted, each with 8 questions assessing residents' knowledge, perceptions and comfort level with spiritual care, on a 5-point Likert scale ranging from 1 (strongly disagree) – 5 (strongly agree). Post-workshop surveys had 4 extra questions assessing likelihood of implementing spiritual care into practice after the training session. Responses were analyzed to compare changes in residents' knowledge/attitudes about spiritual care pre- & post-workshop.

RESULTS: Of the total number of respondents, 95% of residents believe that spiritual care assessment is an important part of a patient's care (pre- and post-workshop). Only 85% agreed that spirituality won't conflict with their personal belief. Post-workshop, 35% more residents disagreed that spiritual care is only effective in religious patients. 20% more agreed that spiritual care assessment would help physicians bond with patients and family. 30% more felt comfortable addressing the patient's spiritual needs. 85% stated they will consult spiritual counselors to assist in patient management. However, 30% still state after the workshop that they don't have time to address a patient's spiritual needs.

CONCLUSIONS: Spirituality plays a vital role in a patient's mental & physical well-being; physicians addressing spiritual distress can improve that patient's overall health. This study concluded that with proper training, physicians recognize the importance of spirituality, are open to engaging patients' spiritual needs, and more likely to include spiritual counselors in their care. Such findings highlight the need for spiritual care assessment as part of the comprehensive management of hospitalized patients

# 13

## Sprengel Deformity: A Rare Congenital Cause Of Shoulder Pain

Bernadette Pendergraph, MD
Harbor-UCLA Department of Family Medicine, Harbor-UCLA/Team to Win Sports Medicine Fellowship

INTRODUCTION: Sprengel deformity often presents as a lump in the posterior neck. It occurs in a third of individuals with Klippel-Feil Syndrome and is often associated with scapular winging and scapular hypoplasia. It is the most common shoulder anomaly in children with a male to female ratio of 1:3. Most common limitation is shoulder abduction followed by forward flexion. If surgical correction is considered, it is best performed before age 8. Our case is a late diagnosis of Sprengel deformity.

METHODS: 36-year-old male right hand dominant hiker with diabetes, VP shunt, and Klippel-Feil syndrome presents with anterior right shoulder pain after falling onto an outstretched hand. He has pain and weakness with overhead activities. His right shoulder has no atrophy but an elevated right scapula and prominent medial border. He has kyphotic posture and tenderness of the proximal bicep tendon and acromioclavicular joint with preserved range of motion of the shoulder. Supraspinatus and subscapularis testing are 4/5. Impingement signs are positive. X-ray shows a Sprengel deformity with a right sided omovertebral bone. An MRI done because of his weakness showed a small supraspinatus tear. He underwent occupational therapy with focus on pectoralis stretches, postural cueing, and isometric scapular stabilization. He received a corticosteroid subacromial injection when pain limited his progression to rotator cuff strengthening. He completed therapy and is back to his normal activities.

DISCUSSION: Sprengel deformity severity is difficult to assess on physical exam and often needs radiographic evaluation with chest and neck radiographs. Using the Rigault classification, our athlete has a Grade 1 deformity with the superomedial scapular angle between the second and fourth thoracic vertebrae transverse processes. Treatment should focus on improving range of motion and function of the shoulder and managing expectations of the patient regarding deformity. More severe grades of deformity or associated restrictions in forward flexion and abduction range of motion of the shoulder are likely to fail conservative treatment and need surgical intervention to resect the omovertebral attachments and transfer the origin of the trapezius and rhomboids more distally on the spinous processes.

## 14

### Comparing Behavioral Symptoms, Functional and Cognitive Status, and Caregiver Measures Among Persons with Early-Onset and Late-Onset Dementia

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INTRODUCTION: In the past decades, interest and concern for patients suffering from dementia and their caregivers have dramatically increased. Among the persons living with dementia, patients with early-onset dementia (EOD) account for only ~5% of persons living with dementia, and little is known about how the disease and its effects differ from those diagnosed with late-onset dementia (LOD). It is important to understand these differences in order to effectively deliver pertinent services for both the patients suffering from EOD and their caregivers. This study aimed to understand differences between persons with EOD and those with LOD in behavioral symptoms and resulting caregiver strain and burden.

METHODS: This cross-sectional study examined the 1091 initial participants in the UCLA Alzheimer's and Dementia Care Program and compared persons with EOD (participants < 65 years of age) to LOD (participants > 80 years of age); 311 participants 65-79 years were excluded from these analyses. Patient measures included the Neuropsychiatric Inventory Questionnaire (NPI-Q), mini mental status exam (MMSE), and activities of daily living (ADLs). Caregiver measures included the Dementia Burden Scale–Caregiver (DBS-CG) and Patient Health Questionnaire (PHQ)-9. Fisher exact tests were performed to compare differences by onset of dementia.

RESULTS: Among the 780 participants (49 with EOD and 731 with LOD) in the analysis, 67.7% were women, 66.9% were non-Hispanic White, and 62.7% were college or higher educated. Persons with EOD were more likely to have spouse caregivers (57.1 vs 26.1%, p<0.001), whereas persons with LOD were more likely to have children as caregivers (57.3 vs 16.3%, p<0.001). Although persons with LOD had higher NPI-Q severity scores compared to persons with EOD (10.5 vs 8.5, p=0.014), there were no statistically significant differences between EOD and LOD participants on MMSE, ADLs and instrumental ADLs dependency, PHQ-9, and DBS-CG.

CONCLUSIONS: Compared to those with LOD, persons with EOD had similar cognition and functional status and fewer behavioral symptoms. More often persons with EOD were cared for by spouses in contrast with children who more often care for persons with LOD. However, these standardized tools may not capture the unique behaviors, caregiver challenges, and social consequences uniquely associated with EOD.

## 15

### Identifying Barriers to the Use of SBIRT for SUD by Primary Care Physician Residents at UCLA Family Health Center – a Quality Improvement Project

Angela Sepulveda Velez
Addiction Medicine Program, Department of Family Medicine at UCLA

INTRODUCTION: Addiction is defined as a chronic, relapsing disorder characterized by drug seeking despite harmful consequences. In 2020, 40.3 million people had a substance use disorder; 14.9% were classified as needing substance use treatment and 97.5% of these did not receive treatment. Screening, intervention, and referral to treatment is a health model to identify individuals with or at risk of developing SUDs. The goal for SBIRT is to improve health by reducing the prevalence of adverse consequences of SUDs through intervention and treatment.

METHODS: Literature search was conducted using PubMed database with key words including: SBIRT, SUD, barriers, implementation. Eight barriers to implementation of SBIRT were identified and transferred to a 2 question survey using the UCLA Qualtrics service. A total of 36 UCLA Family Medicine post graduate trainees years (PGYs) 1, 2 and 3 were sent the survey. Question #1 had a "Yes/No/NA" response to experiencing barriers. Question #2 asked to rank barriers in order of biggest to smallest. Three e-mail reminders were sent within this time. After a 6 weeks data collection period, the UCLA Qualtrics default report was used for analysis and interpretation of survey results.

RESULTS: Twelve out of thirty-six UCLA Family Medicine PGYs approached completed the survey. These PGYs identified the following 2 as the most experienced barriers to using SBIRT for SUD: a) "Little or no familiarity with how to conduct SBIRT" (100%) and b) "Insufficient time to administer SBIRT" (92%). Belief that there are more important topics to discuss during the encounter, little or no familiarity with how to conduct SBIRT, frustration with resources and/or facilitating access to treatment and fear of patients feeling stigmatized with asking and using SBIRT were ranked equally important barriers to using SBIRT.

CONCLUSIONS: PCP resident experiences with applying SBIRT do not fully align with their beliefs of what are the most important barriers to its use. While in their day to day practice the most common barriers were familiarity with SBIRT and the time required to administer the tool, the key concern identified is that other topics require more attention during the encounter. Resident PCPs may benefit from SBIRT training to improve familiarity and potentially decrease patient stigmatization.

## 16

### Can Wellness Sessions Alleviate Resident Burnout?

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INTRODUCTION: What if I told you that 50% of your colleagues thought about quitting residency? Up to 60% of PCPs identify with at least one area of burnout: emotional exhaustion, depersonalization, sense of lack of personal achievement.1,2 Despite a wide variety of trialed interventions, there is no universal wellness program.3,4,5 An often-identified barrier is time.6 We investigated the feasibility of a wellness session on an inpatient service in terms of time and ability to function as a protective activity.

METHODS: We arranged 5 total wellness sessions at the end of an inpatient rotation with a trained psychologist to provide a space for residents to participate in whatever way was meaningful for them. Residents were assessed with a voluntary pre-participation survey. A voluntary post-participation survey was sent to the classes, including those who did not have the opportunity to complete a wellness session, to determine both the utility of a wellness session as well as desired length. Those who participated in a session were asked to determine the impact on their mental state as described by identifying with positive vs negative adjectives as well as their before and after sense of emotional balance.

RESULTS: 24 residents responded to the pre-survey. 33% had a wellness session at time of survey. 30% felt out of their “emotional goal zone” daily. 38% felt out 2-3 times/week with 13% who felt they could bring themselves back into their zone. 42% found themselves taking anger/frustration home after leaving work 2-3 times/week. 46% considered quitting medicine due to these negative thoughts. 87.5% felt their emotional wellbeing would benefit from protected time to debrief at the end of an inpatient rotation.
17 residents responded to the post-survey. Prior to a wellness session, all residents felt below their “emotional goal zone”. After a wellness session, all residents felt back in their zone.

CONCLUSIONS: There is a clear theme from the pre-survey that residents are feeling burnt out. ~50% of respondents said they thought about quitting medicine due to these feelings. Most respondents spent time out of their emotional goal zone (defined as a balanced emotional state of wellbeing) with no time to get back in. It is evident that incorporating wellness sessions with a trained psychologist while on an inpatient rotation can put residents back in their emotional goal zone.

## 17

### Pediatric appendiceal carcinoid

Joshua Amalraj B.Sc (1), Vesta Yazdani M.D. (2)
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INTRODUCTION: Carcinoid tumors are well differentiated neuroendocrine tumors. These tumors are the most common neoplasm of the gastrointestinal tract in children and adolescents. 0.3% of carcinoid tumors are incidentally found during appendectomies. These tumors are called “carcinoid” because they are slower growing than carcinomas; WHO describes these as low- or intermediate-grade neuroendocrine tumors. The probability of metastasis of appendiceal carcinoid tumors to regional lymph nodes is 4.7%.

METHODS: A 15 year-old Hispanic female with no PMH was transferred to our institution complaining of 2-day abdominal pain that migrated to the right lower quadrant. She had one episode of vomiting and fever of 102 F. Labs were significant for WBC 21,400/uL, Na 131 mEq/L, and K of 3.2 mEq/L. CT of pelvis revealed distended appendix with small pockets of extraluminal air implying possible perforation and mildly distended small bowel.
Surgical investigation discovered a large amount of pus and fibrinous exudate in the right lower quadrant noting multiple areas of anterior wall adhesions. There were adhesions from small bowel to large bowel and the abdominal wall. ZoSyn was started to cover possible perforation. Patient developed continuous diarrhea for 3 days post-surgery. Pathology report revealed a tumor arising in the mucosa and extending into the mesoappendix. CT scan with contrast showed no involvement in the liver, stomach, pancreas, lungs, and mediastinum.

