

# future family physicians family medicine matches 2017

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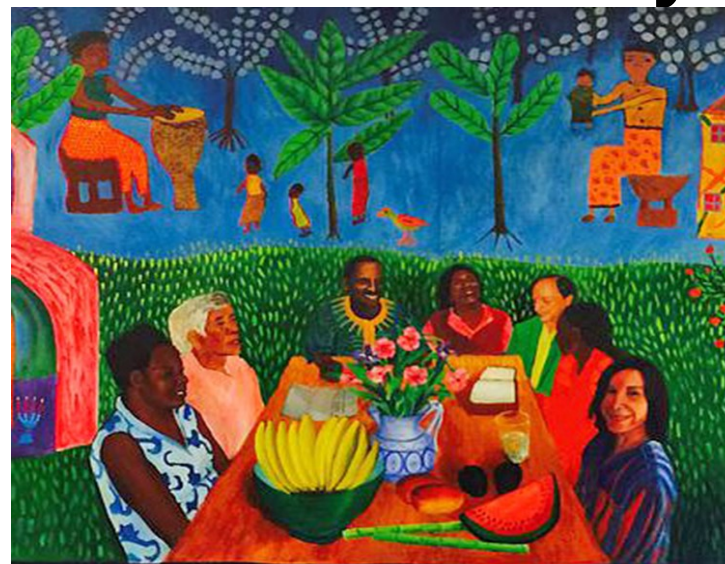
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# Building Community



-Boston Center for Refugee Health & Human Rights, Boston Medical Center

# Uniting for Social Justice

The Rodnick Colloquium  
*Innovations in Family & Community Medicine*

Golden Gate Club, San Francisco  
June 1, 2017

## JACK RODNICK MEMORIAL FUND

Dr. Jonathan (Jack) Rodnick served as Chair of the UCSF Department of Family & Community Medicine from 1989 to 2003 and was a vital member of our faculty until his passing in January 2008. To honor his legacy as a leader and scholar, our department has created the **Jack Rodnick Memorial Fund**. These funds support the Rodnick Colloquium on Innovations in Family & Community Medicine and Rodnick Research Grant Program, providing pilot funding for research projects by medical students, residents, fellows, and junior faculty. Such grants are instrumental in giving these "rising stars" a head start in their scholarly pursuits and positioning them to compete more successfully for larger research grants.

We would like to take this opportunity to thank this year's donors for their generous contributions.

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**CONCLUSIONS:** A majority of physician respondents want more EOL care training (68%). The three most important influences in EOL planning reported were patient-centered communication and shared decision-making (68%), patient's perception of quality of life (63%), and treating pain and physical symptoms (62%). There were no differences between level of training ( $p=0.88, 0.89, 0.23$ , respectively). Attending physicians felt more prepared and confident than resident physicians at delivering bad news (91% vs. 84%,  $p<0.01$ ) and discussing the new California EOL right-to-die law (35% vs. 12%,  $p<0.01$ ). A majority of physicians want more training for EOL discussions, identify patient-centered communication and shared decision-making as the most important factor in EOL planning, and do not have advance directives. Strengthening medical education curriculum so that physicians are better prepared to address EOL care is critical.

Jack dedicated his life to improving medical education and patient care through intellectual inquiry and innovation. With the Rodnick Colloquium and Rodnick Research Grant Program, we invite you to join us in celebrating and continuing Jack's legacy.

For more information, please visit:  
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**CONTEXT & OBJECTIVE:** Kaiser Permanente uses standard patient satisfaction surveys to measure the patient's experience with their physician during their office visit. Current surveys are purely quantitative, with seven questions pertaining to physician performance given in Likert scale format. Responses are calculated and presented to physicians quarterly as Member Patient Satisfaction (MPS) scores. These scores are an important component of physician performance feedback. Patient satisfaction surveys do not afford any opportunity for patients to provide specific, actionable, qualitative feedback to the physician, nor have they been developed to represent the full range of observable behaviors that patients find important in evaluating an optimal doctor-patient interaction. We sought to research whether patients on an advisory council could offer input to a member satisfaction survey in a way that provides specific feedback that could be utilized by the receiving physician to measurably improve their clinical care and patient satisfaction.

**SETTING/POPULATION:** We used our Family Medicine Patient Advisory Council (PAC) at Kaiser Permanente Santa Rosa to assist one physician in our Family Medicine department who has had recurrent low MPS scores.

**INTERVENTION/STUDY DESIGN:** The PAC took an existing MPS questionnaire and modified it in the hopes of eliciting more written feedback from patients. Our volunteer physician then had the medical assistant give every patient the questionnaire before their office visit. The questionnaire was completed after the visit, and left in the exam room for the medical assistant to collect. The patient had the option of remaining anonymous if desired, and the questionnaires were given to the physician after every clinic to review. The physician did this for two months during the 4th quarter of 2016.

**OUTCOMES/RESULTS:** We compared the physician's MPS scores from the previous three quarters to her fourth quarter scores. The physician's 4th quarter MPS scores increased in every single MPS category over the weighted average of scores for the prior three quarters. The total average MPS score in the fourth quarter increased by 17% over the weighted average of the prior three quarters, indicating that the survey may have played a pivotal role in performance improvement.

**CONCLUSIONS:** This pilot study demonstrated successful incorporation of patient input into a member patient satisfaction survey that improved the quality of the feedback given by patients which in turn enabled the physician to feel empowered to change specific observable behaviors to improve the quality of her patient interactions. Input from both patients and the physician involved are encouraging and we plan to refine and further test these patient engagement outcome measures with other physicians in the department. We also plan to use these metrics to develop our evaluations for milestones with residents in our future residency program. This pilot program highlights the need for further research and creative collaboration between physicians and patients in advisory roles. This patient physician collaboration will likely contribute to the success of patient-centered medical homes

**Nguyen M\*, Jones N, Price I, Hughes S, Rodriguez-Carranza L, Macmillan P. Physician perspectives regarding end-of-life care**

**CONTEXT & OBJECTIVE:** Palliative care has been shown to improve quality of life, dignity, emotional and spiritual support, and outcomes for patients and their families. Physicians are uniquely positioned to facilitate this support, however research is limited in identifying physician influences and beliefs toward palliative care.

**SETTING/POPULATION:** Our study investigated physician training, experience and perceptions regarding end-of-life (EOL) care for physicians who work with diverse populations in Fresno, CA, including residents, fellows, and attendings from UCSF Fresno, and non-faculty physicians in practice.

**INTERVENTION/STUDY DESIGN:** An online, anonymous survey was sent to 766 physicians who work at a large community-based teaching hospital (Community Regional Medical Center in Fresno, CA) from October to December 2016. Descriptive statistics of the population and Chi-squared tests comparing differences in training level and personal experience were performed.

**OUTCOMES/RESULTS:** Surveys were started by 192 physicians, of which 175 completed them (23%). Residents or fellows were 42% of respondents. Respondents were 56% men, 58% Caucasian, 40% Christian, and 72% had completed medical school in the United States. Nearly half of respondents had a personal experience with palliative and hospice care specialty services (49%). Only 34% of respondents had an advance directive. Individuals who had personal experience with palliative and hospice care were more likely to have an advance directive than individuals without (p<0.01).

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12 Abstracts—*Concurrent Talks*

28 Abstracts—*Poster Presentations*

63 Abstracts—*Works Not Presented*

COLLOQUIUM ORGANIZERS

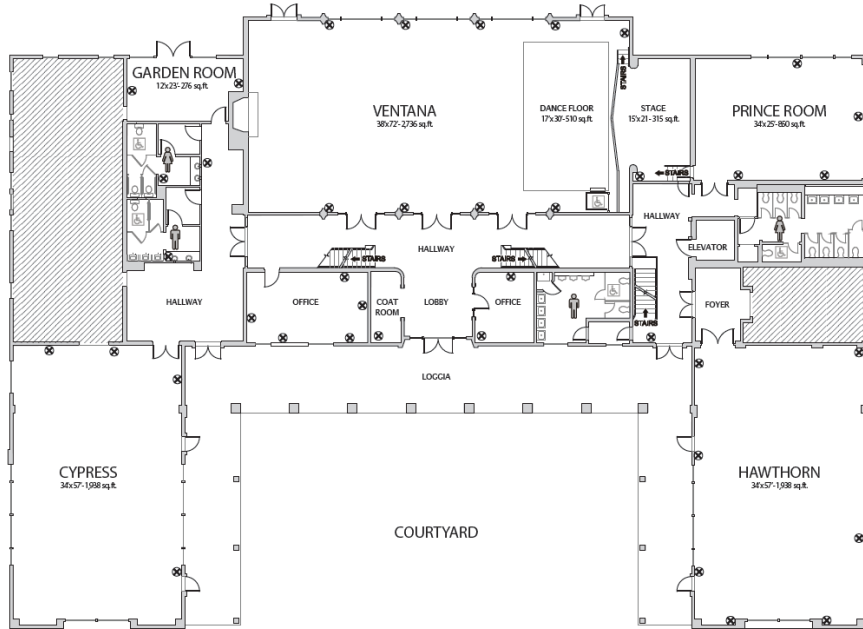
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Maggie Edmunds MD, MPH • Marcella Azucar

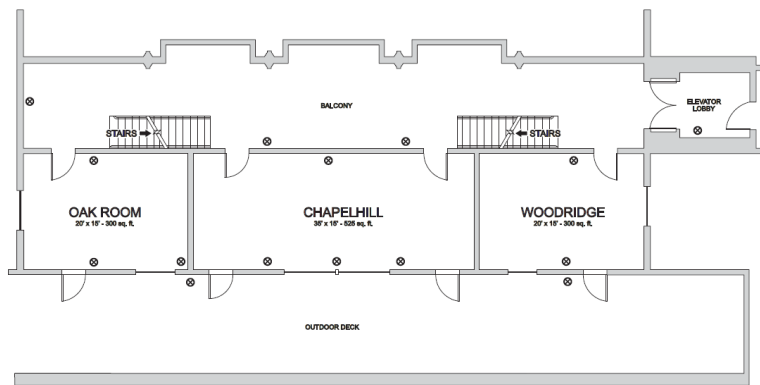
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## First Floor



## Mezzanine



\* The Woodridge room is a designated lactation lounge.

**Robert Martinez, MD; Rachel Friedman, MD; Patricia Hiserote, DO; David Koida, MD**

**CONTEXT & OBJECTIVE:** Kaiser Permanente is a recognized leader of integrated health care, utilizing and leveraging our HealthConnect electronic medical record to optimize both individual and population-based care. After the passage of the Affordable Care Act, our patient population grew substantially necessitating comparable growth in the Adult & Family Medicine department - albeit the growth of the number of primary care physicians is less than needed to keep up with the patient influx. Our specialist colleagues have not had the same rate of expansion as our primary care department. This mismatch of rapid patient growth without congruent growth of primary care physicians and specialists in addition to new primary care physicians in a complex system has resulted in overutilization of our specialists as demonstrated by increased quantity and reduced quality of referrals. We asked the question: how do we as primary care physicians continue to provide quality referrals while maintaining effective communication and a collegial relationship with our specialist colleagues and ensure timely access for our patients to specialty services?

**SETTING/POPULATION:** Primary care physicians in ambulatory Adult/Family Medicine Department at Kaiser Permanente Santa Rosa, and specialist colleagues in 41 departments. Patient population consists of 170,783 members; including 14,000 additional members (nearly 10% increase) since ACA expansion starting in January 2014.

**INTERVENTION/STUDY DESIGN:** The Primary Specialty Excellence Group (PSEG) was created in order to improve primary and specialty care collaboration and communication. The goal of PSEG is to maximize communication and facilitate effective and efficient referrals between primary care and specialty physicians in order to provide optimal patient care. In doing so, we envisioned improving the service to our members by maximizing our specialist physicians' expertise and optimizing workflows to empower the primary care physician to initiate care and best utilize organizational resources.

PSEG pairs one specialist from each specialty department on our campus with one primary care physician. The primary care physician is to act as a liaison to facilitate questions and/or concerns, and plan education between the two departments.

**OUTCOMES/RESULTS:** Multiple positive results have occurred as a result of our PSEG group and include:

1. We improved the quality and standardization of our care by leveraging our eConsult system. eConsult is a platform embedded in HealthConnect that allows us to directly schedule our patients with our specialist colleagues. It also provides required "TO DO's" that outlines the basic work up and care to be provided to the patient prior to referral. This has improved the quality and consistency of care across our Department in addition to serving as a source of physician education.
2. Creation of a workflow to triage specialty requests utilizing the available resources. Urgent clinical needs were to utilize phone consults where a specialist is available to speak to you immediately and provide clinical guidance. Subacute clinical consults utilize Cortext which is a HIPPA safe texting system where our specialist colleagues will answer the clinical question within 24 hours. Non acute clinical queries utilize staff messaging through our HealthConnect EMR.
3. The GRIP framework of communication (Greeting, Request, Information, Plan) was adopted to maximize efficient communication between the primary care and specialist physician.

**CONCLUSIONS:** With the expansion of our patient population since initiation of the Affordable Care Act, we instituted campus-wide workflows to maintain channels of communication maximize the quality of referrals sent to our specialists and maintain adequate access to specialty care. The work of the PSEG group improved patient access for both initial and follow up appointments. Additionally, the PSEG outcomes of improved workflows increased satisfaction among primary care and specialty physicians through open communication and appreciation for the workload required by the other department. Surveys of our primary care and specialist colleagues show an increase in satisfaction attributed to improved quality of referral. Additionally, this work empowered the primary care physicians to re-expand their scope of practice because they feel supported by their specialist colleagues.

**David Koida, MD; Rachel Friedman, MD; Robert Martinez, MD; Patricia Hiserote, DO**  
**Using the Patient Advisory Council to Design Actionable Patient Satisfaction Surveys**

**OUTCOMES/RESULTS:** In July 2016, we opened weekly appointments for medication abortion and options counseling, staffed by second year Family Medicine residents with attending supervision. The process has required addressing inter-departmental collaboration, pharmacy regulations, billing issues to meet federal regulations, training for staff and attendings, and developing new clinic protocols.

**CONCLUSIONS:** The process of integrating a new clinical service, especially one that requires specialized care, regulatory oversight, unique billing requirements, and working with staff around a sensitive and often controversial topic, requires careful interdisciplinary planning. We involved key stakeholders early and often to successfully implement a new service for patients and learning opportunity for residents.

**Expansion of Pediatrics in the FMC : The Experiences of a New Residency Program  
Rachel Friedman, MD; Robert Martinez, MD; David Koida, MD; Patricia Hiserote, DO**

**CONTEXT & OBJECTIVE:** As we launch a Family Medicine residency, we must expand pediatric volume and care in our Family Medicine Center (FMC) to meet accreditation requirements of 10% visits with patients under the age of 10. Consistent with Kaiser's multi-specialty healthcare model, most pediatric patients are seen in the Pediatrics department. Further, in our combined FM/IM department, family practitioners in the FMC are not doing OB and prenatal care, thereby restricting the pipeline of newborns. Average empanelment of patients under the age of 10 across all Family Medicine departments throughout Kaiser Santa Rosa is 2.4%. Our FMC has a higher rate of 8.5%, due to targeted efforts by future faculty to increase their pediatric panels. Our objective is to increase pediatric volume, access, scope of care, skill set, and service in the FMC, with the end goal of providing a consistent, high quality pediatric patient experience while meeting educational goals.

**SETTING/POPULATION:** This expansion is underway in Kaiser Permanente Santa Rosa's "Family Medicine Center," the future continuity clinic for Family Medicine residents and home to 10 practicing family physicians.

**INTERVENTION/STUDY DESIGN:** We partnered with our Pediatric department, a center of excellence, to develop strategies to expand pediatrics in the FMC. This included research and analysis of baseline pediatric patient volume, access, scope of care, skill set, and service experience in the FMC versus the Pediatric department, to develop a gap analysis, goals, and a strategic plan. We collected data, met with and surveyed FM and Pediatric providers as well as pediatric patient families, and toured the Pediatric Department. Improvement strategies were developed based on this gap analysis and included nine initiatives.

**OUTCOMES/RESULTS:** We are implementing the following initiatives:

1. RAISE PATIENT EDUCATION AND AWARENESS
2. INCREASE PEDS ACCESS IN THE FMC
3. INTEGRATE FM PHYSICIANS IN NEWBORN PIPELINE
4. INTEGRATE FM PHYSICIANS IN PEDIATRIC URGENT CARE on weekends to build skill set and increase scope of care
5. INITIATE PRENATAL CARE IN THE FMC and empanel newborns when patient delivers
6. HIRE OR DESIGNATE A FM PHYSICIAN BREASTFEEDING CHAMPION to be located in the FMC, to support mother/child services
7. HIRE STAFF (LVN, Social Worker) to support vaccinations, forms, and social work
8. TRAIN FM PHYSICIANS AND STAFF
9. REDESIGN FACILITIES TO BE PEDS-FRIENDLY

Early results from an individual FM physician who has worked to increase her own patients' awareness in the FMC and participated in newborn rounding have been promising. Pediatric visits (patients under the age of 10) were increased from a department average of 2.4% to 13% for this individual FM physician.

**CONCLUSIONS:** Expanding pediatrics in a Family Medicine Center that is part of a larger multi-specialty health care system, with a dedicated Pediatric department, requires a close partnership with Pediatrics. This strategy requires a multi-pronged approach with many parallel initiatives over at least two years. It is a significant change in culture, awareness, and operations, requiring great collaboration between Family Medicine, Pediatrics, and OBGYN. This collaboration can provide a strong foundation for other impactful, inter-disciplinary work.

**Promoting Specialty and Primary Care Relationships to Maximize Patient Care**

## EVENT SCHEDULE

<b>11:00 – 11:40</b>	<b>Registration and Lunch</b>	<i>Lobby &amp; Courtyard</i>
<b>11:40 – 11:50</b>	<b>Welcome and Introduction</b> <i>Kevin Grumbach, MD, FCM Department Chair</i>	<i>Ventana Room</i>
<b>11:50 – 1:20</b>	<b>Plenary Session and Panel</b> <i>Moderator: Kevin Grumbach, MD</i>	<i>Ventana Room</i>
	<i>Cristy Dieterich, MPH, Program Manager, Newcomers Health Program Community Health Equity &amp; Promotion branch Population Health Division- San Francisco Department of Public Health</i>	
	<i>Jess Ghannam, MD, Clinical Professor Department of Psychiatry, and Global Health Sciences, University of California, San Francisco School of Medicine</i>	
	<i>Manuel Tapia, MD, MPH, Medical Director/Faculty Advisor for Clinica Martin Baro, Director of Community Engagement for FHC at Zuckerberg San Francisco General Hospital Andrea Torres, BA in Latino/a Studies from San Francisco State University, Senior Administrative Volunteer for Clinica Martin Baro</i>	
	<i>Enrique Gonzalez MD, Faculty and Director of Cultural Education at Sutter Health Santa Rosa Residency Program, Founding member of the Latino Health Forum</i>	
<b>1:25 – 1:35</b>	<b>FCM 110 Community Project Awards</b> <i>Margo Vener, MD, FCM Vice Chair of Education</i>	
	<i>1:35-1:45 Move to concurrent session of your choice</i>	
<b>1:45— 2:50</b>	<b>Concurrent Breakout Sessions #1</b> See concurrent talk listing for specific room assignments Pg. 6	<i>Cypress, Hawthorn, &amp; Prince Rooms</i>
<b>2:50 – 3:50</b>	<b>Poster Viewing Session</b> See poster listing for more specific room/area assignments	<i>Cypress, Hawthorn, &amp; Ventana Rooms</i>
<b>3:55 – 5:00</b>	<b>Concurrent Breakout Sessions #2</b> See concurrent talk listing for specific room assignments Pg. 7	<i>Cypress, Hawthorn, &amp; Prince Rooms</i>
<b>5:00 – 5:10</b>	<b>Break</b>	
<b>5:15 – 5:45</b>	<b>Farewell Celebration of Dr. Beth Wilson</b> <i>Kevin Grumbach, MD</i>	<i>Ventana Room</i>
<b>6:00 – 6:45</b>	<b>Wine and Cheese Reception</b>	<i>Lobby &amp; Ventana Room</i>

## CONCURRENT TALKS: *Session 1*

### IMPROVING CARE IN THE PATIENT CENTERED MEDICAL HOME HAWTHORN ROOM

Moderator: Lauren Wodolowski, MD

**RN Chronic Care Visits: Interdisciplinary approach to standard work development for hypertension care**  
Yang, D\*; Sansone, J; Tse, W; Chen, E *Abstract: p. 22*

**A residency curriculum on the 10 building blocks of high performing primary care: educating tomorrow's innovators**  
Coffa, D\*, Mooney, C\* *Abstract: p. 22*

**SHARE the Pain-- A Residency Based Multi Modal Intervention to help a California Safety Net Hospital Address New 11-15 Medicare Waiver Guidelines**  
Tirado, M\*; Ro, P; Zaro, C; Tirado, S *Abstract: p. 21*

**Team-based Care: electronic simulation of a primary care team**  
Vener, M\* *Abstract: p. 23*

### INCORPORATING THE PATIENT VOICE PRINCE ROOM

Moderator: Eva Raphael, MD

**Does Language Matter? Patient experience with electronic specialty consult and referral with a safety net system**  
Lu, C.\*; Smith, C.; Nguyen, R. *Abstract: p. 15*

**A support course for patients with chronic pain: participant characteristics, reported changes in behavior and value of group support**  
DeVore D\*; Willard-Grace R; Thom D; Tirado, M *Abstract: p. 15*

**Promoting a culture of safety for all in an underserved clinic setting**  
Alkov, D.\*; Saba, G, Sharma, A; Morris, J., Lueng, L., *Abstract: p. 16*

**Comparing opportunities for patient engagement: Patient Advisory Councils versus Board of Director membership at Federally Qualified Health Centers**  
Sharma, AE\*; Knox, M; Willard-Grace, R; Potter, MB *Abstract: p. 16*

### HEALTH DISPARITIES CYPRESS ROOM

Moderator: Rita Hamad, MD

**Chronic care management of vulnerable elderly populations in primary care clinics utilizing alternative payment models**  
Morgan, C.\* Olayiwola, N *Abstract: p. 11*

**Social Justice and school lunch: Transforming what some of our nation's poorest children eat for lunch**  
Rienks, J; Shatara A; Shils, J; Dedhia, M *Abstract: p. 12*

**New beginnings: a collaborative care model for substance using pregnant women in a residency clinic**  
Lund, E\*; Matel, J; Gurule, S; Coutinho, A *Abstract: p. 11*

**The Social Interventions Research and Evaluation Network**  
Fichtenberg C\*, Laura Gottlieb, Holly Wing, Stephanie Chernitskyi, Torres, J; Nancy, A *Abstract: p. 12*

programmatic outcomes clearly, and promoting our work within our system and greater community. It also quickly became evident how challenging it is to fund this training program.

