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the

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the future

is

now

The Rodnick Colloquium

Innovations in Family & Community Medicine

Golden Gate Club, San Francisco

May 22, 2014



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 the past year’s donors for their generous contributions.

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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
www.familymedicine.medschool.ucsf.edu/giving

August 2012 and December 2013. We analyzed quantitative outcomes across 20 medical home evaluations, including 13 peer-reviewed and seven industry-generated evaluations, and highlighted the clinical, quality, and financial outcomes they are achieving. In addition to the results from these 21 most recent studies, we also included a summary of PCMH initiatives taking place throughout the US since 2009, reflecting 54 different studies organized by state and location. **Outcomes/Results:** PCMH studies continue to demonstrate impressive improvements across a broad range of categories (including, cost, utilization, population health, prevention, access to care, and patient satisfaction), while a gap still exists in reporting the impact of PCMH on clinician satisfaction and the impact of socioeconomics on fully implementing PCMH models and realizing their potential. However, the PCMH continues to play a role in strengthening the larger health care system, specifically Accountable Care Organizations and the emerging medical neighborhood model. Significant payment reforms are incorporating the PCMH and its key attributes. **Conclusions:** The findings are encouraging and the evidence base for the model continues to build at a rapid pace. While we need to be cautious about over-promising what the PCMH alone can deliver, our review of the recent literature affirmatively shows improvements across a number of categories. Our review also suggests some gaps in the evidence and ways to improve future PCMH studies.

SAZEGAR P, CLUM F, CONELL-PRICE J, YOUNGE T. A quality improvement project to promote safe and effective opioid prescribing at an academic family medicine center.

Context & Objective: There has been an alarming trend in the past decade toward increased prescribing of opioids for chronic, non-cancer pain (CNCP), despite limited evidence for their efficacy. Even more daunting is the commensurate rise in opioid-related deaths in the past decade. Nationally, there is a known gap between physician prescribing habits and established best practices. Furthermore, many existing tools for monitoring opioid therapy for chronic pain lack rigorous testing and are too cumbersome for everyday use. **Settings/Populations:** In this study, we describe an intervention aimed at reducing some of these identified care gaps. An electronic survey was created by a group of medical students at the University of California, San Francisco (UCSF) after consultation with the faculty practice. **Interventions/Study Design:** Physicians and nurse practitioners at the UCSF Family Medicine Center were surveyed regarding their challenges and pitfalls treating patients who suffer from chronic pain and who require or request opioids for their condition. **Outcomes/Results:** Survey results revealed a wide variation in providers’ prescribing habits and the need for a standardized, systematic approach to CNCP patients. Based on these survey findings, some simple tools (known as Smartphrases) were created for the university electronic health record allowing prescribers to provide safe, comprehensive and efficient chronic pain assessments. This tool kit was presented to physician groups at UCSF and the feedback incorporated into a set of revised Smartphrases to allow for seamless integration into everyday clinical practice. **Conclusions:** This new opioid prescribing tool kit includes the following: a standardized progress note template; opioid risk tool (ORT); calculator for morphine equivalent dose (MED); patient health questionnaire-2 (PHQ-2); and the pain, enjoyment, and general activity (PEG) scale. In this study, we discuss the rationale for and implementation of this opioid prescribing tool kit, as well as its future utility in promoting continuous quality improvement at an academic teaching center.

director of the Mama Tabatha Hospital in Kolwezi, DR of the Congo. HarmoniMD use with Android tablets begins this February. This EMR system is built for physician consultations locally with Kolwezi specialists, nationally DR of the Congo specialists, and internationally using Rotary Global Med Web consultants. Consultants can use a robot with a stethoscope, iPad, or Android tablet to see patients. EMR order sets and dictated EMR consultations follow. The EMR records ICU data as a baseline for further analysis. Dr. Kasongo presents a Congo Case every other month on the Rotary CME/CE Teaching Case Presentations of "Go to Meeting." Similar programs are with Kathy McCarty, RN, hospital director of the Chidamoyo Hospital in Karoi, Zimbabwe; with Dr. Frances Kemelagha of the Yenagoa Federal Medical Center in Nigeria; with Dr. Alex Tan, chief of medicine of the Mary Johnston Hospital in Manila, Philippines; with Dr. Vincent Vedamanickom of the Bensam Hospital in Nagercoil, India; and with Dr. Pierre-Michel Antoine Valery of L'Hopital Saint Nicholas of Saint-Marc in Haiti. **Interventions/Study Design:** Wifi, internet, Android tablets, and hospital telemedicine needs are arranged by a local Rotary club assisted by the Sebastopol Rotary Club and International Rotary. HarmoniMD is provided for ICU consultative use. This gratis EMR collects ICU data for analysis. **Outcomes/Results:** Telemedicine's role in EMR, consultations, and education. **Conclusions:** Telemedicine is a tool for improvement of world health.

HE S. Increasing longitudinal pre-medical mentorship for students interested in medicine and primary care.

Context & Objective: The projected shortage of physicians in the US is continuously increasing, with anticipated shortage in primary care physicians reaching 52,000 by 2025. The number of students selecting careers in primary care has declined by 41% in the last decade. In 2007, California State Universities (CSU) produced one medical school applicant per 172 graduates (0.58%), a yield far short of the American Academy of Medical Colleges standard of 2%. It has been estimated that 2,600 of 31,456 college freshman entering CSUs in 2007 were interested in a career in medicine, but only 107 applied to medical school. The objective of this cross-sectional study was to assess the career interests of undergraduate students in the American Medical Student Association (AMSA) at CSU Monterey Bay (CSUMB), and investigate their interest in having a longitudinal mentorship program to prepare for medical school. **Settings/Populations:** CSUMB AMSA premedical students. **Interventions/Study Design:** A cross-sectional survey collected responses from 36 CSUMB undergraduate students regarding: desire to pursue medicine; career interest (primary care vs non-primary care); adequacy of premedical resources from CSUMB career services center; preferred methods of mentorship; and barriers to pursuing a career in medicine. **Outcomes/Results:** Seventy-three percent of students reported a high certainty of pursuing a career medicine, and 64% identified a strong interest in primary care. Sixty-seven percent of students identified the absence of adequate mentorship at the university and poor academics (20%) as the major discouraging factors for pursuing medicine. Sixty-nine percent of students reported inadequate premedical resources available at the CSUMB career services and an overall absence of mentorship. Sixty-one percent of students desired longitudinal, personalized mentorship as the most desirable form of mentorship. **Conclusions:** There is an absence of premedical resources and mentorship at CSUMB. While a majority of the AMSA students reported a high commitment to medicine, most were discouraged by inadequate premedical resources and mentorship. A majority of AMSA students reported desiring longitudinal mentorship, which may help retain student interest in pursuing medicine.

OLAYIWOLA JN. The patient-centered medical home: impact on cost and quality—annual update of the evidence.

Context & Objective: Primary health care settings across the nation are making significant transformations as the patient-centered medical home (PCMH) model of care gains momentum. More than 90 commercial and nonprofit health plans, including some of the largest in the nation, are leading PCMH initiatives. Some of the largest employers in the nation, such as Boeing, Safeway, and IBM, are offering PCMH benefits to their employees. Millions of patients in the public sector are receiving PCMH level care through at least 25 state Medicaid programs, the Federal Employee Health Benefits Program, Medicare, the US military, and the Veterans Administration. Understanding the impact of the PCMH on the Triple Aim has become of paramount importance. **Settings/Populations:** This study was done with the Patient Centered Primary Care Collaborative, with funding from the Milbank Memorial Fund. It reviewed published PCMH initiatives in both the peer-reviewed/academic literature and industry reports. **Interventions/Study Design:** In this study, we reviewed published PCMH initiatives released between

- 4 Site Map
- 5 Event Schedule
- 6 Concurrent Talks Detail
- 8 Poster Presentations Detail
- 13 Abstracts—*Concurrent Talks*
- 25 Abstracts—*Poster Presentations*
- 49 Abstracts—*Works Not Presented*

COLLOQUIUM ORGANIZERS

Committee

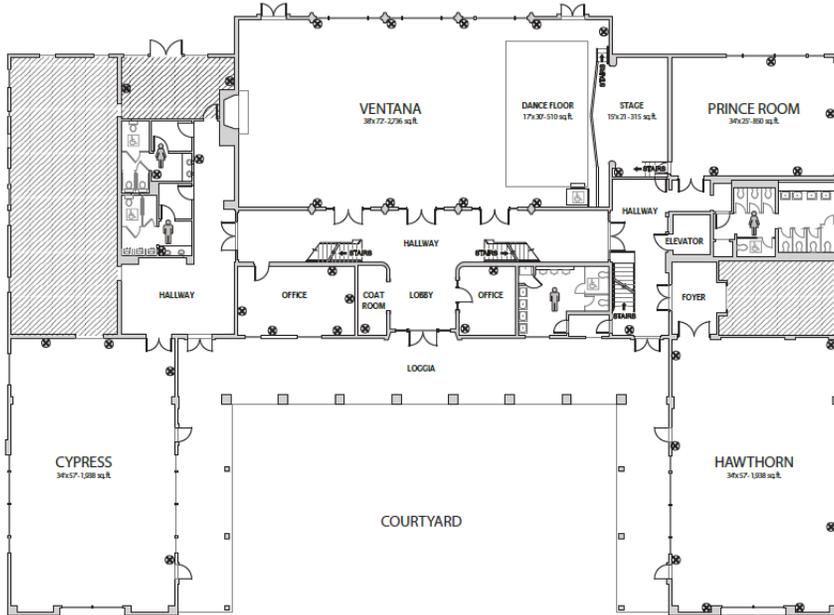
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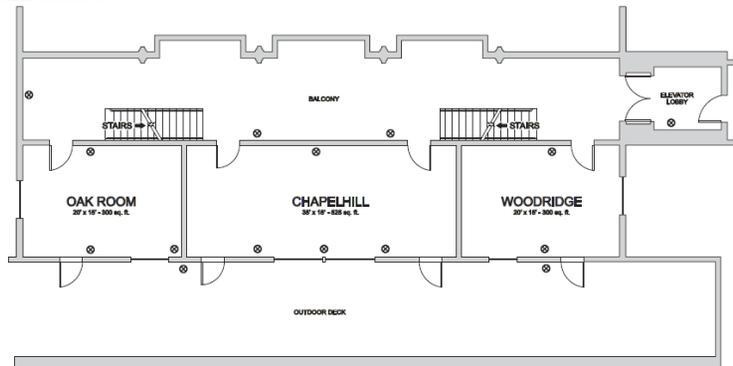
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Aisha Queen-Johnson · Cecilia Quintanilla · Claire Richardson · Zohra Saiyed
Jill Thomas · Roberto Vargas · Alicia Velasquez · Jennifer Wong

Music Provided by Brendan McCaskey

First Floor



Mezzanine



ABSTRACTS, Works Not Presented

BRAVEMAN P. Shorter, sicker lives: the US health disadvantage relative to other affluent countries.

Context & Objective: Low US rankings on some health measures prompted the National Institutes of Health to commission the Institute of Medicine (IOM) to do a study to determine if the US health disadvantage extends across multiple outcomes and age groups. **Populations/Study Design:** The IOM panel examined mostly existing (and some new analyses of) population-based national data on a wide range of health and social indicators and all age groups, comparing it with data from international agencies on 16 other affluent countries. **Outcomes/Results:** The US ranked at or near the bottom for almost all of the over 100 health indicators examined and for all age groups except those over age 75. For example, the US ranked at or near the bottom not only for infant mortality and life expectancy at birth, but for child mortality and life expectancy at every age up to 75, for incidence and mortality from: cardiovascular disease; diabetes; intentional and unintentional injuries including homicides and firearm and traffic deaths; and infectious diseases including HIV and STIs. The US health disadvantage applies not only to disadvantaged socioeconomic and racial/ethnic groups and the obese, but to whites, the affluent, and those with normal weight. **Conclusions:** The US health disadvantage is profound, persistent, and pervasive. No single cause—including medical care or obesity—explains the pervasiveness of the disadvantage across such a wide range of health indicators, but among the causes the panel concluded deserved further consideration are: a specialist-oriented, fragmented health care system with weak primary care and poor access for many people; poverty, particularly child poverty; lack of coverage with high-quality child care and early childhood development/education programs; and a weak social safety net in general. The panel hypothesized that a deeply rooted feature of US culture—namely, a higher value being placed on individualism and a notion of individual “freedom” (eg, freedom from high taxes and from regulations such as gun control and environmental protections) over social solidarity—is a plausible, albeit not proven, root cause that might explain all of the major contributing factors.

GUDE JK. Rotary pilot international telemedicine project in six countries.