DISCUSSION: There is not a definite preoperative clinical presentation for appendiceal carcinoid syndrome and classically is an incidental finding. In the differential diagnosis for diarrhea post-appendectomy, antibiotics are the primary suspect and carcinoid syndrome may be low on the differential. Carcinoid tumors when stressed may induce a carcinoid crisis characterized as a release of serotonin, histamine, and prostaglandins. Serotonin causes increased motility and excessive secretion of the gastrointestinal intestines. Non-metastasized carcinoid syndrome may only present locally with diarrhea. Additionally, surgical correlation may allow additional insight prior to pathological report, as appendiceal carcinoid syndrome may present with marked mesenteric fibrosis and intestinal adhesions.

***NOTE: Abstract 18 has been withdrawn***

# SESSION 3 – Lecterns

**(2:15 – 2:30pm)**

## 19

**Association Between Physical Activity And Hospital Utilization**

Faisal K. Merchant, DO; John K. Su, MD MPH; John J. Tierney, MD; Daniel Malkhassian, DO; Duy H. Do, PhD
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INTRODUCTION: Many factors play a role in the health of an individual and a community. One major force within our control is our behavior, specifically, our physical activity level. Increased physical activity can aid in preventing and managing chronic disease. The authors hypothesized that higher levels of physical activity are associated with decreased hospital utilization, in particular fewer emergency department (ED) visits, fewer hospitalizations, and a shorter hospital length of stay (LOS).

METHODS: This retrospective cohort study utilized patient-reported weekly exercise vitals (EVS) at the first outpatient clinic visit in 2018. The authors categorized patients into three mutually exclusive groups based on EVS documented on index encounter: 0 mins/week (N=743,804), 1-149 mins/week (N=450,933) and 150+ mins/week (N=642,127). Three outcomes including ED visits, hospitalizations and hospital LOS were documented during a 1-year follow-up. A negative binomial regression was used to assess the association between physical activity level and each outcome, controlling for age, sex, race/ethnicity, the number of chronic conditions (based on Charlson comorbidity score) and the most recent BMI.

RESULTS: In fully adjusted analyses, the rate of ED visits was 0.81 (95% CI 0.81-0.82) times lower for those who exercised 1-149 mins/week and 0.77 (95% CI 0.77-0.78) times lower for those who exercised 150+ mins/week compared to those who did not exercise. Similarly, the rate of hospitalization was 0.81 (95% CI 0.79-0.82) times lower for those who exercised 1-149 mins/week and 0.63 (95% CI 0.62-0.64) times lower for those who exercised 150+ mins/week compared to those who did not exercise. Lastly, the average LOS was 0.96 (95% CI 0.94-0.97) times lower among those who exercised 1-149 mins/week and 0.93 (95% CI 0.91-0.94) for those who exercised 150+ mins/week compared to those who did not exercise.

CONCLUSIONS: The data demonstrated a dose-dependent response to exercise. In particular, increased minutes of physical activity is associated with decreased hospital utilization and therefore more time spent outside the hospital. The results have large public health implications as decreased hospital utilization can lead to lower costs to members and health systems. There remains a need to increase support for policies or programs that promote exercise and build safe, outdoor community spaces.

## 20

### Examining Prior Screening and Differences in Rates of Sexual Violence and Associated Abuse Among Collegiate Athletes

Sherilyn DeStefano, MD (1); Dena Florczyk, MD (1); Derek Pham (2); Nicholas Jackson, PhD, MPH (2); Aurelia Nattiv, MD (1)
1) Division of Sports Medicine, Department of Family Medicine at University of California Los Angeles; 2) Statistics Core, Department of Medicine at University of California Los Angeles

INTRODUCTION: Sexual violence is estimated to effect over 40% of women and almost 25% of men. There has been recent increased awareness of the prevalence of sexual violence affecting college athletes. Little evidence exists on appropriate screening protocols in a college athlete population. We aimed to use a screening questionnaire for sexual violence and associated emotional and physical abuse to evaluate differences in rates of sexual violence and associated abuse based on demographic factors and to identify rates of prior screening.

METHODS: Intercollegiate and club athletes over the age of 18 at a Division I university were invited to fill out an anonymous online survey. The survey consisted of screening questions related to sexual violence taken from American College of Obstetricians and Gynecologists recommendations, as well as questions about emotional and physical abuse. Survey respondents were also asked if they had been screened with similar questions in the past. Differences between responses were assessed using chi-square or Welch's t-test. All analyses were conducted in R version 4.0.3.

RESULTS: 126 survey responses (46 male, 80 female) were analyzed. 49% of females had experienced emotional abuse compared to 22% of males (p=0.016). 49% of females reported experiencing non-consensual touching vs. 19% of males, (p=0.007), 40% of females reported being forced or feeling pressured to commit sex acts vs. 8% of males (p=0.002), and 25% of females reported having unwanted sex while under the influence of alcohol/drugs vs. 3% of males (p=0.012). 57% of females had experienced unwanted sexual advances compared to 19% of males (p=0.001) and 42% had someone expose themselves or send sexual imagery unwantedly vs. 19% of males (p=0.043).
Only 24% of athletes indicated receiving prior screening.

CONCLUSIONS: Female college athletes experience significantly higher rates of sexual abuse, sexual harassment, and emotional abuse than male college athletes. Screening in these areas among the college athlete population is low. Further research is needed to improve screening mechanisms for both male and female college athletes.

# SESSION 4 – Videos

**(2:30 – 3:00pm)**

## 21

**Recruitment Challenges and Lessons Learned from Recruiting Primary Care Patients from FQHC's in Telehealth Era**

Leticia Cazares, MPH (1), Lillian Gelberg, MD, MSPH (1), Stephanie Sumstine, MPH (2), Melvin Giron Rico, BS (1), Leticia Cazares, MPH (1), Quynh Vo, BS (1), Natalie Martinez, BS (1), Whitney Akabike, MSPH (1), Dallas Swendeman, PhD, MPH (2)
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INTRODUCTION: The QUIT Using Drugs Intervention Trial (QUIT)-Mobile study is NIDA-funded Screening and Brief Intervention (SBI) effectiveness RCT that aims to reduce moderate substance use among primary care patients in Los Angeles. We partnered with two multi-clinic federally qualified health centers (FQHC) to pilot the recruitment of participants for the study. In this analysis, we detail study recruitment challenges and lessons learned from recruiting primary care patients in FQHC's a screening and brief intervention using remote methods.

METHODS: QUIT is the only efficacious SBI for drug use in primary care settings. QUIT-Mobile augments QUIT by adding mobile support for 12-months. The COVID-19 pandemic presents challenges to research focused in patient care settings and recruitment of participants. Patient electronic health record data (EHR) from participating clinics was entered into the study's data collection system, Chorus, for the initial pilot study. Research assistants (RA's) texted patients a unique eligibility screener survey. Those who completed the screener through their mobile phones and those who participated in the study received study material through text messages. Study participation was conducted remotely.

RESULTS: Due to the experienced recruitment barriers, recruitment and outreach strategies changed. QUIT-Mobile recruitment challenges included patients demonstrating reluctance and mistrust when study staff attempted to call them over the phone to enroll them in the study. Patients demonstrated hesitancy to complete screeners and questioned study staff due to the rise in spam and scam text messages/calls. Lessons learned included: Clinics need to send patients with upcoming appointments messages announcing the study to alleviate mistrust. Patients were responsive and receptive to completing the screener when their clinic sent them the study information. PCP referrals increased screener completion.

CONCLUSIONS: The COVID-19 pandemic significantly affected in-person recruitment and enrollment of participants for research studies. Through this pilot study, it was learned that it is important to reach out to patients in a personalized way, so patients feel connected to the study. It was also learned that messages need to come from a trusted source, their clinic for patients to trust the study. Remote recruitment has become a new way to enroll participants into studies and tailored strategies are needed.

# 22

## A Case of Blunt Chest Trauma Causing Acute Coronary Syndrome in a College Football Player

Jeremy TW Ng, MD CAQSM (1) and Ali Nsair, MD (2)
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INTRODUCTION: Blunt chest trauma is a rare cause of acute coronary syndrome (ACS). There have been several case reports in club soccer and rugby players. We present a 22-year-old healthy male that, to our knowledge, is the only known case of a high-level American football player with blunt chest trauma leading to ACS. This case highlights the need to consider coronary artery injury when evaluating contact/collision sport athletes with blunt chest trauma and chest pain in order to expedite definitive care.

METHODS: This is a 22-year-old All-American involved in a helmet to chest collision during preseason practice. He had immediate leg cramping, then severe chest pain and dyspnea. In the ER, CPK= 6118, Troponin=0.4, Cr=3, and EKG with anterior wall T wave abnormalities. He was admitted for "rhabdomyolysis" and given IV fluids. An echocardiogram demonstrated severe hypokinesis of anterior and anteroapical walls with EF of 25%. Cardiac catheterization revealed a 100% LAD occlusion. He underwent ballooning and thrombectomy to remove clot in the LAD. It was deemed this was due to plaque rupture, and he underwent stenting. No intravascular ultrasound (IVUS) of the LAD was done. Discharged on Plavix. At 3 weeks, stress echo was normal, EF recovered to normal (64%), and he was cleared to exercise. At 3 months, he returned to team activities, but didn't play. He declared for the NFL Draft and played in a pre-draft All-Star game. He went undrafted but played for two years in another professional league.

DISCUSSION: ACS is an extremely rare complication of blunt chest trauma. Symptoms are often initially attributed to other causes such as chest wall contusion. This patient had chest pain, dyspnea, elevated troponin, and an abnormal EKG. Vigilance is needed to avoid delay in care. The LAD is most commonly injured due to its proximity to the chest wall. MI may be due to coronary artery dissection, intramural hematoma of the arterial wall, plaque rupture, or thrombus formation. IVUS may have been helpful to obtain specific diagnosis and dictate management to only use stenting if absolutely needed as the post management and need for anticoagulation can affect clearance to return to play. Given the patient's All-American status, his lack of opportunity at the NFL level may have been due to this trauma.

# 23

## Educational and work process interventions to improve use of Pre-Exposure Prophylaxis in the primary care setting

Jessica Farmer, MD, MPH (1), Tri Trang, MD (2,3), MS; Christopher Lynch, MD (2); Fatima Nazarkhan, MD (1); Katya Corado, MD (4)
(1) Department of Family Medicine at Harbor UCLA; (2) Los Angeles County Department of Health Services; (3) HIV Fellowship at the University of Southern California; (4) Division of Infectious Diseases at Harbor UCLA

INTRODUCTION: Despite the demonstrated effectiveness of pre-exposure prophylaxis (PrEP) for HIV prevention, less than a third of LA County residents with an indication for its use receive it. Prior research has shown that providers with more familiarity with PrEP are more likely to use it; however, there is limited data on the impact of educational interventions on the rates of PrEP use. This project will assess the impact of PCP-directed educational sessions and work tools on the rates of STI testing and PrEP use in the DHS ambulatory network.