**CONCLUSIONS:** The EXA program has been a great asset for our patients and staff. It has brought new creative modalities of healing to support dealing with the challenges of being in the hospital and clinic settings.

**Coffa D\*, Willard R, Magana C, Chen V, Stern N, Sleeth G, Leung L. Practice transformation in teaching clinics: applying the 13 building blocks of high performing primary care in four residency clinics**

**CONTEXT & OBJECTIVE:** For family medicine to remain viable, primary care practices must transform to better meet the needs of patients, providers, and staff. The path to primary care transformation has been well defined by the Center for Excellence in Primary Care (CEPC), which identified the 10 key building blocks for transformation. Unfortunately, implementing them in teaching clinics can be challenging. As a result, residents often train in clinics that are less functional and more difficult to navigate than high performing clinics, leading more residents to choose non-primary care careers. The CEPC recently studied "bright spot" high performing teaching clinics to define an additional 3 building blocks that promote practice transformation in teaching clinics. In the project that will be presented here, the CEPC coached four local residency teaching clinics to support transformation.

**SETTING/POPULATION:** With funding from a federal HRSA grant, the Family Health Center at ZSFG, the Family Health Center at Fresno, the Richard Fine People's Clinic, and the UCSF Pediatrics Clinic worked with practice coaches from the CEPC to support practice transformation in their teaching clinics.

**INTERVENTION/STUDY DESIGN:** While the residency programs at the four sites developed curricula about the 10 building blocks, educating residents in practice transformation principles, each of the related clinics worked with the CEPC to implement those principles. Clinic leadership participated in a 3 day training, then worked longitudinally with practice coaches developing SMART goals and problem solving improvement plans.

**OUTCOMES/RESULTS:** Each of the clinics developed a series of SMART goals focused on 1) advancing one or more of the 10 building blocks, 2) improving patient access, and 3) improving patient care. In addition, by enhancing team based care and other building blocks, we aimed to improve overall rates of burnout, team culture, and access to panel management. These outcomes were measured through surveys and EHR based data analysis. About 50% of SMART goals have been met so far, and some measures of burnout have improved.

**CONCLUSIONS:** Primary care transformation can improve both education and clinical care. By working with practice coaches, clinics are able to focus their transformation efforts and align them with educational efforts.

**Pollock L\*, Lee I, Mackenzie T, Sheinbein M, Ti A, Guh E, Alkov D. It's primary care: integrating medication abortion into an academic urban FQHC**

**CONTEXT & OBJECTIVE:** Medication abortion is an option for termination of first trimester pregnancies that can be offered in the primary care setting. Family physicians are in a position to integrate this service into their primary care practices, offering a more patient-centered, full-spectrum approach to pregnancy care. Increasing the number of residency training sites which offer medication abortion would increase access to this service, expand the number of family physicians capable of offering it in future practice, and recognize its role as part of training for residents to care for women throughout the life cycle.

**SETTING/POPULATION:** The Federally Qualified Health Center (FQHC) in which our urban residency is based has historically provided newly pregnant patients options counseling, prenatal care, and outside referrals for those desiring termination. In the interest of providing more patient-centered care, an interdisciplinary group of providers, residents and staff came together to assess the feasibility of offering medication abortions in our clinic and, eventually, to roll out this service to our patients. The goals were to improve access to this service, train family physicians to provide medication abortion, and model how it can be integrated into primary care.

**INTERVENTION/STUDY DESIGN:** Over the course of two years, we built an interdisciplinary team of providers, residents, and staff. The group identified key stakeholders and allies within both the clinic and hospital and identified the core planning components that would be necessary to address in order to begin offering medication abortions in our clinic.

cants goodness of fit with program values.

**Fan J\*, Claiborne C, Ladner-Beasley S, Session W, Moeller K, Echiverri A. COMMUNITY partnerships: Investing in youth pipeline programs to grow diverse health leaders in Contra Costa County**

**CONTEXT & OBJECTIVE:** Underrepresented minorities (URMs) comprise the majority of California's population at over 60%, whereas URMs constitute 34% of the physician workforce and 47% of the nursing workforce. Research shows that health workforce diversity leads to improved access to care for underserved communities. To address the health needs of underserved communities, it is critical to develop robust health pipeline programs that invest in our diverse youth, grow local leaders, and create opportunities to support, mentor and empower students.

**SETTING/POPULATION:** Since its inception in 2013, Public Health Solutions (PHS) has been delivering public health curriculum to underrepresented youth in West Contra Costa high schools. PHS partners with community organizations and public health employers to offer paid summer internships, preparing select participants with social support, job readiness skills and exposure to various health careers. Demographics of past interns include 52% Hispanic, 24% Asian American, 21% African American, and 3% Caucasian. The Contra Costa Family Medicine Residency Program (CCFMRP) has been working to strengthen a community partnership with PHS to help grow a skilled, diverse health workforce from the local community.

**INTERVENTION/STUDY DESIGN:** PHS and CCFMRP are working together to create avenues for partnership, in order to enhance PHS' existing program by having family medicine residents help deliver public health curriculum and health career workshops. Some of these activities include career panels, health workshops, mentoring, and clinical shadowing experiences in a vast array of health careers.

**OUTCOMES/RESULTS:** The partnership between PHS and CCFMRP continues to strengthen its ties in creating a shared vision of growing future leaders in health, and sustaining a pipeline of diverse youth into health careers. We are excited to create mutual learning opportunities as a collective between the youth, health staff and residency program with our first collaborative activity in Summer 2017.

**CONCLUSIONS:** Community partnerships are important avenues of meeting our shared mission of improving the health of underserved communities and alleviating health disparities. PHS and CCFMRP are working to fortify this partnership by staying true to a shared vision of investing in our diverse youth and preparing them for future success

**Siegel A\*, Koethner N. Utilizing expressive arts therapy in the hospital and group medical visits**

**CONTEXT & OBJECTIVE:** The Expressive Arts Therapy (EXA) program began in 2013 to provide creative expression therapeutic tools to enhance patient-centered care and overall well-being by addressing the whole person within the medical context.

**SETTING/POPULATION:** Art of Health and Healing of Contra Costa Health Services partnered with California Institute of Integral Studies to bring EXA supervisors, interns, and students, who are Marriage and Family Therapists, to work with inpatients and co-facilitate medical group visits for our underserved population while providing staff with training and support.

**INTERVENTION/STUDY DESIGN:** Settings for clinical care include: medical/surgery wards, inpatient psychiatry, and psych emergency; group medical visits, including buprenorphine, prenatal, pediatric obesity, and pain and wellness; and groups in the Cancer Center, homeless shelters, older adult mental health, and Richmond High School. Staff are trained and supported in multiple settings, including department meetings, preceptor retreats, healing events, improvement trainings, and our Farmers' Market.

**OUTCOMES/RESULTS:** With two half-time supervisors, six interns, and one student, the EXA program had 3523 patient group visits and 1179 visits with hospitalized patients during 2016. Patients were primarily single (54%), female (55%), and ranged from ages 14 to 82. The most common therapeutic modalities were music, talk, visual arts, movement, writing, and storytelling. Before participating, patients most commonly identified their feelings as anxious, stressed, hopeful, and depressed. Afterwards, they reported feeling relaxed, happy, calm, grateful, hopeful, and joyful. Some participants stated they felt better about themselves after talking to someone. Others said they felt less pain, could "get their mind off their medical condition," and appreciated learning new ways to take care of themselves. As a program, we learned the value of bringing creative EXA to enhance patient care and improve the well-being of patients and staff. We realized the importance of tracking participant feedback, presenting

## CONCURRENT TALKS: Session 2

### INNOVATIVE PROFESSIONAL DEVELOPMENT

### CYPRESS ROOM

Moderator: Maggie Edmunds, MD, MPH

**Tracking graduates of an advanced training program: provision of abortion services after residency**

Wondolowski, L\*

Abstract: p. 13

**Listening deeply to our clinicians**

Kivlahan, C\*

Abstract: p. 13

**A primary care focused buprenorphine waiver training curriculum for residents**

Lubega, S\*; Pecci, C

Abstract: p. 14

**Developing an anti-oppression curriculum for healthcare professionals: lessons learned in unconscious bias and allyship training**

Saint-Hilaire, L\*; Wu, D

Abstract: p. 14

### WOMEN-CENTERED PRIMARY CARE

### PRINCE ROOM

Moderator: Hannah Snyder, MD

**The impact of a contraceptive decision support tool on patients' experiences of care: results from a cluster randomized control trial**

Campora, P\*

Abstract: p. 17

**Provider experience of a decision support tool to promote patient-centered contraceptive care**

Fox, E,\*

Abstract: p. 17

**The POWER Health Program**

Weber, S\*

Abstract: p. 18

**An innovative patient-centered post-partum treatment and adherence care model for women living with HIV**

Hahn, M\*; Schwartz, R; Chu, C

Abstract: p. 18

### COMMUNITY ENGAGEMENT & WORKFORCE DEVELOPMENT

### HAWTHORN ROOM

Moderator: Angela Echivierri, MD

**Engaging and partnering with the communities we serve**

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**Translational science for water equity**

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**Resident community activism: A model for fostering health equity and resident engagement**

Morris, J\*; Stafford, M; Teitel, Y

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**The medical scholars leadership forum**

Gonzalez, R; Rabbani, J\*; Stecker, T

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## POSTER PRESENTATIONS

### HIV/SEXUALLY TRANSMITTED INFECTIONS

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**The Pacific AIDS education and training center: developing an effective post-intervention follow-up survey for clinical students who have graduated**

Warren, N; Morris, P\*; Reyes, M

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**Improving the quality of hepatitis C treatment at a teaching safety net health**

Lu, C\*; McBride, T\*; Dong, B; Chu, C

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**Lessons learned from launching PleasePrEPMe.org, a crowd-sourced, location-based, searchable statewide California PrEP Provider Directory**

Weber, S\*

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### EDUCATION AND TRAINING

### CYPRESS ROOM

**Physician perspectives regarding end-of-life care**

Nguyen, M\*; Jones, N; Price, I; Hughes, S

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**COMMUNITY partnerships: Investing in youth pipeline programs to grow diverse health leaders in Contra Costa County**

Fan, J\*; Claiborne, C; Ladner-Beasley, S; Session, W

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**Team-based, behavioral interviewing for family medicine residency admission**

Froude, C\*; Triana, A

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**Implementing a point of care ultrasound training program for inpatient faculty**

Ferguson, M\*

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**A pivotal moment: optimizing "best fit" matches between students and preceptors in a longitudinal third-year clerkship**

Vener, M\*; Borok, S; Johnston, R; Brode, E; Lui, YB; Hammer, H

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**A student-run outreach and vaccine administration clinic provides longitudinal workplace-based learning and improves patient care**

MacKenzie, T.\*; Parad, J.\*; Lai, L.\*; Haddad, A.\*; Subbaraj, L.\*

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**Location, location, location: do trainee patient presentations delivered in the exam room improve encounter efficiency in the ambulatory setting**

Beach, S\* ; Hill-Sakurai, L

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**Three clinical pearls: disseminating wisdom about your area of expertise within Family Medicine**

Rorvig, L; Brode, E; Vener, M\*

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**Expansion of Pediatrics in the FMC : The Experiences of a New Residency**

R. Friedman,\* ; Martinez, R; Koida, D; Hiserote, P

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**Building a better care team: a team-based curriculum for ambulatory medicine**

Zaro, C\*

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### CLINICAL CARE & ADDICTION MEDICINE

### CYPRESS ROOM

**Assessing hypertension control in three large health systems using electronic health record data**

Selby, K; Michel, M; Gildengorin, G; Karliner, L; Pramanik, R

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**Developing an agent-based model to link opioid and heroin market conditions to opioid-related medical outcomes**

MPhil, N\*; Mars, S; Georgiy, B

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**The time and place for inquiring about religion in medicine**

Morse, A.\*; Nath, K., Froude, C.

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safety net settings, struggles with patient show rates. Since this issue is multifaceted and tied closely to each clinic's core quality improvement work, residents are rarely able to get involved in efforts that meaningfully impact this area of quality improvement.

**SETTING/POPULATION:** At our teaching health center, we have over 40 residents who were noted in their R2-R3 year to have a dramatically lower show rate (50-60%) as compared to the faculty and advanced practitioners working at the same clinic. The clinic and residency was also taking part in an initiative to reform quality improvement curricula and bring it more in line with the quality improvement efforts of the health network.

**INTERVENTION/STUDY DESIGN:** We conducted an analysis of the root causes behind no shows at the health center, which included process mapping and stakeholder interviews and surveys of people in many different positions within the health center. This analysis revealed patient notification, provider scheduling and lack of standard work as three major areas for improvement. We conducted PDSA (plan-do-study-act) cycles around improving patient notification and provider scheduling. We engaged clinical staff to assist us in collecting quantitative data around patient no-shows and surveyed staff for their qualitative experiences in patient care.

**OUTCOMES/RESULTS:** Our quality improvement efforts improved patient access, continuity and clinic-first resident scheduling. The patient notification improvements were not able to be sustained, but the scheduling changes towards more consistent residency scheduling was able to improve no-show and continuity rates for residents.

**CONCLUSIONS:** Quality improvement does not occur in a vacuum. Our project demonstrated that when combined with graduate medical education and clinical leadership integration around quality improvement, resident projects can have a real impact on bringing residency clinics more in line with high-functioning primary care.

**Froude C\*, Triana A. Team-based, behavioral interviewing for family medicine residency admission**

**CONTEXT & OBJECTIVE:** The field of family medicine prides itself on utilizing integrated, team-based approaches to healthcare. These tenets also translate to resident education, particularly as training environments adopt integrated practices with interdisciplinary teams. Considering our field's commitment to team-based approaches to healthcare and education, adopting these values for interviewing reflects a continuity of values across contexts. Just as we pride ourselves on providing patient care that is valid and reliable, our interview process should also reflect these qualities. The literature on resident and medical student interview assessment presents robust data on the benefits of behavioral interviewing versus standard practice.

Additionally, resources are available regarding behavioral interviewing approaches. However, there is limited research outlining the process by which institutions identify the qualities they seek in medical residents and a systematic way to train interviewers to measure these qualities. However, interviews for prospective medical residents rarely include an interdisciplinary team, for example a program director and medical assistant or nurse. Our proposed colloquium will fill these gaps by outlining the team-based, behavioral process our residency program utilized from identification of residency values through interview training and interviewing candidates.

**SETTING/POPULATION:** Faculty, administrative staff, clinical staff, and resident applicants at a new residency in East Bay.

**INTERVENTION/STUDY DESIGN:** We designed and utilized a team-based, behavioral process to identify the core values of our new residency program located in the East Bay. Next, we utilized the ACGME competencies to create rubrics that measure each of the core values. Following, we trained interprofessional interview teams in best interview practices and utilization of the rubrics. We interviewed approximately 120 students using this design and collected qualitative feedback on their experience. Additionally, we collected qualitative feedback from interprofessional interview teams.

**OUTCOMES/RESULTS:** Identifying residency core values through mixed-method survey of all faculty, administrative staff, and clinical staff facilitated clarity among the team regarding qualities we seek in future residents. Training interprofessional teams in best interview practices, namely behavioral methods, resulted in novice interviewers' reporting preparedness for the interview and confidence in their assessment of candidates. Candidates responded positively to the interview day, citing structured interviews with creative questions as a highlight.

**CONCLUSIONS:** (1) Interprofessional, behaviorally based interviews provide a structure to assess appli-



participate in either experimental or control groups in the Birth Control Connect community. We hosted 70 groups of 9 members each (35 experimental and 35 control). Experimental groups included 4-5 IUD users and 4-5 non-IUD-users, and control groups included 9 non-IUD-users. Groups lasted 2 weeks, after which participants completed follow-up surveys. In preliminary analyses, we used t-tests to examine relationships between group participation and IUD attitudinal ratings, knowledge, and behavior.

**OUTCOMES/RESULTS:** Seventy-one percent of participants completed follow-up surveys. There were no significant differences between condition in participants' pre- and post-study attitudinal ratings of the hormonal and non-hormonal IUD for themselves. There was a significant difference between condition in participants' pre- and post-study ratings of hormonal IUD (mean rating change between pre- and post-survey of 0.61 in the experimental group versus 0.06 in the control,  $p=0.04$ ), and a difference approaching significance in their general ratings of non-hormonal IUD (mean rating change of 0.48 in the experimental group versus 0.01 in the control,  $p=0.09$ ). There were no significant differences by condition in IUD knowledge or behavior.

**CONCLUSIONS:** Experimental non-IUD-users reported greater change in attitude about IUDs in general, indicating that online exposure to IUD users could encourage them to become more reliable and vocal sources of information about the IUD for their peers. Results suggest that anonymous online peers may be influential on others; contraceptive attitudes, providing evidence for social media campaigns or other online interventions that rely on online interaction between ties of varying strength.

**Hessler D\*, Fox E, Hoffman A, Campora P, Dehlendorf C. Creating a brief measure for patient experience of contraceptive care: reduction of the Interpersonal Quality of Family Planning scale to a 4-item patient-reported outcome measure**

**CONTEXT & OBJECTIVE:** Patient-centeredness is a key dimension of quality healthcare and is uniquely crucial in the context of contraceptive care, due to the highly personalized nature of contraceptive decision-making. In 2016, OPA and UCSF began a project to refine and test a patient-reported outcome measure (PROM) and performance measure (PRO-PM) on the patient-centeredness of contraceptive counseling.

**SETTING/POPULATION:** Patients who recently received contraceptive counseling in the United States may respond to this measure.

**INTERVENTION/STUDY DESIGN:** We conducted cognitive interviews using the 11-item Interpersonal Quality of Family Planning (IQFP) scale with English- and Spanish-speaking patients ( $n=33$ ) who received contraceptive counseling at three San Francisco safety net clinics. Interviews were used to understand item importance and confirm clarity and language equivalence. We also conducted quantitative analysis of previously collected IQFP data to examine psychometric properties and confirm validity of a reduced measure.

**OUTCOMES/RESULTS:** Qualitative and quantitative analysis led to a reduced IQFP, the IQFP-R, which asks patients to rate providers with regard to the following:

1. Respecting me as a person
2. Letting me say what mattered to me about my birth control method
3. Taking my preferences about my birth control seriously
4. Giving me enough information to make the best decision about my birth control method

Interview participants deemed these items to be understandable and equivalent across languages and ranked these items highly in terms of importance. The IQFP-R retained all psychometric properties of the IQFP, including strong internal consistency (Cronbach's  $\alpha = 0.92$  vs.  $0.97$  for the IQFP-R and IQFP respectively), and a consistent single factor analysis solution (factor loadings  $.86-.92$  and  $.81-.91$ , respectively). Both the IQFP and IQFP-R are associated with measures of concurrent validity, convergent validity, and predictive validity.

**CONCLUSIONS:** The IQFP-R is a valid PROM that may be distributed to patients to understand the patient-centeredness of contraceptive care. In Fall 2017, we will test the measure as a PRO-PM with patients of 80 providers at 5-10 clinics across the United States. Scores will be aggregated at the provider level, and should if the PRO-PM is valid, we will submit it for endorsement by the National Quality Forum (NQF).