Context & Objective: To develop a cloud-based, inexpensive electronic medical record (EMR) on Android tablets with telemedicine specialty consultative and educational uses in international hospitals. HarmoniDOC/Mobile is our creation. It started as HarmoniMD, which is accredited for EMR use in US hospitals, clinics, and MD offices. **Settings/Populations:** With local Rotary clubs in six countries supporting six local Hospitals providing EMRs, specialty consultations, and education benefits with the help of Sunrise Rotary Club in Sebastopol, CA, and Rotary International. **Interventions/Study Design:** With Rotary, donate cloud-based EMRs on Android tablets to six international hospitals to facilitate ICU specialty consultations, data collection, and CME/CE educational benefits. **Outcomes/Results:** Cloud-based EMRs can be dirt cheap and revolutionize international medicine by providing data collection, specialty consultations, and educational benefits. **Conclusions:** Cloud-based EMRs on Android tablets are cheap and revolutionary. Telemedicine is fun for the clinician.

GUDE, JK. Rotary-sponsored telemedicine for world hospitals.

Context & Objective: To use telemedicine with an electronic medical record (EMR) for international specialty consultations and educations. **Settings/Populations:** In six countries: Nigeria, Democratic Republic of the Congo, Zimbabwe, Haiti, Philippines, and India. **Interventions/Study Design:** Set up EMRs (cloud-based) in six hospitals in the developing world for clinical consultative and educational uses. **Outcomes/Results:** Power of EMR for needed specialty consultations and education. **Conclusions:** Cheap and powerful EMRs enhance clinical care and education.

GUDE JK. Rotary telemedicine with EMR in world hospitals for specialty consultations and education.

Context & Objective: The Sunrise Rotary Club of Sebastopol, CA, and OffSite Care, a California Professional Corporation also in Sebastopol, are partnering with six international Rotary clubs to provide six hospitals in Nigeria, Democratic Republic (DR) of the Congo, Zimbabwe, Haiti, the Philippines, and India with a cloud-based electronic medical record, specialty consultations, and weekly continuing medical education. Intensive care unit (ICU) data on types of diseases, mortality, and cost will be collected by electronic medical record (EMR). **Settings/Populations:** Dr. Pinel Kasongo is the medical

and second to inspire a spirit of entrepreneurialism while addressing the problems that they defined. **Outcomes/Results:** The youth identified nutrition, employment, and access to health care as the topics most important to them. To address those topics, the youth researched and created health and employment posters oriented for young people and presented them to their peers at the 2013 Making Waves Health and Wellness Fair. Witnessing struggles within their community the youth strongly believed that health is a right that should be available to all, which is a philosophy that is shared with San Francisco's Clínica Martín Baró. From this shared philosophy, YCC partnered with Clínica Martín Baró to create a community mural at 9th and Mission Streets in San Francisco. The mural was completed in May 2013 and expresses the emotions and experiences of the youth and the clinicians facing threats to the health of their community. **Conclusions:** Young people have incredible insight to the communities they are a part of, and partnerships such as YCC serve to bring forth the youth of San Francisco as a viable and powerful resource for change.

EVENT SCHEDULE

11:00	Registration, Lunch Buffet	<i>Lobby & Courtyard</i>
	Informal Poster Viewing	<i>Mezzanine</i>
11:30	Welcome and Introduction to the Colloquium	<i>Ventana Room</i>
11:45	Plenary Panel Discussion	<i>Ventana Room</i>
	Family Physicians of 2025: Who Will They Be, What Will They Do, and How Will We Prepare Them?	
	<i>Kevin Grumbach, MD, Moderator</i> <i>Chair, UCSF Department of Family & Community Medicine</i>	
	<i>Bruce Blumberg, MD</i> <i>Director of Graduate Medical Education, Kaiser Permanente Northern California</i>	
	<i>Jeremy Fish, MD</i> <i>Registrar & Former Director, Contra Costa Family Medicine Residency</i> <i>Chair, CAFP State Educational Network</i>	
	<i>Sue Meighan</i> <i>Senior Project Manager, Sue Meighan and Associates</i> <i>Member, UCSF Lakeshore Patient Advisory Council</i>	
	<i>Teresa Villela, MD</i> <i>Director, UCSF/SFGH Family & Community Medicine Residency</i> <i>Chief, SFGH Family & Community Medicine Service</i> <i>Vice Chair, UCSF Department of Family & Community Medicine</i>	
1:00	Poster Session	<i>See Page 8 for locations and detailed listings</i>
2:30	Concurrent Talks—Session 1	<i>See Page 6 for locations and detailed listings</i>
3:55	Concurrent Talks—Session 2	<i>See Page 7 for locations and detailed listings</i>
5:10	Break	
5:25	Keynote Address	<i>Ventana Room</i>
	Family Medicine as a Social Movement <i>Kevin Grumbach, MD</i>	
5:45	Wine & Cheese Reception	<i>Lobby & Ventana Room</i>

CONCURRENT TALKS

Session 1

Quality Improvement

LaKisha Garduño, MD, Moderator

Hawthorn Room

The Pain Squad: An Interdisciplinary Team to Promote Safe and Effective Pain Management

Diana Coffa, MD

Abstract: Page 15

Creating a Model for Collaboration to Bring Expressive Arts Therapy Services to a Safety Net County Health System

Alan Siegel, MD

Abstract: Page 21

Reducing Wait Times: A Patient-centered Needs Assessment for an Appointment System at the San Francisco General Hospital Urgent Care Center

Theresa Poulos

Abstract: Page 19

Communicating Wisely: A Collaborative Model for Care Transitions

Jack Chase, MD

Abstract: Page 13

Education

Erica Brode, MD, Moderator

Ventana Room

Curriculum Revision to Engage Learners and Optimize Interprofessional Teaching

Elisabeth Wilson, MD, MPH, and JoAnne Saxe, DNP, MS, ANP

Abstract: Page 22

Bull's-eye: Experiences of Students Pursuing Family Medicine from a Family Medicine "Target School"

Emilia H. DeMarchis, BA

Abstract: Page 16

Prospects for Sustaining the Primary Care Residency Expansion Program

Rossan Chen, MD, MSc

Abstract: Page 14

Innovative Faculty Development Using Objective Structured Teaching Exercises

Ivan Gomez, MD, MS

Abstract: Page 17

Community Engagement

Ivel Morales, MD, Moderator

Cypress Room

Interprofessional Development of Online Curriculum Modules to Prepare Future Health Professionals for Community Engagement

Naomi Wortis, MD

Abstract: Page 15

The Power of a Checklist: Facilitating Leadership of a Homeless Foot-washing Clinic in Salinas, California

Pauline Filippou and Dora Friedman

Abstract: Page 16

Self Advocates Speak on Health Care Experiences and Policy: How Will We Respond?

Clarissa Kripke, MD, FAAFP

Abstract: Page 18

Collective Impact: Partnered Efforts to Reduce Sugary Drink Consumption

Roberto Ariel Vargas, MPH

Abstract: Page 22

these clinicians over the long term, we developed a multiyear, annual assessment tool. **Settings/Populations:** Our target population was community health clinic primary care clinicians in southern California and Arizona. **Interventions/Study Design:** PAETC developed an annual online clinician assessment questionnaire to be administered at baseline and annually thereafter to those who attended eight or more of 17 telehealth sessions held over one year. The assessment measured changes in knowledge/skill, confidence, attitudes towards HIV patients, and perceptions of clinic adherence to HIV-related policies/guidelines/procedures. The instrument is designed to be used over multiple years with the hypothesis that group scores will improve with session dosage. **Outcomes/Results:** The HIVLN faced significant retention issues: out of 32 baseline assessments, only eight were repeated because other clinicians never returned. The sample included four physicians, three advanced practice nurses, and one social worker. Three had seen HIV patients for less than one year, one for two to five years, and three for more than three years. Results included an overall increase in self-reported confidence in nine out of 15 measures (60%). An increased percentage reported more providers following four out of five HIV-relevant policies/procedures/guidelines at their clinics (80%); increase in knowledge/skill in correct answers for 11 out of 20 questions (55%); a decrease in stigmatized views of patients for 71% of questions. This sample was too small to perform statistical analysis. **Conclusions:** Even this small sample indicates that our assessment offers a multi-dimensional measure of clinician learning in a telehealth environment. The fact that improvement occurred across all domains seemed very promising. The knowledge measures related to complex cases showed the most improvement in that section, reinforcing the importance of case-based learning, as well as the impact of distance-based support to improve clinical skills. Weaving cultural sensitivity throughout the sessions (vs specific sessions) may be effective in reducing stigma.

WILSON E, FISH J. Greater Bay Area Family Medicine Education Collaborative.

Context & Objective: To develop a collaborative network of family medicine educators in the greater Bay Area. Family medicine education programs have traditionally faced challenges alone. In the era of health care reform and new accreditation systems, educational leaders must find ways to develop meaningful collaborations to succeed. **Settings/Populations:** The UCSF Department of Family and Community Medicine has five affiliated residency programs and numerous medical student training sites, providing a strong foundation for the creation of a new regional collaboration. **Interventions/Study Design:** In the spring of 2013, family medicine educators from the greater Bay Area convened to discuss ways to share best practices and strategies. A needs assessment was conducted, using surveys, site visits, and shared activities. A logic model was also developed to record inputs, establish outputs, and determine outcomes. **Outcomes/Results:** The needs assessment identified six areas for collaboration: faculty development; curriculum design and evaluation; research and scholarly work; primary care innovation; peer support; and family medicine pipeline efforts. Results identified during the assessment and documented on the logic model are being tracked and reported back to internal and external stakeholders. The first collaborative-sponsored event, focusing on rolling out educational milestones, is planned for March 2014. **Conclusions:** Educational silos need to be broken down across institutions. As a large academic institution, UCSF is in a perfect position to build strong regional partnerships. The Greater Bay Area Family Medicine Education Collaborative is a unique attempt by the UCSF Department of Family and Community Medicine to bring educators together to share best practices and develop strategies to overcome challenges together.

YONN-BROWN T, SANTAMARIA G, PANTOJA J, WILSON B. Youth creating change in San Francisco.

Context & Objective: Change can occur at many levels, but is most powerful when it comes from within. Growing up in San Francisco, young people have been shown to face an increased risk of obesity, violence, and mental health. These problems, compounded with a feeling of powerlessness, can leave young people feeling disenfranchised from their communities. The intention of this project was to give a spark to the empowerment and hopefulness of these young people. **Settings/Populations:** In the fall of 2012, a partnership was created between medical students of UCSF's Program in Medical Education for the Underserved (PRIME-US) and the at-risk, high-school-aged youth of HOMEY, a youth violence prevention program in San Francisco. This partnership grew out of the idea that youth should be empowered to make changes to the health of their own community. The title for this partnership became Youth Creating Change (YCC). **Interventions/Study Design:** YCC set out first to engage with the youth to recognize and identify the aspects of their community that negatively affect their health,

primary care clinic. Traditionally, there had been no census cap for either service, and sharing of patients between services was *ad hoc* and sometimes challenging. In 2011-2012, FMIS experienced a surge in its average census which coincided with new work-hour restrictions and change to a shift-based schedule; the high census raised concerns about patient safety and resident work-hour compliance. The SFGH Physician Staffing Task Force was charged with creating a structure for sharing admissions between FMIS and RIS/FIS to reduce census surges on each service. **Settings/Populations:** The FMIS and RIS/FIS directors worked together to design a system for census sharing between the services at SFGH. **Interventions/Study Design:** The family medicine, internal medicine, and cardiology services all determined their optimal census. We then defined three numerical census ranges for each service: Green (at target census); Yellow (slightly above target census); and Red (significantly above target census). We set up an algorithm for sharing new admissions between the services based on each service's current census color (eg, if FMIS yellow and RIS/FIS green, medicine takes every other FMIS admission). An administrator checks service censuses daily and texts a pre-determined list of pagers with census codes and actions (eg, "FMIS 21, yellow. Medicine 65, green. Medicine takes every other FMIS admission.") **Outcomes/Results:** FMIS average census was in target range 0 out of 6 months between January and June 2012. Census sharing was implemented in July 2012. FMIS average census was in target range for 9 out of 12 months between July 2012 and July 2013. **Conclusions:** The census-sharing program has successfully brought the FMIS census to within target range a majority of the time. Components which contributed to its success include having a pre-determined algorithm and having administrative support in sending out the pages. Feedback from both services has been positive.

THOM D, WILLARD-GRACE R, HESSLER D, DEVORE D, PRADO C, BODENHEIMER T, CHEN E.

Medication concordance and adherence in low-income patients: a randomized controlled trial of medication reconciliation by health coaches.