METHODS: This project is designed as a prospective cohort study with historical controls. Eligible subjects are adult primary care providers in the LAC-DHS ambulatory care network of clinics. These providers receive a one hour educational intervention on PrEP prescribing as well as access to work process tools, which include order sets, algorithms, and clinical reference material. From the providers that received the intervention, the number of STI tests and unique PrEP prescriptions will be collected during the year of 2019 to serve as a baseline. We will then collect this data every 3 months following the intervention and use statistical analysis to compare changes over the following year.

RESULTS: To date, 11 educational sessions have been completed during the first quarter of 2022, reaching over 150 providers. Data collection is ongoing and will continue through the end of 2022.

CONCLUSIONS: Pending finalization of data collection and analysis.

## 24

**The Border Health Curriculum: A Resident Physican Advocacy Curriculum for an Evolving Border.**

Lorenzo Antonio Gonzalez MD, MPL (1), Rebeca Cazares Adame MD, MPH (2), Austin Parish MD MS (3)
(1) Harbor UCLA Medical Center, Department of Family Medicine, (2) PrevenCasa, A.C., (3) Lincoln Medical and Mental Health Center, Department of Emergency Medicine

INTRODUCTION: The US-Mexico border is a unique region with specific healthcare challenges that differ from the interior of the United States and Mexico. Specifically, the city of Tijuana, Baja California receives a large flow of people in transit ultimately comprising a substantial portion of the patient population in Los Angeles. We present the Border Health Curriculum (BHC); a curriculum geared toward providing resident physicians a binational practicum to experience and contribute to the evolving region and populations.

METHODS: The objective was to create an advocacy curriculum reflecting both historical and current events contributing to border health challenges. Phase 1 involved researching the legal, political, and cultural roots of border communities including key stakeholder interviews. Phase 2 centered on conducting a needs assessment of the current border health understanding by resident physicians. Phase 3 focused on the development of curriculum materials and praxis components including binational experiences. Phase 4 involved the implementation of the longitudinal curriculum with frequent resident feedback. Phase 5 will be the evaluation of data.

RESULTS: The Border Health Curriculum was able to develop several successful components of a longitudinal multi-year residency elective. During the development of the BHC, critical events arose including the arrival of Afghan refugees, Ukrainian asylum seekers, and continued Central American migrations. Through strategic partnerships during its development, the curriculum became an organizing mechanism to mobilize and direct resources toward the Tijuana border in addition to providing resident physician education. Quantitative results are currently pending data collection and analysis as the project continues in progress.

CONCLUSIONS: The Border Health Curriculum displays how a medical education curriculum has a broad impact reaching outside educational confines. The BHC aims to provide resident physicians with the knowledge of the unique issues of the US-Mexico border with actionable steps to implement scalable solutions through developed partnerships. The next steps will include the full implementation of the curriculum and assessment of the curriculum impact.

## 25

### The Impact of Telehealth Visits on Patient Satisfaction Regarding Quality of Medical Care Provided

Joanne Kong, DO, Christopher Kuhlman, MD
Dignity Health Northridge Family Medicine Residency Program

INTRODUCTION: The COVID-19 pandemic changed healthcare delivery platforms, necessitating physicians to implement telehealth to meet the healthcare needs of their patients. This project will evaluate our patients' perceptions and level of satisfaction regarding the quality of medical care provided during telehealth visits. Do patients feel they receive a similar quality of medical care through virtual visits, and would they prefer scheduling virtual visits again compared to in-office visits?

METHODS: We administered a survey to interested patients over the age of 18 who presented to the DHMG Northridge Family Medicine Office for routine visits who have had a telehealth visit from March 2020 – September 2021. Patients were asked their level of satisfaction regarding using telehealth platforms; whether telehealth platforms were easy to navigate; whether they received similar medical care compared to in-office visits; whether their questions were adequately answered during the visit; and whether they would prefer telehealth visits.

RESULTS: 15 out of 20 surveys were adequately completed. Regarding the telehealth platforms' ease of use, 67% reported they were either highly or very easy to use, 20% reported moderately easy to use, and 13% reported minimally or not easy to use. 67% reported they were very or highly satisfied with telehealth, 21% reported they were satisfied, 14% reported either slightly or not satisfied. 60% felt telehealth visits provided equivalent care as in-office visits. 80% preferred an office visit so a physician would perform a physical exam. 80% felt their medical questions were adequately addressed during the telehealth visit. The majority would not prefer a telehealth visit over an office visit.

CONCLUSIONS: Telehealth services have provided physicians and patients an essential platform in administering and receiving medical care while keeping both parties safe in the setting of a worldwide pandemic. Although patients are mostly satisfied with telehealth services and ease of use, the majority still prefer office visits with their physicians. Telehealth platforms will still likely remain an alternative and convenient option for patients to receive non-acute medical care.

## 26

### Microinduction of Sublingual Buprenorphine from High-Dose Methadone: A Case Report

Matthew Lamon, DO. Tipu Khan, MD.
Ventura County Medical Center, VCMC Addiction Medicine Fellowship

INTRODUCTION: Buprenorphine is a partial agonist of the μ-opioid receptor. It is prescribed for medication assisted treatment of opioid use disorder. Traditional buprenorphine induction requires a period of interval opioid withdrawal prior to initiation in order to avoid precipitated withdrawal caused by the premature administration of buprenorphine. Here we present a case of buprenorphine microinduction from high-dose methadone.

METHODS: Here we present a case of a 34 year-old female with a past medical history of polysubstance use (heroin, prescription opioids, amphetamines, and tobacco) who underwent buprenorphine microindcution from high-dose methadone in an outpatient residential treatment center. The patient was first introduced to opioids at the age of 23 after sustaining a traumatic right femoral artery transection. She began to self-medicate with non-prescription opioids. Her pattern of use progressed to involve heroin as her primary drug of choice. At 31 years of age, she became pregnant and enrolled in a methadone treatment program. She stabilized at a total daily dose of 76 mg of Methadone. Due to several logistical factors, the patient decided to switch from buprenorphine from Methadone. In order to avoid withdrawal, A microinduction was completed over a 12-day period as depicted in the graph below. The patient was stabilized on sublingual buprenorphine with minimal withdrawal symptoms.

DISCUSSION: This case represents a successful transition from high-dose methadone to sublingual buprenorphine with subsequent transition to long-acting sub-cutaneous buprenorphine. Avoidance of the withdrawal state is a significant trigger for perpetual illicit opioid use. Microinduction mitigates typical withdrawal symptoms required of standard buprenorphine induction. The transition from a full agonist to buprenorphine via microinduction with subsequent administration of a once monthly sub-cutaneous buprenorphine product may reduce barriers to treatment for patients with logistical constraints to methadone maintenance therapy in the future. Further research pertaining to such transitions is warranted.

# 27

## Information-Seeking about Over-the-Counter Products in Patients on Apixaban

Marley Magee (1) and Derjung Mimi Tarn, MD, PhD (2)
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INTRODUCTION: Direct-acting oral anticoagulants (DOACs) are indicated for the prevention and treatment of several cardiovascular conditions, and have advantages over traditional anticoagulants such as warfarin. However, concurrent use of over-the-counter (OTC) products and DOACs may result in interactions that lead to excessive bleeding. This study investigated perspectives of patients taking apixaban, one of the most commonly prescribed DOACs, regarding information-seeking about potential apixaban-OTC product interactions.

METHODS: 46 adults participated in semi-structured interviews. Potential participants were identified through electronic health record data extractions at the University of California, Los Angeles and the University of California, San Francisco, and were invited to take part in the study. Participants were 18 years or older, currently taking apixaban, English-, Spanish-, or Cantonese-speaking, and not cognitively impaired. They were asked about the reasons they did or did not seek information about OTC products. Interviews were transcribed verbatim and analyzed using thematic analysis to develop themes related to information-seeking.

RESULTS: Of 46 participants, there were 16 Asians, 11 Hispanics, 9 whites, and 7 Blacks. The mean age was 66.8 years (SD=15.4). Patients reported taking a total of 172 OTC products, of which at least 16% had potential interactions with apixaban. Six major themes related to patient information-seeking about OTC products: 1) beliefs about provider versus patient responsibility for ensuring medication safety; 2) quality of provider-patient interactions; 3) beliefs about the safety of OTC products; 4) convenience of obtaining information; 5) frequency of OTC product use; and 6) previous experience with the product. Patient orientations toward these themes either promoted or inhibited information-seeking.

CONCLUSIONS: Barriers and facilitators to information seeking relate to patient perspectives about responsibility for medication safety, provider-patient interactions, convenience, and patterns of OTC product use. Provider queries about OTC product use and education about the potential for interactions with OTC products could raise patient awareness about the potential for DOAC-OTC product interactions.

## 28

### Hypocomplementemia mediated interstitial nephritis: A case study

Jesus Mendez, DO, Jeffrey Wang, DO, William Yang, MD
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INTRODUCTION: Hypocomplementemia mediated interstitial nephritis is a rare and poorly understood subtype of acute interstitial nephritis (AIN), with most literature confined to isolated case reports. This case study illustrates the clinical course of a 43-year-old female presenting with new onset renal failure and was found to have this rare subtype of AIN, hopefully providing further clinical insight into this rare condition.

METHODS: 43-year-old female with past medical history significant for hypertension and morbid obesity presented with weakness and shortness of breath starting 4 days prior to admission. Given initial work-up and CT findings, she was started on treatment for pyelonephritis. However, her respiratory status and renal function continued to deteriorate despite adequate therapy. Patient was subsequently transferred to the ICU, where she was intubated and placed on pressor support. Further infectious work-up was initiated and antibiotic therapy escalated. During this time, renal replacement therapy was started. Given lack of response to treatment, autoimmune work-up was pursued which revealed low C3/C4 complement levels. Subsequent renal biopsy showed hypocomplementemia mediated interstitial nephritis. Prednisone 60mg BID was started and the patient began to demonstrate gradual improvement. Renal replacement therapy was discontinued after a few weeks and corticosteroids were slowly tapered outpatient

DISCUSSION: The etiology of this subtype of AIN is unclear. At present, the gold standard for diagnosis remains renal biopsy. Likewise, the recommended treatment remains the same as in other cases of AIN, which is high dose corticosteroids with a slow taper lasting several months. This case proved to be especially difficult as the patient had confounding diagnostic and clinical findings leading to suspicion of other disease processes. Based on multiple previous case reports, it is recommended that clinicians avoid an extensive work-up; instead, focusing on obtaining history of a possible offending agent, ANA, anti-Ro/-La antibodies, complement levels and lastly, renal biopsy. Difficult cases such as these teach young physicians to challenges and broadens one knowledge to become more encompassing.