**Lu C\*, Diaz-Mooney C, Leung L, Coffa D. Using continuous quality improvement to increase patient show rates and improve residency scheduling**

**CONTEXT & OBJECTIVE:** Virtually every family medicine residency clinic, especially those based in

**Comparison of HbA1c as a screening tool for GDM in first trimester pregnant women**  
Tovian, Z; Hughes, S; Gomez, I; Delsman, E; Macauley, T  
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**Pump it up: implementation of a standardized hypertension treatment protocol**  
Deming, H\*; Opene, C; Brode, E  
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**Promoting Specialty and Primary Care Relationships to Maximize Patient Care**  
Martinez, R\*; Friedman, R; Hiserote, P; Koida, D  
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## **REPRODUCTIVE, MATERNAL & CHILD HEALTH** **HAWTHORN ROOM**

**It's primary care: integrating medication abortion into an academic urban FQHC**  
Pollock, L\*  
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**Creating a brief measure for patient experience of contraceptive care**  
Hessler, D; Fox, E; Hoffman, A; Campora, P; Dehlendorf, C  
Abstract: p. 44

**Birth Control Connections: the effect of online social communication on contraceptive attitudes**  
Fox, E; Zhang, J; Yang, S; Hall, E; Centola, D; Dehlendorf, C\*  
Abstract: p. 43

**Development of a chart-review data collection tool to evaluate and improve comprehensive perinatal services programs in California**  
Rienks, J; Shataru, A\*  
Abstract: p. 42

**The Affordable Care Act and changes in health insurance coverage before, during and after pregnancy in California**  
Marchi, K\*; Dove, M; Heck, K; Fan, C  
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**Exploring women's preferences for peripartum contraceptive counseling and family planning care**  
Wilson, W\*; Fitzpatrick, J; Dehlendorf, C  
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**Tracking high-risk obstetric patients to support resident education and patient care**  
Lund, E; Clinite, K\*; Rhodes, J\*; Zwerdling, M\*  
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## **HEALTH COACHING** **HAWTHORN ROOM**

**First year outcomes of a hospital-based patient navigator for underserved, medically and socially vulnerable patients**  
Chase, J\*; Mo, M  
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**Qualitative analysis of patient and care team perspectives on impact of health coaching on COPD management & quality of life outcomes for patients in safety net clinics**  
Huang, B\*  
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**Health coach-facilitated patient consultation with a pulmonary nurse practitioner improves guideline-based care for patients with COPD in an urban, underserved population**  
Wolf, J\*  
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**Health coaching for urban, underserved patients with Chronic Obstructive Pulmonary Disease (COPD)**  
Chirinos, C\*  
Abstract: p. 34

**Participants Highly Recommend Health Coach Trainings from UCSF Center for Excellence in Primary Care**  
Knox, M\*  
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## **PRIMARY CARE & BEHAVIORAL HEALTH** **HAWTHORN ROOM**

**Utilizing expressive arts therapy in the hospital and group medical visits**  
Siegel, A\*; Koethner, N  
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**Behavioral medicine skills and procedures curriculum project**  
Macias, E\*  
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**Patient and staff usability of connection to health: a website for health behavior change for use in primary care**

Bowyer, V\* *Abstract: p. 36*

**CART Services Consult Team: Interprofessional consultation services**

Collins, Z.\*; Kripke, C.; Ihle, E.; Mejia, P.; Cummins, J. *Abstract: p. 34*

**Predictors of two-year attrition for primary care staff and clinicians**

Willard-Grace R\*; Knox, M; Huang, B; Grumbach, K *Abstract: p. 26*

**How to assess patient engagement in behavior change:**

Hessler Jones, D.\* *Abstract: p. 35*

**HEALTH CARE FOR THE UNDERSERVED**

**HAWTHORN ROOM**

**Collecting and analyzing demographic information from mission neighborhood health center's teen clinic during the 2016 calendar year**

Diaz, M\*; Bennett, S *Abstract: p. 39*

**Race and reproductive justice: results from a pilot workshop in training and advocacy**

Baltrushes-Hughes, N; Saint-Hilaire\*, L; Wu, D *Abstract: p. 37*

**Addressing patients' social and economic needs in medical care settings**

Wing, H\* ; Adler, N; Gottlieb, L *Abstract: p. 35*

**Addressing food security in an FQHC**

Bondi-Boyd, B\*; Wong, M *Abstract: p. 33*

**The affordable care act's impact: changes in a free clinic's patient population and considerations for future resource allocation**

Nath, K\* *Abstract: p. 27*

**Stronger together: promoting UCSF primary care leadership by uniting student-led clinics**

Vener, M\* *Abstract: p. 24*

**Providing medically tailored meals to patients with congestive heart failure on hospital discharge**

Lu, C\*; Smith, C; Nguyen, R *Abstract: p. 24*

**PCMH AND QUALITY IMPROVEMENT**

**VENTANA ROOM**

**Using continuous quality improvement to increase patient show rates and improve residency scheduling**

Lu, C\*; Diaz-Mooney, C; Leung, L; Coffa, D *Abstract: p. 44*

**Increasing conversations around oral health at UCSF Family Medicine Center at Lakeshore, a primary care medical home**

Subbaraj, L.\*; Haddad, A.\*; MacKenzie, T. *Abstract: p. 42*

**Patient advisory councils at the Family Health Center: A collaborative journey of how empowered patients lead and effect change**

Sharma, AE\* *Abstract: p. 40*

**All Hands on Deck with the Team Dance: Using Practice Management Coaching to Improve Staff Communication and Productivity**

Liang, C\*, Manaois, A *Abstract: p. 32*

**In our hands year two: a primary care procedure elective teaches students the scope and role of family medicine**

GaleWyrick, S\*; Person-Rennell, N; Vener, M *Abstract: p. 26*

**Using the Patient Advisory Council to Design Actionable Patient Satisfaction Surveys**

Koida, D\* *Abstract: p. 49*

address.

**SETTING/POPULATION:** CPSP chart-reviews and chart-review tools were collected from LHJ's PSCs in California's Northern, Southern, and Central Valley regions; represented counties range from rural to urban.

**INTERVENTION/STUDY DESIGN:** FHOP collected LHJ CPSP chart-reviews and chart-review tools and developed a comprehensive chart-review data collection tool (the "Tool") by determining how components of various chart-review tools related to each other and the main elements of CPSP.

**OUTCOMES/RESULTS:** In reviewing multiple patient chart-reviews and different chart-review tools, we've learned that varied approaches to quality assurance of CPSPs do not allow for evaluation of its successes/failures beyond the local level.

**CONCLUSIONS:** Since CPSP has not been evaluated at a state level in over three decades, the development and use of the Tool will be invaluable in determining if the intended program goals are being met and to identify areas for improvement that CDPH-MCAH and local PSCs can work together to address.

**Morris P\*, Warren N, Reyes M. The Pacific AIDS education and training center: developing an effective post-intervention follow-up survey for clinical students who have graduated**

**CONTEXT & OBJECTIVE:** Certain HRSA health professional training grants require follow-up on clinical student graduates after a training/education program has finished. The purpose is to ascertain what percentage of clinically trained students treat or screen HIV patients in their work setting after graduation. Obtaining information on students in any clinical training field is difficult after graduation; a preliminary literature search shows clinical alumni response rates range from 17% to 53%, with most clustered at the lower range. An effective methodology that will reach a majority of post-graduate students is needed to understand if the training/education was effective.

**SETTING/POPULATION:** Multiple AETC projects train clinical students on HIV as part of their core clinical curriculum. One of these projects is a UCSF Nurse Practitioner education program that had a graduating class of 57 students with whom we implemented a new follow-up survey approach.

**INTERVENTION/STUDY DESIGN:** We designed an intervention to achieve a high response rate with 2 central elements-- a friendly survey interface in an email sent and followed-up on by respected, known faculty members. The short email contained one question which asked about the respondent's workplace. If the respondent answered that question they were automatically transferred to an online survey in Qualtrics. The subsequent 9 questions asked about their workplace, if they were treating HIV patients, and if HIV policies such as routine testing were being implemented in their work setting. The survey used logic to eliminate extra questions where possible.

**OUTCOMES/RESULTS:** Preliminary results show a higher than usual response rate (68%) using this follow-up survey technique). PAETC is in the process of expanding this methodology to additional university settings which will include follow-up with students graduating from Medical, Pharmacy, and Nurse Practitioner Programs.

**CONCLUSIONS:** In order to understand the impact of an HIV curriculum on clinical students, it's important to measure only how much they learn while in the university, but also how they use this information once they graduate and are employed in a healthcare setting. Ensuring higher response rates when surveying this population means the results are more reliable and meaningful. Further research to replicate and refine this methodology is needed.

**Dehlendorf C\*, Fox E, Zhang J, Yang S, Hall E, Centola D. Birth Control Connections: the effect of online social communication on contraceptive attitudes**

**CONTEXT & OBJECTIVE:** Peers are a valued source of contraceptive information, but it is not well understood if this influence extends to unfamiliar peers in digital spaces. Online platforms provide opportunity for sharing their birth control experiences widely, and interventions could facilitate such communication to change contraceptive knowledge, attitudes, and behavior. We conducted an RCT to examine the effect of online communication with IUD users on non-IUD-users' contraceptive knowledge, attitudes, and behaviors.

**SETTING/POPULATION:** Women ages 18-45 (n=490) who lived in the United States and who had never used an IUD.

**INTERVENTION/STUDY DESIGN:** Participants completed baseline surveys and were randomized to

## OUTCOMES/RESULTS:

1. Formal survey of 382 patients for real-time optimization of experience
2. Improvement trend in patient satisfaction and basic health understanding.
3. Increased patient utilization of FMIS warmline and resolution of post-discharge problems
4. Statistically significant improvement in provider perception of discharge safety/workflow support.
5. Trend toward improved provider efficiency in discharge workflow

**CONCLUSIONS:** A Patient Navigator for underserved, medically and socially vulnerable patients at an urban, academic, safety-net hospital improved patient satisfaction, post-discharge self-management support and provider experience. Future work will focus on increasing coordination of MDR teamwork and a deeper dive into common patient-identified concerns regarding food, sleep and communication during hospitalization.

### **Subbaraj L.\*, Haddad A.\*, MacKenzie T. Increasing conversations around oral health at UCSF Family Medicine Center at Lakeshore, a primary care medical home**

**CONTEXT & OBJECTIVE:** Oral diseases including tooth decay, gum disease, facial pain, and oral and pharyngeal cancers affect millions of Americans each year. Oral health is linked to overall health and oral disease can cause complications in the management of other chronic conditions, including diabetes and heart disease. In addition, over 9700 Americans die from oral and pharyngeal cancers per year. Preventative action via good dental hygiene and routine oral examinations can lead to earlier detection of oral diseases, resulting in better outcomes and decreased health care costs. Americans are more likely to visit a primary care provider than a dentist, making the primary care setting a more reliable source of preventive oral health care. Therefore, incorporating basic oral screening and preventative procedures into primary care visits could increase the oral and overall health of all patients, especially those without access to a dentist.

**SETTING/POPULATION:** UCSF's new educational curriculum includes the clinical microsystem clerkship (CMC) in which students learn quality improvement and clinical skills through workplace-based longitudinal learning. We were assigned to UCSF Family Medicine at Lakeshore and sought to incorporate oral health into well visits.

**INTERVENTION/STUDY DESIGN:** To increase conversations around oral health, we educated clinic staff and providers via two PowerPoint presentations on the importance of oral health and how to perform a basic oral exam. We also created an oral health flowsheet within the electronic medical record (Apex) to guide providers through an oral screen and document visits.

**OUTCOMES/RESULTS:** A pre-assessment survey showed that 86% of providers and staff at Lakeshore believe oral health should be incorporated into well visits, but only discuss oral health with patients 39% of the time. We expect post-intervention surveys to show increases in the frequency of oral health conversations between providers and patients, oral screens performed during well visits, and dental referrals. We will track the flowsheet and expect usage of at least 70% during well visits in the two months post-release.

**CONCLUSIONS:** In summary, we sought to increase the conversations and integration of oral health into annual visits at Lakeshore Clinic through provider education and the creation of an oral health flowsheet within Apex.

### **Shataria A\*, Rienks J. Development of a chart-review data collection tool to evaluate and improve comprehensive perinatal services programs in California**

**CONTEXT & OBJECTIVE:** The Comprehensive Perinatal Services Program (CPSP) is a Medi-Cal program for low-income pregnant and postpartum women. CPSP was developed over 35 years ago to improve pregnancy outcomes for mothers/children by providing comprehensive perinatal care services. Each California Local Health Jurisdiction (LHJ) should have a CPSP provider. To maintain quality assurance in CPSPs, the California Department of Public Health's Maternal, Child, and Adolescent Health division (CDPH-MCAH) tasks the LHJ's Perinatal Service Coordinators (PSCs) with conducting CPSP patient chart reviews. CDPH-MCAH provides sample chart-review tools, but PSCs are not required to use them and many LHJs use their own tools. Furthermore, there has been no collection or analysis of chart reviews beyond the jurisdiction level to identify common gaps and challenges that could be addressed at a higher level across programs. The Family Health Outcomes Project (FHOP) at UCSF provides technical assistance to MCAH programs in LHJs and has been asked to lead a CPSP quality improvement project in several jurisdictions. To facilitate this, we have created a data collection tool to extract common data elements from the various chart reviews being utilized. This data will then be analyzed to identify common CPSP gaps and challenges in meeting the program goals that the jurisdictions can collectively

## ABSTRACTS: *Concurrent Talks*

### **Morgan C.\* Olayiwola, N. Chronic care management of vulnerable elderly populations in primary care clinics utilizing alternative payment models**

**CONTEXT & OBJECTIVE:** The population of elderly adults over the age of sixty-five years old will nearly double by 2050. The Medicare population accounts for a disproportionate amount of healthcare expenditures, and its healthcare costs are projected to balloon from 3.0% of United States (U.S.) GDP to 5.5% of U.S. GDP by 2050. Medicare and other payers are motivated to mitigate inflating healthcare costs while enhancing patient experiences, improving population health, and reducing physician burn-out; collectively, known as the quadruple aim. The achievement of these aims within our healthcare system will require novel delivery paradigms for elderly patients. Chronic care management programs that decrease costs and improve patient outcomes in the Medicare population, particularly those adopting alternative payment models, are of notable interest as large health systems consider the benefits of risk-sharing arrangements with payers.

**SETTING/POPULATION:** This is an exploratory, qualitative study of stakeholders and thought leaders who have research or implementation experience with chronic care of elderly adults enrolled in capitated or risk-sharing payer healthcare plans. The study was based at the Center for Excellence in Primary Care at the University of California, San Francisco, with interviews conducted both remotely and on-site (in Boston, New York, Las Vegas, Chicago, San Jose, and San Francisco).

**INTERVENTION/STUDY DESIGN:** Each participant took part in a one-time, in-depth interview which was transcribed and analyzed using established qualitative methodologies. Research interviewers also took field notes to help our understanding of the participants' lived experiences. Questions were developed with qualitative research design methodology. In-depth interviews were conducted using pre-constructed interview guides. Questions addressed interviewees' personal experiences, observations of the broader community experience, and suggestions for the future.

**OUTCOMES/RESULTS:** Key common themes and foundations of primary care systems utilizing alternative payment models emerged, including fast access to care, effective patient education, patient empowerment, and facile communication between the patient and the primary care home.

**CONCLUSIONS:** Financing of primary care through alternative payment models can impact health outcomes in elderly populations by facilitating the building blocks of successful primary care systems. Financing not only enables innovation: financing can be the innovation that leads to improvement of health outcomes for complex and vulnerable patients.

### **Lund, E\*, Matel, J, Gurule, S, Coutinho, A. New beginnings: a collaborative care model for substance using pregnant women in a residency clinic.**

**CONTEXT & OBJECTIVE:** Providing optimal care to pregnant patients in an FQHC residency setting is often challenging. Many pregnant patients seen in our residency clinic suffer from substance use disorders and co-morbid mental health conditions. These patients can be challenging to care for in the traditional office setting due to multiple medical co-morbidities and barriers to regular prenatal care. Without adequate support from case management and mental health, providers can become frustrated and quality of patient care becomes suboptimal. Frequent missed visits by these patients can lead to poor continuity with their prenatal providers and impede the development of trusting therapeutic relationships necessary to provide effective and trauma-informed care to this vulnerable population.

**SETTING/POPULATION:** We instituted a collaborative care clinic run by two family medicine faculty, a senior resident, nurse case manager and licensed clinical social worker to provide continuity prenatal, postpartum and newborn care for the highest risk patients at our clinic. This includes women with active or recent substance use disorders, unstable housing, incarceration, active mental health disorders and other high risk social conditions.

**INTERVENTION/STUDY DESIGN:** We developed a weekly trauma-informed collaborative care prenatal and postnatal clinic for our highest risk obstetric patients and their babies seen in our family medicine residency clinic.

**OUTCOMES/RESULTS:** Since creating our New Beginnings Clinic we have seen an increase in patient engagement in prenatal care and more frequent visits. We have increased patient access to mental health services by having a therapist meet with patients at the time of their prenatal visits. We have helped many patients connect with community resources such as drug treatment programs, stable

housing and public health nursing services. We have increased uptake of long acting reversible contraceptives by this population at high risk for unintended pregnancy. Residents involved in the care of our patients have gained knowledge and skills around substance use and mental health disorders in pregnancy and have improved attitudes about caring for this population in the future.

**CONCLUSIONS:** Since instituting a collaborative care model for socially complex obstetric patients in our residency clinic we have seen many improvements in patient care, provider satisfaction and resident education.

**Rienks J\*, Shatara A, Shils J, Dedhia M. Social Justice and school lunch: Transforming what some of our nation's poorest children eat for lunch.**

**CONTEXT & OBJECTIVE:** The goal of the Conscious Kitchen (TCK) is engaging local communities, particularly low-income, in a collaborative approach to break the cycle of prepackaged, unhealthy school lunches. TCK is committed to serving fresh, local, organic, seasonal, and non-GMO foods to ensure better, eco-friendly health and life outcomes for children. It includes a garden and nutrition curriculum and supports farmers by purchasing produce at local farmers markets. Through partnerships with local chefs to develop kid-friendly menus, the program serves breakfasts and lunches prepared from scratch. With TCK gaining traction, and more schools wanting to participate, the Family Health Outcomes Project is collaborating with TCK to evaluate the program.

**SETTING/POPULATION:** TCK currently operates in the only two schools within the Sausalito-Marin City School District, one is low-income and predominantly African-American, and the other is more affluent and ethnically diverse. TCK also recently conducted a pilot tasting working with a 97% free and reduced lunch elementary school in Richmond, California considering TCK implementation.

**INTERVENTION/STUDY DESIGN:** Key informant interviews were conducted with staff, teachers, administrators, and school board and community members in sites TCK currently serves. To evaluate the tasting week, we collected baseline data for a week, including daily surveys of all students in grades 3-6 eating school lunches. We asked about the types and amounts of foods/beverages eaten/drank, hunger and thirst before and after lunch, and how much students liked their lunch. Daily student surveys were also completed during the pilot week, and teachers and other school staff completed a post pilot week survey.

**OUTCOMES/RESULTS:** This presentation will highlight findings from key informant interviews and from student and teacher surveys. Preliminary analyses of student surveys indicates that they like the TCK school lunches significantly more than lunches during the baseline week (M=1.43 vs. M=2.40, T=24.9, p=0.00). There also appears to be significant increases in the consumption of fruits, vegetables, and milk in the pilot vs. baseline week (data analyses in process).

**Conclusions:** TCK appears to have developed an effective approach to increasing consumption of healthy school lunches rich in fruits and vegetables, something particularly important for improving nutrition and preventing obesity among low income students.

**Fichtenberg C\*, Gottlieb L, Wing H, Chernitskyi S, Torres J, Nancy A. The Social Interventions Research and Evaluation Network: A model accelerating translation of research into practice**

**CONTEXT & OBJECTIVE:** A substantial literature has established that social factors play an important role in determining health outcomes. This has led to a growing interest in interventions attending to patients' social and economic resource needs (also known as social determinants of health (SDH)) in health care delivery. Stronger evidence of the effectiveness of interventions that aim to change SDH, complemented by convincing implementation and dissemination research, is needed to inform decision-making and secure health care sector funding for these activities. The Social Interventions Research and Evaluation Network (SIREN) at UCSF was launched in the spring of 2016 to fill this need by synthesizing, disseminating, and catalyzing rigorous research in this field.

**SETTING/POPULATION:** SIREN is based in the UCSF Department of Family and Community Medicine and the Center for Health and Community. The Network's national program office works closely with researchers and health care stakeholders across the country and in Canada. The project's audience is all researchers conducting research on these interventions and all health system stakeholders seeking to implement these interventions.

**INTERVENTION/STUDY DESIGN:** Foundation funding enabled SIREN's creation in the spring of 2016. One of SIREN's first goals is to develop a clear and coherent research agenda that articulates evaluation priorities reflecting the perspectives of key stakeholder groups. The Network also facilitates cross-program learning for both researchers and health sector leaders through an online hub (sirennetwork.ucsf.edu) that increases the accessibility of research findings, tools, and metrics. Other

mented the specific skills and procedures they have practiced and completed during their three years of residency.

**Marchi K\*, Dove M, Heck K, Fan C. The Affordable Care Act and changes in health insurance coverage before, during and after pregnancy in California**

**CONTEXT & OBJECTIVE:** The Affordable Care Act (ACA) has reduced the percentage of Americans under age 65 who have no health insurance. Insurance coverage around the time of pregnancy is important for maternal and infant health, but recent insurance trends have not been reported. The objective of this study was to examine changes in insurance coverage for California women before, during and after pregnancy following ACA implementation.

**SETTING/POPULATION:** Data were drawn from the 2011-2015 Maternal and Infant Health Assessment, an annual representative survey in English and Spanish of California mothers sampled from birth certificates (n=34,425).

**INTERVENTION/STUDY DESIGN:** Women were asked about health insurance coverage in the month before pregnancy, during pregnancy, and at the time of the survey, 2-7 months postpartum. We examined changes in insurance coverage between baseline (2011-2013) and 2014 and 2015 separately. Prevalence ratios were calculated from predicted marginals of logistic regression models, adjusting for age, race/ethnicity, nativity, language, income, marital status, education, and parity to account for population changes. We also ran stratified models to evaluate changes in the uninsured rate by income, race/ethnicity/nativity, and parity.

**OUTCOMES/RESULTS:** Very few (1.5%) women were uninsured during pregnancy in any year; therefore, analyses focused on insurance before pregnancy and postpartum. At baseline, 24% of women were uninsured in the month before pregnancy; following ACA implementation, this fell to 16.6%. About 17% of women were uninsured postpartum during 2011-2013; this fell to 12.1% in 2014 and 8.9% in 2015. Adjusted models showed that the likelihood of being uninsured postpartum fell 45% after ACA, primarily due to increases in Medi-Cal coverage. The percent of women who were uninsured before and after pregnancy decreased significantly across all levels of income, race/ethnicity/nativity, and parity, except for the highest income category.

**CONCLUSIONS:** ACA implementation resulted in a dramatic reduction in the uninsured rate among California women with a recent live birth. Medi-Cal coverage played a major role in this improvement. If the ACA is revised, and expanded eligibility criteria are not maintained in California, the number of women uninsured shortly before and after pregnancy could increase substantially.