Context & Objective: We sought to determine if medical assistants trained in health coaching increased medication concordance and adherence. **Settings/Populations:** Participants were 441 low-income, English- or Spanish-speaking patients aged 18 to 75 years with poorly controlled type 2 diabetes, hypertension, and/or hyperlipidemia at two urban federally qualified health centers. **Interventions/Study Design:** Patients were randomized to receive a health coach or usual care for 12 months. Concordance for medications prescribed for diabetes, hypertension, or hyperlipidemia was assessed at baseline and at 12 months by reviewing each patient's bottles or medication list and comparing it to the medication list found in the medical chart. Concordance for charted medications was defined as the percent of medications listed in the chart that the patient reported to be taking. Concordance for all medications was defined as the percent of all medications (whether from chart or patient report or both) both listed in the chart and taken by the patient. Medication adherence was defined as the mean number of days out of the last seven patients reported taking their medications and as the percent of patients in each arm who reported taking all of their medications at least five of the past seven days. Multivariate modeling was used to compare change concordance and adherence from baseline to 12 months by study arm, adjusting for baseline concordance and intervention. **Outcomes/Results:** At baseline, concordance with charted medications was essentially the same in the usual care and health coaching arms (73% vs 71%). At 12 months, while usual care patients were still taking 73% of their chart-listed medications, the coached patients were taking 83% (difference=10%, $p < .01$). When both chart-listed and patient-reported medications were considered, concordance between the two was 64% in usual care and 62% in the coached group at baseline and 67%, compared to 74% at 12 months (difference=7%, adjusted $p = .03$). Mean number of days adherent at 12 months was 5.7 in the usual care group and 6.1 in the coached group (difference=0.4 days, adjusted $p = .003$). The proportion of participants adherent to all medications was 70% at baseline and 75% at 12 months for the usual care group, compared to 66% at baseline rising to 86% in the coached group (difference=11%, adjusted $p = .022$). **Conclusions:** Medication reconciliation by medical assistants increased medication concordance and adherence compared to usual care.

WARREN N, BERNSTEIN M, REYES EM. A HIV telehealth program: evaluations indicate the road to success.

Context & Objective: The Pacific AIDS Education and Training Center (PAETC) launched an HIV telehealth project, the HIV Learning Network (HIVLN), to improve clinical management skills of HIV primary care clinicians working in low-HIV-prevalence, mainly rural areas. The program consists of biweekly online, live sessions with didactics and case consultations. As we expected to be engaged with

Patient-centered Medical Home

Lauren Wolchok, MD, Moderator

Hawthorn Room

-
- Understanding the Level of Integration of Safety Net Settings in the Medical Neighborhood: Development of a Conceptual Model
Rachel Willard-Grace, MPH *Abstract: Page 18*
-
- The HIV Medical Homes Resource Center Project: Delivering Technical Assistance for Practice Transformation to HIV Ryan White Practices across the United States
Sarah Evan Colvario, MS *Abstract: Page 13*
-
- Broadening Team-based Care: Pharmacist-led, Post-hospital-discharge Clinic Visits at the Family Health Center
Shirley Wong, PharmD *Abstract: Page 24*
-
- Team-based Care and Primary Care Clinicians' Experiences at Work: A Comparison across Health Systems
Kate Dubé *Abstract: Page 16*
-

Coaching in Primary Care

Alexa Lindley, MD, Moderator

Cypress Room

-
- How Health Coaching Impacts Medical Visits: A Study of Primary Care Clinician Experiences
Camille Prado, MS *Abstract: Page 19*
-
- How Health Coaches Promote Patient Decision Making in the Context of Team-based Primary Care
Jessica Wolf, MA *Abstract: Page 23*
-
- 10 Building Blocks Coaching Program: Implementing the 10 Building Blocks of High-performing Primary Care into Practice
Jennifer Wong, BA *Abstract: Page 23*
-
- Does Health Coaching Reduce Patients' Trust in Their Primary Care Providers?
David Thom, MD, PhD *Abstract: Page 21*
-

Special Issues in Clinical Care

Nina Patel, MD, Moderator

Ventana Room

-
- Adapting Motivational Interviewing and 'Screening, Brief Interview, and Referral for Treatment' for Latinos and Indigenous Oaxacans
Eric Sanford, MD *Abstract: Page 20*
-
- Midlife Women in the HIV Epidemic
Jess Waldura, MD, MS *Abstract: Page 13*
-
- Fighting HIV Stigma through PhotoVoice: An Innovative Tool for Patient Education and Empowerment
Monica Hahn, MD, MPH, MS *Abstract: Page 17*
-
- A New Standard for Incapacitated Patient Decision Making: The Clinical Standard of Surrogate Empowerment
Marc Tunzi, MD, MA *Abstract: Page 22*
-

POSTER PRESENTATIONS

Alternative Approaches

Oak Room

Piloting "Brief Counseling Stress Reduction" in Primary Care: A Medical Student Quality Improvement Project at the UCSF Family Medicine Center at Lakeshore

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Body Awareness, the Practice of Yoga or Meditation, and Recovery in 435 Primary Care Patients with Past or Current Low Back Pain

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Mindfulness Training for Childbirth Fear and Pain: Preliminary Results from a Randomized Controlled Trial

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Design and Administration of a Gratitude and Mindfulness Journal for Postoperative Patients: A Pilot Study

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Coaching in Primary Care

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Medication Concordance and Adherence in Low-income Patients: A Randomized Controlled Trial of Medication Reconciliation by Health Coaches

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How Patients Make Decisions with Health Coaches and Primary Care Clinicians: A Mixed Methods Study

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"Value Added": First-year Medical Students Working as Health Coaches in a Primary Care Clinic

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Low Patient Trust in Their Primary Care Providers Predicts Medication Non-adherence 12 Months Later

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Volunteer Health Coaches in a Primary Care Chronic Care Model

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Community Engagement & Prevention

Oak Room

Aligning Community-initiated, Practice-based Research: A Summary of Partnerships from the San Francisco Bay Area Collaborative Research Network's Small Grant Program

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Teaching Critical Health Literacy to At-risk Youth in East Salinas, California

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Youth Creating Changes in San Francisco

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residents were surveyed about their two or three most important learning points, the value of this experience, how it could be improved, the degree to which learning objectives were met, and how their practices changed from their educational experiences. **Outcomes/Results:** Sixty-four percent of first-year and 79% of second-year residents completed the survey. In addition to being introduced to the value of buprenorphine treatment for opioid addiction, residents learned about and appreciated how addiction is a chronic disease. Seventy-four percent of residents plan to or already have taken the DEA waiver training qualifying them to prescribe buprenorphine. Of significance were residents' descriptions of not only how patients' lives were improved by this treatment, but how their educational experiences were formative to better understand opioid addiction and their ability to treat it. **Conclusions:** Buprenorphine group treatment is a powerful tool not only for treating opioid addiction but a means of effectively teaching family medicine residents how the chronic disease of opioid addiction can be successfully and compassionately treated with buprenorphine and motivational interviewing.

SENG T. The business of saving lives.

Context & Objective: Continuous quality improvement (CQI) project regarding improving inpatient resident documentation and its multiplicative ramifications, including financial reimbursement, the case-mix index, and observed mortality ratios which allows for the comparison of our work to other hospitals. **Settings/Populations:** San Francisco General Hospital Family Medicine Inpatient Service, including residents, attendings, and medical students. **Interventions/Study Design:** Plan-Do-Study-Act involving raising awareness of problem of how language determines reimbursement and analysis using chart extraction to see if there was improvement in how problems are worded. **Outcomes/Results:** Results are pending. **Conclusions:** Documentation at the resident level has enormous downstream ramifications, including financial reimbursement, better communication with other providers, and how the hospital is externally evaluated.

SHAW B, LEUNG L. Through patients' lens: needs assessment for a nurse-led care management program.

Context & Objective: Within a one-year period, less than 1% of Family Health Center (FHC) patients accounted for nearly 50% of admissions to the Family Medicine Inpatient Service at San Francisco General Hospital (SFGH). In an effort to improve health outcomes and decrease costs, the FHC is developing a nurse-led care management program that provides intensive care coordination and support for this subset of high-risk patients. As the program strives to increase patient engagement, the patients' perspectives were instrumental in our needs assessment. **Settings/Populations:** Primary care providers (PCPs) at the FHC were prompted to identify English-speaking, cognitively intact patients who had frequent, avoidable hospital admissions or emergency department visits within the past year. A total of 21 patients were identified for one-on-one in-depth interviews. **Interventions/Study Design:** All patients were contacted via telephone, with permission from their PCPs, using a standardized script for recruitment. A first-year medical student who was blind to the patients' medical records and histories interviewed eight FHC patients—five in clinic and three by telephone. Interviews were structured with aims to address patients' perceptions of their health and illness, gaps in care, and experience with the health system. All interviews were recorded and analyzed using a simple coding method post-interview. **Outcomes/Results:** Patients consistently described positive relationships with their PCPs, regardless of their health status or experience with the overall health system. They cited continuity in their relationships with PCPs as the primary driver allowing them to seek care and follow treatment plans. The most common barriers to maintaining good health were lack of patient education, poor care coordination, inability to access timely care, lack of respect for patients, and potentially avoidable clinical complications. Additionally, current hospital structures do not address the needs of patients living with chronic pain and the aforementioned obstacles often led to avoidable readmissions. **Conclusions:** The patients' narratives inform the development and implementation of the FHC care management program. Continued partnership with patients will guide the care management program to innovate in an effort to address the multiple health system deficiencies while building upon the strength of the patient-PCP relationships.

STAFFORD M, BROOKS R. Developing a census sharing system between Family Medicine and Internal Medicine at San Francisco General Hospital.

Context & Objective: At San Francisco General Hospital, the Family Medicine Inpatient Service (FMIS) and Internal Medicine Resident and Faculty Inpatient Services (RIS/FIS) admit patients based on their

conferences. A core group of residents sought to develop and implement a proposal for a resident-driven morbidity and mortality conference. **Settings/Populations:** Four family medicine residents in our 14-14-14, unopposed, community-based family medicine residency program worked with a faculty advisor and the residency leadership group to develop the project. **Interventions/Study Design:** Initial development was a three-presentation pilot series to test the model and guidelines for presentation preparation. The group evaluated the project in both pilot and initial implementation phases for sustainability and positive educational value. **Outcomes/Results:** The pilot was judged successful and followed by a one-year implementation plan. The initial year of implementation is being evaluated for educational value, ongoing support, and sustainability as a permanent component of the residency training program. **Conclusions:** The pilot program generated a successful initial one-year project, meeting both resident-identified educational needs as well as ACGME core educational competencies. Further possibilities being considered are long-term incorporation into the curriculum and resident quality improvement projects.

ROUSE IÑIGUEZ, POTTER M, GRUMBACH K. Aligning community-initiated, practice-based research: a summary of partnerships from the San Francisco Bay Area Collaborative Research Network small grants program.

Context & Objective: The mission of the San Francisco Bay Area Collaborative Research Network (SF Bay CRN) is to encourage, facilitate, and lead mutually beneficial practice-based research partnerships between community-based primary health care organizations, practices, and clinicians in the San Francisco Bay Area and UCSF. Since 2010, the SF Bay CRN has administrated three cycles of year-long small grants between community-based network members and expert faculty members at UCSF. Our goal has been to support clinician researchers to work together with limited grant support and technical assistance. The purpose of these collaborations is to build research capacity and support the development of research partnerships within our network. **Settings/Populations:** The SF Bay CRN small grants program has funded 11 research partnerships in a range of practice-based settings including healthcare organizations, patient groups, general practice clinics, and nonprofit organizations. Each community-based network member was paired with a faculty member from one of the four schools at UCSF and given a discretionary budget of up to \$3,000 to advance a mutually beneficial practice-based research project. **Interventions/Study Design:** Each partnership consisted of a community-based network member and faculty member from UCSF. The goal of each partnership was unique, but the range included projects which focused on quality improvement, patient engagement, education and training, study design, and evaluation. Each partnership also received two in-kind technical assistance sessions: one with the SF Bay CRN Director at the time of funding; and a group consultation with the SF Bay CRN Steering Committee at the end of the cycle. **Outcomes/Results:** An overarching theme is that even with a small amount of funding and limited technical assistance there is a desire to work with UCSF not only to learn about research, but to translate evidence from the academy into practice, taking it from bench to bedside. **Conclusions:** The SF Bay CRN has nurtured a community of university- and community-based, practice-based researchers, aligning practice-based research at UCSF and in the SF Bay Area primary care community.

SAFFIER K, RADHAKRISHNA R, RAMOS M. Buprenorphine group treatment promotes residents' addiction medicine education and future practice.