# 29

## Can a Matchday Cooling Protocol Mitigate Self-Pacing in Elite Youth Soccer Players Competing in the Heat?

Jeremy TW Ng, MD (1), Yasuki Sekiguchi, PhD, CSCS (2), Courteney Benjamin, PhD (2), Pete S Calabrese, MS ATC CSCS (3), Andrew J Grundstein, PhD (4), Douglas J Casa (3), PhD
(1) UCLA Health, Division of Sports Medicine, (2) Korey Stringer Institute. University of Connecticut, Department of Kinesiology, (3) Tampa Bay Rowdies (USL), (4) University of Georgia, Department of Geography

INTRODUCTION: Competing in hot conditions is detrimental to performance. Individual performance data of elite soccer players suggest the adoption of a self-pacing strategy in hot conditions, sacrificing performance metrics to preserve high-intensity activity when needed. Studies demonstrate appropriately timed cooling improves simulated standardized performance. There are no published studies addressing the effects of a matchday cooling protocol on the individual performance data of elite youth soccer players competing in stressful environmental conditions.

METHODS: Retrospective data analysis of 9 members of a men's youth national team (mean age:17 +/- 0.2yrs) were collected from 11 World Cup Qualifying Tournament and FIFA Men's U17 World Cup matches. Weather data was recorded every 5 minutes. Wet Bulb Globe Temperatures were modeled from observed data. Matches were divided into WBGT hot (WBGTH ≥28C) and WBGT warm (WBGTW <28C). Matchday cooling protocol included precooling, percooling, and post cooling. Performance data were obtained using validated GPS units including Distance/Minute (DM), # Sprints (S), # Accelerations (A), High Metabolic Load Distance (HMLD), and %HML. Data were analyzed with a mixed ANOVA model, controlling for player and match.

RESULTS: Outcomes were standardized to 90 minutes played unless noted. There was a statistically significant difference between WBGTH and WBGTW (29.9C +/- 2.4 vs 26.9C +/- 0.6, p=0.028). There were no statistically significant differences between WBGTH and WBGTW in DM (99.15m/min +/- 2.45 vs 101.41m/min +/- 2.74, p=0.554), HMLD (1195.01m +/- 63.92 vs 1258.78m +/- 70.08, p=0.518), %HML (13.2% +/- 0.53 vs 13.6% +/- 0.58, p=0.645), S (26.83 +/- 2.04 vs 28.58 +/- 2.22, p=0.577), A (31.18 +/-3.42 vs 30.03 +/- 3.73, p=0.824), or minutes played (87.39min +/- 1.09 vs 87.13min +/- 1.18, p=0.870).

CONCLUSIONS: This retrospective study suggests that when using a specific cooling protocol there were no differences in performance metrics between warm and hot WBGT environments in elite youth soccer players. Further investigation using practical cooling methods over a wider range of WBGT is encouraged. A need exists to expand results to include core body temperature readings.

## 30

### Adopting Internal Motivations (AIM) clinic – A motivational interviewing resident clinic teaching model

John Nuhn, M.D. (1), Jacob David, M.D. (1, 2)
1 Family Medicine Residency Program, Ventura County Medical Center, 2 David Geffen School of Medicine at UCLA

INTRODUCTION: Comprehension and adherence to management can be difficult for many patients. Physician experience and limited time also contribute to diagnostic and treatment challenges. Communication breakdown manifests in a variety of ways, such as a pattern of missing lab draws, inconsistency with medications, or failure to follow up. Meanwhile, expanding ACGME training requirements include motivational interviewing (MI). Dedicated clinic time exploring challenges while meeting educational requirements would benefit residents and patients simultaneously.

METHODS: The Ventura Family Medicine Residency clinic opened a MI clinic titled Adopting Internal Motivations (AIM). Residents are invited to refer challenging patients or those with a loosely defined perceived resistance to therapy. Referrals are encouraged for patients with at least a year of continued difficulty. Referred patients are scheduled for a one-hour visit. Specific MI tools are employed for specific conditions, such as chronic pain. A questionnaire is sent to physicians six weeks after the visit to assess how helpful AIM clinic was addressing their concerns and aiding in understanding of disease, diagnosis, and treatment options.

RESULTS: Early feedback indicates that referring physicians perceive an increased level of understanding in both diagnosis and management after a visit in AIM clinic. While data collection is just beginning, the first few questionnaires suggest resident physicians perceive an increase in cooperation towards health goals and better physician understanding of a patient's individual health goals. Resident response also indicates referencing AIM clinic notes and discussion with AIM physician aid in individualized communication regarding diagnosis and patient treatment goals at follow up.

CONCLUSIONS: AIM clinic combines challenging patient encounters with resident MI experience. Data is being collected to evaluate how effectively this model impacts patient understanding of disease and adherence while providing MI education. Dedicated MI time with an experienced clinician is important for proficiency. AIM clinic provides a novel model for an integrative solution to challenging patient encounters in resident clinics alongside an educational MI experience.

# 31

## Perceptions of Weight And Nutrition on Performance Among Division 1 Distance Runners

Lauren Oberle (1), Aurelia Nattiv (1), Michael Fredericson (2), Kristin Sainani (2), Megan Roche (2), Ellie Diamond (2), Taylor Lewis (1), Emily Krause (2), Abby McIntyre (2), Jenny Wang (2), Michelle T. Barrack (3)
(1) University of California Los Angeles, Department of Family Medicine; (2) Stanford University; (3) California State University, Long Beach

INTRODUCTION: It is well established that low energy availability can result in the Female and Male Athlete Triads, and sports that encourage “leanness” may predispose athletes to low energy availability. While prior studies suggest that a majority of youth distance runners believe that thinness improves running performance, there is limited data of this perception in male and female collegiate distance runners. The purpose of this study is to examine Division I collegiate runners’ attitudes towards body habitus and nutrition on performance.

METHODS: This data is a secondary analysis of a larger nutritional intervention study among NCAA Division I collegiate distance (>800 meters) runners. Athletes were enrolled in the study after informed consent was obtained at each athlete’s respective school, and a baseline survey was distributed to athletes via an online questionnaire. Using a combination of five questions from validated questionnaires, the survey used a Likert scale to evaluate the runners’ perceptions of their nutrition and body weight on their athletic performance.

RESULTS: Fifteen collegiate runners (10 females, 5 males; BMI: 20.2 ± 1.2 kg/m2) from 3 NCAA Division I teams completed the perception survey. Approximately half (n= 8, 53.3%) of the runners agreed with the belief that “having a low body weight will help me run fast” and that gaining weight would decrease performance. Nearly all runners disagreed (n=5, 53.3%) or strongly disagreed (n=5, 33.3%) that losing weight would improve performance and disagreed (n=5, 53.3%) or strongly disagreed (n=3, 20.0%) that their muscles are too small. Most runners agreed (n=5, 33.3%) or strongly agreed (n=5, 33.3%) that they need to make an effort to replace calories burned during exercise.

CONCLUSIONS: Findings from this collegiate runner sample suggest competing perceptions regarding effects of energy intake and body habitus on performance. Further research from this ongoing study and future studies are needed to clarify runners’ perceptions. Understanding motivations and barriers to optimally fueling exercise training may be used to benefit performance and reduce injury risk. The study is funded by the Pac-12 Student-Athlete Health and Well-Being Grant Program.

# 32

## Don’t Mix It Up: Severe Hypothyroidism or Myxedema Coma?

Michael Okazaki, DO, Nadeem Albadawi, DO, Jesse Cheung, MD, Maria Christina Tolentino DO
Pomona Valley Hospital Medical Center Family Medicine Residency Program

INTRODUCTION: Myxedema coma is a rare complication of severe hypothyroidism. This can lead to hypothermia, bradycardia, hypoventilation, hypotension, and confusion. Etiologies include uncontrolled hypothyroidism or precipitating event such as infection, surgery, myocardial infarction. We describe a case of an 82 year old female who presented with an extremely elevated thyroid stimulating hormone (TSH). Cardiac complications, older age, persistent symptoms are associated with increased mortality, up to 50%.

METHODS: The patient is an 82-year-old female with hypothyroidism, hypertension, depression presented after found down covered in feces with dried blood in the mouth. 1 week prior, outpatient labs showed elevated TSH due to medication nonadherence. Family reported no tongue swelling, weight gain, temperature intolerance, constipation, hoarse voice, muscle aches/pain/tenderness. Chart review showed TSH of 250 one year ago. In ER, patient had temperature of 34oC, and HR 45. Exam notable for 3/5 strength of bilateral lower extremities. TSH was 136 with free T4 less than 0.25, CK 4619, and spot cortisol 18.4. EKG showed sinus bradycardia. Patient was admitted to ICU given concern for myxedema coma. Mentation improved with boluses of hydrocortisone, then IV levothyroxine and later started on oral liothyronine and IV hydrocortisone. Unfortunately, imbalance and weakness remained and patient was discharged to a skilled nursing facility.

DISCUSSION: Key features of myxedema coma are altered mental status, hypothermia and a precipitating event. Current guidelines include a combination therapy of T4 and T3 for two reasons: the biologic activity of T3 is greater than T4 with a more rapid onset of action and the conversion of T4 to T3 is impaired in severe hypothyroidism. ICU monitoring is generally recommended as the T4 and T3 can cause myocardial infarction or arrhythmias. Other supportive measures include ventilation or passive rewarming. Serum T4/T3 are measured every 1-2 days. Treat adrenal insufficiency empirically until ruled out. Repeat T4 and TSH outpatient every 2-3 weeks if having persistent symptoms. As little as 4-6 weeks of not taking thyroid replacement can result in severe hypothyroidism or myxedema coma.

# 33

## Oh My, Pain in My Thigh…

Marissa Vasquez, MD, MBA (1) AND Kenneth Choi, MD, MPH (2)
(1) UCLA Health Family Medicine-Division of Sports Medicine; (2) Kaiser Permanente Los Angeles-Division of Sports Medicine

INTRODUCTION: A male marathon runner and rock climber presents for evaluation of bilateral anterior burning thigh pain and intermittent episodes of weakness. This cases highlights atypical findings and a challenging diagnosis. It underscores a clinician's need to obtain a detailed history and collaborate with consultants serving as an important puzzle piece.

METHODS: 39 y/o runner and rock climber presents with bilateral anterior burning thigh pain and intermittent episodes of weakness. History of low back pain due to repetitive hyperextension. Currently not rock climbing. Reports no posterior thigh or acute back symptoms. Endorses anterior knee pain bilaterally going down stairs and with prolonged sitting. Denies locking, swelling or mechanical symptoms. Tried modified activities, massage and stretch. Endorses wearing compressive clothing with exercise. Symptoms exacerbated following increased activity but not during. No recent travel, new medications or vaccines. Past medical history is hyperlipidemia. No significant family/surgical history. Review of systems-negative.
Exam-Back:L4 5/5 knee extension, nl squat, unable to elicit patellar reflex bl w distraction.L5/S1:5/5 ankle dorsi/plantarflexion, nl heel/toe walk,2+ Achilles reflex.Bl Hip/Knee:R Fem Stretch +,Otherwise nl
Labs-CK,CRP,A1C,TSH-nl
Hgb-13.8
NVC-nl
MRI Pelvis-neg
MRI L Knee-MM tear

DISCUSSION: This case demonstrates exercise related entrapment neuropathy with bilateral femoral nerve compression. Femoral nerve neuropathies are uncommon.This clinical condition may present as a mononeuropathy with acute or subacute pain, weakness and decreased reflexes. Weakness of the quadriceps femoris and decreased patellar reflexes are key clinical findings. Nerve compression may due to mechanical, traumatic, pathologic or metabolic etiologies.
The athlete was recommended to remove compressing forces from compression shorts/clothing. Conservative treatment includes soft tissue/nerve mobilization, aerobic conditioning, stretching and strengthening exercise. In non-responsive cases, consider hydrodissection, injections vs surgical release. Diagnosis is challenging and imitates other conditions.