**Chase J\*, Mo M. First year outcomes of a hospital-based patient navigator for underserved, medically and socially vulnerable patients**

**CONTEXT & OBJECTIVE:** Primary care health coaches (Bodenheimer et al., 2014, Ann Fam Med,) and patient navigators, a hospital-based adaptation, (Balaban et al., 2015, JGIM) can improve outcomes for patients and the healthcare workforce. Health coaching may be particularly valuable for socially and medically vulnerable patients (Roberts et al., 2015, Jour Healthcare Quality). To improve care of our underserved and vulnerable patients, the UCSF Family Medicine Inpatient Service (FMIS) at Zuckerberg San Francisco General (ZSFG) implemented a Patient Navigator (PN), beginning on February 8, 2016.

**SETTING/POPULATION:** Inpatients cared for by FMIS at ZSFG from February 8, 2016 through present (N ≈ 1700): ~30% are admitted for primary diagnosis of severe organ failure, &gt;50% of Medi-Cal beneficiaries &gt; 55 yo have mild or more profound dementia/cognitive impairment, 35% speak a primary language other than English, ~100% are affected by one or more: economic poverty, food insecurity, homelessness, unbefriended status, drug/alcohol use disorders, severe mental illness, interpersonal violence.

**INTERVENTION/STUDY DESIGN:** PN role is developed based on existing research and local input from FMIS Multidisciplinary (MDR) Team, and leadership from SFHN primary care, ZSFG and DFCM Residency. Through face-to-face visits at the bedside and cross-network coordination, the PN focuses on 4 areas:

1. Arrange/engage patients in post-discharge primary/specialty care
2. Educate patients about basic details of health, hospitalization and care transition
3. Investigate patient experience through interview/survey, identifying barriers for FMIS team to address in real time.
4. Empower patients to address post-discharge issues through post-discharge resources including FMIS post-discharge warm-line

**CONCLUSIONS:** These findings represent a unique sample of adolescents living mainly in San Francisco's Mission neighborhood who receive healthcare at MNHC. Further data collection could elucidate more meaningful relationships between the variables already analyzed and guide future practices to reduce no-show rates and gear education towards more mental health services given the relatively high prevalence within this sample.

**Sharma A\*, Fernandez L, Kroll L, Leung L. Patient advisory councils at the Family Health Center: A collaborative journey of how empowered patients lead and effect change.**

**CONTEXT & OBJECTIVE:** Patient-centered care is gaining growing attention, yet there are few successful examples of how patients can directly influence primary care clinic operational decision-making. The Family Health Center (FHC) at Zuckerberg San Francisco General Hospital has two Patient Advisory Councils (PAC) that have developed a collaborative relationship with the management team to participate in continuous quality improvement (QI).

**SETTING/POPULATION:** The English-speaking and Spanish-speaking PACs are based at the FHC, a large urban safety net primary care practice. Each PAC has 4-6 members. Members are nominated by providers and clinic staff with specific inclusion criteria and conduct a screening interview before enrolling as a member.

**INTERVENTION/STUDY DESIGN:** PAC members participate in QI using the IHI Model for Improvement. The PACs meet on a monthly basis with UCSF liaisons. Our liaisons meet monthly with the FHC QI team to facilitate open communication about ongoing projects and QI priorities.

**OUTCOMES/RESULTS:** Over the past year, PACs have engaged in QI projects with FHC management team, including increasing mammogram screenings and improving patient experience. PAC members promoted safety and care experience by participating in a multidisciplinary safety committee and attending clinic-wide meetings to discuss patient safety and share narratives of their experiences of care. PAC members helped medical students implement an iPad-based CG-CAHPS survey and tabled in waiting rooms to enroll patients into an online patient portal. Members have gone one to participate in network-wide initiatives and performed customer service training at our most recent retreat.

**CONCLUSIONS:** Through their work with FHC, PAC members have challenged and inspired the clinic to consider the patient experience in a more nuanced and ongoing fashion, creating a palpable shift in our perspective. Our PACs have served as a model for the far-reaching impact of system-level patient engagement.

**Macias E\*. Behavioral medicine skills and procedures curriculum project**

**CONTEXT & OBJECTIVE:** Teaching behavioral medicine in Family Medicine programs is varied from one residency program to another. While there are guidelines and requirements regarding content of behavioral medicine subjects to teach during residents there are no specific guidelines regarding methods to insure residents are learning specific skills (e.g., mental status exam) and procedures (e.g., hypnotherapy) in the practice of behavioral medicine. This abstract outlines a curriculum project focusing on teaching and documenting behavior medicine skills and procedures at our residency program.

**SETTING/POPULATION:** Teaching and documenting behavior medicine skills and procedures is being done at our residency with all residents starting in their first year and continuing until graduation in the third year. The core behavior medicine skills and procedures residents practice are documented in outpatient and inpatient settings.

**INTERVENTION/STUDY DESIGN:** All residents are monitored by faculty each time they complete a behavioral medicine procedure or skill on the list of core behavior medicine skills and procedures. All residents and faculty are responsible for documenting all the behavior medicine skills and procedures residents are required to complete during residency. The goal is to document over a three year period of resident education all the core behavior medicine skills and procedures residents have completed.

**OUTCOMES/RESULTS:** While all residents are now required to do a specific number of core behavior medicine skills and procedures some residents are doing a significantly higher number or are doing a significantly higher number of a specific behavior medicine skill and/or procedure. We now have metrics regarding each resident's experience and practice with regard to core behavior medicine skills and procedures.

**CONCLUSIONS:** Developing a list of specific core behavior medicine skills and procedures will track and insure all residents are learning to address and treat psychological and psychiatric problems by documenting the use of specific behavior medicine skills and procedures. All residents will have docu-

SIREN activities include: providing seed grants for new research, synthesizing existing research through issue briefs and other resources, organizing in person and online events to share research approaches and findings, and creating resources to advance the field.

**OUTCOMES/RESULTS:** SIREN has succeeded in attracting a core group of researchers who interact regularly through SIREN activities, share information about ongoing research projects, and who are developing new research collaborations as a result of these interactions. The website is providing access to a large amount of the evidence published in this area as well as to resources for research and program implementation. SIREN's existing and planned activities are facilitating the strategic accumulation of knowledge to inform both best practices and the financial sustainability of health care-based efforts to address patients' SDH.

**CONCLUSIONS:** SIREN provides one model for accelerating the translation of research into practice through support of a network of researchers and the synthesis and dissemination of high quality evidence.

**McNeil, S, Block, Alison; Wondolowski, Lauren\*; Schiff, Teresa. Tracking graduates of an advanced training program: provision of abortion services after residency.**

**CONTEXT & OBJECTIVE:** Although unplanned pregnancy and abortion remain prevalent in the US, there is a nation-wide shortage of abortion providers. Prepared family medicine graduates are well-equipped to fill this gap, but despite training, graduates report barriers to integrating comprehensive reproductive health services into their practices. In 2012 we launched an advanced training curriculum called CREATE (Continuing Reproductive Education for Advanced Training Efficacy) that provided additional procedural and leadership training for motivated third year family medicine residents. We undertook this project to evaluate the program's success in helping graduates integrate miscarriage and abortion care into practice.

**SETTING/POPULATION:** We surveyed graduates from Northern California family medicine residency programs who had completed the CREATE program. We received completed follow up surveys from 48 of the 53 program graduates, representing a 6, 18, or 30 month follow up (classes of 2015, 2014, and 2013 respectively).

**INTERVENTION/STUDY DESIGN:** In March 2016 we sent a survey to all program graduates which asked about provision of reproductive health services, enablers and barriers that graduates encountered, elements of our curricular interventions that were or were not helpful, and additional support services that may be of benefit following graduation. We also evaluated the perceived impact of the advanced training curriculum on service provision and reproductive health advocacy or teaching activities.

**OUTCOMES/RESULTS:** At the time of survey, 42% of graduates were providing miscarriage management services and 35% were providing abortion services. Most were providing contraceptive procedural services such as IUDs (79%) and contraceptive implants (77%). Factors associated with abortion provision included higher procedural volume during residency and a stronger intention to provide at graduation. The most commonly reported barriers were competing interests (33%) and lack of support from administration or staff (29% and 31%).

**CONCLUSIONS:** Few found lack of training or skills to be a barrier to provision (13%). Graduates noted that the CREATE program provided necessary procedural and leadership training, but that barriers to post-graduation provision remain. This training model may serve as a useful template for programs looking to incorporate advanced abortion training into their residency curricula. The model could also be applied to other advanced procedural training across family medicine education.

**Coleen\*, Kivlahan. Listening deeply to our clinicians**

**CONTEXT & OBJECTIVE:** Not since our training have most clinicians been directly observed while providing care for our patients. There are many reasons for this: too little time, no structure or guideline to use for mature clinicians, professional discomfort, autonomy and anxiety, and concern about patient reactions to the observation. Analysis of patient experience of our communication scores showed a group of clinicians with lower scores than average. Clinician communication improvement is a key goal in our clinic True North Boards, and we had not yet achieve our goals. Following interventions of Dr. Diane Sliwka and her team to improve physician communication skills across UCSF, and using physician communication scores as measured by the Gallup surveys done by our primary care patients, we developed a model of direct observation and communication improvement strategies for primary care physicians and nurse practitioners at UCSF Health.

**SETTING/POPULATION:** Interventions were done in UCSF primary care clinics, observing experienced clinicians. I served as observer clinician, as Executive Director of Primary Care. In addition, observations have been done in these sites by other clinicians including Dr. Diane Sliwka and Maria Otto.

**INTERVENTION/STUDY DESIGN:** Using practice medical directors to identify clinicians who could benefit based on scores or self-identification, we met with the individuals regarding their perceptions of skills and competency gaps prior to performing a half day observation. All clinicians were curious, and all had individual areas for improvement they identified based on patient experience qualitative and quantitative data. Using real time interventions and course-correction, clinicians were able to alter their approaches to communication challenges and practice in their subsequent observed interactions. Following the observations, a written report was provided to each clinician with opportunity to discuss recommended interventions.

**OUTCOMES/RESULTS:** Qualitative outcomes will be discussed and include rapid learning occurring from the observations and included both the clinician and myself. Lessons learned ranged from use of computer in the exam room, greeting and agenda setting skill variation, use of empathy, and negotiating challenging conversations.

**CONCLUSIONS:** Our goal was to improve scores for these physicians, and contribute to improvements in overall primary care patient experience of clinician communication. Data and case examples will be presented.

**Saint-Hilaire L\*, Wu D. Developing an anti-oppression curriculum for healthcare professionals: lessons learned in unconscious bias and allyship training.**

**CONTEXT & OBJECTIVE:** There is an ever expanding library of research around healthcare disparities and unconscious bias. However, there are limited resources and curriculum available that address the "silent curriculum," how healthcare trainees can confront unconscious bias, make active strides towards critical introspection and drive personal action. We developed an interactive curriculum that focuses on exploring unconscious bias, how it relates to the practice of medicine and how it can lead to healthcare disparities, followed by encouraging participants to address health disparities through an active process of allyship.

**SETTING/POPULATION:** Workshops have been piloted with medical students/residents, NP students, as well as faculty/attendings, RN/Medical assistants, clinic staff and managers, integrative medicine practitioners, as well as PAs and NPs.

**INTERVENTION/STUDY DESIGN:** Methods used in this curriculum include didactic and literature review, guided reflection on historical and current events, small group case-based inquiry and guided strategies of allyship in clinical and interprofessional encounters. In addition to unconscious bias and allyship, we also explore concepts of privilege, racism, medical hierarchies, microaggressions, religious intolerance/Islamophobia, the model minority myth, stereotype threat, impostor syndrome, misgendering, and language discordance during the didactics and vignettes.

**OUTCOMES/RESULTS:** During each workshop, we conduct pre- and post-surveys that asked participants to rate their ability to understand, assess, and address unconscious bias and allyship (see attached). We measure the change between pre- and post-survey responses. The mean difference showed that there was improvement across all indicators, of which all were statistically significant.

**CONCLUSIONS:** Ultimately, our results show that an anti-oppression curriculum would enhance our training by providing necessary skills to actively address injustices in healthcare.

**Lubega S\*, Pecci C. A primary care focused buprenorphine waiver training curriculum for residents.**

**CONTEXT & OBJECTIVE:** The opioid epidemic has become a prominent issue of national significance as the US faces record numbers of patients struggling with and dying from opiate use disorders. In August 2016, the US Surgeon General issued a "Call to Action" for physicians across the nation to "turn the tide on the opioid epidemic" by pledging to educate themselves about proper treatment of pain, screen patients for opioid use disorder (OUD), and treat addiction appropriately. The AAFP recommends that residency curricula on substance use disorders include training in office-based buprenorphine treatment for OUD. Historically, residents have expressed strong interest in the 8-hour training to become a buprenorphine prescriber, but are limited by schedules, leading to missed opportunities for emerging PCPs to obtain the licensure required to offer this resource to patients in need.

**SETTING/POPULATION:** In order to eliminate barriers to obtaining the physician waiver for buprenor-

phine, essentially the HbA1c taken 0-15wga had very poor positive or negative predictive value of GDM developing later in pregnancy.

**CONCLUSIONS:** This study is limited; a prospective study would provide more data for determining if HbA1c aids in screening for GDM. A recent study by Khalafallah et al. (2016) demonstrated promising support for using HbA1c as a screening tool when taken at 24-28 weeks gestation. Therefore, a trial from 15-24week gestation would be a logical next step investigating HbA1c in screening for GDM.

**Deming H\*, Caroline O, Brode E. Pump it up: implementation of a standardized hypertension treatment protocol**

**CONTEXT & OBJECTIVE:** Hypertension is one of the most costly diseases in the United States with regards to patient mortality, morbidity, medical expense, and use of primary care appointments. Improving the efficacy and efficiency with which HTN is controlled could save millions in lives and dollars. Several health systems including Kaiser Permanente and the San Francisco Health Network have succeeded in improving patient outcomes while reducing resource utilization with a standardized hypertension treatment protocol that titrates patients' medications without requiring multiple physician appointments.

**SETTING/POPULATION:** Utilizing these programs' protocols as a foundation, we implemented a trial of a similar protocol at the UCSF Lakeshore Clinic. We invited a subgroup of the clinic's patients, who were either newly diagnosed with HTN or were on treatment but not under control, to participate.

**INTERVENTION/STUDY DESIGN:** Patients were allowed to choose between biweekly blood pressure monitoring in clinic with an Licensed Vocational Nurse or at home follow up by way of a phone call from a Medical Assistant.

**OUTCOMES/RESULTS:** A minority of the patients invited chose to participate in the program, and all of them preferred at home BP follow up. Of the patients who were recruited and retained, almost all were eventually routed towards an appointment with their primary care physician for a variety of reasons.

**CONCLUSIONS:** We present our findings from following this group of patients through their experience with the protocol and identify challenges to the approach that are both specific to this clinic and more general to primary care. Based on our analysis, we present recommendations to further improve the efficacy of standard hypertension treatment protocols.

**Diaz M\*, Bennett S. Collecting and analyzing demographic information from mission neighborhood health center's teen clinic during the 2016 calendar year**

**CONTEXT & OBJECTIVE:** Mission Neighborhood Health Center (MNHC) is a federally qualified facility that sees over 12,000 patients every year. As part of MNHC's many diverse populations it serves, the pediatric clinic sees adolescents ages 12-21 in its Teen Clinic. To date, there lack significant data on this unique patient population. This project, therefore, sought to collect demographic information on this sample during the 2016 calendar year. Specifically, we were interested in main reasons for visits to Teen Clinic, BMI percentile, mental disorder diagnoses, no show status, preferred birth control methods, and patient ethnicity.

**SETTING/POPULATION:** Teen Clinic operates at 240 Shotwell Street in San Francisco, CA, every Monday and Thursday afternoon and sees patients between the ages of 12 and 21. Many are recent immigrants from Central America and receive MediCal as their primary insurance.

**INTERVENTION/STUDY DESIGN:** We created a retrospective database using information from MNHC's electronic medical record system, NextGen, and input into a spreadsheet for analysis (see objective for specific measures). We collected patient information from each Thursday afternoon during 2016.

**OUTCOMES/RESULTS:** 230 patients were seen at Teen Clinic on Thursday afternoons during the 2016 calendar year. 37% were males, and 91% were identified as Hispanic. The main reasons for visits to Teen Clinic included: birth control/family planning, teen physical exams, BMI checks, STI checks, and pregnancy tests. 29% of patients were classified as overweight based on BMI percentile, and 17% were considered obese. The most popular forms of contraception administered were Depo-Provera, condoms, Nexplanon, OCPs, and emergency contraception. 24% of teen patients carried a diagnosis of a mental disorder, with the most common being depression, anxiety, and adjustment disorder. Finally, patients were more likely to skip appointments if their main reason for the visit was a BMI check ( $z = 2.42, p = 0.016$ ).

**Wilson W\*, Fitzpatrick J, Dehlendorf C. Exploring women's preferences for peripartum contraceptive counseling and family planning care**

**CONTEXT & OBJECTIVE:** Preterm birth is disproportionately experienced by minority women and women of lower socioeconomic status, representing a pressing social justice and health equity issue. Poor use of contraceptives in the postpartum period can contribute to high rates of and disparities in unintended pregnancy and short interpregnancy intervals, a risk factor for preterm birth. While counseling may influence contraceptive use, the quality of contraceptive counseling varies. In an effort to improve contraceptive counseling and support autonomous decision making, we conducted formative research in order to understand women's experiences and preferences related to peripartum contraceptive counseling and family planning care.

**SETTING/POPULATION:** African American and Latina women ages 18 to 45 in California who were currently pregnant or had given birth in the past year, or had ever given birth and were members of the UCSF Preterm Birth Initiative's Community Advisory Board.

**INTERVENTION/STUDY DESIGN:** From December 2016 to May 2017, formative research was conducted with African American and Latina women in California. Twenty two semi-structured interviews were conducted in-person and over the phone, regarding experiences and preferences related to peripartum contraceptive counseling and family planning care. Thematic analysis was performed on qualitative data, and emerging themes were interpreted.

**OUTCOMES/RESULTS:** Early analysis reveals that the majority of participants reported having had a conversation with their provider about birth control or preventing pregnancy. While most participants expressed that these interactions met their family planning needs, some reported a desire for them to have occurred earlier in or throughout the peripartum period, dissatisfaction with information provided about methods and the time-limited nature of counseling, or experiences with directive or foreclosed counseling. Most participants were not specifically counseled regarding special postpartum considerations for birth control and family planning, such as when methods can be started or healthy pregnancy spacing, and clear desirability for this information was articulated. Many placed value on accessing information through in-person conversations with their providers and trusted community service providers, and expressed openness to and acceptability of educational materials in the form of electronic tools, pamphlets and digital resources to inform these exchanges and serve as reference for the future.

**CONCLUSIONS:** Our findings will inform the adaptation of our established contraceptive decision support tool, and development of complimentary resources, to facilitate patient-centered peripartum care and ensure that women are able to make informed decisions about their postpartum contraceptive use. The next phase of our project will be to pilot test the tool in clinics and community organizations across the Bay Area to assess acceptability of the intervention and its content.

**Tovian Z\*, Hughes S, Gomez I, Delsman E, Macauley T. Comparison of HbA1c as a screening tool for GDM in first trimester pregnant women**

**CONTEXT & OBJECTIVE:** Gestational diabetes mellitus (GDM), carbohydrate intolerance that develops during pregnancy, affects around 5-7% of pregnancies. Current recommendations suggest screening all women for GDM around 24-28 weeks gestation using a glucose tolerance test (GTT). Hemoglobin A1c (HbA1c) monitors average blood glucose levels over a 3 month period in non-pregnant patients with diabetes. This research is exploring how well an HbA1c at 15 weeks gestation identifies patients that later develop GDM. If HbA1c could accurately predict or rule out GDM, earlier and simpler screening would allow for more effective interventions and save time and cost to the medical system at large.

**SETTING/POPULATION:** Pregnant women seen in three different prenatal clinics located in California's Central Valley, near Fresno CA.

**INTERVENTION/STUDY DESIGN:** A retrospective cross-sectional study of pregnant women seen in 3 OB clinics in the Central Valley. Patients with an HbA1c during the first 15 weeks of their pregnancy were included. Women with anemia (hemoglobin <math>\leq 10</math> gm/dl), preexisting diabetes or HbA1c > 6.5, patients with pregnancy loss or delivery at or prior to 28 weeks of gestation, chronic renal disease, pancreatic disease or other severe illness were excluded. Outcome measure was GDM status. HbA1c was categorized into <math>\leq 5.7</math> and 5.7-6.4 levels. Secondary information includes age, ethnicity, number of pregnancies, and known risk factors for GDM.

**OUTCOMES/RESULTS:** Eight hundred and thirty charts were reviewed with 75 (9%) meeting inclusion criteria. Of this subset, the majority (94%) fell into the <math>\leq 5.7</math> HbA1c category. Twenty had GDM, of which eighteen had an HbA1c <math>\leq 5.7</math>. HbA1c values for those with GDM and those without overlapped

phine prescribing, we instituted a standardized buprenorphine training into our core didactic curriculum for all PGY-2 family medicine residents.

**INTERVENTION/STUDY DESIGN:** Content of the training included online modules and in-person didactics; case-based content was developed by residency faculty across disciplines to include adolescent, pregnant, and medically-complex patients that reflect the diversity of the populations we serve.

**OUTCOMES/RESULTS:** Before and after participation in the training, residents were assessed on their attitudes and motivations with regard to providing office-based screening and treatment for OUD, including prescribing buprenorphine and managing the primary care needs of patients on maintenance buprenorphine therapy. Results of the resident surveys will be shared at this presentation.