Context & Objective: The epidemic of opioid addiction affects countless patients and family members and presents challenges for our health care providers and system. Residents at Contra Costa Regional Family Medicine Residency have a unique opportunity to learn about the chronic disease of opioid addiction and its treatment by participating in buprenorphine group treatment clinics during their first and second years of training. Motivational interviewing is the basis for individual and group treatment with buprenorphine. To determine the educational value of these experiences, residents were surveyed after their first or second year's participation as co-facilitators in buprenorphine treatment groups. **Settings/Populations:** Contra Costa Regional Medical Center and Health Centers offers buprenorphine treatment to patients addicted to opioids in group and individual visits. As the numbers of patients referred to this medically assisted treatment have increased, residents have actively participated in buprenorphine treatment groups as a required part of their training. Groups are composed of approximately eight to 10 patients, a resident, and a family physician trained in addiction medicine. **Interventions/Study Design:** At the end of their respective first and second year's training,

Impact of Nutrition and Physical Activity Interventions on Knowledge and Growth in Sixth-grade Students <i>Nitika Dhir, MD, and Ji Young Park, MD</i>	<i>Abstract: Page 32</i>
Skin Cancer Knowledge, Attitudes, and Behaviors in the Chinese-speaking Population of San Francisco <i>Mary-Margaret Chren, MD</i>	<i>Abstract: Page 29</i>
Online Commitment Contracts for Weight Loss <i>Lenard Lesser, MD, MSHS</i>	<i>Abstract: Page 38</i>
Influence of Alcohol on Urban Trauma: A Spatial Model for San Francisco <i>Max Brondfield, BA</i>	<i>Abstract: Page 28</i>

Education *Balcony*

Innovations in Family Medicine through Community Electives: One Student's Journey <i>Emilia H. DeMarchis, BA</i>	<i>Abstract: Page 31</i>
Practice-based Challenges and Improvement Opportunities: Clerkship Students' Perspectives <i>Yufan Wu, BHSc</i>	<i>Abstract: Page 27</i>
Greater Bay Area Family Medicine Education Collaborative <i>Elisabeth Wilson, MD, MPH, and Jeremy Fish, MD</i>	<i>Abstract: Page 47</i>
Buprenorphine Group Treatment Promotes Residents' Addiction Medicine Education and Future Practice <i>Kenneth Saffier, MD, and Rohan Radhakrishna, MD</i>	<i>Abstract: Page 45</i>
Beyond These Walls: Creating an Effective Curriculum in Culturally Responsive Medicine <i>Katya Adachi, MD</i>	<i>Abstract: Page 25</i>
Implementing a Resident-driven Morbidity and Mortality Conference at a Community-based Family Medicine <i>Leah Romito, MD, and Kristin Moeller, MD</i>	<i>Abstract: Page 43</i>
The B.E.S.T. Model: A Tool for Structured Feedback <i>Brain M. Johnson, MD</i>	<i>Abstract: Page 37</i>
Patient-centered Care: Student Perspectives on the Benefits and Challenges <i>Victoria Boggiano, BA</i>	<i>Abstract: Page 26</i>

Family Planning & Contraceptive Use *Balcony*

Family Planning in the LGBT Community: A Narrative Essay <i>Kaitlin Hollander</i>	<i>Abstract: Page 36</i>
Developing a Contraceptive Counseling Decision Support Tool <i>Judith Fitzpatrick, BA</i>	<i>Abstract: Page 35</i>
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Improving Clinical Care*Chapelhill Room & Outdoor Deck*

Collection of Gender Identity Data Using Electronic Medical Records <i>Madeline B. Deutsch, MD</i>	<i>Abstract: Page 32</i>
Development of an HIV Patient Registry to Improve Care in an Academic Family Medicine Clinic <i>Lealah Pollock, MD, MS</i>	<i>Abstract: Page 42</i>
The Business of Saving Lives <i>Thearith Seng, MD</i>	<i>Abstract: Page 48</i>
Formal Hepatitis C Education Enhances Hepatitis C Care Coordination, Expedites Hepatitis C Treatment, and Improves Antiviral Response <i>Samali Lubega, MD</i>	<i>Abstract: Page 38</i>
Preventing Death by Overdose: Naloxone for Chronic Pain Patients <i>Diana Coffa, MD</i>	<i>Abstract: Page 30</i>
Developing a Census-sharing System between Family Medicine and Internal Medicine at San Francisco General Hospital <i>Margaret Stafford, MD</i>	<i>Abstract: Page 46</i>
Challenging Case Consultations Provided by the National HIV/AIDS Clinicians' Consultation Center to the Federal Bureau of Prisons <i>Betty Dong, PharmD</i>	<i>Abstract: Page 33</i>
Piloting a Geriatrics Outpatient Consult Service to Support Primary Care Providers <i>Anna Chodos, MD, MPH</i>	<i>Abstract: Page 27</i>
Improving Patient Access to Maxine Hall Health Center <i>Sarah Evan Colvario, MS, and Maria Beza, MSN, RN</i>	<i>Abstract: Page 26</i>
Evaluation of Navigational and Educational Pamphlets in the San Francisco General Hospital Urgent Care Center <i>Michelle Meyer, BA</i>	<i>Abstract: Page 41</i>
Effectiveness of a Smartphone App for Guiding Antidepressant Drug Selection <i>Colin Man, Cathina Nguyen, MS, and Steven Lin, MD</i>	<i>Abstract: Page 38</i>
A HIV Telehealth Program: Evaluations Indicate the Road to Success <i>Nancy Warren, MPH</i>	<i>Abstract: Page 47</i>
Maximizing Caregiver Social Needs Disclosure in an Urban Pediatric Emergency Department: The iScreen Study <i>Laura Gottlieb, MD, MPH</i>	<i>Abstract: Page 36</i>
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"I Don't Want to Make My Own Decisions": Decision Control Preferences in a Diverse Elderly Population <i>Mariko Feuz, BS</i>	<i>Abstract: Page 28</i>
Through Patients' Lens: Needs Assessment for a Nurse-led Care Management Program <i>Brian Shaw</i>	<i>Abstract: Page 45</i>

1997 to assist pregnant federally incarcerated women make the transition from pregnancy to motherhood while in prison. During the last two months of their pregnancies and up to three months after the birth of their babies, women are furloughed from federal penitentiaries throughout the western United States to a "halfway" house in San Francisco. While living in this less restrictive and less stressful environment, participants receive counseling and instruction aimed at promoting maternal bonding, breastfeeding, and parenting skills. The goal of the program is family reunification on release of the participant from prison. The SFGH Family Health Center (FHC) became the medical home for families in the MINT program in 2000. We have developed a process of prompt and easy access to care for all women who enter the program. The MINT families are offered prenatal, postpartum, and newborn care at the FHC, with continuity providers attending most of their deliveries. **Settings/Populations:** One hundred eight women have received care from FHC attendings and residents at the FHC and SFGH. **Interventions/Study Design:** In order to study utilization and outcomes, we performed chart reviews for the 108 women and their babies in the MINT program who have received care at the FHC. **Outcomes/Results:** Eighty-eight percent of families in the MINT program received prenatal, postpartum, and newborn care all at the FHC, and usually by the same continuity primary care physician. Of 85 women whose records were available, 92% planned to breastfeed their babies at the time of discharge after delivery. Forty-two percent of those who chose contraception received long-acting, reversible contraception by the time they left the program (either release from custody or return to prison). **Conclusions:** Families in the MINT program receive high-quality, family-centered care at the FHC and SFGH. Women are highly likely to leave the hospital after delivery with intention to breastfeed. A large number of MINT patients return to prison or home with long-acting, reversible contraception.

RIENKS J, REMY L, OLIVA G, LONG R. California trends in maternal, child and adolescent health outcomes from 2000-2011.

Context & Objective: Since 2000, the Family Health Outcomes Project has been analyzing rates and trends in maternal, child, and adolescent health (MCAH) indicators for California and its 61 local health jurisdictions and producing databook summaries for public health surveillance, needs assessment, and planning. **Settings/Populations:** Databooks are based on California county of residence. Data sources include hospital discharge and emergency department data; birth, death, and fetal death certificate data; federal estimates of health insurance coverage and poverty; foster care placements; child abuse and neglect reports; and county-level population estimates from the California Department of Finance. **Interventions/Study Design:** Annual rates and confidence intervals were calculated overall and for race/ethnic groups (White, Hispanic, African-American, and Asian/Pacific Islander). Trend tests were done using JoinPoint software to evaluate if a trend is statistically significant, if a local rate changes at a rate similar to or different from the state, and if the local jurisdiction rate is significantly different from the state at the three-year-start and end-of-period. Indicators, organized using a life course framework and social determinants of health, include: health insurance, poverty status, and unemployment; prenatal care (Kotelchuck), birth interval, gestational diabetes and substance abuse hospitalizations in pregnancy; C-sections (NTSV), gestational age, and birth weight; fetal, infant, child, and adolescent death; hospitalizations or emergency department visits for injury, mental health, and substance use; and child abuse, foster care, and teen pregnancy. **Outcomes/Results:** Statewide indicators with significant trends indicating improvement include prenatal care (except for African-Americans), preterm birth, child and adolescent deaths, injury hospitalizations, child abuse, foster care, and teen pregnancy. Indicators with significant trends reflecting worsening rates include poverty, unemployment, birth interval, C-sections, low birth weight, adolescent hospitalizations (mental illness, substance abuse, self-injury), and female hospitalizations (ages 15-44 years) for mental illness and self-injury. Significant differences in rates and trend based on geographic regions and race ethnic group reveal continuing health disparities. **Conclusions:** Assessing and monitoring MCAH outcomes in state as large and diverse as California is enhanced by analyzing state and local rates and trends over time and identifying disparate outcomes by geography and race/ethnicity.

ROMITO L, RADOSEVICH J, LEE R, MOELLER K. Implementing a resident-driven morbidity and mortality conference at a community-based family medicine residency program.

Context & Objective: Residents at the Contra Costa Family Medicine Residency program identified a need and desire for more substantive resident physician involvement in morbidity and mortality case reviews at our institution. This correlates with a national trend identified in 2007 that only about 42% of community-based family medicine residency programs hold educational morbidity and mortality

immediate neonatal care.

POLLOCK L, MATIN M, HAMMER H. Development of an HIV patient registry to improve care in an academic family medicine clinic.

Context & Objective: A key component of chronic disease management is a data collection system that both supports and drives optimal care of the individual patient and the defined population. Registries are used to manage chronic illness, improve care coordination, and ensure adherence to preventive care guidelines. As HIV is increasingly managed as a chronic condition, population registries have potential to improve HIV care provision and coordination. However, few studies have evaluated their impact. This project aims to implement and evaluate a population registry for HIV-positive (HIV-POSTIVE) patients at a residency-based public health center. **Settings/Populations:** The San Francisco General Hospital Family Health Center (FHC) is a family medicine clinic serving a diverse urban population. Within the FHC, the Family HIV Clinic (FHVC) provides primary care and consultation services to HIV-POSTIVE patients and their family members. The registry will include all HIV-POSTIVE patients who actively receive primary care at the FHC. All FHC providers with HIV-POSTIVE patients in their primary care panels will have the opportunity to utilize the registry. **Interventions/Study Design:** We are creating a registry of HIV-POSTIVE patients and their key clinical measures for use by health care providers. Once the registry has been modified based on provider feedback in short cycles of implementation and evaluation, we will disseminate provider reports and conduct trainings on how to use the registry to improve care. At baseline and six months after dissemination, we will evaluate outcome measures. **Outcomes/Results:** We will measure improvement in the percent of HIV-POSTIVE patients with a primary care visit in the last six months, percent of HIV-POSTIVE patients with an HIV viral load measured in the last six months, and percent of HIV-POSTIVE patients with an undetectable viral load. We will also assess improvement in other key clinical measures that are identified as part of the development process for inclusion in the registry. **Conclusions:** We hope to assess the feasibility of implementing an HIV patient registry in this setting, identifying challenges and successes to aid future efforts at other sites. We will also assess whether and how the registry improves clinical outcomes for patients.

PRADO C, HESSLER D, DeVORE D, WILLARD-GRACE R, BODENHEIMER T, CHEN EH, THOM DH. Low patient trust in primary care provider predicts medication non-adherence 12 months later.

Context & Objective: Patients' trust in their primary care providers (PCPs) has been associated with medication adherence in cross-sectional studies. This study examines the association between patients' trust in their PCPs, medication adherence, and the influence of health coaching on adherence. **Settings/Populations:** Participants were 441 low-income English- or Spanish-speaking adult patients with poorly controlled type 2 diabetes, hypertension, and/or hyperlipidemia at two urban federally qualified health centers. **Interventions/Study Design:** In a prospective study of patients enrolled in health coaching versus usual care, we examined the association between patients' trust in their PCPs and medication non-adherence. The predictor variable was patient trust in his/her PCP measured by the Trust in Physician Scale at baseline. Outcome measures were medication non-adherence at 12 months, defined as the Hill-Bone Scale score and as patient-reported number of days in past week medication not taken, adjusted for age, gender, language, race/ethnicity, and baseline adherence. **Outcomes/Results:** Patient trust at enrollment predicted number of patient-reported days missed taking medication in the past week (adjusted $r = -0.22$, $p < .001$). At 12 months, patients who were in the lowest trust quartile at baseline reported missing medications in the past week twice as often as those in the highest trust quartile (mean = 1.6 days vs 0.8 days). Patient trust at enrollment also predicted 12-month adherence as measured by the Hill-Bone scale for patients in the usual care group ($r = -0.25$, adjusted $p = .004$), but not in the coached group ($p < .01$ for interaction by study arm). Patients in the usual care group who had low baseline trust had an increase in their Hill-Bone non-adherence score at 12 months. In contrast, coached patients with low baseline trust had the same Hill-Bone scores at 12 months as the high-trust, coached patients. **Conclusions:** Patients with low trust in their PCPs are more likely to be non-adherent to medications up to one year later. Health coaching appears to attenuate the association between low trust in the PCP and nonadherence.

PRIETO E, MEEHAN EK, HAMMER H. The Mothers and Infants Nurturing Together (MINT) program: a model of family-centered care for a vulnerable and underserved population.