## 34

### Impact of Electronic Health Record in Mirrored Screen in Patient Satisfaction

L. Verduzco, MD; S. Zolghadr, DO; C. Kuhlman, MD
UCLA Northridge Family Medicine

INTRODUCTION: Since hospitals and providers adopted electronic health records (HER) systems, physicians and patients have voiced their concern that EHR may be detrimental to the patient physician relationship. Studies trying to establish whether a negative or a positive impact on satisfaction exists have been inconclusive. Our survey project will try to establish whether a patient's satisfaction with their office visit is influenced by their concurrent visualization of their EHR data during that visit.

METHODS: We conducted a seven-question Survey to patients who had an initial or follow-up visit in the Family Medicine Clinic at Dignity Health Northridge. Patients were randomly assigned based on the date of visit on a control and a study group. Mirrored screen was used on the latter. Patients were over the age of 18, fluent in English or Spanish, with good literacy and mental capacity. The survey included questions regarding the perceived interference in patient care created using EHR. An additional 4-question survey to provide feedback was provided to the study group at the end of their visit.

RESULTS: PENDING

CONCLUSIONS: PENDING

***Note: Abstract 35 has been withdrawn***

## 36

### Creating a Community-Academic Partnership to Pilot a Geriatric Resources Navigation Program in a Community Clinic

Marcos Muñoz (1), Andreé Franco-Vásquez (1), Miriam Ramos (1), Heather Schickedanz, MD (2)
(1) UCLA David Geffen School of Medicine; (2) Family Medicine Department at Harbor-UCLA Medical Center

INTRODUCTION: The Los Angeles County DHS launched the Geriatrics eConsult Navigation Program (Geri eConsult) in 2018 to provide patients with resource navigation support and help primary care providers address unmet social needs of older adults. With the COVID-19 pandemic highlighting social vulnerabilities as key mediators of negative health outcomes, we developed a community-academic partnership with a Federally Qualified Health Center (FQHC) primarily serving uninsured low-income patients to pilot Geri eConsult within their clinic sites.

METHODS: Our community-academic partnership was guided by the Model of Research-Community Partnership. We worked with the Northeast Valley Health Corporation in developing our program. Primary care providers (PCPs) referred patients with unmet social needs who were at least 50 years old and ineligible for insurance. Two bilingual fourth year medical students served as community resource navigators and provided language-concordant telephonic support. We conducted a descriptive analysis with baseline and 1-month follow-up patient surveys to explore resource utilization, knowledge of local resources, and satisfaction with Geri eConsult.

RESULTS: PCPs referred 15 patients (average age 69, 80% female, 100% Spanish-speaking) between April and August 2021. Top referrals were food insecurity and financial needs (67%). All patients had access to cell phones yet 25% lacked internet. The majority of patients (75%) had not accessed recommended resources, citing competing time demands and fear of being denied as primary reasons. At follow-up, more patients somewhat/strongly agreed with knowing local resources (63% difference), how to contact them (57% difference), and who to ask for help (88% difference). To improve resource utilization, patients recommended that the organizations initiate contact and navigators help submit applications.

CONCLUSIONS: Community-academic partnerships can enable the implementation of interventions aimed at addressing vulnerable patients' unmet social needs. After using Geri eConsult, more patients were familiar with local resources and how to access them. However, providing resource information to patients is insufficient. Robust and longitudinal resource navigation support is of utmost importance for uninsured, older adults living in poverty, who may face barriers such as fear, language, and technology access.

# SESSION 5 – Lecterns

**(3:05 – 3:25pm)**

## 37

### Trends in Total Neonatal Phototherapy Use From 2010 to 2020 in a Large Integrated Healthcare System

Bonnie Jan, MD; Mirnes Kadic, DO; Erica Wolfish, MD; David Braun, MD; Monique George, MD; Jose Garcia, MD
UCLA, Department of Family Medicine

INTRODUCTION: The COVID-19 pandemic altered training routines for all sports. Schools shifted to virtual or hybrid models. In this study, we sought to evaluate the impact of various marathon training methods on the well being and social connectedness of participants in a youth distance running program.

METHODS: A demographic survey was sent to all participants in middle school and high school during the 2020-21 season. At 3 time points over the training season a well-being survey, with questions adapted from the Social Connectedness Scale and Ryff Scales of Psychological Well Being, was sent out. Questions related to training format were included (virtual vs hybrid/in-person). This study was IRB approved.

RESULTS: 1015 participants completed the demographic survey, 204 (20%) in MS, 811 in HS (80%). They were 42.7% male, 57% female, 0.3% other. For the well-being survey, response rates declined with each survey (1002 survey 1, 621 survey 2, 519 survey 3). Ryff psychological well-being and social connectedness scores range from 10-70, with lower numbers indicating more connectedness and well-being respectively. The mean Social Connectedness score was 22.7 in the virtual training model vs 19.7 in the hybrid model (p<0.001). The mean Ryff Psychological well-being score was 26.0 in the virtual training model vs 26.1 in the hybrid model (p=0.76).

CONCLUSIONS: Virtual training programs did not negatively affect students' psychological well-being compared to hybrid training, but they did correlate with decreased social connectedness. Both training methods had high raw scores for well-being and connectedness compared to the normalized Ryff scale. Limitations include the lack of a control group which would improve the understanding of virtual team training on adolescents' well-being during the pandemic.

# 38

## Overcoming COVID-19 Vaccine Hesitancy – "One Size Does Not Fit All"

Arash Salari (1), Shunling Tsang (1), Manpreet Singh (2), Shuja Ayouby (1), Sanmisola George (1), Kimngan Nguyen (1), Guillermo Daniel Peverini (3), Nicolette Lam (3), Timothy Allison-Aipa (3), Susanna Zamarripa (3), and Anthony Firek (3)
1Division of Sports Medicine, Department of Family Medicine at University of California Los Angeles; 2Statistics Core, Department of Medicine at University of California Los Angeles

INTRODUCTION: Sexual violence is estimated to effect over 40% of women and almost 25% of men. There has been recent increased awareness of the prevalence of sexual violence affecting college athletes. Little evidence exists on appropriate screening protocols in a college athlete population. We aimed to use a screening questionnaire for sexual violence and associated emotional and physical abuse to evaluate differences in rates of sexual violence and associated abuse based on demographic factors and to identify rates of prior screening.

METHODS: Intercollegiate and club athletes over the age of 18 at a Division I university were invited to fill out an anonymous online survey. The survey consisted of screening questions related to sexual violence taken from American College of Obstetricians and Gynecologists recommendations, as well as questions about emotional and physical abuse. Survey respondents were also asked if they had been screened with similar questions in the past. Differences between responses were assessed using chi-square or Welch's t-test. All analyses were conducted in R version 4.0.3.

RESULTS: 126 survey responses (46 male, 80 female) were analyzed. 49% of females had experienced emotional abuse compared to 22% of males (p=0.016). 49% of females reported experiencing non-consensual touching vs. 19% of males, (p=0.007), 40% of females reported being forced or feeling pressured to commit sex acts vs. 8% of males (p=0.002), and 25% of females reported having unwanted sex while under the influence of alcohol/drugs vs. 3% of males (p=0.012). 57% of females had experienced unwanted sexual advances compared to 19% of males (p=0.001) and 42% had someone expose themselves or send sexual imagery unwantedly vs. 19% of males (p=0.043).
Only 24% of athletes indicated receiving prior screening.

CONCLUSIONS: Female college athletes experience significantly higher rates of sexual abuse, sexual harassment, and emotional abuse than male college athletes. Screening in these areas among the college athlete population is low. Further research is needed to improve screening mechanisms for both male and female college athletes.

## 39

### Patient-centered comparative effectiveness randomized controlled trial of two federally recommended weight loss strategies in overweight, low-income primary care patients: MyPlate.gov versus Calorie Counting

Melvin Rico, BS (1,2); William J McCarthy, PhD (3); Lillian Gelberg, MD, MSPH (1,3); Dena R. Herman, PhD, MPH, RD (3,4); Maria Chandler, MD, MBA (5); Cindy Chang, MS (3); Stephanie Love (5); Evangelina Ramirez (5)
(1) Harbor-UCLA Department of Family Medicine (2) National Clinician Scholars Program – UCLA, (3) Healthcare Anchor Network (4) Kaiser Permanente School of Medicine

INTRODUCTION: Social determinants of health interventions respond to social needs but generally fail to address underlying wealth and power inequities generating those needs. To address this gap, some health systems are turning to community wealth building approaches that build assets and power among community residents. Two key approaches are community land trusts and worker-owned businesses. This study seeks to identify challenges, opportunities, and best practices for health systems partnering with these types of community wealth building initiatives.

METHODS: Twenty-six semi-structured interviews were conducted across ten different health system-supported community wealth building initiatives. Participants were identified through the Healthcare Anchor Network, a national consortium of health systems committed to supporting local community economic development. For each initiative, at least one healthcare representative and at least one staff member from the partnering community wealth building organization were interviewed. Each interview addressed the initiation, implementation, and evaluation stages of the initiative. Interviews were analyzed for common themes and variation on salient topics.

RESULTS: There was a 100% response rate among the eligible initiatives identified. Preliminary findings reveal a variety of health system roles in initiatives ranging from contributors to conveners to catalyzers. Roles were determined by health system interest and capacity as well as the local institutional landscape. Impact measures focused on process outcomes (e.g. number of homeowners) as long time-horizons and externalities precluded traditional health outcome or return-on-investment analyses. Respondents from several health systems noted the potential of these interventions to transform upstream systems, but health systems generally focused on more downstream outcomes (e.g. housing stability).

CONCLUSIONS: Community wealth-building initiatives like community land trusts and worker-owned businesses provide health systems a unique opportunity to impact the root causes of social inequities while addressing immediate housing and employment needs. Effective partnerships take a variety of forms and health systems can tailor their role based on internal and external capacities. Demonstrating the long-term and broad benefits of these initiatives can help encourage increased health system investment.