**CONCLUSIONS:** Family physicians play an invaluable role on the front lines of caring for patients with OUD, particularly in under-resourced practice settings. An 8-hour evidence-based curriculum on medication-assisted treatment of OUD qualifies residents to receive the DATA X waiver for buprenorphine prescribing and can be easily incorporated into a family medicine residency curriculum. The integration of such training has been found to support resident interest and sense of self-efficacy in providing primary-care based treatments for patients suffering from addiction.

**C. Emily Lu\*, Margae Knox, Tem Woldeyesus\*, Delphine Tuot, J. Nwando Olayiwola. Does language matter? Patient experiences with electronic specialty consult and referral within a safety net system.**

**CONTEXT & OBJECTIVE:** Electronic specialty consult and referral (eCR) is an emerging solution for limitations in specialty access within safety net systems. Though eCR has cost-effectively improved access and clinical outcomes, the patient experience within these systems have not yet been well-articulated. This study was conducted to better understand patient experiences within a mature eCR system.

**SETTING/POPULATION:** Within a public hospital referral network with over ten years of experience with an eCR, patients were selected that had been referred using the eCR by their primary care clinician over the last year and spoke one of the three primary languages spoken within the system: English, Spanish or Cantonese.

**INTERVENTION/STUDY DESIGN:** Modified grounded theory analysis of six focus groups in three languages was used to examine a hypothesized effect of linguistic and cultural differences on patient experiences.

**OUTCOMES/RESULTS:** Respondents across all language groups supported ongoing primary care clinician (PCC) and specialist communication through an eCR. In non-English-speaking focus groups, additional themes emerged around concerns about PCC accountability, and the language, technological and health literacy related barriers they face to engaging with the system.

**CONCLUSIONS:** For low English proficiency patients, their experiences with eCR was colored by their perception of how accountable their PCC is to their care, and the many barriers they must overcome to engage with the system. These findings indicate that patient and clinician communication rather than technology may be more important for designing eCR systems to better serve low English proficiency patients.

**DeVore D\*, Willard-Grace R, Thom D, Tirado M. A support course for patients with chronic pain: participant characteristics, reported changes in behavior and value of group support.**

**CONTEXT & OBJECTIVE:** More than 100 million Americans are living with chronic pain. Nearly half a million emergency department (ED) visits yearly are due to misuse or abuse of prescription pain killers. California's safety net healthcare providers are seeking new models of care to address chronic pain while alleviating the opioid epidemic. We describe characteristics of adults taking part in a chronic pain self-management support course (Share the Pain) in rural California and summarize perceived impacts of the program from the perspective of participants.

**SETTING/POPULATION:** English or Spanish-speaking patients of the Natividad Medical Center in Salinas, CA who have had pain for at least 6 months and are enrolled in a 12-week chronic pain support course.

**INTERVENTION/STUDY DESIGN:** Data was collected at baseline and after completing at least 6 sessions of the 12 week course.

**OUTCOMES/RESULTS:** Forty patients were enrolled and 15 have taken part in at least 6 sessions to

date. At baseline, two-thirds of participants (66%) reported their pain interfered “quite a bit or very much” in their daily activities. Many participants reported having a low or moderate confidence level for managing their pain (43%). Of the 15 participants who completed the second survey, 87% reported that they valued meeting and talking with other patients living with chronic pain and 80% valued being able to ask questions of the care team and learning of new resources or techniques for managing pain. Of the 14 participants who reported changes they have made in their life as a result of this program, 71% reported use of mindfulness strategies or meditation, 50% tried massage, and 43% reported trying acupressure. 43% of participants reported having reduced the amount of medication that they take for their pain, and 36% reported planning to reduce the amount of medication they take for their pain in the future.

**CONCLUSIONS:** Participants in a chronic pain self-management support course reported significant disruption of their lives as a result of living with pain. Those completing at least 6 sessions reported valuing talking to others living with the condition, suggesting that peer-coaching program being explored in this site could be well received by patients with chronic pain.

**Sharma E\*, Knox M, Willard-Grace R, Potter M. Comparing opportunities for patient engagement: Patient Advisory Councils versus Board of Director membership at Federally Qualified Health Centers.**

**CONTEXT & OBJECTIVE:** There is little known about how patients can be engaged to improve primary care delivery at the system or practice level. Two strategies are Patient Advisory Councils (PACs) and patient membership within a clinic’s Board of Directors. Federally Qualified Health Centers (FQHCs) are legally mandated to have a majority of patient representatives on their Board of Directors. We sought to compare and contrast the role and makeup of patients in PACs versus Boards of Directors at FQHCs.

**SETTING/POPULATION:** This study is being conducted among 16 FQHCs across California, Hawaii, and Arizona serving a majority of low-income and publicly insured patients. Eight FQHCs engage patients only as board members, and 8 FQHCs engage patients as board members as well as through PACs. We recruited clinic staff who work closely with PACs or Boards of Directors to speak for a 30-60 minute phone interview based on a semi-structured interview guide.

**INTERVENTION/STUDY DESIGN:** We will analyze interview notes to derive common themes around the similarities and differences of patient demographics and roles in influencing practice decision making and quality improvement activities within PACs versus Boards of Directors.

**OUTCOMES/RESULTS:** Preliminary review of interviews demonstrates that patient membership on Boards of Directors tends to recruit higher-educated and higher-literacy patients and are less demographically representative of the patient population served. Patient board member roles primarily concern human resources and funding decisions, with minimal involvement in quality improvement activities. Patients on PACs tend to have a more diverse representation as well as more active work with day-to-day practice activities and quality improvement. A subsection of FQHCs intentionally targeted Board of Director patient membership to be more diverse and more engaged with quality improvement.

**CONCLUSIONS:** FQHCs are mandated to involve patients and consumers in their Board of Directors, and therefore have a standing opportunity to involve patients within the safety net in practice-level decisions and quality improvement. Thoughtful Board of Director recruitment and role-setting may enable patient representatives to influence practice improvement activities. Patient Advisory Councils can augment the patient board member role by providing a dedicated forum for patient input on specific practice initiatives and operational improvements.

**Saba G\*, Sharma A, Morris J, Alkov D, Lueng L, Weyer-Jamora C. Promoting a culture of safety for all in an underserved clinic setting**

**CONTEXT & OBJECTIVE:** Creating safe and welcoming clinical environments for all patients and staff can be challenging, especially when working with populations with diverse backgrounds and varying degrees of institutional trust. Recent events in our Family Health Center (FHC), ranging from active shooter incidents to concerns about police use of force, have heightened concerns about safety. To improve our culture of safety, we have worked collaboratively with clinic staff, patients, leadership, and sheriff’s officers to develop a multi-pronged intervention.

**SETTING/POPULATION:** The FHC is in an urban community clinic with a multicultural and vulnerable patient population, diverse staff workforce, and a security service provided by the Sheriff’s Department.

**INTERVENTION/STUDY DESIGN:** We created a committee consisting of patients, behavioral health

(63%), tobacco cessation medications (34%), further assessment for other conditions (47%), and referral to pulmonary rehabilitation (14%). Recommendations had a high rate of acceptance by primary care providers.

**CONCLUSIONS:** The data illustrate the potential impact of a health coach-facilitated consultation with a PNP for improving guideline-based treatment, particularly for smoking cessation and inhaler therapy.

**Huang B\*, Masaki S, Joseph R, De Vore D, Wolf J, Chirinos C, Willard-Grace R, Tsao S, Hessler D, Su G, Thom D. Qualitative analysis of patient and care team perspectives on impact of health coaching on COPD management and quality of life outcomes for patients in safety net clinics**

**CONTEXT & OBJECTIVE:** Chronic obstructive pulmonary disease (COPD) is the 3rd leading cause of death in the United States. At least half of all COPD patients do not receive recommended pharmacologic therapies and many never see a pulmonologist. Health coaching has been proposed as a way to improve care and self-management. We explored the perspectives of patients, providers, and health coaches participating in a randomized controlled trial of health coaching for COPD.

**SETTING/POPULATION:** 20 patients, 11 providers, 3 specialists, and 2 health coaches from 7 primary care community clinics across San Francisco.

**INTERVENTION/STUDY DESIGN:** Semi-structured, in depth interviews were conducted by 2 interns not otherwise associated with the study. A codebook was developed and interviews were coded by 4 study team members using Atlas.

**OUTCOMES/RESULTS:** All groups reported that health coaching led to improved inhaler use, smoking reduction, increase in physical activity, and improved self-management and self-awareness. This positive impact was facilitated by the strength of patient-health coach relationships and the ability of health coaches to individualize care plans and fill care gaps. When patients failed to make significant behavior change, providers and health coaches identified contextual/system-level factors as important barriers, whereas patients identified internal factors.

**CONCLUSIONS:** Health coaching was identified as improving COPD management and patient quality of life. The flexibility of the health coach role was significant to improved care. Further exploration is needed to optimize this model for adaptation in other contexts.

**Saint-Hilaire L\*, Baltrushes-Hughes N, Wu D. Race and reproductive justice: results from a pilot workshop in training and advocacy**

**CONTEXT & OBJECTIVE:** Disparities are well documented within reproductive health and a growing body of research describes physicians’ roles in contributing to disparities within healthcare in general. As providers seeking to tackle the structural violence that is often a main driver of health disparity, it is also important to consider ourselves as loci for change. To help residents identify their own biases and give them tools to change, we partnered with providers from UCSF and Physicians for Reproductive Health, to host a workshop pairing implicit bias and advocacy training.

**SETTING/POPULATION:** Eleven residents from the Continuing Reproductive Education for Advanced Training Efficacy (CREATE) program attended the workshop.

**INTERVENTION/STUDY DESIGN:** The implicit bias training introduced concepts and provided concrete examples of implicit biases within healthcare. Case-based discussion followed, which explored biases and helped to deconstruct power hierarchies. In the advocacy training, residents learned how to use patient stories to advocate for change in the form of letters to the editor and op-eds. Pre- and post-surveys were distributed to participants.

**OUTCOMES/RESULTS:** Residents reported increased comfort with: understanding concepts of implicit bias; having tools to effectively manage situations where prejudice, power and privilege are involved; feeling confident as physician advocates; and using patient stories to form advocacy messages. One resident reflected, “The morning session was fantastic. I’ve done bias training before, but the focus on one aspect of social justice made it more relatable and more palpable.” Another wrote that s/he had gained a “deeper understanding of all the concepts from implicit bias to advocacy and concrete tools to build on each of these for the future.”

**CONCLUSIONS:** Initial feedback from this small pilot workshop has been encouraging. The narrow focus on reproductive justice, within the broader context of implicit bias, appeared to be beneficial for learners. We hope to continue to offer and improve the materials moving forward, so they can be disseminated to other programs around and outside of the Bay Area.



**CONCLUSIONS:** Using the new nine-item PEBC measure, we found that while most patients are willing to make a change, many do not view self-management or behavioral change as worthwhile or feel they have the ability to make the change happen. Importantly, these concerns are linked with diabetes outcomes and merit attention in clinical practice. The PEBC can identify those patients who may benefit from specific motivational or engagement techniques.

**Bowyer V\*, Hessler D, Bauer L, Rouse-Iñiguez J, Schwarz N, Fisher L, Potter M. Patient and staff usability of connection to health: a website for health behavior change for use in primary care**

**CONTEXT & OBJECTIVE:** Diabetes self-management support (SMS) is the help given to people with diabetes that enables them to manage their health on a daily basis. Diabetes SMS has been shown to improve diabetes outcomes and reduce lifetime health care costs, but SMS is inconsistently delivered in primary care. Connection to Health (CTH) is web-based program that can be used together by patients and clinic staff which incorporates the following SMS activities: brief health screening, goal selection, action planning, and goals follow up. While there is great interest in leveraging technology to deliver SMS, the introduction of new technology can present additional clinic adoption and implementation issues. This study evaluates staff and patient user experiences with the CTH web program during two stages of its development, with the aim of identifying and addressing usability issues that might affect its adoption in primary care settings.

**SETTING/POPULATION:** Staff involved in delivering diabetes SMS and adult patients with type 2 diabetes from primary care or community health clinics in the Bay Area.

**INTERVENTION/STUDY DESIGN:** Participants were asked to complete tasks on the CTH website (e.g., health screening or an action plan). Participants were observed completing the tasks and asked to think aloud while interacting with the website, and were interviewed for feedback on their experience.

**OUTCOMES/RESULTS:** Twenty three interviews were completed (12 patients, 11 staff). Staff and patients reported that they found the website useful and indicated a willingness to use the tools; the action planning tool was especially well received. Staff felt that the utility would be improved by incorporating individualized staff task lists and reminders to guide their SMS workflow. Patients reported and demonstrated a range of experience with computer-based technology and experienced problems using the health screening, in particular, due to deficiencies in the website functionality and layout, plus some difficulties in question comprehension. Addressing staff and patient feedback by revising the design demonstrated improvements in usability.

**CONCLUSIONS:** Web-based tools present a promising method for supporting SMS delivery in primary care. However, careful design that incorporates the requirements and experiences of representative staff and patient users is necessary to create usable SMS tools.

**Wolf J\*, Tsao S, Chirinos C, Huang B, DeVore D, Willard-Grace R, Hessler D, Thom D, Su G. Health coach-facilitated patient consultation with a pulmonary nurse practitioner improves guideline-based care for patients with COPD in an urban, underserved population.**

**CONTEXT & OBJECTIVE:** Chronic Obstructive Pulmonary Disease (COPD) affects over 14 million people and is the 3rd leading cause of death in the U.S. Socioeconomically disadvantaged individuals bear a disproportionate disease burden. As part of a randomized control trial of health coaching for COPD, we developed and implemented a model where health coaches facilitated a consultation by a pulmonary nurse practitioner (PNP) to improve care for patients with COPD.

**SETTING/POPULATION:** 192 patients were enrolled across seven San Francisco primary care network safety net clinics by April 2016. Of those, 100 were randomized to receive health coaching.

**INTERVENTION/STUDY DESIGN:** Two health workers were trained as health coaches and consulted weekly with a PNP regarding individual patient cases. The health coaches gathered information from the patient and the electronic medical record including use of COPD medications, COPD symptoms, exacerbation risk, smoking practices, co-morbid conditions and willingness to be referred for other therapies (pulmonary rehabilitation, physical therapy, specialist care, etc.). The PNP then made recommendations to the patient's primary care provider and the health coaches followed-up with patients regarding any changes to their treatment plan. Follow-up was ongoing for patients assigned to the intervention arm; however, a one-time health coach visit that included the PNP consultation was offered to patients assigned to the usual care (no health coach) arm after completion of the study.

**OUTCOMES/RESULTS:** Of the 192 patients in the trial, 76 had a consultation with a PNP via the health coach, of whom 45 had not had any other care from a pulmonary specialist during the 9 month intervention period. PNP recommendations made included changes to COPD medication management

clinicians, clinic providers, residents, nursing staff, FHC leadership and sheriffs. It meets monthly to identify problematic issues and action plans. Using a quality improvement framework, we have initiated PDSA cycles to gather incident data about situations requiring de-escalation and to test potential changes.

**OUTCOMES/RESULTS:** Our initial findings show:

- Significant institutional trauma exists for staff and patients regarding critical incidents and must be addressed.
- Patients often feel powerless, scared, misunderstood, and lack trust in the system. Power dynamics, stakeholder perceptions and roles also influence challenging patient interactions. Interventions to address patients in crisis must take this into account.
- Communication and relationships with the Sheriff's department can be aided by consistency of staff, shared language, and a protocol for unsafe situations.
- Data is needed regarding the frequency of high intensity (threat of violence) and low intensity (conflictual interactions) incidents, who handles them, and when security is contacted.
- Variation among staff and patients exists about whether the presence of sheriffs in the clinic heightens or reduces the sense of safety.

**CONCLUSIONS:** To provide excellent care within a safe environment, the FHC is recognizing, analyzing and addressing safety challenges that impact staff and patients. We are learning to balance the safety concerns of everyone by examining staff-patient, patient-patient, and staff-provider relationships and power dynamics. Prioritizing the patient perspective has brought an often neglected voice into our quality improvement work of enhancing safety in our medical home.

**Campora P\*, Fitzpatrick J, Fox E, Hoffman A, Reed R, Dehlendorf C. The impact of a contraceptive decision support tool on patients' experiences of care: results from a cluster randomized control trial**

**CONTEXT & OBJECTIVE:** Contraceptive method choice is a complex health care decision. Most women may choose from over ten methods with varying attributes, and individual needs and preferences depend on personal, interpersonal, social, and cultural contexts. Quality, patient-centered counseling can improve women's healthcare experiences and help them choose a method they use continuously. We developed a contraceptive decision support tool, My Birth Control, and evaluated the effect of the tool on contraceptive continuation and patient experience of care in a cluster randomized trial.

**SETTING/POPULATION:** Women ages 15-45 (n=749) were recruited from family planning clinics in San Francisco in 2014-2016. Recruitment occurred before appointments in which participants planned to talk about birth control.

**INTERVENTION/STUDY DESIGN:** Participants were assigned to interact with the decision support tool before their visit or receive usual care.

**OUTCOMES/RESULTS:** Assignment to tool use was not associated with continuous use at 7 months, but was significantly associated with a top score on the Interpersonal Quality of Family Planning Care (IQFP) scale, a patient-reported outcome measure for patient-centered counseling (66% intervention vs. 58% control, OR 1.43, CI 1.05-1.95). More intervention than control participants indicated complete satisfaction with information received about side effects during their visit (83% vs. 76%, OR 1.59, CI 1.10-2.29), and gave a top score on the Informed Decision subscale of the Decisional Conflict Scale (51% vs. 43%, OR 1.34, CI 1.00-1.80).

**CONCLUSIONS:** These findings indicate that patients who used the tool experienced more patient-centered counseling, were more satisfied with information about side effects, and felt better equipped to make an informed birth control decision. This effect on patient experience is uniquely important in the context of reproductive health, the history of which includes race- and class-based reproductive coercion and documented patient distrust of family planning providers. Broader use of the tool may improve patients' experiences of reproductive healthcare on a larger scale, and play a role in efforts towards reproductive health equity.

**Fox E\*, Reed R, Kimport K, Fitzpatrick J, Hoffman A, Dehlendorf C. Provider experience of a decision support tool to promote patient-centered contraceptive care**

**CONTEXT & OBJECTIVE:** Patient-centered care requires the buy-in of healthcare providers, whose application of knowledge and skills in this area are integral to the achievement of positive patient experiences. Interventions to increase the patient-centeredness of care should not negatively impact provid-

ers' experience of delivering this care. As part of an RCT investigating the effect of a decision support tool on patients' contraceptive use and experience of care, we examined the experiences of the providers who incorporated use of the tool into their work for this study, compared to their peers.

**SETTING/POPULATION:** Family planning providers (n=28) in 4 San Francisco Bay Area safety net clinics in 2014-2016.

**INTERVENTION/STUDY DESIGN:** Providers were randomized to use the tool with their patients (n=15) or to give usual care (n=13) with study participants. All providers completed pre- and post-surveys including the Maslach Burnout Inventory, a validated scale used with people in the caring professions. We conducted t-tests to compare study appointment times and change in burnout between the intervention and control arms. We also conducted post-RCT semi-structured interviews with intervention providers on their experience of using the tool. Thematic analysis of interview transcripts is ongoing.

**OUTCOMES/RESULTS:** There were no significant differences in change in burnout between intervention and control providers or in appointment time. Emerging themes of qualitative interviews include provider perception of increased patient knowledge about methods, side effects, and their own preferences, and increased provider ability to allocate time to counseling and other aspects of the appointment besides information sharing.

**CONCLUSIONS:** Quantitative results indicate that use of the tool in the workplace did not negatively impact providers' relationship with their work or add extra burden in terms of appointment length. In addition, preliminary interview results suggest that intervention providers had an actively positive experience of the tool. These findings indicate that our tool is commensurate with the work of providers and does not add undue complication or responsibility, while simultaneously supporting patient-centered care. Interview results in particular point to not only acceptability of the tool among providers, but benefits the tool it may offer to their delivery of care.

#### **Weber S\*, Oseguera-Bhatnager Y, Watson C, Oza K, Koester K. The POWER Health Program: A novel, online, multi-modal educational intervention for HIV-negative women**

**CONTEXT & OBJECTIVE:** PrEP (pre-exposure prophylaxis) for HIV prevention is effective, safe and works for women. It's estimated 468,000 U.S. women could benefit from PrEP. Uptake of PrEP among women has been low, estimated at around 19,000. Despite the many advances in HIV prevention and safer conception options, many HIV vulnerable women are unaware of and/or are unable to navigate medical systems to access to PrEP, and other HIV prevention options.

**SETTING/POPULATION:** The Positive Outcomes for Women Engaged in Reproductive (POWER) Health program consists of a web-based, multi-modal educational curriculum aiming to empower HIV vulnerable women to take control of their reproductive and sexual health.

**INTERVENTION/STUDY DESIGN:** The POWER Health team reaches their audiences using a web portal containing an array of materials such as patient and provider educational brochures as well as leveraging social media outlets in novel ways. Videos depicting interviews with sexual and reproductive health experts as well as videos with patients, writing blogs, and creating brochures using accessible language are key. All patient materials are reviewed by consumers and published in English and Spanish.

**OUTCOMES/RESULTS:** Since February 2015, the POWER Health program developed and posted 95 multi-modal educational pieces online. These pages reached 14590+ views across 5 continents. The most widely accessed pages included: "My TasP Conception Story" (543 views), "Ben Banks Thriving and Fatherhood with HIV" (1157 views) and "Sex Workers in Nigeria Need PrEP"(497 views). Viewers have engaged with the material in various ways, often expressing gratitude. One viewer wrote "I admire your courage," in response to a blog. Another replied "This gives me hope" about the possibility of PrEP.

**CONCLUSIONS:** POWER Health is reaching its intended audience of HIV- vulnerable women by championing the voices and stories of people who are often silent or hidden. POWER Health educational materials are raising awareness about sexual and reproductive health options as well as breaking down social isolation often felt by HIV vulnerable women.