Context & Objective: The Mothers and Infants Nurturing Together (MINT) Program was established in

Maternal, Child, and Adolescent Health

Chapelhill Room & Outdoor Deck

Does a History of Prior Uterine Scarring Increase the Likelihood of Intervention among Women Undergoing Medication Abortion?

Nora Anderson, MPA

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The Mothers and Infants Nurturing Together Program: A Model of Family-centered Care for a Vulnerable and Underserved Population

Edna Prieto and Hali Hammer, MD

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Immediate Neonatal Care: A Needs Assessment in the District of Arequipa, Peru

Ivel Morales, MD

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Medi-Cal Recipients' Reasons for Lack of Dental Care during Pregnancy in California

Kristen S. Marchi, MPH

Abstract: Page 39

Prenatal Care Providers' Practices and Women's Receipt of Dental Care during Pregnancy before and after Release of California Perinatal Oral Health Guidelines

Kristen S. Marchi, MPH

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Experiences Developing a Financial Empowerment Program to Improve Maternal and Infant Health

Mercedes Dekker, MPH

Abstract: Page 31

Evaluating a State-wide Program for African-American Pregnant and Postpartum Women

Mercedes Dekker, MPH

Abstract: Page 30

California Trends in Maternal, Child, and Adolescent Health Outcomes from 2000-2011

Jennifer Rienks, PhD, Harleen Dyal, MD, and Ruth Long, MPH

Abstract: Page 43

*Some abstract submitters were unable to present their posters,
but their abstracts are listed here and included
in the abstracts section of the program.*

Shorter, Sicker Lives: The US Health Disadvantage Relative to Other Affluent Countries
Paula Braveman, MD, MPH *Abstract: Page 49*

Rotary kPilot International Telemedicine Project in Six Countries
James K. Gude, MD *Abstract: Page 49*

Rotary Club Sponsored Telemedicine for World Hospitals
James K. Gude, MD *Abstract: Page 49*

Rotary Telemedicine with EMR in World Hospitals for Specialty Consultations and
Education
James K. Gude, MD *Abstract: Page 49*

A Quality Improvement Project to Promote Safe and Effective Opioid Prescribing at an
Academic Family Medicine Center
Payam Sazegar, MD *Abstract: Page 20*

Increasing Longitudinal Pre-medical Mentorship for Students Interested in Medicine and
Primary Care
Steven Y. He, BS *Abstract: Page 50*

The Patient-centered Medical Home: Impact on Costs and Quality—Annual Update of
the Evidence
J. Nwando Olayiwola, MD, MPH *Abstract: Page 50*

strains/fractures). The pamphlets were placed in the waiting room, and the navigational handout was given to 20 randomly chosen patients. A short questionnaire was administered to these patients to gather feedback regarding the reading materials. **Outcomes/Results:** Reducing the wait time was patients' number one concern. Most patients thought the navigational pamphlet was helpful in terms of setting expectations for their visits. The educational handouts were not effective—no patients read the handouts and none expressed interest in reading them. Common reasons given were that patients were too tired, watching a movie, or feeling unwell; they did not see the handouts; or they brought their own reading materials. Additional financial and insurance assistance could be helpful. Additional signs at SFGH directing patients to UCC might be helpful, but not necessary. **Conclusions:** Having a navigational pamphlet for the UCC was helpful to patients, but additional reading materials were not. Since most patients are concerned about the long waits at UCC, reducing wait time will likely improve patient satisfaction.

MIRSKY J, GONZALEZ V, DUSCH M, HILL-SAKURAI L. Piloting “Brief-Counseling Stress Reduction” in primary care: a medical student quality improvement project at the UCSF Family Medicine Center at Lakeshore.

Context & Objective: The burden of patient stress in primary care is staggering, with up to 80% of primary care visits including a stress-related component. Surprisingly, primary care providers devote less time to counseling for stress management than nutrition, physical activity, weight reduction, and tobacco cessation. The effects of this are likely profound given the high incidence of depression, anxiety, and other mental health conditions in the population. Complementary and alternative approaches to stress reduction have recently grown in popularity. Several studies demonstrate the benefit of Mindfulness-Based Stress Reduction, a clinically standardized meditation technique taught in a classroom setting. To our knowledge, the interest in and feasibility of stress counseling in the primary care setting has not been assessed. **Settings/Populations:** Our study was conducted at the UCSF Family Medicine Center at Lakeshore. The authors are three UCSF third-year medical students and one attending physician. **Interventions/Study Design:** The first objective of the study was to assess Lakeshore provider opinions on the use of stress management practices in primary care. The second objective was to develop a standardized brief-counseling technique for stress reduction to be piloted at Lakeshore. **Outcomes/Results:** All providers (n=5) indicated that they spend no more than 25% of a visit discussing stress management when a patient is not coming in for a stress management issue. Providers were enthusiastic that they would feel comfortable teaching a brief stress reduction technique. We developed a teaching module for the 478 Deep Breathing Technique that we call Brief-Counseling Stress Reduction (BCSR). The use of BCSR takes approximately three to five minutes in clinic and includes home instructions for continued use. Initial anecdotes indicate overwhelmingly positive reception from patients. Lakeshore providers will be taught BCSR in the spring of 2014. **Conclusions:** Providers at Lakeshore mirror the national trend of inadequately addressing stress management in a primary care setting. BCSR is feasible and likely effective in the primary care setting.

MORALES I, MARTIN H. Immediate neonatal care: a needs assessment in the District of Arequipa, Peru.

Context & Objective: High perinatal mortality in developing countries of South America is an important global health concern. In Peru, there are 16 perinatal deaths per 1000 term pregnancies. Observational studies in low-resource settings have shown that basic neonatal resuscitation may avert 30% of intrapartum-related neonatal deaths. In Peru, there are 10 stillbirths per 1000 births, posing neonatal resuscitation and routine infant care as an area of priority in service development. **Settings/Populations:** Public community clinics and hospitals in the Region Arequipa-Caylloma, Peru, that have maternity care. **Interventions/Study Design:** In order to identify the deficiencies in the region of Arequipa, Peru, a formal needs assessment of routine immediate neonatal care was performed. In affiliation with the local health officials of the Region Arequipa-Caylloma, health centers that provide maternity care were selected for the study. Health providers including midwives, obstetricians, nurses, and general doctors in these centers were verbally consented and provided with a survey. These surveys assessed their knowledge base prior exposure to training courses, perceptions on current needs, and receptiveness to interventions. The written surveys were supplemented with elicitation interviews covering the same objectives but focusing on motivations and beliefs. **Outcomes/Results:** Data collection is currently in its final stage. **Conclusions:** With this qualitative data and insight, we plan to design an effective, sustainable, and realistic intervention in the community of Arequipa to optimize

Likert scales rated their confidence (1=not confident, 5=highly confident) performing various health coaching tasks as 3.26 (0.18). They rated their knowledge base (1=not knowledgeable, 5=highly knowledgeable) regarding various chronic medical conditions, such as hypertension as 3.20 (0.11). A March 2014 focus group was independently coded by Dr. Marcus and Dr. Vener. Three themes arose from student responses: medical students learning initiative and confidence; residents as teachers; and medical students adding value. Preliminary qualitative comments suggest strengths of student health coaching include meaningful, direct interactions with patients where students play useful, authentic roles in patient care. Barriers to optimal implementation of this curriculum are logistical, such as ensuring all team members know student roles and ensuring adequate space and privacy for students to perform health coaching work. In spite of these challenges, qualitative feedback suggests the selective has been well received. **Conclusions:** Curricula allowing first-year medical students opportunities to gain early direct clinical exposure are well received by medical students, residents, and attendings. Medical students develop their initiative and confidence while residents develop their teaching skills. The medical students "add value" to the health care team by spending extra time with patients to make the patients feel their concerns are being heard.

MEHLING WE, PRICE C, DAUBENMIER J, ACREE M, BARTMESS E, STEWART A. Body awareness, the practice of yoga or meditation, and recovery in 435 primary care patients with past or current low back pain.

Context & Objective: Low back pain (LBP) is a common reason for patients to see a primary care physician. Neurologically, perceived pain is an element of interoceptive body awareness (BA), which describes how we attend to our body and to pain. It has been hypothesized that practicing yoga and meditation may help pain patients through improved BA, but BA has rarely been assessed in this population. We provide the first quantitative data on BA in primary care patients with past or current LBP, comparing those who practiced yoga and/or meditation with those who did not. **Settings/Populations:** Primary care patients at Kaiser Permanente in Northern California. **Interventions/Study Design:** Observational cohort study in primary care patients who had strictly defined acute LBP at inception (duration <30 days; no prior episode of LBP for 1 year; no prior spine surgery). At the two-year follow-up, we applied the Multidimensional Assessment of Interoceptive Awareness (MAIA) questionnaire that assesses eight dimensions of BA: noticing; distracting; worrying; attention regulation; emotional awareness; self-regulation; body-listening; and trusting. We compared rates of non-recovery (chronic pain) and MAIA scores between those who practiced a form of mind-body therapy and those who did not. **Outcomes/Results:** Of the 435 patients surveyed, 172 (40%) had persistent/recurrent LBP. Eighty practiced yoga, 144 reported experience with meditation; both scored significantly higher on six of eight MAIA scales (range 0-5) than mind-body inexperienced patients (largest difference for self-regulation: 3.60 vs 2.80; $p < .001$). Higher levels of yoga and meditation experience (4 levels) were associated with higher BA scores. Higher levels of BA were not associated with better recovery. Those who reported more than "a taste of" meditation experience had a 38% reduced risk of chronic pain ($p = .041$); those reporting that level of any type of mind-body therapy experience had a 24% reduced risk ($p = .047$). **Conclusions:** In a cohort of primary care patients with acute LBP at inception, those who practiced yoga or reported some experience with meditation reported higher levels of BA compared to those who did not. Mind-body therapies were associated with better recovery from pain.

MEYER M, LABUGUEN R. Evaluation of navigational and educational pamphlets in the San Francisco General Hospital Urgent Care Center.

Context & Objective: Previous student projects have identified patients' desires for clearer expectations regarding the process in the San Francisco General Hospital Urgent Care Center (UCC) and for reading materials in the waiting room. Research has demonstrated that accurate expectations are important determinants of patient satisfaction. The goal of this project was to use patient input from previous projects regarding how to improve the UCC, to implement changes based on these recommendations, and to analyze the effectiveness of these changes with the ultimate goal of improving patient satisfaction and quality of care. **Settings/Populations:** A survey was conducted of English-speaking patients ($n = 20$) in the UCC waiting room to evaluate the effectiveness of both a navigational pamphlet and educational handouts, and also to solicit additional suggestions for how to improve the UCC experience. **Interventions/Study Design:** A navigational pamphlet was created to explain the process of what happens in the UCC and what services are provided. Six educational handouts were created regarding a variety of topics (nutrition, domestic violence, Healthy SF, back pain, colds/flu, and sprains/

ARORA I, WALDURA J. Midlife women in the HIV epidemic.

Context & Objective: The risk of HIV infection among middle-aged women may be underestimated by medical providers and the general public alike. Women aged 45-64 years often believe HIV only affects younger, more promiscuous individuals, and clinicians may consider sexual histories to be of limited importance in this demographic. Although statistics about the HIV epidemic are frequently reported for women as a whole, information about middle-aged women, in particular, is not readily available. The objective of this study is to examine and highlight the impact of the HIV/AIDS epidemic on middle-aged women. **Settings/Populations:** Data used for this study were collected and published by the Centers for Disease Control (CDC) and is representative of the US population. **Interventions/Study Design:** We used publically accessible CDC HIV surveillance data for this study including the HIV surveillance report from 2010 and two supplemental reports. The data were retabulated to highlight information specific to middle-aged women (defined as ages 45-64) and to make comparisons with other groups such as adolescents. **Outcomes/Results:** In 2010, among adults and adolescents, one in five patients with new HIV diagnoses was a woman. However, in patients aged 50-64 years, one in four with new HIV diagnoses was a woman. From 2007-2010, the incidence of HIV in women aged 45-54 years was the same as, or higher than, that in adolescent females. In addition, although the rate of new HIV diagnoses in middle-aged women remained stable, infections attributable to intravenous drug use decreased by 2.4% while infections from heterosexual contact increased by 3.1%. **Conclusions:** Middle-aged women have the same risk of HIV infection as adolescents, and their rate of heterosexually acquired infections continues to rise. Clinicians should be vigilant about the risk of HIV in their middle-aged female patients and should include sexual histories as a part of routine care for women of all ages. Public health and women's health groups should consider expanding their HIV prevention campaigns to include middle-aged women.

BROMER S, COLVARIO S. The HIV Medical Homes Resource Center Project: delivering technical assistance for practice transformation to HIV Ryan White practices across the United States.