# SESSION 6 – Videos

**(2:30 – 3:00pm)**

## 40

### Cannabis use and mental health among transition age youth receiving care in a large urban healthcare system 2019-2020

Whitney Akabike1 Marjan Javanbakht2, Howard Padwa3, Lawrence Dardick1, Yu-Hsiang Lin4, Steve Shoptaw1, Lillian Gelberg1
1University of California Los Angeles, Department of Family Medicine, 2University of California Los Angeles, Fielding School of Public Health, 3University of California Los Angeles, Integrated Substance Abuse Programs, 4University of California Los Angeles, Department of Internal Medicine, UCLA Department of Pediatrics

INTRODUCTION: Transition Age Youth (TAY) are at high risk for problem cannabis use and its consequences. We describe the prevalence of cannabis use and diagnosed mental health conditions among TAY patients 18 – 29 years compared to older adults attending primary care (PC) in a large urban healthcare system.

METHODS: We used EHR data July 2019–May 2020 from 60 PC clinics of patients' ≥ 18 years with annual physical examination. Current cannabis use was assessed by clinical staff. We also used EHR data on current mental health diagnoses (ICD-10) including depression, anxiety, sleep and opioid use disorders.

RESULTS: Of the 83,913 patients, 13.8% were TAY (18-29 years). Cannabis use was highest among TAY: 22-25 years (27.4%), 26-29 years (24.8%), 18-21 years (21.4%), compared to 7.6% among age ≥ 50 years (p<.01). Anxiety and depression was highest among TAY (10.3% and 8.6% respectively) and declined with age (4.5% and 4.6% respectively among age ≥ 50 years) (p<.01). Cannabis use was significantly higher among TAY with anxiety or depression and this was significantly more when compared to patients ≥ 50 years. In multivariable analyses, the interaction between age and cannabis use on depression and anxiety remained statistically significant.

CONCLUSIONS: The prevalence of cannabis use among TAY adults in PC is high and is higher among those diagnosed with anxiety or depression. TAY patients may benefit from routine PC screening for cannabis use and evaluation & treatment for associated mental health problems.

# 41

## The Impact of Virtual Marathon Training on Adolescents during the COVID-19 Pandemic

Nelson Boland, MD, Joshua Goldman MD, MBA, Summer Runestad ATC, Emily M. Miller, MD
UCLA Department of Family Medicine

INTRODUCTION: The COVID-19 pandemic altered training routines for all sports. Schools shifted to virtual or hybrid models. In this study, we sought to evaluate the impact of various marathon training methods on the well being and social connectedness of participants in a youth distance running program.

METHODS: A demographic survey was sent to all participants in middle school and high school during the 2020-21 season. At 3 time points over the training season a well-being survey, with questions adapted from the Social Connectedness Scale and Ryff Scales of Psychological Well Being, was sent out. Questions related to training format were included (virtual vs hybrid/in-person). This study was IRB approved.

RESULTS: 1015 participants completed the demographic survey, 204 (20%) in MS, 811 in HS (80%). They were 42.7% male, 57% female, 0.3% other. For the well-being survey, response rates declined with each survey (1002 survey 1, 621 survey 2, 519 survey 3). Ryff psychological well-being and social connectedness scores range from 10-70, with lower numbers indicating more connectedness and well-being respectively. The mean Social Connectedness score was 22.7 in the virtual training model vs 19.7 in the hybrid model (p<0.001). The mean Ryff Psychological well-being score was 26.0 in the virtual training model vs 26.1 in the hybrid model (p=0.76).

CONCLUSIONS: Virtual training programs did not negatively affect students' psychological well-being compared to hybrid training, but they did correlate with decreased social connectedness. Both training methods had high raw scores for well-being and connectedness compared to the normalized Ryff scale. Limitations include the lack of a control group which would improve the understanding of virtual team training on adolescents' well-being during the pandemic.

# 42

## Parental Decisions About COVID 19 vaccines in children

Nadia Chavez M.D., Catherine Cho M.D
Dignity Health Northridge Family Medicine Residency

INTRODUCTION: COVID 19 virus has caused severe illness and complications in children worldwide. Since the release of COVID 19 vaccine for adults there has been hesitancy in receiving the vaccine, making only 66% of USA adults fully vaccinated. In hopes of protecting the pediatric population, pharmaceutical companies have received the approval for COVID 19 vaccine to children 5-11 yo. We are aiming to understand the barriers and factors that may take place for parents /guardians of the children 5-11yo at the time of making the decision about COVID 19 vaccine.

METHODS: We conducted a nine- question survey answered by the parents/ guardians of children aged 5-11yo at the time of their Well Child Care office visits at Dignity Health Northridge Family Medicine Clinic. The survey was available in both Spanish and English. Parents/guardians checked their most appropriate answer including (1) number and age of their children,(2) their own vaccination status, (3) vaccination among their families and (4) if they agree or disagree in regards to receiving the COVID vaccine for their children. If they disagreed, we explored the reasons why they disagreed. The questionnaire also included economic background and race.

RESULTS: As 03/31/2022, the results are pending.

CONCLUSIONS: As 03/31/2022, conclusions are pending.

## 43

### Assessment of Patient Satisfaction Regarding Phone Visits at Harbor UCLA Family Medicine Residency Clinic during the COVID-19 Pandemic

Roberto Nelson Ramos, MD, MPH (1), Rosemarie Byrd, MD (1), John Cheng, MD (1), Oscar F. Fernandez Arce, MD (1), Karen M. Olmos MD, MPH (1), and Suneun Sarah Reichert , DO (1)
(1) Department of Family Medicine at Harbor-UCLA Medical Center

INTRODUCTION: Society in the twenty-first century has been faced with a paramount challenge. CoVID-19 has altered the ways in which we interact with one another. Due to the increased need for social distancing, telemedicine became a crucial tool in providing uninterrupted patient care in addition to fighting the spread of CoVID-19. As the infrastructure for telemedicine develops, it is crucial to investigate if telemedicine should be integrated into routine medical care beyond the pandemic.

METHODS: A multiple-choice question survey will be performed over the phone with an adult patient who had a phone visit at the Harbor-UCLA Lomita Family Medicine Clinic from 10/1/2021 until 3/30/2022. Each calendar week, a list will be generated with all the patients who had a phone visit during the 7 days prior to the intervention. The list will then be randomly assorted (i.e by last 2 digits of MRN or last 2 digits of phone number). Once the list is randomly assorted, every 10th patient will be called. The goal is to contact at least 10 patients per week until a total of 100 total patients are surveyed. The questionnaires will be analyzed using descriptive statistics using Excel.

RESULTS: Ongoing collection.

CONCLUSIONS: Final discussion will be available after completion of survey collection.

## 44

### A Mixed-Methods Approach to Measuring Disparities in Telehealth Use for Chronic Care Management Due to COVID-19

Ann M. Hernandez, MD, MPH (1), Arturo Vargas Bustamante, PhD, MPP, (2) Andrea Bañuelos Mota, MD, MPH (1), Yohualli Medina Anaya, MD, MPH (1)
UCLA Department of Family Medicine (1), UCLA Fielding School of Public Health Department of Health Policy & Management (2)

Introduction: In response to COVID-19, health systems rapidly shifted from routine in-person care to telehealth visits. Patients with chronic medical conditions are at greater risk for severe complications from COVID-19. Despite the need for essential medical care, many patients are forgoing in-person visits. These factors can result in detrimental consequences. Patients in underserved communities, who are disproportionately people of color, are most vulnerable to facing barriers in accessing telehealth. This study will generate new policy recommendations about disparities in telehealth use in primary care to manage chronic conditions.

Methods: This mixed-methods study includes analysis of patient and utilization data provided by a healthcare network in Southern California, as well as qualitative analysis of interviews and key informant surveys at outpatient health care sites. Based on demographics, four clinics were pre-selected. Retrospective aggregated patient utilization and health outcomes data from 1/1/2019 and 12/21/2020 will allow analysis of pre-post COVID-19 transition. A non-probability sample of health care providers and health care administrators from each site were recruited for interviews. Key informant surveys utilized the Assessment of Chronic Illness Care tool. Themes will be compared to understand facilitators and barriers to support underrepresented minority patients from the provider and administrator perspective.

Results: Health care sites were pre-selected based on demographics to allow for inclusion of a diverse patient population. Patient variables, including patient characteristics (age, gender, type of health plan, number of comorbidities), indicators of patient engagement (percent of patients receiving care reminders, percent of patients using self-management tools), and utilization (number of patients with in-person visits, phone visits, and video-visits, number of non-English visits, number of emergency department visits, number of no shows or missed appointments) were collected. Results of quantitative data analysis will be compared side-by-side to the results of the key informant interviews and surveys. Disparities in digital health use and chronic care will be estimated through comparisons within and across clinics.

Conclusions: Analyses aim to identify disparities in digital health use and chronic care within primary care. The results of this study will be used to inform state policy makers and health system leaders regarding disparities in chronic care management via telehealth modalities.

## 45

### Equity and Access – A Roadmap to Improving Vaccination Equity in South Los Angeles

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INTRODUCTION: The COVID-19 pandemic precipitated negative economic, social and environmental factors, which disproportionately eroded health within Black and Latina/o/x communities. This study used the socio-ecological framework to guide analysis of perspectives and experiences around COVID-19 vaccination access and equity in South Los Angeles, an area overwhelmed by increased disease burden, poverty, and violence.

METHODS: Focus virtual focus groups (33 total participants) were conducted in three different groups– community members (essential workers; English and Spanish-speaking), community leaders (clergy, faith-based, community-based organization leaders) and community-based medical providers. A semi-structured guide was used. Transcripts were coded into themes.

RESULTS: Analyses of themes showed participants emphasized medical mistrust and distrust in the system, barriers to healthcare and information about COVID-19, misinformation, fear, feeling pressured and blamed as factors impacting decisions for COVID-19 vaccination. Quick development and roll-out of COVID-19 vaccines increased concerns and skepticism about vaccine safety. Participants, especially Black participants, noted historical experiences of medical discrimination as contributing to avoiding vaccines.

CONCLUSIONS: Policy directions from findings underscore continued investments in social and healthcare systems in racial and ethnic minority communities that emphasize “whole person” health, that fund and provide access to health prevention services and that provide an avenue for community members to take control in ensuring their health and that of their communities. Findings also point to ensuring services rolled out to address future pandemics in Los Angeles address structural racism, poverty and inequity.

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### Lemierre Syndrome "A not so forgotten disease"

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INTRODUCTION: Lemierre Syndrome (LS), a common complication of bacterial throat infection prior to introduction of antibiotics is now rare, making it difficult to identify. The estimated incidence of septic thrombophlebitis of internal jugular vein is 0.8 to 3.6 cases per million in the general population. This commonly develops with bacterial throat infection spreading into tissues and deep spaces in the neck. In our report, we describe a transgender patient exhibiting typical LS after

METHODS: 28-yo transgender male to female presented to the ER for 3-day right-sided jaw swelling. Two weeks prior, thpatient had sore throat and subjective fever. On admission patient met criteria for sepsis. Maxillofacial CT w/contrast showed right suprahyoid neck collection, cellulitis, and myositis, possible thrombosis of the right upper internal jugular vein. ENT was consulted and patient was admitted to receive IV antibiotics. One-day later patient's symptoms worsen. Trans-oral drainage was performed and a sample for culture was taken. A new CT neck with contrast was ordered showing possible developing LS. Due to the possibility of LS, Ceftriaxone and Metronidazole were started and successful CT-guided insertion of a pigtail was placed. Unasyn was restarted after cultures showed rare Streptococcus pyogenes and rare Enterococcus faecalis sensitive to ampicillin. The patient was complicated with post-streptococcal glomerulonephritis. The patient was discharged on oral Augmentin for 2 weeks.