#### **Hahn M\*, Schwartz R, Chu C. An innovative patient-centered post-partum treatment and adherence care model for women living with HIV**

**CONTEXT & OBJECTIVE:** Our goal is to pilot an innovative, patient-centered postpartum care model to improve ART provision and virologic suppression among women living with HIV (WLWH) in San Francisco. The postpartum period is increasingly recognized as a particularly vulnerable time for new

emotional health, and communication with provider.

**CONCLUSIONS:** Offering multiple modalities of contact enabled the health coaches to offer more patient-centered visits. Inhaler use and symptom awareness were two of the most notable aspects of the coaching delivered.

#### **Wing H\*, Adler N, Gottlieb L. Addressing patients' social and economic needs in medical care settings: a systematic review of the literature**

**CONTEXT & OBJECTIVE:** Healthcare-based interventions that help identify and address patients' social determinants of health (SDH) may reduce health care costs and improve both the quality and patient experience of care. Despite the increasing experimentation around social and medical care delivery integration, little information has been compiled across studies about the impacts of these interventions or their comparative effectiveness. To better understand the impacts of these activities, we undertook a qualitative systematic literature review to examine how often, how, and how well interventions bridging social and medical care have been evaluated.

**SETTING/POPULATION:** N/A

**INTERVENTION/STUDY DESIGN:** The review included literature from PubMed published in English between January 2000 and February 2017 that described evaluations of interventions specifically designed to address patients' basic resource needs in the context of medical care delivery. Additional studies were identified by hand searching bibliographies of retrieved articles and consulting local experts. To be included, an evaluation had to be based in the U.S.; address at least one SDH, e.g., housing, employment, or food insecurity; and be integrated with the medical care delivery system.

**OUTCOMES/RESULTS:** Our search yielded 4,965 references from which we included 67 studies of clinically integrated social or economic needs programs. Findings focused primarily on process measures and SDH-related outcomes. Specific outcome measures varied widely across studies. Only 7 studies met the GRADE standard for high quality.

**CONCLUSIONS:** Health care systems increasingly incorporate programs to address patients' social and economic needs in the context of care delivery. But evaluations of these programs to date are heavily weighted towards process and social outcomes and are often limited by poor study quality. Higher quality research that includes common health and health care utilization outcomes would advance our understanding of effective interventions in this rapidly expanding field.

#### **Hessler Jones D\*, Fisher L, Polonsky W, Bowyer V, Bauer L, Potter M. How to assess patient engagement in behavior change: A new patient-reported measure to inform clinical conversations.**

**CONTEXT & OBJECTIVE:** Up to 95% of the variation in diabetes outcomes result from disease-related behaviors that require self-management (Tuerk et al., 2008). Many patients struggle to reach disease-management goals and to change in self-management behaviors (e.g., diet, physical activity, and medication adherence). While related instruments, such as the Patient Activation Measure (PAM), are designed to evaluate general patient activation, there is currently no validated instrument to assess patient engagement around making or maintaining behavioral changes. To fill this gap, we developed and evaluated a new patient-reported measure for assessing participants' engagement and motivation for making changes in their diabetes management - the Patient Engagement in Behavior Change (PEBC) measure.

**SETTING/POPULATION:** 340 adults diagnosed with type 2 diabetes from a national diabetes registry.

**INTERVENTION/STUDY DESIGN:** Areas of patient engagement and motivation for making behavior changes in health management were developed from structured interviews and were then translated into 18 survey items. Participants, recruited from the national registry, completed an online survey. Items were submitted to an exploratory factor analysis (EFA). Construct validity was assessed by associations with diabetes distress, depression symptoms, medication adherence, and HbA1c.

**OUTCOMES/RESULTS:** EFA yielded three factors with three items per factor: (1) Willingness (interest in making a change;  $\alpha = .69$ ), (2) Worthwhileness (feeling that making a change is "worth it";  $\alpha = .62$ ), and (3) Ability (feeling able to make a change happen;  $\alpha = .74$ ). High ratings of Ability and Worthwhileness were significantly associated with lower diabetes-related distress, lower depression symptoms, and fewer missed medication doses. Higher reported Ability was also associated with lower HbA1c.

training period will end in July 2017 and then we will complete the research protocol to evaluate our training program and assess POCUS when compared to formal imaging. The pre-curriculum quiz to assess baseline knowledge had an average score of 31% correct. The pre-curriculum survey results were collected to subjectively assess the baseline perspectives of trainees. 100% had prior training, whereas 0% of respondents felt "comfortable" or "extremely comfortable" with their current POCUS skills. 80% "strongly agreed" that POCUS would improve the medical care of their patients. 80% "strongly agreed" it would decrease time to treatment and diagnosis. 100% anticipate using POCUS in their future practice "frequently (weekly)." 100% identified POCUS training for faculty as "important" or "extremely important."

**CONCLUSIONS:** Based on the pre-curriculum physician survey and quiz, current Family Medicine inpatient faculty do not feel qualified to utilize POCUS comfortably, despite having prior training. They do have a strong desire to obtain training in order to improve patient care.

**Collins Z\*, Kripke C, Ihle E, Mejia P, Cummins J. CART Services Consult Team: Interprofessional consultation services**

**CONTEXT & OBJECTIVE:** Transition age youth and adults with developmental disabilities are an underserved population with significant medical and behavioral health care needs. Barriers to accessing care are programmatic, physical, social and financial. The CART Services Mobile Consult Team was established in 2016 to support people with developmental disabilities. The CART Services team supports individuals and also system change through capacity development and training.

**SETTING/POPULATION:** The CART Services Mobile Consult Team is funded by six regional centers in Northern California. Regional centers administer California's entitlement to services and supports for people with developmental disabilities. Developmental disabilities are complex disabilities such as autism, cerebral palsy, intellectual disability and epilepsy.

**INTERVENTION/STUDY DESIGN:** We developed an interprofessional team including primary care, clinical psychology, psychiatry, nursing and family support. The team travels to client's homes to provide consultation and training to people with developmental disabilities and those who serve them. We provide support to health care professionals, service providers, families, researchers, and policy makers. We also provide phone and email consultation, and are working on establishing telemedicine consultation.

**OUTCOMES/RESULTS:** Common consultations include providing accommodations, working with non-traditional communicators, evaluating changes in behavior, and transitioning from institutional to community living. Common training topics include managing aggressive and self-injurious behavior, supported decision making and disability-sensitive goals of care conversations.

**CONCLUSIONS:** The CART Services Team is building the capacity of the health care system to serve adults with developmental disabilities. We have had a number of successes including completing 14 comprehensive consults for clients; providing training for health professionals and families in every geographical area in Northern California; writing a program design for enhanced behavioral supports homes, and disseminating our materials to help improve care.

**Chirinos C\*, Wolf J, Huang B, De Vore D, Willard-Grace R, Tsao S, Su G, Thom D. Health coaching for urban, underserved patients with Chronic Obstructive Pulmonary Disease (COPD)**

**CONTEXT & OBJECTIVE:** Chronic Obstructive Pulmonary Disease (COPD) affects over 15 million people and is the 3rd leading cause of death in the U.S. Previous studies indicate that health coaching for chronic diseases such as type 2 diabetes and hypertension results in improved health outcomes and patient experience. We applied this model to COPD in a randomized controlled trial and recorded the process and content of the health coaching provided.

**SETTING/POPULATION:** 192 English- or Spanish-speaking adult patients enrolled across seven primary care clinics in the San Francisco Health Network.

**INTERVENTION/STUDY DESIGN:** A randomized controlled trial of health coaching vs. usual care for patients with COPD over a 9-month period. Patients that received a health coach met regularly between medical visits to discuss COPD education and self-management skills.

**OUTCOMES/RESULTS:** Of the 192 patients enrolled, 100 received a health coach. Health coaches conducted 494 individual visits, took part in 382 medical visits, made 131 home visits, and contacted patients through 2948 phone calls during their enrollment in the study. Primary topics discussed with patients were COPD basics, inhaler technique, medication reconciliation, COPD action plan, triggers, energy conservation, pursed-lip breathing, smoking cessation, physical activity, cold and flu prevention,

mothers living with HIV, as it often exacerbates pre-existing challenges to retention in care and adherence, leading to decreased rates of virologic suppression.

**SETTING/POPULATION:** The project's population includes pregnant and postpartum WLWH enrolled in care at several San Francisco clinics, including HIVE, Family HIV Clinic (FHC), and the UCSF Women's HIV Program. All clinics are members of the Family Services Network (FSN), a multi-agency collaborative of inter-professional providers serving HIV-positive and HIV-affected women, infants, children, and youth.

**INTERVENTION/STUDY DESIGN:** FSN implemented three novel, multi-faceted, inter-professional interventions. First, we piloted the EMCT Stakeholders Comprehensive Care Workgroup's "HIV Postpartum Loss to Follow-up Risk Assessment Tool"(ERAT). This identifies a broad range of factors affecting postpartum adherence. Second, we implemented postpartum case conferences to discuss ERAT findings and develop individualized care plans to strengthen postpartum adherence. Finally, we implemented intensive case management for women identified as high risk by the ERAT; this included home visits to deliver patient navigation and adherence support alongside indicated medical and wrap-around services tailored to individual needs.

**OUTCOMES/RESULTS:** This project is in its 8th month of operation and data collection, with 22 women enrolled (5 are receiving intensive case management). Data collected include descriptive patient information, ERAT risk assessments, case conference tracking, and clinical outcomes including viral suppression, medication adherence, and retention in care. Goals are to ensure that all enrollees have an updated ERAT and comprehensive post-partum plan by delivery, and improvement in our 12-month postpartum viral load suppression rate from 31% to 45%

**CONCLUSIONS:** This innovative pilot is one of the first of its kind to focus on identifying and addressing needs of WLWH in the postpartum period. As this project unfolds we hope to identify the greatest needs and assets in this uniquely underserved population, and develop best practices to bolster patients' strengths to improve retention in care, medication adherence, viral suppression, and overall health and well-being.

**Vargas R\*, Patel A, Mar E, LaSarre M, Bohm V, Nip C. Translational science for water equity**

**CONTEXT & OBJECTIVE:** In 2014, we conducted a study into community perspectives on evidence-based approaches to reducing consumption of sugary drinks. We learned, among other things, that participants believed residents in low-income communities and communities of color in San Francisco will drink more water if they are provided: 1) increased access to bottle-filling stations 2) community relevant education about the safety of public water in SF and 3) assurance that the stations will provide uncontaminated water. We have UCSF faculty researchers studying barriers and facilitators to public water consumption. As part of our work to translate discovery into changes in practice that improve health outcomes, we shared our findings with local policymakers and community leaders to increase access and education for equity in water consumption in SF.

**SETTING/POPULATION:** We shared findings with local policymakers, City agencies and community leaders at City hall and in community meetings. We did this in partnership with policy makers, community leaders, civil servants and graduate-level learners from USF and UCSF.

**INTERVENTION/STUDY DESIGN:** We reviewed literature on the subject and shared local and national thematic barriers and facilitators to consumption of public water in low-income and immigrant communities of color in the US. We shared findings with stakeholders. We did this in partnership with policy makers, community leaders, civil servants and graduate-level learners from USF and UCSF.

**OUTCOMES/RESULTS:** As a result of sharing our findings with key stakeholders, several community-based health advocacy coalitions now have water equity as priority for their collective impact work. Additionally, we got the City of SF to commit new resources to 1) installation of 34 new school-based hydration stations, 2) installation of 19 new hydration stations in the public realm and 3) funded community-based education efforts in disproportionately burdened communities.

**CONCLUSIONS:** Multi-stakeholder partnerships help communicate and translate research findings into environmental and education change efforts. Opportunities for more progress on equity in access, education and consumption of public water persist.

**Gonzalez-Mendez E\*. Engaging and partnering with the communities we serve**

**CONTEXT & OBJECTIVE:** Family Medicine residents and physicians serve a fundamental role in serving safety-net populations in the increasingly diverse communities of California. Residencies have a unique

opportunity to engage with the communities to identify and address issues of access, health equity, diversity and social determinants of health. The Santa Rosa Family Medicine Residency (SRFMR) presents a replicable model for residencies to engage and partner with local communities through interventions that include community health forums, radio programs, mentoring and school-based programs.

**SETTING/POPULATION:** SRFMR residents provide care to a low-income population where 65% of patients are from a racial or ethnic minority and over 43% are immigrants.

**INTERVENTION/STUDY DESIGN:** For the last 24 years SRFMR has led and coordinated an annual Latino Health Forum with community partners, bringing together over 400 health, social services, education professionals, local politicians and high school and college students for a day-long learning collaborative focusing on social determinants, health equity and community health. SRFMR had added an annual Asian Pacific Islander Health Forum. Residents also participate in a weekly Spanish bilingual radio health program, Vida Saludable, moderated by a SRFMR faculty member. Residents also engage in high school and community college mentor programs and provide health education presentations at local low income schools.

**OUTCOMES/RESULTS:** The Health Forums have provided a unique opportunity for cross-sector professionals, community members and students to study and identify local opportunities to improve health equity and social determinants. Hundreds of local low-income minority high school, community and state college students have participated in the conference gaining insight and personal connections with residents and other local professionals to support them in pursuing health career opportunities. The Spanish-language radio and television programs reach thousands of immigrant Latinos in 10 counties in Northern California. Together, these interventions provide residents with important skills and experience that they can use in their careers to impact the health of patients and communities through community engagement and partnership.

**CONCLUSIONS:** Family physicians and residency programs are valued and respected by communities and can provide important leadership in collaborative learning and dialogue to address fundamental health equity and social determinant issues.

**Morris J\*, Stafford M, Teitel Y. Resident community activism: A model for fostering health equity and resident engagement**

**CONTEXT & OBJECTIVE:** For family medicine trainees, exploring the impacts of social determinants on patients' health is an integral component of clinical training; however it can be challenging to address the root causes of these issues (such as racism, evictions, deportation, and economic inequality) from within the walls of the clinic, potentially leading to burnout and frustration.

**SETTING/POPULATION:** The Do No Harm Coalition (DNHC) was founded by medical students, residents, and faculty at UCSF in order to provide a multidisciplinary forum for healers and health workers to collectively engage in local social justice issues through a public health lens. Thus far, the group has collaborated with community organizations to support campaigns against police brutality, displacement/gentrification, criminalization of homelessness, and for indigenous rights.

**INTERVENTION/STUDY DESIGN:** Given that the issues DNHC is engaged with are all issues facing our clinic patients, we hypothesized that participation in DNHC may have an impact on residents' clinical experiences and their overall satisfaction with residency. Brief open-ended surveys were distributed to active members asking what they viewed as the value of their participation, its impacts on their work, and the role of DNHC within their broader professional development.

**OUTCOMES/RESULTS:** Initial data suggest that residents associate participation in DNHC with increased satisfaction with their experience of residency, and that they identify a desire to continue to pursue this type of advocacy in the future.

**CONCLUSIONS:** Given the significant social challenges that impact the patient population we serve, providing avenues for residents to address the root causes of disease may help improve resident satisfaction, prevent burnout, and make a difference in combating negative social determinants while improving community health. Key aspects of this approach include solidarity with community organizations, organizing within the medical community, and participation in community-led mobilizations. We believe our experience can serve as a model for how residencies (and/or residents) can incorporate direct action on social determinants of health into their training and professional development.

**Rabbani J\*, Gonzalez R, Stecker T. The medical scholars leadership forum: describing a novel health promotion-based approach to increasing diversity in the medical workforce**

and 4) coaching training for the management team to sustain these changes. Coleman Associates will be working with the UCC for four months to continue this improvement work.

**OUTCOMES/RESULTS:** Data is currently being collected on lead times, provider cycle times, no-show rates, patient visits, clinic capacity, and patients who leave without being seen. During the first week after the four-day intervention, lead time was reduced by 12% (92 minutes to 81 minutes). The average number of patients seen per day was increased from 61 to 63. The UCC also plans to evaluate staff satisfaction.

**CONCLUSIONS:** Improving communication among front line staff, clarifying expectations, and increasing management team presence through coaching provider-nurse/MEA pairs likely improves clinic efficiency and productivity. Data suggests that there is potential to increase productivity to three patients per hour.

**Bondi-Boyd B\*, Wong M. Addressing food security in an FQHC**

**CONTEXT & OBJECTIVE:** Food insecurity affects approximately 14% of the United States population. People living in food deserts or without sufficient income are disproportionately affected. Our aim was to survey patients who receive care at the county clinic in Concord for food insecurity. We also surveyed providers at Concord clinic to assess their knowledge of food security screening tools and their knowledge of available community resources to treat food insecurity. We developed a plan to address food security for patients who screened positive and plan to re-screen patients for continued food insecurity after being provided with resources.

**SETTING/POPULATION:** Contra Costa Regional Medical Center, Concord site

**INTERVENTION/STUDY DESIGN:** We used a validated 2-question screening tool used widely by other FQHCs to screen 100 patients at the Concord Health Clinic, one of Contra Costa's ambulatory care sites serving a largely indigent population (1). A likert scale survey was used to determine provider knowledge of screening tools for food insecurity as well as provider comfort level in addressing food insecurity in their primary care clinics.

**OUTCOMES/RESULTS:** Our 2-question survey revealed that for the Concord Health Clinic, food insecurity was; 40%. We correlated that of those who we identified as food insecure; 50% also carried a diagnosis of Hypertension or Diabetes. We found that; 50% of providers did not know how to screen for food insecurity nor felt comfortable addressing it in their clinics.

**CONCLUSIONS:** The World Health Organization lists Food security as one of its Determinants of Health. We cannot treat chronic diseases like Diabetes, without also considering more prescient effects on our patients' health. We found that our patients in Concord clinic suffered from food insecurity at a rate four times higher than the national average. We found that by offering our patients food bank services and helping them to apply for and understand the benefits of CalFresh, their sense of food insecurity improved. We addressed provider barriers by offering two simple interventions and plan to re-assess our patients after these interventions.

**Ferguson M\*, Bergman K, Romito L, Tulshian P. Implementing a point of care ultrasound training program for inpatient faculty.**

**CONTEXT & OBJECTIVE:** Point of care ultrasound (POCUS) is quickly establishing itself as a crucial medical-care delivery tool, especially in low resource environments, where timely radiologic services are not readily available. Current Family Medicine faculty lack the training to perform bedside ultrasound. We seek to assess the reliability and impact of our POCUS curriculum.

**SETTING/POPULATION:** Five faculty members at Contra Costa Regional Medical Center, a county hospital, are enrolled in the training. After credentialing, they will enroll approximately 375 hospitalized patients with possible cardiac, pulmonary or deep vein thrombosis pathology as part of our IRB approved study.

**INTERVENTION/STUDY DESIGN:** We created a comprehensive training curriculum to establish clear standards for proficiency and credentialing that are currently lacking in Family Medicine and Hospitalist literature. After training completion in July 2017, the trainees will compare bedside ultrasounds to the results obtained from standard of care formal studies. We will use this data to assess if POCUS can decrease the need for standard imaging, decrease the time to diagnosis and decrease time to treatment. Additional subjective data is being gathered via survey to specifically evaluate provider perspective.

**OUTCOMES/RESULTS:** We are conducting an IRB approved study in clinical research. The current

than 17,000 page views. Separately, willingness from providers to join PleasePrEPMe.org depended on varied PrEP awareness. Having readily available capacity building assistance tools for providers not aware and/or comfortable prescribing PrEP was helpful. For counties with rural populations, low HIV incidence and/or low HIV prevalence, partnering with major influencers, like the State Office of AIDS, along with targeted outreach was key in our recruitment efforts.

**CONCLUSIONS:** PleasePrEPMe.org fills the demand of consumers seeking a willing PrEP provider and supports providers to become more PrEP-friendly. We will soon launch online-based chat navigation supporting potential PrEP users in accessing sexual health services. As PrEP uptake continues to increase, our lessons learned may be useful to others developing PrEP provider directories.

#### **Zaro C\*. Building a better care team: a team-based curriculum for ambulatory medicine**

**CONTEXT & OBJECTIVE:** Teams at our residency clinic had been loosely formed, and met together infrequently. Residents often worked with different MAs at each clinic session. Large numbers of unanswered patient calls and refill requests regularly accumulated. Residents did not know how to manage these. The objective of this project is to create and trial a curriculum for learning efficiency, quality improvement, population management, and medical knowledge about ambulatory care in a team-based setting. This aligns with the "Building Blocks of High-Performing Primary Care" model by Bodenheimer et al and our ongoing goal to become a patient-centered medical home.

**SETTING/POPULATION:** This pilot curriculum was started at the Natividad Family Medicine Residency clinic. We created eight care teams, each consisting of 3-4 residents, 2 medical assistants, 1 patient service representative, and 1 faculty attending.

**INTERVENTION/STUDY DESIGN:** The teams met twice during the 2-week R1 orientation, then monthly over six months. Sessions started with a 10-minute introduction/didactic, then teams broke off to do team activities at their workstations. Session topics included EMR and paper in basket management strategies, building a better teamlet huddle, creating team reference binders, managing team chronic pain and diabetes panels.

**OUTCOMES/RESULTS:** We observed improved resident ability to access their patient panels, and to navigate prenatal and chronic pain visits. Paper and EMR inboxes are now being better monitored by the teams. Team reference binders were created and are being used by each team. Cross-coverage now is managed within each team instead of the attending for the day. Rates of huddles are increased from 30 to 50%. However, three measures of efficiency and good teamwork did NOT change over 6 months: Patient cycle times, open charts past 48 hrs, and continuity rates with PCP.

**CONCLUSIONS:** Faculty leadership is essential; ours was limited by variable interest level and other competing responsibilities. MA presence during the sessions is needed. Because they were unable to attend on most occasions due to staffing limitations, we went out to them at their workstations. Valuable opportunities arose for resident peer teaching, strategizing, leadership. Resident response has been positive, and we will continue to evolve this curriculum.