Context & Objective: For the past three years, the Center for Excellence in Primary Care (CEPC) in UCSF's Department of Family and Community Medicine has been collaborating with Rutgers University's François-Xavier Bagnoud (FXB) Center as the HIV Medical Homes Resource Center (HIV-MHRC). The HIV-MHRC supports Ryan White HIV practices around the country to transform into patient-centered medical homes (PCMHs) using CEPC's 10 Building Blocks of High Performing Practices as a guide. The Ryan White HIV/AIDS Program provides services to more than 500,000 people each year who do not have sufficient healthcare coverage to cope with HIV disease. Building upon existing strengths of Ryan White HIV/AIDS Program grantees, the HIV-**Settings/Populations:** PCMH models are increasingly becoming more common as a mode of primary care delivery in the US, and many clinics want to get certified or recognized as PCMHs. The PCMH model has been focused on the primary care setting, and most of the literature and tools are not specific to HIV settings. MHRC provides an important resource to strengthen primary care for people living with HIV/AIDS and to improve health care access and outcomes for a population of adults and children at significant risk for health disparities. **Interventions/Study Design:** The HIV-MHRC provides support to Ryan White grantees to: understand concepts behind PCMH and their relationship to the HIV model of care; learn the requirements for recognition/certification as a PCMH and successfully become recognized/certified medical homes; and increase capacity to implement PCMH principles and practices. **Outcomes/Results:** Fifty-five Ryan White programs participated in five regional two-day strategic planning workshops to introduce PCMH concepts and support their teams to develop action plans for practice transformation. These were followed up with opportunities to participate in virtual learning collaboratives (VLCs). Additionally, a series of five national webinars were presented on key PCMH concepts. **Conclusions:** This presentation/poster will share details of our delivery mechanisms to this diverse audience. We will highlight both qualitative and quantitative results of our interventions from the strategic planning workshops, VLCs, and webinars with a particular focus on the unique challenges that Ryan White Practices face in transforming toward the PCMH model.

CHASE J. Communicating wisely: a collaborative model for care transitions.

Context & Objective: Care transitions are a vital focus for healthcare system quality and cost containment. Ongoing care transitions research includes communication and risk prediction tools and

interventions to reduce post-discharge adverse events. This presentation describes a two-phase project using email-based, standardized communication to identify multidisciplinary needs on inpatient admission and to simultaneously communicate and arrange interventions with community clinic multidisciplinary providers. **Settings/Populations:** The San Francisco General Hospital Family Medicine Inpatient Service (FMIS) provides care to an underserved (majority at or below the federal poverty level) and diverse (> 30% non-English speaking) population from six partner clinics in the San Francisco Department of Public Health (SFDPH). **Interventions/Study Design:** Phase 1 piloted a standardized email from FMIS to primary care providers (PCPs) detailing patient admission, including diagnosis, expected discharge date, and FMIS contact information. The admission email allowed simultaneous communication to facilitate primary care follow-up appointment scheduling. A standardized email was sent at discharge to update the PCP. Outreach interviews with PCPs about impact have yielded positive feedback. The follow-up appointment process was 50% successful at making primary care medical home (PCMH) appointments. Analysis of the initial pilot yielded multiple areas for further improvement. The communication process in Phase 2 incorporates feedback from PCPs regarding email details and inpatient providers' recommendations to PCMHs for evidence-based interventions based on an embedded risk prediction tool. The Phase 2 communication process simultaneously involves FMIS, PCP, PCMH clerical and care transitions staff, and other established or anticipated consultants (eg. outpatient oncologist, anticoagulation pharmacist, community case manager, etc.) **Outcomes/Results:** Results from Phase 1 show positive feedback from PCPs about quality and timeliness of communication. Planned data collection, available by the time of the colloquium, will include formal satisfaction data from PCPs, feedback from inpatient providers, and investigation of the impact on readmissions. **Conclusions:** This collaborative care transitions process leverages an inexpensive, efficient communication strategy, describes essential patient details, initiates care collaboration between multidisciplinary providers on admission, incorporates risk screening and actionable recommendations for evidence-based interventions, and facilitates scheduling of post-discharge appointments. The process is easily adaptable to future electronic health record platforms. While final data is pending, we anticipate that it will improve coordination of care and patient outcomes.

CHEN R, PETERSON S, BAZEMORE A, GRUMBACH K. Prospects for sustaining the Primary Care Residency Expansion program.

Context & Objective: The success of the Affordable Care Act will depend upon a robust primary care physician training pipeline. The purpose of this study was to determine the likelihood of sustaining the expanded residency positions added through the Primary Care Residency Expansion Program beyond the expiration of the grant in 2015 and the sources of funding that will support those expanded positions. **Settings/Populations:** Program directors were located in academic institutions and in community clinics spread across urban and rural settings in the US. The authors administered an online or telephone survey to the program directors of the 78 active primary care residency programs that received the grant. The survey was conducted from September to December 2013. **Interventions/Study Design:** Cross-sectional survey. **Outcomes/Results:** A total of 64 program directors responded (response rate = 82%). Nearly half (48%) of programs were either not planning to continue supporting the expanded residency positions or felt it is unlikely or very unlikely that they will be able to do so after the expiration of the Primary Care Residency Expansion grant in 2015. Of the programs that planned to continue supporting the expanded positions, nearly two-thirds (61%) of programs have no funding secured to do so. **Conclusions:** In this survey about the prospects for sustaining the gains from the Primary Care Residency Expansion program, a considerable number of programs are at risk of losing the expanded residency positions. Most program directors have not secured funding, and many are relying on funding sources that are unrealistic. Current projections of the supply and distribution of primary care physicians fall vastly short of future need as health care utilization continues to climb due to an aging, expanding, and newly insured population. The survey results portend the potential loss of significant numbers of new primary care physicians being trained every year, many of whom practice in underserved areas (Federally Qualified Health Centers, Rural Health Clinics, and/or Critical Access Hospitals). Future directions in GME funding should focus on targeted efforts that produce primary care physicians and physicians working in shortage areas to better align taxpayers' investment in physician training with society's pressing health care needs.

prevalence of receipt of oral health care and reasons for not receiving dental care during pregnancy among Medi-Cal recipients. **Outcomes/Results:** Overall, 42.1% of women had a dental visit during pregnancy and 47.1% had Medi-Cal coverage for prenatal care. Medi-Cal recipients were significantly less likely than women with private insurance to have had a dental visit (29.9% vs 53.7%, $p < .001$). While Medi-Cal offers limited dental coverage during pregnancy, lack of dental insurance was the second most frequently reported reason for non-receipt of dental care (54.8%) among Medi-Cal recipients. Other barriers were cost (58.0%), lack of perceived need (39.2%), and belief that one should not get dental care during pregnancy (32.4%). The proportion of Medi-Cal recipients reporting lack of dental insurance varied among racial/ethnic groups: foreign-born Latina, Asian/Pacific Islander, and White women were more likely than African-American women to report lack of dental insurance. Spanish-speakers were also more likely to lack insurance. Other subgroup variations were not notable. **Conclusions:** Although coverage for dental services was available for pregnant Medi-Cal recipients, fewer than one-third had dental visits during pregnancy. Cost and lack of insurance were their leading reasons for not receiving care; lack of knowledge also contributed. Women on Medi-Cal need to be better informed of the dental benefits available to them and the importance of receiving dental care during their pregnancies.

MARCHI K, RINKI C, TERPAK C, CURTIS M, BRAVEMAN P. Prenatal care providers' practices and women's receipt of dental care during pregnancy before and after release of California perinatal oral health guidelines.

Context & Objective: Prior research found many pregnant women in California did not receive dental care during pregnancy. In 2010, the California Dental Association Foundation and the American College of Obstetricians and Gynecologists jointly released guidelines promoting oral health care during the perinatal period and recommending provision of oral health education and referrals as part of prenatal care. We examined whether prenatal care provider oral health practices during pregnancy and pregnant women's receipt of dental care improved between 2009 and 2012. **Settings/Populations:** Women with a recent live birth in California in 2009 and 2012. **Interventions/Study Design:** We used survey data from 2009 ($n=3,105$) and 2012 ($n=6,810$) to compare increases in the prevalence of prenatal provider discussion of oral health during pregnancy; provider referral to an oral health professional, and pregnant women's receipt of dental care. We also examined whether women's receipt of dental care during pregnancy varied by whether their providers discussed oral health or referred them to a dentist. **Outcomes/Results:** Between 2009 and 2012, the proportion of women reporting that their prenatal care providers talked with them about oral health or referred them to a dentist increased significantly overall (from 35.9% to 41.7%, and 20.5% to 26.2%, respectively, $p < .001$). The proportion of women with a dental visit during pregnancy also increased, from 38.2% in 2009 to 42.1% in 2012 ($p < .01$). Women whose providers discussed oral health or referred them to a dentist were approximately two times more likely to report having had a dental visit in both 2009 and 2012. Changes in oral-health-related services were greater in some lower-SES subgroups of women. **Conclusions:** Provider oral health practices and receipt of dental care increased between 2009 and 2012. Improvements in receipt of dental care could partly be explained by the increase in the proportion of prenatal providers who talked about oral health with their patients or who referred them to dentists. Unfortunately, more than half of California women giving birth in 2012 still did not receive oral health counseling during their prenatal visits; about 60% did not receive dental care during pregnancy. Additional outreach to providers and pregnant women is needed to ensure women receive recommended oral health education and intervention during pregnancy.

MARCUS P, COLETTI C, CRAWFORD J, GHOROB A, McNAMARA N, VENER M. "Value added": first-year medical students working as health coaches in a primary care clinic.

Context and Objective: In 2013-2014, 154 first-year medical students participated in a health coaching workshop to develop skills in motivational interviewing techniques and how to work collaboratively with patients to manage some basic aspects of common chronic illnesses. After this training, 12 students were placed at the SFGH Family Health Center for five workplace learning sessions. The objective was to expand opportunities for early learners' clinical exposure and to engage them in the health care team to play meaningful roles in improving patient care while still in an early stage of training. **Setting/Populations:** First-year medical students in the "Health Coaching Selective" working with residents in a busy, urban, county-hospital-based family medicine resident continuity clinic. **Intervention/Study Design:** Medical students, residents, and attendings completed pre-selective, Likert-scale surveys evaluating their experiences. A focus group was completed March 2014, and post-selective surveys will be distributed May 2014. **Outcomes/Results:** Before sessions began, medical students using five-point

LUBEGA S, AGBIN U, SURJADI M, MAHONEY M, KHALILI M. Formal hepatitis C education enhances hepatitis C care coordination, expedites hepatitis C treatment, and improves antiviral response.

Context & Objective: Formal Hepatitis C virus (HCV) education improves HCV knowledge, but the impact on treatment uptake and outcome is not well described. We aimed to evaluate the impact of formal HCV patient education on primary provider-specialist HCV co-management and treatment.

Settings/Populations: Primary care providers and HCV infected patients within the San Francisco safety-net health care system. **Interventions/Study Design:** Primary care providers within the San Francisco safety-net health care system were surveyed, and the records of HCV-infected patients before and after institution of a formal HCV education class by liver specialists (2006-2011) were reviewed retrospectively.

Outcomes/Results: Characteristics of 118 patients who received anti-HCV therapy were: mean age 51 years; 73% male; and ~50% White and uninsured. The time to initiation of HCV treatment was shorter among those who received formal education (median 136 vs 284 days, $p < 0.0001$). When controlling for age, gender, race, and HCV viral load, non-1 genotype (OR 6.17, 95% CI 2.3-12.7, $p = 0.0003$) and receipt of HCV education (OR 3.0, 95% CI 1.1-7.9, $p = 0.03$) were associated with sustained virologic treatment response. Among 94 provider respondents (response rate=38%), mean age was 42 years, 62% were White, and 63% female. Most providers agreed that the HCV education class increased patients' HCV knowledge (70%), interest in HCV treatment (52%), and provider-patient communication (56%). A positive provider attitude (Coef 1.5, 95% CI 0.1-2.9%, $p = 0.039$) was independently associated with referral rate to education class. **Conclusions:** Formal HCV education expedites HCV therapy and improves virologic response rates among patients referred by their primary care providers for treatment. As primary care provider attitude plays a significant role in referral to HCV education class, primary providers play a critical role in enhancing access to HCV treatment services and relieving the burden of HCV in vulnerable populations.

MAN C, NGUYEN C, LIN S. Effectiveness of a smartphone application for guiding antidepressant drug selection.

Context & Objective: Major depression is a prevalent chronic disease in the US. However, many physicians lack access to decision support tools at the point of care to choose antidepressants in a rational, evidence-based manner. A patient-centered treatment model that uses a symptom-based approach to selecting antidepressants was developed into a smartphone application to provide instant, evidence-based recommendations and drug monographs. The purpose of this study was to assess the impact of this mobile application on the confidence level of family physicians in treating depression.

Settings/Populations: The smartphone application was provided to 14 family medicine residents and attending physicians from the O'Connor Family Medicine Residency Program in San Jose, CA.