DISCUSSION: LS describes a progression from suppurative peritonsillar infection, thought thrombophlebitis of the internal jugular vein to septic embolization of distant sites, making this syndrome life-threatening. Early diagnosis is vital to prevent sepsis and death, but this diagnosis is often delayed because it is not well known, and the incidence is low. The first-line treatment for LS is intravenous antibiotics including anaerobic coverage. Surgical exploration is rarely needed. This case illustrates the importance of findings on history and physical examination confirmed with imaging of the neck and chest to diagnose this forgotten disease. LS should be suspected in young adults with recent pharyngitis who present with swelling of the neck and/or pulmonary manifestations such as septic emboli.

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### Development of a Protocol to Monitor Referral to Treatment for Primary Care Patients Exhibiting Possible Substance Use Disorder based on WHO ASSIST Screener

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INTRODUCTION: Screening for substance use in primary care settings has no standard protocol. Piloting the NIDA-funded Screening and Brief Intervention (SBI) trial, Quit Using Drugs Intervention Trial - Mobile (QUIT-M) revealed the need for implementing a standardized referral to treatment (RT) process in collaboration with clinic behavioral health teams (BHT). We propose implementing a standardized protocol to monitor RT for patients at risk for developing SUD based on their WHO Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) score.

METHODS: QUIT-M is a hybrid effectiveness-implementation RCT of SBI to prevent substance use disorder (SUD) among FQHC primary care patients with moderate risk substance use. From July of 2021 to February 2022 the QUIT-M team has been piloting in two Los Angeles area clinics. Using the WHO ASSIST screener to screen for patients eligible for the QUIT-M trial, scores of 4-26, indicating moderate risk use, 27+ indicating possible dependency on one or more substances. While piloting the study, if a patient scored 27+, they were automatically ineligible from the study and asked to consent to the program sharing their results with their PCP. All patients declined sharing their results with the clinics.

RESULTS: Of the patients who completed the screener (n=48), 14% of patients were deemed ineligible from the study for scoring 27+ on one or more substances on the ASSIST. Out of the 9 patients that scored at 27+ on at least one substance, 7 also scored either moderate risk or high risk for dependence on one or more substances other than their highest scoring drug (HSD). Three patients also displayed possible SUD (27+) on one substance in addition to their HSD. Patients most commonly demonstrated moderate risk or SUD with alcohol (n=6), followed by cannabis (n=5), tobacco (n=4), sedatives and prescription opioids (n=3), cocaine and methamphetamine (n=2), and heroin and prescription stimulants (n=1).

CONCLUSIONS: QUIT-M currently addresses only moderate risk substance use; we propose a standardized RT protocol to strengthen the connection between our clinic partners and the needs of those patients most vulnerable to developing SUD. The full trial of QUIT-M, set to begin in April 2022, will now automatically provide BHT with patients scoring dependent (ASSIST 27+) on one or more substances, with monitoring of patient medical record data to ensure patients were indeed referred to treatment/resources.

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### Improving Medical Student Standardized Learning and Satisfaction in the Family Medicine Clerkship at UCLA DGSOM

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INTRODUCTION: The Family Medicine Medical Student Clerkship at UCLA DGSOM is a 4-week primarily outpatient clinical rotation. Students are placed in a variety of sites with varying pathologies and access to standardized learning. End-of-rotation feedback (AY 2021-2022) included requests for more frequent and formal teaching across rotation sites. Our goal is to offer formal didactic, practice-based learning in order to standardize and improve the learning experience and fill gaps in topics which may be missed depending solely on student placement.

METHODS: End-of-rotation feedback surveys for (AY 2021-2022) were analyzed for areas of curricular improvement. We then developed standardized interactive didactics based on these surveys and high yield board questions. We delivered these lectures to cohorts of third-year medical students on their family medicine clerkship via Zoom to allow students at all sites to participate. Student participants were surveyed after the learning activity. Rating scales were used to assess satisfaction and perceptions of improvement in knowledge. Student learning activity logs were compared before and after initiation of lectures to assess student learning in topic areas chosen for didactics.

RESULTS: Participants included in the study were cohorts of third-year medical students on their family medicine rotation who filled out post-lecture surveys. Post-lecture surveys will be collected over the course of the next academic year (AY 2021-2022). Student learning activity logs will also be compared before and after initiation of lectures to assess for changes observed with initiation of formal standardized curriculum. We hypothesize we will see improvement in subjective satisfaction and perceived confidence regarding care and diagnosis in topic areas in post-lecture surveys.

CONCLUSIONS: Students on the third year family medicine clerkship rotate at a number of sites, and comments on end-of-rotation surveys indicated a desire for a standardized curriculum. We will evaluate post-lecture surveys to assess whether standardized virtual lectures improved medical student satisfaction and perceived confidence in topic areas. Further studies could evaluate incorporation of other methods of teaching such as standardized patient encounters or simulation of common outpatient procedures.

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### A Novice Sepak Takraw Player with Thigh Swelling

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INTRODUCTION: We present a 37-year-old male with a persistent thigh mass, previously diagnosed as a hematoma, found to be mammary-type myofibroblastoma. This is a very rare, benign soft tissue tumor. Although 95% of soft tissue masses referred for imaging are benign, life-threatening soft tissue sarcomas (STS) can occur, most often in the thigh. This case highlights a rare diagnosis, the vigilance needed when observing soft tissue masses, and the importance of urgent referral should they persist.

METHODS: A 37-year-old healthy male developed right proximal medial thigh pain during his first day playing Sepak Takraw (soccer volleyball). He rested, improved, and returned to play three days later. Three weeks later, symptoms returned. Swelling developed. Outside MRI showed well defined 11.3x5.7x15.7cm ovoid mass at the medial aspect of the proximal thigh with no adjacent muscle edema. Outside ultrasound showed mass with peripheral hyperechogenicity with internal hypoechogenicity without vascularity. Outside orthopaedic surgeon diagnosed hematoma, prescribed rest, and felt it would resolve spontaneously. Swelling persisted. Mass slightly larger on repeat outside MRI 5 months later. Patient presented to us complaining of localized swelling and pressure. Our exam revealed a large, nontender, nonpulsatile, firm mass without overlying skin changes or erythema. US-guided biopsy revealed mammary-type myofibroblastoma. A 16.4x13.8x6.3cm mass was excised. Patient was full weightbearing at 2 weeks.

DISCUSSION: Thigh masses have a broad differential including hematoma and malignant STS. Patients may report trauma. It is important to correlate the trauma with clinical findings. A hematoma of this size requires significant trauma. Hematomas are treated with compression, sometimes aspiration, and gradually resolve. A repeat exam at a minimum in no more than 3 months is strongly recommended for a large (>5cm) soft tissue mass that is not biopsied. A repeat MRI in 3 months is warranted to ensure resolution or stability. In this patient with persistent thigh swelling for 6 months, urgent referral to orthopedic oncology was indicated. Only about 20 such cases of mammary-type myofibroblastoma have been reported in the literature. No malignancy or recurrence has been documented after surgical resection.

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### I ANCA-nna Make This Easy to Solve: a case of Granulomatous Polyangitis (GPA)

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INTRODUCTION: Granulomatous polyangiitis is a rare condition. We present a case of a GPA presenting with renal failure with pulmonary granuloma. This case is unusual since the condition may have been precipitated by a recent gastric ulcer related to Helicobacter pylori infection which is a novel association. The prognosis is grave with significant morbidity and mortality. Include this diagnosis in differential diagnosis of patients presenting with ENT, lung and kidney involvement.

METHODS: 69 year-old white female with a recent hospitalization for gastric ulcer associated with H. pylori. Patient now presents with extreme fatigue, shortness of breath, anorexia, abnormal weight loss (30 lbs) and melena for two months. Exam is notable for pallor, decreased left upper lobe breath sounds and holosystolic murmur. Laboratory testing was significant for pH 7.27, hemoglobin 6.5, BUN 133, Creatinine 13, CRP 23, ESR 111, and UA with red blood cells. CT chest demonstrates left upper lobe consolidation. EGD showed fresh blood in the oropharynx. Bronchoscopy with biopsy demonstrates chronic inflammation but no malignancy or vasculitis. Renal biopsy was deferred due to renal atrophy. Further lab testing significant for C-ANCA titer: 1:320, anti-PR3 antibody: 5; anti-MPO antibody: <1.

DISCUSSION: GPA was possibly precipitated by a recent gastric ulcer from Helicobacter pylori infection, an association not previously described. Older patients present with a constellation of symptoms affecting ENT, lungs, and kidneys (ELK). Most cases of GPA are anti-neutrophil cytoplasmic antibody (ANCA) positive, 80% can be anti-proteinase 3 (PR3) positive and 20% anti-myeloperoxidase (MPO) positive. ANCA is a diagnostic but not indicative of disease activity. Treat with induction immunosuppression, then maintenance therapy for 1 to 3 years. Monitor for hematuria, renal function, electrolytes, and liver function. Life expectancy without treatment is 5 months; with treatment, 80% of patients are alive for at least 8-9 years. Frequently patients succumb from sequelae of immunosuppression.

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## Spontaneous subdural hemorrhage in a COVID-19 patient concurrently admitted for presumptive neurosyphilis

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INTRODUCTION: Coronavirus disease 2019 (COVID-19) is known to increase the risk of arterial and venous thrombosis, however, it can cause bleeding complications including intracerebral hemorrhage (ICH). Fewer cases of ICH were reported in patients admitted for COVID-19. Here we present a case of a 69-year-old female admitted for presumptive neurosyphilis who acquired COVID-19 during admission and developed a SDH.

METHODS: A 69-year-old female with a history of type 2 diabetes mellitus, cognitive impairment with hallucinations, treated syphilis and COVID-19 vaccinated twice presented to the emergency department with altered mental status and admitted for UTI with an infection history of extended spectrum beta-lactamase E. Coli. A CT of the brain cerebral atrophy and periventricular white matter microvascular ischemic changes and lumbar puncture resulted in elevated protein. Penicillin G was initiated for presumptive neurosyphilis. On hospital day (HD) 13, the patient was febrile, coughing and agitated, and COVID-19 test resulted positive. On HD 14, the patient had poor response, and Glasgow Coma Score (GCS) was 11-12. There were no reports of trauma or incidents overnight. CT head showed SDH with 8mm midline shift. Patient received tranexamic acid. Following treatment and towards the end of the patient's admission, GCS was 14-15. She completed her treatments and was discharged to home with hospice.