#### **Liang C\*, Manois A. All Hands on Deck with the Team Dance: Using Practice Management Coaching to Improve Staff Communication and Productivity**

**CONTEXT & OBJECTIVE:** According to a 2013 American Academy of Family Physicians survey, physicians spend about 22 minutes per patient encounter. Given that primary care physicians provide comprehensive care, seeing three patients per hour in an urgent care setting is likely achievable. However, the Zuckerberg San Francisco General (ZSFG) Adult Urgent Care Center (UCC) has only been able to support a productivity level of two patients per hour. Through San Francisco General Hospital Hearts Grant funding, Coleman Associates, a practice management consulting firm, was contracted to provide support and coaching with their Rapid DPI TM (Dramatic Performance Improvement) interventions to promote communication among front line staff and improve clinic productivity.

**SETTING/POPULATION:** The UCC is located in San Francisco's Mission neighborhood and provides services to the county's urban underserved population. In collaboration with the ZSFG hospital administration, the UCC management team engaged all of its providers, nurses, and support staff in these interventions.

**INTERVENTION/STUDY DESIGN:** Coleman Associates worked directly with the UCC management and front line staff for four days to introduce and implement: 1) the "Team Dance" to improve support for providers to see patients, 2) "All Hands On Deck" to encourage proactive patient care, 3) data sheets for each provider-nurse/MEA pair to track lead times, provider cycle times, and patient visits in real time,

**CONTEXT & OBJECTIVE:** While the number of underrepresented minorities (URM) in U.S. medical schools has increased over the decades, the gap between URMs in the general population and in medicine has widened. Since URMs are more likely than non-Hispanic whites to have attended community college prior to matriculating into medical school, solutions at the community college level may effectively narrow this gap. The Kaiser Permanente Napa-Solano Family Medicine Residency Program (KPNFSFMRP) has partnered with Napa Valley College (NVC), which primarily serves URM students, to create a multi-faceted Medical Scholars youth development program that aims to increase the number of URM students who transfer to STEM (Science, Technology, Engineering, Math) majors at 4-year universities. One component of the program, the Leadership Forum, will be discussed in this presentation.

**SETTING/POPULATION:** NVC students who are enrolled in the Medical Scholars youth development program receive training and mentorship from the faculty, residents, and fellows of the KPNFSFMRP to implement health promotion initiatives in Solano and Napa Counties.

**INTERVENTION/STUDY DESIGN:** The Medical Scholars Leadership Forum has four major components: leadership and personal development training, research and medical career mentorship, community engagement training, and community project workgroups. Students design and implement two community-based needs assessments (focus groups and survey facilitation), which inform a student-driven health promotion program. After each of these initiatives, they present their experience and findings to Kaiser Permanente leadership and receive recognition for their efforts.

**OUTCOMES/RESULTS:** In December 2016, 12 NVC students (100% URMs, 70% father with no college education, 67% mother with no college education) participated in the inaugural Leadership Forum at the KPNFSFMRP. Under guided mentorship, students developed a focus group facilitator guide, identified topics for exploration and their target populations, and after implementation will present their needs assessment findings in May 2017. We will present the program structure and preliminary lessons learned at the UCSF Colloquium in June 2017.

**CONCLUSIONS:** Hospital-community youth development programs have the ability to provide applied health promotion training experiences to URM community college students. These opportunities can increase the competitiveness of students applying to STEM and medical programs while also providing meaningful mentorship experiences with health professionals in these fields.

#### **Tirado M\*, Ro P, Christina Z, Tirado S. Share the Pain-- A Residency Based Multi Modal Intervention to Help a California Safety Net Hospital Address New 11-15 Medicare Waiver Guidelines to Improve Care for Chronic Non Malignant Pain Patients and Reduce Emergency Department Utilization.**

**CONTEXT & OBJECTIVE:** The study objectives are to 1) increase patients' self management of their pain and anxiety through the use of pain support group visits, one-on-one breakouts, and automated mobile texting to reinforce material presented during group sessions, 2) enhance medical residents' knowledge of and ability to care for chronic pain patients, and 3) support our safety net hospital's efforts to meet new State and Federal Medicare 11-15 waiver requirements to improve the management chronic pain patients and reduce ED usage

**SETTING/POPULATION:** The study is centered at Natividad Medical Center in Salinas, California serving a predominately Latino immigrant and working class patient population. Medical Residents participating in the project are affiliated with the UCSF/Natividad Residency Program.

**INTERVENTION/STUDY DESIGN:** Conduct hospital based group visits for patients primarily referred by the emergency department and Residency clinics along with 3rd year medical residents. 12 Groups sessions adapted from curriculum developed by the UCSF/ San Francisco General Hospital Residency. Automated text messages, portable bio sensors and peer pain coaches are used to reinforce the material taught during the weekly group visits. Referrals and feedback to physicians on patient's progress in pain management are sent via Hospital's EPIC data base.

**OUTCOMES/RESULTS:** Participants learned non-pharmacological methods of pain management and sensed greater empowerment in managing their chronic pain and reducing opiate use in the long term. Medical residents report increased understanding and sensitivity to the needs of chronic pain patients as well as greater knowledge of pain management.

**CONCLUSIONS:** A multi modal hospital based approach to chronic pain self-management can complement the efforts of primary care physicians to help patients reduce their reliance on chronic pain medications and ED use as well as improve the quality of their lives.

**Diana Coffa\*, Claudia Mooney\*, Ila Naeni, Julia Shaver, George Saba, Georgia Sleeth. A residency curriculum on the 10 building blocks of high performing primary care: educating tomorrow's innovators**

**CONTEXT & OBJECTIVE:** For family medicine to remain viable, primary care practices must transform to better meet the needs of patients, providers, and staff. The path to primary care transformation has been well defined by the Center for Excellence in Primary Care, which has identified the 10 key building blocks for transformation and 3 additional building blocks for educational settings. These building blocks are being implemented in clinics around the country, but a residency curriculum based on the building blocks has not yet been developed. To advance primary care transformation, we must educate tomorrow's physician leaders about the principles of primary care transformation and prepare them to innovate new, improved models of care.

**SETTING/POPULATION:** Led by FCM and with funding from a federal HRSA grant, the UCSF Family and Community Medicine residency at ZSFG, the UCSF FCM residency at Fresno, the UCSF Primary Care Internal Medicine Residency, and the UCSF pediatrics department partnered to develop a curriculum based on the 10 building blocks that could be used in all four residencies and nationwide.

**INTERVENTION/STUDY DESIGN:** We developed a robust menu of curricular materials designed to teach the key principles of primary care transformation over the course of 3 years. We have developed 85 different PowerPoints, workshop guides, and seminars and have recently made them all available online so that other residency programs around the country can use them. These materials provide over 100 hours of curricular content and our website provides instructions and examples of how to implement the curriculum in a variety of residency settings.

**OUTCOMES/RESULTS:** The principles of practice transformation can be taught through a variety of formats: lectures, workshops, experiential practice with CQI projects, and many other modalities. These curricular modules can be implemented in many different residency settings.

**CONCLUSIONS:** Models of primary care delivery will continue to evolve. Population needs will change, new technologies will arise, and the context of care will never be stagnant. By training residents in the basic principles of transformation, educators can help them become innovators with the skills to lead our field in meeting the changing demands primary care.

**Yang D\*, Sansone J, Tse W, Chen E. RN Chronic Care Visits: Interdisciplinary approach to standard work development for hypertension care**

**CONTEXT & OBJECTIVE:** Hypertension is the most common diagnosis among the San Francisco Health Network Primary Care (SFHN PC) patients. For many years, BP control rates remained steady at 60%, substantially below the national Medicaid 90th percentile of 71%. Hypertension control became an improvement focus with a goal of 70% by June 2017 from baseline of 65% in January 2015. SFHN PC used QI and Lean methodology to understand, develop and test interventions in 2015-2016. Recognizing that team-based care is effective for hypertension management, RN role development became a priority in hypertension QI efforts

**SETTING/POPULATION:** The 18,000 hypertensive patients are cared for by 10 community health centers and 4 academic-teaching, hospital-based clinics that make up the SFHN PC.

**INTERVENTION/STUDY DESIGN:** A one-day improvement workshop brought together representatives across all 14 clinics: frontline staff, managers, and other departments such as EHR specialists, compliance, patient financial services. Collectively, the team devised standard work for RN chronic care visits. Four Primary Care sites were selected to test the new standard work through iterative PDSA cycles and refinement of standard work over 3 months (10/2016- 12/2016). The pilot ensured the standard work was adapted to local clinic constraints and was integrated with other clinic workflows. In November 2016, centralized hypertension training taught RNs to titrate 3 medication classes used for hypertension treatment; this augments the hypertension medication algorithm used by providers and pharmacists.

**OUTCOMES/RESULTS:** For the pilot, a preliminary pre-post analysis of 222 RN visits (n=186 patients) occurring between 10/2016-11/2016 showed increase in BP control rate of 67% post-RN visit from pre-visit rate of 23% for the same group of patients. Further observations showed that PCP only needed to provide consultation for RNs and writing for prescriptions, approximately 30% of visits, instead of providing individual face-to-face visits for every patient.

However many participants also incorrectly identified first repeating provider instructions (46%) and checking for understanding with a close-ended question (30%) as best practices.

**CONCLUSIONS:** CEPC's health coach trainings are well received. Participants come away with strong confidence in health coaching skills and are aware of several best practices. More nuanced, communication-style best practices may need additional emphasis in future trainings. Future evaluations should explore whether participant confidence and skills change over time and to what extent participants use health-coaching skills in practice.

**Vener M\*, Borok S, Johnston R, Brode E, Lui Y, Hammer, H. A pivotal moment: optimizing "best fit" matches between students and preceptors in a longitudinal third-year clerkship**

**CONTEXT & OBJECTIVE:** Third-year Family Medicine clerkships play a pivotal role in exposure to primary care, role model work with underserved patients, and often impact students' specialty choice. In the new longitudinal FCM 110 clerkship format, students attend clinic once every other week for 44 weeks. Given the substantial time investment for students and preceptors, we sought to optimize "best fit" matches to maximize mentorship/role modeling and promote career interests in FM.

**SETTING/POPULATION:** Third-year UCSF medical students.

**INTERVENTION/STUDY DESIGN:** We queried students about their preference for patient population, practice setting, additional interests and whether they had engaged in primary care interest activities in the first 2 years of med One hundred forty-five students replied. Most students were interested in academic (45%) or underserved (33%) practice settings. Fewer requested HMO's (10%) or private practice (5%). For patient populations, students were interested in practices focused on families (28%); adults (30%); children (19%), women (8%) and geriatrics (6%). In an open-ended question, we asked students about additional interests. Students mentioned HIV care (11%); sports medicine (8%); refugee health (5%); integrative health (8%); Latina patients (4%); adolescent health (3%); LGBTQ care (3%); transgendered care (1.5%); full spectrum FM (2%); substance use (2%); chronic care (1.5%); community health (1.5%); practice transformation(1.5%) and palliative care (1%). Twenty-four students (17%) reported participation in primary care interest activities in first or second year.

**CONCLUSIONS:** Our data suggests that entering third year, a high percentage of students are interested in underserved care and academic FM. Vital opportunities exist to promote these interests in the clerkship. Unfortunately, we often lack "best fit" clinical placements. Many family physicians enjoy teaching. However, limitations of space, time, and patient access -- as well as lack of compensation for teaching, prohibit many sites from accepting students. DPH estimates a cost of \$214,500/ year to precept 20 students in their clinics. Committing to teaching requires individual recruitment as well as institutional advocacy. Placing students at only one site all year raises the stakes in finding optimal student-preceptor matches. Recognizing strong student interest in underserved and academic FM provides motivation to continue to advocate for greater placement in these setting.

**Weber S\*. Lessons learned from launching PleasePrEPMe.org, a crowd-sourced, location-based, searchable statewide California PrEP Provider Directory to connect consumers interested in PrEP to PrEP-friendly providers**

**CONTEXT & OBJECTIVE:** According to the U.S. Centers of Disease Control and Prevention, one in three primary care doctors and nurses have not heard about pre-exposure prophylaxis (PrEP). While efforts are underway to train providers and develop policies to increase PrEP access, there is consumer demand to find PrEP-friendly providers.

**SETTING/POPULATION:** PleasePrEPMe.org, a crowd-sourced, location-based, searchable statewide California PrEP Provider Directory, launched November 2015 connecting potential PrEP users to willing providers. The website was developed in collaboration with regional partners. Queryable by zip code, city or location, the website scans the directory of 280 clinics mapping the nearest within a customizable mile radius. The website offers resources to empower consumers and support providers.

**INTERVENTION/STUDY DESIGN:** We solicited user input using heuristic reviews and surveys throughout the development process to ensure the website's look, feel and messaging were consumer-oriented. We invested significant skill, time and resources for building the searchable database and website design to meet consumer desire for a simple search process and information structured in a user-friendly format.

**OUTCOMES/RESULTS:** To date, more than 6,500 visitors have visited PleasePrEPMe.org with more

repeat ultrasounds or HROB consultations who had not previously been referred by their resident provider. The senior residents involved in the HROB review process have learned skills in population management and have expanded their knowledge of HROB conditions. Finally, we are in the process of surveying current residents about how the HROB oversight team has helped, hindered, or could better support their OB education.

**CONCLUSIONS:** HROB patients are frequently cared for by resident physicians. An oversight team is one way to ensure residents learn standards of care for managing common HROB conditions and ensures proper care for these patients. Now that our system is in place, it may be possible to track patient outcomes to determine if and how we are improving patient care.

**MacKenzie T\*, Parad J\*, Lai L\*, Haddad A\* Subbaraj L\*, Takimoto S\*. A student-run outreach and vaccine administration clinic provides longitudinal workplace-based learning and improves patient care**

**CONTEXT & OBJECTIVE:** A key element of UCSF's new educational curriculum is the clinical microsystem clerkship (CMC) in which students learn quality improvement and clinical skills through workplace-based longitudinal learning. A student-run vaccine clinic provided the opportunity to meaningfully increase influenza vaccination uptake and progress toward mastery in all UCSF MD graduation competencies.

**SETTING/POPULATION:** Five students assigned to UCSF Family Medicine at Lakeshore piloted and refined a student-run vaccination clinic for primary care patients at the clinic.

**INTERVENTION/STUDY DESIGN:** A primary care faculty physician worked with UCSF leadership to approve the clinic and student training process. The student-run clinic ran for 3 hours each week during influenza season. For each patient visit, students reviewed the electronic medical record and checked for health maintenance notifications. They then administered the recommended vaccines and addressed additional patient concerns. Students also attended to clinic workflow and conducted Plan-Do-Study-Act (PDSA) cycles for continual improvement.

**OUTCOMES/RESULTS:** Ongoing PDSA cycles increased clinic efficiency and the student-run clinic contributed to an increase in influenza vaccination uptake from 2015 to 2016. Additionally, students linked learning experiences within the student-run vaccine clinic to all 7 UCSF MD competencies.

**CONCLUSIONS:** A student-run outreach and vaccine administration clinic empowers students to make meaningful contributions to high-quality health care while learning quality improvement and clinical skills.

**Knox M\*, Magana C, Sell A, Willard-Grace R. Participants Highly Recommend Health Coach Trainings from UCSF Center for Excellence in Primary Care**

**CONTEXT & OBJECTIVE:** The Center for Excellence in Primary Care (CEPC) is a leader in health coach training. Since 2014 alone, CEPC has trained more than 1,200 participants. CEPC's interactive curriculum emphasizes communication techniques to help patients build the knowledge, skills, and confidence required to manage their chronic conditions and improve their health. Previous evaluations have collected general feedback from individual trainings. This is the first evaluation across multiple trainings to assess participant satisfaction, confidence, and understanding of the curriculum.

**SETTING/POPULATION:** Participants took part in one of seven CEPC health-coaching trainings held between August and December 2016 (n=103). Different organizations sponsored a training session for their staff members: an independent practice association, federally qualified health centers, and a county-based public health system. One "open enrollment" training included individuals from different organizations.

**INTERVENTION/STUDY DESIGN:** All participants were emailed an evaluation survey within one week of completing the CEPC health coaching training. 103 participants responded to the survey, which was required to receive a certificate of completion for the course.

**OUTCOMES/RESULTS:** All participants reported they would recommend this training to a friend in the health care field. Two-thirds of participants rated the training a 9 or a 10 (scale from 0, worst, to 10, best). Most participants reported strong confidence (5 on a scale of 1-5) in ability to listen to patient concerns (63%), confirm patient understanding (64%), build relationships with patients (73%), and support other care team members (69%). More than 90% of participants correctly identified the health coaching best practices of first asking patients about knowledge of their health condition, asking permission to discuss health concerns, and checking for understanding with an open-ended question.

**CONCLUSIONS:** Additionally, RN visits allowed for development of alternative care plans focused on home BP monitoring and lifestyle changes, both of which encourages active patient engagement with their health. The structure of the RN visits also permitted better assessment of medication adherence and troubleshooting with pharmacy to ensure patients have the correct medications.

**LEE, E\*; BRODE, E; VENER, M. Team-based care: electronic simulation of a primary care team helps learners appreciate everyone's role.**

**CONTEXT & OBJECTIVE:** Team-based care is an innovative strategy for providing high quality primary care for patients and greater efficiency for the clinical team. Unfortunately, because most students spend a limited amount of time on outpatient clinical teams, it is often difficult for learners to see the "big picture" and appreciate the potential impact for team-based care in optimizing primary care.

**SETTING/POPULATION:** We piloted our project with 25 third-year UCSF medical students.

**INTERVENTION/STUDY DESIGN:** We developed an electronic simulation of a clinical team so that learners could gain insight into the benefits of team-based care for patients, staff, providers and health care system. In our virtual team ("The A Team"), the number of hours that the total team works is fixed, as are the number of patients and their health needs. The student adjusts each team members' time to optimize workflow, and patient/team satisfaction. For instance, if students assign all chronic care patients to see an MD or NP, they run out of available hours (red frown face appears on screen) and quality of care suffers. However, if learners delegate some chronic care follow up and prevention to the MA and/or health worker, all chronic care patients can be seen, receive follow up/coaching and prevention (green happy face). Using a written survey, we assessed our intervention with qualitative and quantitative methods.

**OUTCOMES/RESULTS:** Written feedback from students suggested that the simulation was valuable and helped increase their understanding of team member roles (eg medical assistant), as well as the function of the team overall. Constructive suggestions were to teach more about team roles in advance and to make the interface more intuitive

**CONCLUSIONS:** Next steps are to implement this simulation and discussion materials for all third year students, and potentially FM interns as well. We hope that through these simulations, students will be more astute observers of the team-based care they do (or do not) see in clinical preceptorships and can engage with preceptors and staff by asking thoughtful questions and learning more about future innovations. By engaging students and preceptors in these discussions, we hope to inspire students as future "change agents" in primary care innovation.

**CONCLUSIONS:** Family physicians are the ideal clinicians to assess medical decision-making capacity in patients with behavioral illness. References: Tunzi M. Can the patient decide? Evaluating patient capacity in practice. *Am Fam Physician* 2001; 64(2):299-306. Tunzi M, Spike JP. Assessing capacity in psychiatric patients with acute medical illness who refuse care. *Prim Care Companion CNS Disord* 2014; 16(6):doi:10.4088/PCC.14br01666 Tunzi M. Another kind of diversity: honoring—or not—the decisions of people who refuse care. *Am J Bioethics* 2016; 16(2):78-79.

## ABSTRACTS: Posters

### **Lu, C.\*; Smith, C.; Nguyen, R. Providing medically tailored meals to patients with congestive heart failure on hospital discharge.**

**CONTEXT & OBJECTIVE:** Food insecure seniors are 57% more likely to report an experience of congestive heart failure. Addressing food insecurity has been shown to improve diabetes outcomes and decrease health care utilization. However, though heart failure remains an important cause of hospital admission and readmission, the effect of food insecurity on heart failure is not well understood.

**SETTING/POPULATION:** Adults hospitalized at the Zuckerberg San Francisco General Hospital for congestive heart failure exacerbation were recruited for the intervention if they spoke English or Spanish, were housed, and were noted to have the cognitive capacity to consent to a research study.

**INTERVENTION/STUDY DESIGN:** The participants were randomized to a waitlist control or an intervention where they were referred to Project Open Hand to receive a 5-month tapered food delivery when they were discharged from the hospital, starting at heart healthy provisions for 3 meals a day and tapering to 1 meal per day by the last 2 months of the intervention. Dietitian counseling and heart failure education was also provided each month.

**OUTCOMES/RESULTS:** The primary outcomes examined were heart failure quality of life, as measured by the Kansas City Cardiomyopathy Questionnaire and other quality of life scales, and health care utilization after the index hospitalization. The secondary outcomes included heart failure knowledge, dietary changes, medication adherence and depressive symptoms.

**CONCLUSIONS:** This study began enrolling patients in March of 2017. It demonstrates the potential for community partnerships to advance medical knowledge and health disparities research. It also highlights the importance of interdepartmental and cross-disciplinary partnerships for successful implementation and sound program design.

### **Vener, M\*.; Sneden, J; Patanwala, M; Cocohaba, J; Tapia, M; Labugen, R, Jain, S. Stronger together: promoting UCSF primary care leadership by uniting student-led clinics.**

**CONTEXT & OBJECTIVE:** Through UCSF's student-led clinics, early students care for underserved patients. Evidence indicates many learners cite student-led clinic experiences as instrumental in supporting career interests in underserved and/or primary care. UCSF's three clinics include: the UCSF Students' Homeless Clinic in SoMa which serves homeless patients; Clínica Martín Barró (CMB) in the Mission which serves Latino immigrants and Mabuhay Health Center (MHC) in SoMa which serves Filipino patients. Since 1991, the clinics have operated independently. We hypothesized that uniting clinics' leadership would: 1) promote synergy of clinical missions; 2) streamline logistics; 3) encourage collaboration in challenging issues; 4) advocate for primary/underserved care.