Interventions/Study Design: Participants were asked to use the software as drug reference and clinical decision support during patient care activities. Three surveys were administered over a 12-week period to assess provider characteristics, outcome measures (ie, confidence in managing depression and choosing an initial antidepressant based on patient symptoms, medical comorbidities, potential side effects, and drug interactions), and fund of antidepressant knowledge. **Outcomes/Results:** The average confidence levels in managing depression, starting an antidepressant on a patient with depression, and choosing an initial antidepressant based on patient symptoms increased significantly within the period of smartphone application usage. The average scores on the antidepressant knowledge tests also improved. **Conclusions:** The smartphone application was an effective tool for both increasing confidence in depression treatment and educating physicians. Future studies to evaluate the effectiveness and impact of smartphone applications on medical education and postgraduate training are warranted.

MARCHI K, RINKI C, TERPAK C, CURTIS M, BRAVEMAN P. Medi-Cal recipients' reasons for lack of dental care during pregnancy in California.

Context & Objective: Prior research has found that many pregnant women in California do not receive recommended dental care during pregnancy. Medi-Cal recipients are more likely than privately insured women to lack oral health care. We examined self-reported reasons for lack of receipt of dental care among Medi-Cal recipients during pregnancy. **Settings/Populations:** Women with a recent live birth in California surveyed through the annual, population-based Maternal and Infant Health Assessment (MIHA). **Interventions/Study Design:** We used MIHA survey data from 2012 ($n = 6,810$) to examine

CHUNG L, BOYER-CHU L, COLLINS-BRIDE G, KYM E, LE M, WIU W, QUEEN-JOHNSON A, QUEZADA R, ROSE S, SHEN A, SISLER S, SOESBE S, TAYLOR P, WONG H, YOUMANS S, WORTIS N. Interprofessional development of online curriculum modules to prepare future health professionals for community engagement.

Context & Objective: The Centers for Disease Control defines community engagement as "the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people." All health professionals need the skills to do this kind of population health work. However, UCSF's existing community engagement curricula are not available to all UCSF learners and are not designed for interprofessional audiences. The objective of this project was to develop online modules that prepare health professions trainees from any of UCSF's schools for authentic community engagement, following Kern's curriculum development framework. **Settings/Populations:** Our target population was all UCSF trainees. Our interprofessional team included faculty members and students from the Schools of Dentistry, Medicine, Nursing, Pharmacy, and Graduate Division, along with university staff and community partners. **Interventions/Study Design:** We conducted a targeted assessment of needs and resources, including focus groups with community members and UCSF learners, to inform the selection of five module topics and their content. Working groups were formed to develop each module's goals, learning objectives, and educational strategies. Three cycles of internal review by the team resulted in modifications during the formative stage. We incorporated photographs and videos into narrated presentations, using Articulate software and Moodle 2.0. **Outcomes/Results:** Five modules are available on UCSF's Collaborative Learning Environment and on UCSF's Office of University Community Partnerships website: Introduction to Community Engagement; Community Assessment; Introduction to SF's Diverse Communities; Health Communication/Literacy; and Partnering with UCSF. We are piloting the modules in all UCSF schools and with community partners. Each module contains an evaluation to assess viewer knowledge, attitudes, and satisfaction. Early pilot results suggest that 85% of 129 respondents report improved knowledge. **Conclusions:** Our interprofessional and community-engaged curriculum development process worked well, and pilot learners find the modules effective. We found the Articulate software difficult to use.

COFFA D, WAND AC, ADBEL-WAHAB M, LISEA L, BARNES S, SABA G. The Pain Squad: an interdisciplinary team to promote safe and effective pain management.

Context & Objective: The management of chronic pain has long been an area of struggle for medical providers. Before the advent of opioids, providers were frequently disheartened by their inability to improve patients' pain. In recent decades, provider frustration has been compounded by increasing rates of opioid misuse, dependence, and overdose, leading most providers to feel uncertain about how to help this vulnerable group of patients. The availability of specialty consultants is inadequate to the need. **Settings/Populations:** At the Family Health Center (FHC), we developed a unique program to provide support for providers struggling to help their patients. The Controlled Substances Peer Review Committee, affectionately known as the Pain Squad, is a multidisciplinary group consisting of a physician's assistant, nurse practitioner, psychologist, physician, medical assistant, quality improvement manager, clerk, and nurse. The team meets bi-weekly or monthly (depending on the need). **Interventions/Study Design:** The Pain Squad collaboratively reviewed best practices regionally and nationally to develop a comprehensive clinic policy and guidelines on opioid prescribing; 100% of our providers signed onto the program. Guided by these policies and guidelines, the Pain Squad reviews high-risk cases monthly. Providers and staff members may refer any patient to the Pain Squad, either out of concern about misuse of a controlled substance or inadequately treated pain. The group reviews patient records, urine drug tests, and Prescription Drug Monitoring Program data to determine the patient's risk for opioid misuse and likely pain diagnosis. A standardized form is used to provide feedback and guidance to the primary care provider regarding substance abuse treatment strategies and pain management strategies. **Outcomes/Results:** We were affirmed in our thesis that a multidisciplinary team is uniquely suited to this task, with clerks and medical assistants sharing information about patients' behavior outside of clinic visits, psychologists providing insight into management strategies for psychological issues, and medical providers able to provide specific advice about medications and non-pharmacologic pain management. **Conclusions:** We will describe the Pain Squad's process for reviewing cases and share standardized referral and feedback forms, provider utilization data, and clinic policies and guidelines.

DeMARCHIS EH, LIN S, YU GC, RYDEL TA, SCHILLINGER E. Bull's-eye: experiences of students pursuing family medicine from a family medicine "target school."

Context & Objective: A cohort of courageous future family doctors is coming from some unlikely places: the family medicine "target schools." Ten US medical schools are considered target schools because they lack departments of family medicine (FM). The national spotlight is shining on FM's essential role in providing the best access and quality of health care, yet these schools remain more focused on subspecialty training than on primary care. Even so, there has been a significant uptick in student interest in FM. This project focuses on what factors influence medical students at target schools to pursue FM careers and what more can be done to pique student interest. **Settings/Populations:** The eight Stanford University medical students who matched in FM in 2013 and the six matching in 2014 were surveyed on their experiences with FM before and during their time at Stanford to explore the positive and negative experiences that helped shape their specialty choice. Response rate 11/14 (78.6%). **Interventions/Study Design:** Survey responses were collected as both categorical and free text. Attention was paid to those strengths that can be leveraged across institutions and those areas for improvement that need to be addressed in order to support our future leaders in FM. **Outcomes/Results:** Overall, students at Stanford felt supported in their decision to match in FM, though many continue to feel pressure to first explore alternative options promoted as more academic or encounter negative feedback regarding their choice of specialty, especially from non-FM house staff interns and sub-specialists. Nearly half of students entered medical school unaware of FM as a specialty option (46%) and identified lack of visibility of FM at Stanford as one of the largest obstacles to the specialty flourishing. **Conclusions:** Interest in FM is increasing at target schools, such as Stanford University. Much progress can be made with even a small, dedicated FM faculty. Early exposures to FM and opportunities to explore the breadth and academic rigor of FM may further increase interest for FM. Institutional support and a commitment to FM by the hospital and school is essential.

DUBÉ K, WILLARD-GRACE, O'BRIEN B, SHUNK R, EARNEST G, GUPTA R, BODENHEIMER T, GRUMBACH K. Team-based care and primary care clinicians' experiences at work: a comparison across health systems.

Context & Objective: Team-based care has been proposed as an antidote to primary care clinician burnout. Robust models for team-based care have been developed in organizations such as the Veterans Administration (VA) with the patient-aligned care team (PACT) model. We investigated the relationship between the implementation of team-based care processes, primary care clinician perception of team culture, and clinician work experience in the VA compared to two other health care systems. **Settings/Populations:** We surveyed 326 primary care clinicians in 10 public, six university-run, and three VA health centers in San Francisco in 2013. While each health system has some kind of team-based care model, VA PACT is the most well-established and well-staffed model. **Interventions/Study Design:** This cross-sectional survey examined the outcomes of emotional exhaustion (Maslach Burnout Inventory) and single-item measures of likelihood to recommend one's clinic as a place to work and whether primary care is becoming a more doable job. Predictor variables included clinician characteristics (eg, sessions worked per week, tenure, resident status), clinician perception of team-based care processes (eg, capability of staff to conduct panel management and complex care management), and perception of team culture. Data were analyzed using t-tests and multivariate modeling to examine differences between the systems. **Outcomes/Results:** When compared with the other systems, clinicians in VA clinics reported a strong trend towards lower emotional exhaustion (14.2 vs 16.3, $p=.08$), greater likelihood to recommend their clinic as a place to work (7.7 vs 6.6, $p=.005$), and strong trend towards greater likelihood to rate primary care as a more doable job this year than last year (7.0 vs 6.2, $p=.07$). Multivariate analysis found that team-based processes of care, such as panel management and complex care management, positively impact primary care clinician emotional exhaustion, willingness to recommend their clinic as a place to work, and do-ability of their job. Team culture partially or fully mediates this relationship, such that team-based processes of care are associated with greater team culture among the primary care clinicians, which in turn improves their experience at work. **Conclusions:** The VA PACT model offers one example of robust team-based care that appears to have a positive impact on clinician work experience.

FILIPPOU R, FRIEDMAN D, BOLOUR A. The power of a checklist: facilitating leadership of a homeless foot-washing clinic in Salinas, California.

Context & Objective: Otter Spa is a monthly foot-washing service and psychosocial outreach for the

following fellowship completion.

LACHICA R, LAHIFF M, PRATA N. Assessing the relationship between nativity and contraception use in California's Filipina women.

Context & Objective: Unintended pregnancy is common in the US, accounting for 51% of all pregnancies. Of these, 40% end in abortion and 27% end in unwanted birth. Furthermore, studies have found associations between poor prenatal and perinatal health indicators for women with unintended pregnancies. Contraception is an important intervention for preventing unintended pregnancy but, despite Filipinos being the most populous Asian and Pacific Islander (API) subgroup in California, research assessing contraceptive use in this population is lacking. Available research often aggregates data into an API racial/ethnic group, focuses solely on adolescents, or is based on convenience samples. This study aims to examine the relationship between nativity and contraceptive use among California's Filipina population using state-representative data. **Settings/Populations:** This is a secondary data analysis of the California Women's Health Survey from 1998-2009. This random digit dialing based survey is conducted by the California Department of Public Health (DPH) and collects information on a variety of health-related behaviors. Survey weights for these data were provided by the California DPH and used for all analyses. Data from a subpopulation of 355 women meeting exclusion criteria were used for analyses. **Interventions/Study Design:** Logistic regression models were used to assess the relationship between nativity and contraceptive use. Several models were created, accounting for parity as a potential confounder and a range of potential mediating variables. All models were stratified by age. **Outcomes/Results:** For women aged 18-24 years, no significant differences in contraceptive use were seen between US-born and Philippines-born Filipina women. However, for women aged 25-49 years, Philippines-born women had lower odds of contraceptive use when compared to US-born women, even after adjusting for parity. Marital status, education, employment, and poverty status did little to mediate the relationship between nativity and contraceptive use. **Conclusions:** Filipina women aged 25-49 years in California who were Philippines-born have significantly lower odds of using contraception than those that were US-born. Further research should investigate additional potential mediators of this effect, including religion/religiosity, knowledge about contraception, side effects/infertility concerns, and fertility preferences. Health practitioners should acknowledge the relationship between nativity and health behaviors in the Filipino community, especially when approaching contraception use and other culturally sensitive health issues.

LESSER L, THOMPSON C, MAZZA M, AZAR K. Online commitment contracts for weight loss.

Context & Objective: Commitment contracts are a behavioral economic tool where individuals make contracts with themselves to achieve a goal at a specified time. There are many options that can be added to commitment contracts to make them more effective. Individuals can put down money (stakes) to incentivize themselves to complete the goal; if they do not complete the goal, they lose the money. The participant can designate lost stakes to an organization that s/he likes (ie, charity), one that s/he dislikes (ie, anti-charity), or to a friend. Our objective was to determine what components of commitment contracts for weight loss are likely to lead to the largest percent decrease in weight loss. **Settings/Populations:** Our population includes contracts from individuals who voluntarily went to a public website and created a weight loss goal in 2012 ($n=5024$ individuals). **Interventions/Study Design:** We obtained data on commitment contracts for weight loss from a company that allows individuals to create online contracts. Individuals specified their own weight loss goals and time periods. Every week, they had to report their weights. Our primary outcome was percent weight loss from initial weight. We analyzed whether percent weight loss differed between those who did not put any stakes down and those who put stakes down in three different ways (charity, anti-charity, or to a friend). **Outcomes/Results:** The average age of the individuals was 38.6 years ($SD=13.2$), with 70% being female. The median duration of the contracts was 15 weeks. On average, participants lost 5.2 percent ($SD=5.9$) of body weight. Participants who put down anti-charity stakes (26% of individuals) lost 7.7% ($SD=6.5$) of body weight, compared to those who put down charity stakes (11.2% of individuals, 6.8% loss, $SD=5.8$), those who put stakes towards a friend (11.4%, 6.3% loss, $SD=5.6$), and those who did not put down stakes (51%, 3.4% loss, $SD=4.9$). All groups were significantly different from each other, except the charity and friend groups. **Conclusions:** Commitment contracts may be effective tools to assist individuals lose weight. Adding a monetary incentive may increase weight loss, with the amount dependent on the type of incentive and whether another individual verifies weight.

conducted by a fully bilingual/bicultural researcher. **Outcomes/Results:** Differences in disclosure rates between electronic and face-to-face interview formats were significant for three topics (household violence, substance use, and inadequate health insurance). Two social needs topics trended towards significance with higher disclosure rates in electronic format (financial insecurity and neighborhood and school safety). **Conclusions:** Pediatric clinical sites interested in incorporating caregiver-reported socioeconomic, environmental, and behavioral needs screening should consider electronic screening when feasible, particularly when surveys include sensitive topics like child safety and household member substance use. Screening format distinctions may be less relevant for sites focusing on basic material needs, including food, habitability, and service access. Our findings do not take into account potential limitations of electronic screening for rapport-building and interventions.