DISCUSSION: Prophylactic anticoagulation treatment was recommended due to prothrombotic complications by COVID-19, however, small numbers of hemorrhagic cases including ICH have been reported. The pathological pathway of the COVID-19 has been shown to be mediated via the angiotensin-converting enzyme 2 (ACE2). There is a decrease of ACE2 in the central nervous system from the virus binding to ACE2 that can lead to injury of the smaller vessels via systemic hypertension. In our case, elevated CRP may have been a sign of endothelial damage from COVID-19. It is possible that the stresses on the central nervous system vasculature from neurosyphilis and COVID-19 led to our patient's SDH. With more COVID-19 ICH cases being reported, further evaluation for pathophysiology is expected.

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### Lessons Learned from Telephone Health Coaching to Prevent Substance Use Disorder among Diverse Low Income Primary Care Patients in the New Age of Telehealth

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INTRODUCTION: The uncertainty caused by the COVID-19 pandemic has caused an increased use of substances as coping mechanisms as well as an expansion of telehealth. An integral part of the Quit Using Drugs Intervention Trial - Mobile (QUIT-M) intervention is the health coaching (HC) that patients receive at 2- and 6-weeks after enrollment. This analysis aims to find common themes identified by pilot patients who completed HC sessions to improve upon the current health coach protocol for the full trial that is set to start in mid-April of 2022.

METHODS: The National Institute on Drug Abuse-funded screening and brief intervention (SBI), QUIT-M study, is an SBI that aims to reduce risky drug use among low-income primary care patients at federally qualified health centers (FQHC) in Los Angeles. Pilot patients (n=8) were randomized into one of three groups: standard QUIT, QUIT-Mobile, and usual care. Two health coaches, trained in motivational interviewing and cognitive behavioral techniques, conducted the telephone HC session with the four patients receiving the QUIT interventions. Common themes were identified through detailed grid notes taken by the health coaches during the health coach sessions.

RESULTS: Two overarching themes were observed: consequences of the COVID-19 pandemic and the legalization of cannabis in California. COVID-19 consequences included: (1) mandated quarantine-caused isolation and loneliness, especially among adults who are older and live alone who used drugs to cope; (2) increased unemployment rates led to more leisure time for people to seek drugs; and (3) there is an increase in drug use among people who noted lack of motivation related to the pandemic. Legalization of cannabis included: (1) patients not viewing cannabis use as negatively as compared to other illegal substances; and (2) cannabis users are often long term users who use it for pain and/or insomnia.

CONCLUSIONS: Using the observed themes, QUIT-M has adjusted the health coach counseling script to have less stigmatizing language to account for the change in perception of cannabis after legalization, and also to have resources for patients regarding the impact of the COVID-19 pandemic on their drug use. With these adjustments to the HC protocol, we hope the HC sessions will complement other QUIT-M intervention components given to patients to support them in reducing or quitting drug use.

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## Anxiety and Depression Outcomes for Cognitive Behavioral Therapy in Community Mental Health Centers

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INTRODUCTION: Depression and anxiety have increased since the COVID-19 pandemic, particularly in Black, Indigenous, and people of color (BIPOC) communities. Cognitive Behavioral Therapy (CBT) as treatment for anxiety and depression has been studied broadly, but there is a lack of literature on BIPOC client outcomes. Community mental health clinics (CMHCs) are opportune setting to conduct research, given the diverse clientele. In this study, COVID-19 infection, functional impairment, anxiety, and depression outcomes of CMHC patients were tracked over time.

METHODS: Participants were 115 adult clients receiving CBT from a Los Angeles County-funded community clinic from April 2020 to February 2022. Sixty-nine clients did not have race/ethnicity information. The breakdown of the remaining 46 was 21.7% White, 6.5% Asian, 37.0% Black/African American, 23.9% Hispanic/Latinx, 2.2% Native American/Indigenous, and 8.7% more than one. Clients took a baseline survey assessing demographics, functioning across domains, and psychopathology (e.g., General Anxiety Disorder (GAD-7), Patient Health Questionnaire (PHQ-9), Work and Social Adjustment Scale (WSAS), weekly surveys with consistent measures). Clients were excluded if they completed under 2 weeks of treatment.

RESULTS: Hierarchical linear modeling was used to evaluate changes in symptoms over time. Three models were run (dependent variables: GAD-7, PHQ-9, and WSAS; predictor: week of treatment) testing fixed and random effects. Covariates were race/ethnicity and suspected COVID-19. Results indicated symptom reduction across all measures. For the GAD-7 and WSAS, fixed effects were not significant ($p' \geq .23$), while random effects were significant ($p \leq .005$). For the PHQ-9, fixed ($p=.01$) and random effects (p<.01) were significant. Additionally, $\chi 2$ analyses indicated significant differences in suspected COVID-19 cases ($p=.03$), with 41.2-75% of BIPOC groups and 0% of White clients reporting suspected COVID.

CONCLUSIONS: Client outcomes improved over the course of treatment; however, there were no significant differences by race/ethnicity or COVID-19 infection. Given limited data in sample size and demographic information, these findings are difficult to interpret, but suggest that CMHCs may provide effective CBT during the pandemic. Further investigation is needed with more consistently collected data to explore the impact of CBT for BIPOC clients in CMHCs and identify potential areas for improvement.

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### Hashimoto's Thyroiditis Presenting as Paresthesias in a Female Rower

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INTRODUCTION: Autoimmune thyroid disease, such as Hashimoto's thyroiditis, is the most common cause of hypothyroidism in the United States and is characterized by insufficient levels of thyroid hormone in the body. We describe a case of a female athlete with bilateral extremity paresthesias as the initial presentation of Hashimoto's thyroiditis. Relative to other signs and symptoms, numbness and tingling is a less common presentation of hypothyroidism, which can make diagnosis of this disease a challenge.

METHODS: An 18 year-old female rower with a history of back pain due to lumbar disc herniation presented with sudden onset bilateral lower extremity paresthesias after a training session. Strength and reflexes were normal. Imaging of her L-spine did not show significant new disc herniation or stenosis. Despite rest and anti-inflammatories, her symptoms persisted, and two weeks later she developed bilateral upper extremity paresthesias. Symptoms improved with laying flat and worsened with activity but never fully resolved. She had normal strength and reflexes but altered sensation in the upper and lower extremities. Given her symptoms, additional work-up was obtained. Of note, multiple family members had hypothyroidism. Electromyography and C-spine MRI were normal. Lab testing showed elevated thyroid stimulating hormone, thyroid peroxidase antibody, and thyroglobulin antibody, consistent with Hashimoto's thyroiditis. The patient was treated with levothyroxine with improvement in her symptoms.

DISCUSSION: Abnormalities in the thyroid gland's function can lead to symptoms that can affect an athlete's performance. Diagnosis of hypothyroidism can be challenging since the presentation can be nonspecific. Atypical presentations of neuropathy, such as non-specific, non-dermatomal symptoms should be further evaluated, particularly if there is a strong family history of a condition, given that not all neuropathy is directly related to spinal pathology. Untreated hypothyroidism can have a significant impact on various physiologic components, including exercise tolerance, muscle strength, and recovery time. Though the diagnostic yield may be low, athletes presenting with atypical paresthesias should be evaluated for thyroid disease given that it is an easily treatable condition.

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### Application of Point of Care Ultrasound in the removal of nonpalpable Nexplanon in a Teaching Community Health Center

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INTRODUCTION: Nexplanon is a reversible non-biodegradable progestin-only long-acting hormonal contraceptive subdermal implant. It has the inclusion of a small amount of Barium Sulfate, aiding radiological localization for easy removal. Superficial palpable implants are easy to remove in the outpatient setting. However, deep nonpalpable implants traditionally are referred to Surgery for elective removal. In the wake of Covid -19, priority was given to emergent cases leaving patients with nonpalpable implants unattended. Herein described are five cases of reproductive-age women who presented at our community health center with nonpalpable implants for removal under ultrasound guidance.

METHODS: Approval was exempt from the Institutional Review Board of both Clinica Sierra Vista and Kern Medical. We performed a retrospective study by reviewing the charts of patients who underwent Nexplanon removal from September to October 2021. Data was gathered from our electronic medical records of the patient's database. A total of twenty-nine women presented for Nexplanon removal and five of them have nonpalpable implants. A high-frequency linear ultrasound probe was utilized to localize the non-palpable implant followed by removal in the clinic under local anesthesia. The implants' relationship to fascia, muscle, and vascular structures was also assessed prior to removal.

RESULTS: A total of twenty-nine female patients presented at East Niles Community Health Center for their scheduled Nexplanon removal. Twenty-four patients (82.7%) have palpable implants successfully removed by manual palpation. Five patients (17.3%) have non-palpable implants that were removed successfully under ultrasound localization and guidance in our clinic. Non-palpable implants were identified as intrafascial (n=3); subfascial (n=1); suprafascial (n=1).

CONCLUSIONS: Our study has shown that nonpalpable Nexplanon implants can be successfully removed under ultrasound localization and guidance in a teaching health center under the direct supervision of an experienced health care provider without the need for specialty referral. It is safe, fast, cost-effective, and overall increases patient satisfaction.

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### Improving the Care of Unhoused Patients and Resident Interest in Street Medicine through an Integrated Curriculum

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INTRODUCTION: As programs train highly competent family medicine physicians, it is crucial to provide the tools to serve patients from all backgrounds, including individuals experiencing homelessness. This study combines a curriculum with experiential learning focused on enhancing the structural competency and clinical care of this population. This study aims to determine whether a curriculum that couples formal didactics with hands-on experiences is associated with improvement in knowledge of clinical guidelines, access to resources, and resident engagement

METHODS: Single-site, prospective cohort study with 36 family medicine residents. We scheduled a series of 4 modules to be introduced into resident didactics, covering topics including a review of homelessness in LA and the development of the modern street medicine team. Modules include a variety of learning modalities, including presentation slides and audio-visual platforms to appeal to different learning styles. Topics were chosen to complement experiential learning that residents receive with 2 street outreach teams during their street medicine/community medicine rotations. A pre + post curriculum survey will be distributed to assess resident knowledge of guidelines, resources, and engagement

RESULTS: Curriculum is ongoing, and we anticipate completion of the four modules within a 12-week period. We anticipate a survey completion rate of about 80% for both pre and post-test surveys. We anticipate an improvement in resident knowledge of clinical care guidelines for caring for unhoused patients, an increase in the knowledge of available resources to provide, and an increase in resident interest in continuing to care for unhoused patients in the future.

CONCLUSIONS: Given the study is ongoing, we anticipate that the FM residents utilizing the street medicine didactics-experiential learning curriculum are more likely to utilize evidence-based clinical guidelines, have an improved understanding of available resources, and plan to continue caring for unhoused patients as part of their future clinical practice. Future directions for this study include the development of resident-driven projects that are integrated within the community medicine rotation.

# Notes and Acknowledgements

- For all faculty and resident physicians, please assist us in completing a voluntary 2-3 min **survey** being done as a **cross campus research collaboration** between two of our family medicine programs. We hope this will spur future research projects between programs. Click here to access the survey, or utilize the QR Code below:

- Please stay for the entirety of the event. **We will be raffling gift cards for three 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 Laura Sheehan, the Multi-Campus Research Committee coordinator at LSheehan@mednet.ucla.edu.

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

- Thank you for participating in this event. We hope to see you again next year!