**SETTING/POPULATION:** Annual volunteers include nearly 300 UCSF students (Medicine, Dentistry, Nursing and Pharmacy); 135 undergraduates (SFSU, USF and UCB); and over 60 preceptors. UCSF students volunteer at the Homeless Clinic (160/year), CMB (80/year) and MHC (47/year).

**INTERVENTION/STUDY DESIGN:** We conducted a needs assessment by collecting each clinic's demographics, visit numbers and types, volunteer roles, scope of practice, clinic organization, and funding sources. We identified unique and common strengths, challenges and best practices. We met with UCSF's Dean, Vice Dean, and DFCM Chair to assess the role for student-run clinics. We also met with UCSF's legal team to clarify liability and volunteer roles.

**OUTCOMES/RESULTS:** Annual patient visits to sites include Homeless Clinic (1000), CMB (300), and MHC (200). Benefits common to all clinics included: 1) positive impact to students of working with underserved patients; 2) preceptor role modeling; 3) health education and counseling for patients; 4) UCSF students serving as role models for pre-health student volunteers who are often from underrepresented backgrounds. Shared challenges included: 1) Referring patients for primary and specialty care; 2) Onboarding of non-UCSF student volunteers; 3) Documentation of patient care efforts.

**CONCLUSIONS:** By collaboration with the Primary Care Leadership Academy (PCLA), individual clinics more effectively advocated for their long-term role at UCSF. Based on our initial work, we started the PCLA/Student Service Learning Executive Board. Early efforts of the Board include improving communication, enhancing patient care documentation, and standardizing volunteer onboarding. The Board's long-term goals are to enhance students' efforts to provide clinical care and advocacy for underserved and primary care.

the US, the Gail model, now includes race as a factor, but not religion. However, two highly rated websites, including Harvard's calculator, do include Jewish ancestry in the calculation. The NCCN guidelines list Ashkenazi origin as a criterion for BRCA screening in patients diagnosed with breast or ovarian cancer. Additionally, physicians are often hesitant to ask patients about religious practices and spirituality. A 2016 study reported that only 51.8% inquired about their patients' beliefs.

**CONCLUSIONS:** Using Ashkenazi Jewish data in breast cancer risk assessment as an example, we contend that religious screening questions should become standard practice in primary care clinics as personalized medicine evolves. We offer this review of AJ ancestry and breast cancer screening to aid physicians in engaging with patients who seek personalized screening and care.

### **Beach, S\*, Hill-Sakurai, L. Location, location, location: do trainee patient presentations delivered in the exam room improve encounter efficiency in the ambulatory setting?**

**CONTEXT & OBJECTIVE:** Medical educators in the ambulatory setting face increased time demands that limit patient access and provider compensation. Trainee presentation location has been suggested as a means of optimizing visit efficiency. We aimed to improve the efficiency of outpatient visits involving third year medical students (MS3s). Using the Institute for Healthcare Improvement's Model for Improvement, we employed Plan-Do-Study-Act (PDSA) cycles to evaluate the impact of trainee presentations delivered in the exam room on encounter length. Our specific aim was to reduce the median encounter length by 30% with relocation of trainee presentations to inside the exam room.

**SETTING/POPULATION:** This project was conducted at the UCSF Lakeshore Family Medicine Center, a primary care office serving patients of all ages. Amongst those involved in data collection were 8 family medicine attendings, 5 MS3s, and 47 patients.

**INTERVENTION/STUDY DESIGN:** First, we mapped the current appointment structure in which trainee presentations are delivered outside the exam room. We then measured the median length of such encounters. Next, we used PDSA cycles to investigate the impact of trainee presentations delivered in the exam room on encounter length. Feedback surveys were distributed to all patients, attendings, and MS3s involved in data collection.

**OUTCOMES/RESULTS:** Pre-intervention data based on 22 patient visits revealed that the median encounter length of appointments with out-of-exam-room trainee presentations was 56.5 minutes. Results from the first PDSA cycle involving 26 patient visits found that the median encounter length of appointments with in-exam-room trainee presentations was 42.5 minutes, a 25% decrease in encounter length. Feedback survey data collection is ongoing. Preliminary survey data showed that 94% (16/17) of pre-intervention patients and 88% (22/25) of intervention patients felt that medical students positively influenced their clinic experience.

**CONCLUSIONS:** Trainee presentations delivered in the exam room measurably reduced the length of patient encounters involving MS3s at the UCSF Lakeshore Family Medicine Center. Moving forward, we will expand this study to include more clinic sites and investigate the impact of relocating trainee presentations on the quality of medical student education.

### **Lund E MD, MPH; Clinite K\* MD; Rhodes J\* MD MPH; Zwerdling M\* MD. Tracking high risk obstetric patients to support resident education and patient care.**

**CONTEXT & OBJECTIVE:** Many obstetric (OB) patients are medically or psychosocially complex and considered high risk. Often these patients are cared for by resident physicians in training. Our residency has developed a way to track high risk obstetric (HROB) patients in our clinic as a means to guide residents overseeing their care. The goal of this system is to support resident education and ensure evidence-based patient care.

**SETTING/POPULATION:** The team of reviewers includes three second year residents and the Maternity Care Director from Santa Rosa Family Medicine Residency. They oversee a list of HROB patients from Vista Family Health Center.

**INTERVENTION/STUDY DESIGN:** We have created a system in which senior residents review the OB charts of patients that have been deemed high risk every month. We ensure that patients are receiving adequate care for their high risk condition in addition to routine prenatal care. Additionally, all charts of new OB patients are screened for high risk criteria and added to the list.

**OUTCOMES/RESULTS:** Many more HROB patients have been identified since developing this oversight team. Additionally, more patients have been referred to our HROB and ultrasound clinics. Some patients needing increased monitoring were identified and subsequently referred for antenatal testing,



which is older, more non-English speaking, and with more chronic illness since implementation of the ACA. Further research is needed to correlate these findings to other SNCs in the state, but these results suggest that governmental agencies cannot simply look at the reduced patient volume when determining the resources that SNCs require. SNCs may require more per-patient funding to offer quality health care, as English-speaking patients and younger patients with fewer chronic illnesses are absorbed into conventional health clinics. Likewise, the effects of governmental healthcare policy on the SNC environment must be taken into account when considering impending ACA changes.

**Murphy, Nicholas, MPhil\*;** Mars, Sarah, PhD; Bobashev, Georgiy, PhD; Ciccarone, Daniel, MD, MPH. **Developing an agent-based model to link opioid and heroin market conditions to opioid-related medical outcomes.**

**CONTEXT & OBJECTIVE:** Heroin use is on the rise in the United States and is causing medical problems within communities of injection drug users (IDUs). Medical problems related to heroin use include infection, such as HIV and HCV, and overdose. Heroin is a dynamic and variable drug " differences in source, composition, purity and novel chemical forms or mixtures, broadly defined as source-form, alter the structural risk environment for IDUs.

**SETTING/POPULATION:** As a result of international market forces, the eastern U.S. heroin market has been historically dominated by Colombian-sourced "Powder Heroin" (PH), while the western U.S. market primarily consists of Mexican-sourced "Black Tar Heroin" (BTH). HIV prevalence is relatively higher in IDU populations of eastern U.S. cities than in western cities when compared to HIV prevalence in MSM communities.

**INTERVENTION/STUDY DESIGN:** The source-form of heroin affects drug preparation, hygiene techniques and self-administration rituals including the chosen paraphernalia, sequence of injection, and anatomical injection site. Ethnographic work has found BTH is a resinous compound that appears to require a larger volume of water and longer heating to dissolve into solution, clogs up syringes and dirties other paraphernalia requiring greater syringe turnover. This may protect users from HIV or HCV infection. In contrast, powder heroin is reportedly soluble in cold water, does not clog syringes as frequently or dirty paraphernalia and thus may carry an increased risk of viral transmission.

**OUTCOMES/RESULTS:** Laboratory experiments confirm that heating fluids to 65 degrees C will inactivate HIV with 5-10 seconds of direct heating; HCV is also inactivated at 65 degrees C, but the duration of heating required for inactivation has yet to be determined. Ethnographic field work and analysis of injection sequences confirms that users consistently heat their solution longer in San Francisco, CA than in northeastern US cities, e.g., Lowell, MA and Baltimore, MD, and that SF users always heat while users in the eastern cities will sometimes skip the heating step.

**CONCLUSIONS:** The differences in source-form of heroin and the resulting variation in drug solution heating affect viral viability and may contribute to the lower HIV prevalence in IDU populations in the western U.S.

**Lund, E\*;** Matel, J; Gurule, S; Coutinho, A, Morse, A.\*, Nath, K., Froude, C. **The time and place for inquiring about religion in medicine.**

**CONTEXT & OBJECTIVE:** Physicians must know intimate details about their patients' lives to provide the highest quality care that is tailored to patients' biopsychosocial contexts. Personalized medicine has introduced family genetics and race into clinical guidelines. For example, JNC-8 tailors hypertension treatment regimens to black patients. Current cancer screening guidelines are changing as well and our patients (up to 59%) are searching online for health information. The goal of our literature review is to stress the importance of assessing religion in addition to race, and to better prepare providers to participate in shared decision making.

**SETTING/POPULATION:** We found an example of the utility of this practice in the increased incidence of certain genetic conditions in Ashkenazi Jewish (AJ) people. The estimated prevalence of BRCA is 0.2-0.3% in the general population of women vs. 2.1% in the population of Ashkenazi Jewish (AJ) women.

**INTERVENTION/STUDY DESIGN:** Our review examines the unique circumstances correlating AJ ancestry with breast cancer risk in past decades, how this relationship waned from some methodologies, and now is reemerging with BRCA testing. We also review the "founder" effect and the risks of assuming phenotype in AJ people.

**OUTCOMES/RESULTS:** Our analysis, inspired by recent articles comparing available online breast cancer risk calculators, notes a conspicuous discrepancy in the family history section, specifically concerning religion and spiritual beliefs. The most commonly used guideline for breast cancer assessment in

**Rorvig, L; Brode, E; Vener, M\*. Three clinical pearls: disseminating wisdom about your area of expertise within Family Medicine.**

**CONTEXT & OBJECTIVE:** Diversity is a true highlight of family medicine (FM). Unfortunately, because of the limited time in clerkships, it is difficult to expose to FM's rich diversity of patient populations, practice settings, and role models. The traditional educational model assumes students primarily learn from the individual preceptors with whom they work directly. However, students could potentially benefit from exposure to their own preceptor as well as others with different skills. We conducted a needs assessment of third-year students to assess what areas of expertise they knew about within FM.

**SETTING/POPULATION:** We piloted our intervention with twenty five third-year UCSF medical students.

**INTERVENTION/STUDY DESIGN:** Inspired by the concept of "crowd sourcing," we used electronic technology to expand the number of preceptors who could impact each student's education. We queried preceptors: "If you could teach medical students something valuable from your practice, what would it be?" Preceptor interests included contraception, mental health, global health, substance use, HIV care, prison health, geriatrics, substance use, racism, and social justice. We created a curriculum called "Three Clinical Pearls" for topics of interest. Each "Three Clinical Pearls" module consists of a brief online reading, a video by a preceptor, and online self-assessment questions. Each module takes 20-25 minutes for students to complete.

**OUTCOMES/RESULTS:** In a written survey prior to the intervention, a majority of students could identify geriatrics as a field within FM. However, fewer than one third identified other areas such as family planning, HIV care, and integrative medicine. Students most commonly cited their preceptors as the source of learning about FM scope. Open-ended questions after students completed modules revealed that students felt positively about learning more about areas of expertise within FM.

**CONCLUSIONS:** The "Three Clinical Pearls" curriculum creates an opportunity for students to learn from the rich diversity of preceptors. In addition, participating preceptors feel more engaged in teaching and excited to share their experiences. "Crowd sourcing" is an innovation that can enhance the education of an individual student by expanding the pool of preceptors. Relatively simple digital technology can allow students and preceptors to share their wisdom more broadly and may benefit national recruitment of FM physicians.

**Kevin Selby, Martha Michel, Ginny Gildengorin, Leah Karliner, Rajiv Pramanik, Valy Fontil, Michael Potter. Assessing hypertension control in three large health systems using electronic health record data: can we find targets for improvement?**

**CONTEXT & OBJECTIVE:** Despite several decades of results and guidelines, only 50 percent of hypertensive Americans are at their target blood pressure, leading to significant morbidity and mortality. Data from electronic health records (EHR) can allow for learning between health systems and the identification of local best practices, but data sharing is fraught with political and technical difficulties. The San Francisco Bay Collaborative Research Network (SFBayCRN) created the Hypertension Data Collaborative (HDC) to share EHR data across health systems in order to better understand current hypertension practices and promote collaboration.

**SETTING/POPULATION:** Three health systems (Contra Costa Health Services (CCHS), University of California San Francisco (UCSF), and San Francisco Health Network (SFHN)) joined the HDC and shared de-identified, individual patient EHR data for all adults aged 18 to 85 who were seen at least once at a primary care clinic during a two-year period between 2014-2016.

**INTERVENTION/STUDY DESIGN:** A retrospective cohort was created with patient demographics, insurance status, diagnoses, anti-hypertensive medications, and the 3 most recent outpatient blood pressure readings.

**OUTCOMES/RESULTS:** Extensive preliminary work was necessary at each site to build trust and gain buy-in from leadership. Data were obtained and harmonized for 69,409 patients from CCHS (41%), 47,796 from UCSF (28%), and 52,588 from SFHN (31%). A total of 53,133 (31%) had a diagnosis of hypertension on their problem list or at least one billing code. The sample is diverse, with 32% non-Hispanic White patients, 15% Black, 20% Hispanic, 22% Asian/Pacific Islander, 1% American Indian, 6% other and 3% unknown. Applying JNC-8 criteria for blood pressure targets, 18,636 patient with hypertension were not at their target blood pressure at the time of their most recent reading (35%), with differences between patient groups, health systems and clinic sites.

**CONCLUSIONS:** Data sharing and harmonization are possible across multiple primary care systems with

different EHRs participating in the SFBayCRN. A significant portion of patients with hypertension was not at target at the most recent blood pressure reading. Ongoing work includes identifying local risk factors associated with poor hypertension control, measuring differences between individual clinics and health systems, and describing variations in prescribing patterns.

**GaleWyrick, S\*;** **Person-Rennell, N;** **Vener, M.** **In our hands year two: a primary care procedure elective teaches students the scope and role of family medicine.**

**CONTEXT & OBJECTIVE:** Family Medicine offers many opportunities for office-based procedures, yet learners are rarely exposed to this aspect of Family Medicine until residency. We are in our second year of offering a primary care procedures elective for first year UCSF medical students. Course goals are to 1) educate students about family physicians' roles in procedures; 2) explain the importance of providing procedures in a patient's medical home; 3) provide an opportunity for students to try hands-on simulation of procedures; 4) introduce first-year students to primary care faculty and resident role models.

**SETTING/POPULATION:** We are now in the second year of the elective. Year one, 32 medical students enrolled. Year two, 27 students enrolled. Residents and faculty were recruited to teach.

**INTERVENTION/STUDY DESIGN:** Our procedures elective included two classroom sessions and three procedures workshops. "In year two" we added assigned reading and videos to prepare students for the workshops. This allowed us to reduce the workshops from 120 to 90 min. Workshops include a primary care case and discussion of how each procedure fits into the overall context of the patient-centered medical home. Procedures taught included: IUD and Nexplanon placement and removal, mole removal, incision and drainage, splinting and joint injection.

**OUTCOMES/RESULTS:** Quantitative and qualitative outcome data was collected using a pre- and post-elective survey. Topics assessed included: interest in primary care, interest in performing procedures, belief that family physicians should perform procedures, impact of resident role models, etc. When possible, we matched pre and post surveys. Results for year 2 will be collected and analyzed by the time of the Colloquium.

**CONCLUSIONS:** Providing students with an opportunity to learn about primary care procedures leverages students' interest in procedures with a chance to better understand the scope of family medicine and the medical home. In addition, engaging in a procedures elective provides a valuable opportunity to expose students to resident and faculty role models. "We hope that this course may be a model for other student electives that expose students to engaging aspects of family medicine during pivotal years in which they formulate their understanding of primary care and consider possible career opportunities."

**Willard-Grace R\*;** **Knox M,** **Huang B,** **Grumbach K.** **Predictors of two-year attrition for primary care staff and clinicians.**

**CONTEXT & OBJECTIVE:** Attrition of clinicians and staff in primary care contributes to reduced ability to meet the need for care, and the increased resulting demand on remaining clinicians and staff may lead to a "downward spiral" in which remaining clinicians and staff face even greater risk of burnout. Moreover, turnover places significant financial burden on the system as new staff and clinicians must be recruited and trained into their roles. Commonly proposed predictors of attrition include burnout, loyalty, and engagement.

**SETTING/POPULATION:** Non-resident clinicians in 10 county-run and 6 university-run primary care clinics.

**INTERVENTION/STUDY DESIGN:** We surveyed 344 staff and 201 non-resident clinicians at the study sites in 2014. Two years later, we collected rosters from those clinics and determined which staff were no longer working in the system. Self-reported measures from the 2014 survey included the Maslach Burnout Inventory emotional exhaustion subscale, likelihood to recommend one's worksite as a place to work (the PULSE question), and the 12-item Gallup staff engagement survey. We conducted logistic regression with attrition as an outcome for each proposed predictor, stratified by staff versus clinicians and controlling for years in the system and number of half days (for clinicians), to identify self-reported measures in 2014 that were associated with no longer being in the system in 2016.

**OUTCOMES/RESULTS:** In the two-year interval between the time of the 2014 survey and the review of rosters in 2016, 29% of staff and 25% of providers left their systems. There was no significant difference between attrition rates between the two systems or between academic and non-academic practices. None of the proposed measures (emotional exhaustion, likelihood to recommend the clinic, or the Gallup engagement score) predicted attrition for either staff or clinicians. For clinicians a higher number

of half days was associated with greater risk of attrition.

**CONCLUSIONS:** Although there may be good reasons to combat burnout and promote staff experience, these did not appear to be the primary drivers of attrition within this sample. Other factors such as convenience of the commute, salary, or opportunities for advancement may play a role that is not captured by work experience.

**Lu, C.\*;** **McBride, T.\*;** **Dong, B.;** **Chu, C.** **Improving the quality of hepatitis C treatment at a teaching safety net health center.**

**CONTEXT & OBJECTIVE:** With the success of direct-acting antiviral agents, a cure for chronic hepatitis C (HCV) is no longer restricted to patients without medical and psychiatric comorbidities, and more primary care clinics and even residency clinics are seeking to cure their patients of hepatitis C. We developed and iterated using quality improvement methods to increase the number of patients treated for hepatitis C at an academic primary care safety net clinic.

**SETTING/POPULATION:** At our teaching health center, we have over 40 residents, over 20 teaching faculty, and more than 5 advanced practitioners that provide primary care to over 200 patients living with chronic hepatitis C that have newly become eligible for treatment.

**INTERVENTION/STUDY DESIGN:** We built on an existing pharmacy clinic embedded within the health center to provide both individual and group-based classes for hepatitis C treatment. We developed hepatitis C curricula for providers of all levels to assess patient readiness for treatment and prepare patients for pharmacist specialty consult. We used continuous quality improvement methods to outreach patients, and we used clinic wide data collection and chart review to monitor the impact of the intervention.

**OUTCOMES/RESULTS:** Based on our outreach efforts and clinician trainings, we have been able to treat over 10 patients with hepatitis C and have more than 10 more patients on various stages of the primary-care based hepatitis C treatment cascade. We have also educated many residents and clinicians about how to prepare patients for hepatitis C treatment. We iterated on numerous methods for patient outreach and engagement, including group visits, direct outreach, and provider-based outreach.

**CONCLUSIONS:** With a small team and limited dedicated resources, we have been able to expand access and knowledge about hepatitis C treatment in an academic primary care clinic. We describe the core teaching principles to provide to clinicians, and the outreach methods we found most effective for increasing treatment access and engagement.

**Scrubb A, Nath K, MD\*;** **Kullar R, MD\*;** **Grazzini C, RN,** **Isa L, Ali R, Hunter-McElroy G, Lotman-Ottobre S.** **The affordable care act's impact: changes in a free clinic's patient population and considerations for future resource allocation.**

**CONTEXT & OBJECTIVE:** As more people have gained access to health insurance through the Affordable Care Act (ACA), health care entities and governmental agencies must determine how to best support community health programs and safety net clinics (SNCs). Many SNCs are seeing their funding frozen or reduced under the assumption that many of their patients, under the ACA, will find care within the conventional healthcare system. In addition, changes at the federal level are looming; any modifications will impact the populations SNCs serve even further.

**SETTING/POPULATION:** This study is to better characterize the population in Contra Costa County that sought free care at the John Muir Health Mobile Health Clinic (MHC) before and after ACA implementation. Researchers conducted a retrospective review of 3127 patients seen at the MHC clinic before and after ACA implementation.

**INTERVENTION/STUDY DESIGN:** Multiple factors were included in this retrospective chart review: patient demographics, diagnoses, acuity, follow up measures, and complexity scoring. Z-test and logistic regression analyses were performed on available data.

**OUTCOMES/RESULTS:** The research shows that while the overall annual patient population size decreased (574 in 2010, 363 in 2015), the clinic population contained a larger percentage of non-English-speaking patients (67% vs 74%, p<0.01), a larger percentage of patients over 40 (23% vs 27%, P<0.05), and more visits for chronic illness, both in percentage (12% vs. 18%, P<0.01) and absolute number (67 vs. 75).

**CONCLUSIONS:** These findings indicate that while the total census at the MHC has declined, disease complexity has increased and patient demographics have changed. The MHC now manages a panel