HOLLANDER K, MITTAL P. Family planning in the LGBT community: a narrative essay.

Context & Objective: Families with LGBT-identified parents are becoming more visible with the changing social climate and the legalization of gay marriage across America and the world. Family planning in this community is unique for its deliberateness and for the logistic issues of conceiving a child when the parents do not possess the necessary sperm, eggs, and womb. Many young LGBT-identified people have interests in a future family but little formal preparedness for the medical, legal, and emotional obstacles. The goal of this project is to educate LGBT-identified youth on the process of building a family through planned pregnancy. **Settings/Populations:** This project focused on LGBT-identified parents and prospective parents in the Bay Area and those who provide conception care for this population. **Interventions/Study Design:** LGBT-identified families and prospective parents were interviewed about their conception experiences and interactions with health care providers. Providers of fertility and conception services were also interviewed regarding the level of preparedness of their patients and what knowledge they would like to see imparted to young members of the LGBT community regarding family planning. We reviewed books and articles written for the popular press about family planning in the LGBT community, along with popular LGBT-focused Internet magazines and blogs for family planning content. The project's product is a narrative essay discussing the process and logistics of LGBT family planning for publication for the lay LGBT community. This essay has elements of first-person memoir, story telling from the interviews conducted, and information dissemination.

Outcomes/Results: The project has elucidated the need for better public health education, as providers report that many prospective parents present without a solid understanding of their own fertility. Families reported being unprepared for the financial and emotional costs and for the time involved in assisted conception. The goal of publishing the findings in the lay press is to reach this population before they are ready to conceive to encourage earlier planning and overall health. **Conclusions:** The projected impact will be more informed and better-prepared young members of the LGBT community regarding family planning. Future steps include an essay to be published for the medical community detailing the needs of young LGBT-identified people interested in creating a family through assisted conception.

JOHNSON BM, MULLER J. The B.E.S.T Model: a tool for structured feedback.

Context & Objective: Effective feedback is a vital step in the acquisition of medical learner development, but is often omitted or handled imperfectly in clinical training. Educational studies indicate mnemonic devices are effective means of improving short- and long-term memory. We proposed a simple, evidence-based mnemonic tool for providing feedback and evaluated faculty ratings of the new tool. **Settings/Populations:** The surveyed population included faculty members participating in the UCSF Family Medicine Faculty Development Fellowship from five consecutive cohorts beginning in 2009. Sixty-four faculty members representing seven family medicine residencies were surveyed.

Interventions/Study Design: We exposed participants to the B.E.S.T model through fellowship-run didactic and role-playing sessions. Participating faculty members completed related surveys after the teaching sessions. **Outcomes/Results:** A total of 64 faculty fellows were exposed to the model and surveyed. Results indicate a substantial majority of participants believe the B.E.S.T. tool is useful to clinical teachers interested in improving feedback from mentors to learners. Fellows rated the utility of the tool very highly with an average rating of 4.8 on a 5-point Likert scale. We are planning to continue to evaluate the B.E.S.T. model by contacting former fellows to ask additional survey questions related to the tool's use in the practice setting. **Conclusions:** Family Medicine faculty development fellows report positive reactions to the B.E.S.T model for providing feedback to learners. Further evaluation is needed to determine whether faculty members continue to use this model in their respective practice settings

homeless population of Salinas, CA. It aims to engage clients in the healthcare system and promote self care, while providing California State University, Monterey Bay (CSUMB) pre-medical undergraduates an opportunity to lead and serve in a medical setting. University of California, San Francisco (UCSF) third-year medical students rotating through the Salinas Family Medicine clerkship act as pre-medical advisors and mentors to CSUMB students by helping to oversee long-term growth of the Otter Spa. Many CSUMB students are minority and first-generation college students. By providing leadership opportunities and structural organization, we hope to empower and recruit underrepresented students to the field of medicine while nurturing commitment and loyalty to their local communities. This attempts to address an even larger long-term goal of recruiting future health professionals to a designated health professional shortage area. **Settings/Populations:** Since Otter Spa's inception in April 2013, the clinic's stakeholders have grown to include six different community, physician, and student organizations. This surge in participation, as well as frequent rotation of individual participants, necessitated the building of an efficient means of collaboration, including organized and well-delineated operations procedures. **Interventions/Study Design:** Two key organizational tools were created: an operating checklist to streamline tasks required for the functioning of the clinic; and an operations manual to consolidate all new and existing information. A united vision was solidified through the collaborative creation of a mission statement and visual diagram of key-player involvement. **Outcomes/Results:** The implementation of these tools has not only helped to facilitate transitions of leadership, but also to empower CSUMB pre-medical students to lead and manage a student-run clinic in the context of complex support. Community projects can easily be founded on collaborations lacking in cohesion and continuity. We found that the implementation of organizational tools helps to delegate responsibilities, streamline everyday functioning, empower leadership, and ensure long-term stability. **Conclusions:** In the way that checklists and protocols enable interprofessional collaboration in the hospital, so do similar interventions in a community project setting. Importantly, input from all participants in the creation of such tools is paramount to establishing commitment, trust, and a sense of community for all those invested.

GOMEZ I, HUGHES S. Innovative faculty development using objective structured teaching exercises.

Context & Objective: Faculty development is an important component of training to improve clinical teaching skills. A longitudinal curriculum was designed to help core faculty members improve their teaching skills in delivering feedback using standardized learner simulations in objective, structured teaching exercises (OSTE). **Settings/Populations:** Family medicine faculty at the UCSF Fresno Medical Education Program in Fresno, California. **Interventions/Study Design:** Four OSTE teaching scenarios were developed to address situations dealing with problem learners and difficult scenarios. Sixteen family medicine faculty members participated in a half-day event. Faculty members participated in all sessions: two as faculty preceptor; and two as faculty observer. Sessions were digitally recorded in a clinical simulation lab. Quantitative measures for each faculty member included pre/post-OSTE teaching evaluations and a faculty member behavior checklist score. Four Individuals with the highest and lowest checklist scores were selected for qualitative semi-structured interviews. Video was reviewed by the project staff and categorized by scenario encounter. Relevant excerpts denoting key observations and identifying teaching points were assembled. Five small-group reflection sessions on these excerpts were done using a trained faculty facilitator in the nine months following the OSTE: one specific to each OSTE scenario; and one focusing on faculty observer feedback to the faculty preceptor. A mixed methods analysis was done to assess effectiveness of the curriculum. Pre/post-OSTE teaching evaluations were compared using a paired t-test. Grounded theory analysis was used to identify common themes from individual semi-structured interviews. **Outcomes/Results:** There was no statistical difference in teaching evaluations. Average pre/post-OSTE scores were 4.50 and 4.45 respectively (p=0.14). Themes identified from interviews included: potential behavior change; repeating the OSTE; social learning; learning is uncomfortable; collegiality; and reality of scenarios. **Conclusions:** This study showed many qualitative benefits, but there was no difference in teaching evaluations. Further study to validate the OSTE as a tool for improving faculty teaching skills is required.

HAHN M, LIM H, MATIN M. Fighting HIV stigma through PhotoVoice: an innovative tool for patient education and empowerment.

Context & Objective: HIV patients and their families face many challenges to maintaining health and wellbeing. Stigma of HIV continues as a regrettable barrier. PhotoVoice is a community-based tool for

advocacy that utilizes photography with an aim to raise awareness and promote group-based health and education. We piloted a month-long series of Photovoice/health education sessions with the objective of providing a safe space for HIV patients and their families to share experiences and personal narratives through PhotoVoice. **Settings/Populations:** We recruited a group of current and former patients at the Family Health Center (FHC) Family HIV Clinic and the Positive Health Program at San Francisco General Hospital to participate in Photovoice sessions at the FHC. **Interventions/Study Design:** Three PhotoVoice sessions were facilitated; at each session, patients received instruction to take photographs that represent to them salient health issues in regards to HIV. The PhotoVoice sessions included introductory digital photography didactics, sharing of personal narratives in a group setting, group discussion about HIV-related health topics, and health education through the use of patient-centered educational brochures on the topics of promoting health in sero-different partnerships and disclosing HIV status to children and partners. **Outcomes/Results:** Common themes identified and discussed during these sessions include: stigma; experiences around each patient's time of HIV diagnosis; challenges in medication adherence; challenges in disclosing HIV status to friends and family; and overcoming the myriad of social challenges to maintaining health and wellbeing. By the conclusion of the sessions, patients expressed improved knowledge of protecting sero-different partners from HIV and improved skill in disclosing their diagnosis to a loved one or close friend. Patients also expressed improved emotional wellbeing and empowerment from sharing experiences with other group members. The project will culminate with a gallery exhibition of participants' photos at SFGH and a community art gallery. **Conclusions:** PhotoVoice proved to be an empowering method for patients to share experiences, participate in peer education, and contribute overall to the fight against HIV stigma. Based on the success of this pilot project, and using feedback provided by our patients, we have created a group-based curriculum centered on caring for HIV-positive families with plans to initiate family/group HIV care at the FHC.

KRIPKE C, NE'EMAN A. Self advocates speak on health care experiences and policy: How will we respond?

Context & Objective: The United Nations Convention of the Rights of Persons with Disabilities calls for inclusion of people with disabilities in all aspects of society. To end health disparities, we need research that is produced with organizations run by people with developmental disabilities. The World Health Organization recently set priorities for research in health care for people with developmental disabilities. Better understanding of basic science alone will not improve health. We also need to understand social exclusion, discrimination, and disadvantage. Health is not just about access to quality medical care. It is about access to power, wealth, education, and employment. **Settings/Populations:** The Office of Developmental Primary Care is dedicated to building the capacity of the health care system to serve adults with developmental disabilities. To advance our mission, we contracted and partnered with the Autistic Self Advocacy Network in the District of Columbia and Boston, People First of Washington State, and Green Mountain Self Advocates in Vermont. **Interventions/Study Design:** Six discussion groups of were facilitated by the self-advocacy organizations. In addition to general groups conducted by each organization, one meeting was held specifically for women and one for autistic users of Augmentative and Alternative Communication technology. The Autistic Self Advocacy Network developed a list of guiding questions. Each group adapted the questions into language they determined was most likely to be cognitively accessible to their members. Follow up interviews were conducted with select self-advocates to expand on the issues raised in groups. **Outcomes/Results:** The issues discussed in the meetings were summarized by self advocates in a white paper titled, "Our Lives, Our Health Care: Self Advocates Speaking about Our Experiences with the Medical System." The paper includes recommendations for physicians and policy makers. **Conclusions:** Common themes identified by self advocates include challenges with: transportation; disability culturally competent providers; overt discrimination; physical and cognitive access; continuity of care; dignity and respectful interactions with clinicians and staff; adequate time for exam and communication; access to support; transition to adulthood. Areas requiring policy attention include cognitive accessibility, reimbursement rates to physicians, cost sharing requirements, access to paid supporters, and access to non-medical services.

OLAYIWOLA JN, WILLARD-GRACE R, DUBÉ K, BODENHEIMER T, GRUMBACH. Understanding the level of integration of safety net settings in the medical neighborhood: development of a conceptual model.

Context & Objective: Starfield's pillars of comprehensiveness and coordination of care are the two

has undergone a systematic development process, including pilot testing, input from patient and provider stakeholders, and subsequent cognitive testing. We first conducted a needs assessment using qualitative interviews of patients and providers and observation of counseling. Collaborating with University of California, San Francisco (UCSF) family planning experts to synthesize evidence and create a storyboard, we developed prototypes with our design and programming team, which were then reviewed by patient and provider stakeholders. A pilot test was conducted in one clinic to obtain preliminary information about its acceptability and feasibility. Further cognitive testing was performed at another local clinic. **Outcomes/Results:** Field tests suggest our tool is well-received by patients and providers. Results include trends toward increased knowledge of various methods and increased acceptability of long-acting reversible contraceptive (LARC) methods among women who used the tool. Women using the tool were also more likely to be completely satisfied with their method choice. In subsequent cognitive testing, specific issues raised during stakeholder discussions and patient interviews were presented to family planning patients for feedback. **Conclusions:** Through a systematic development process that included feedback from patient and provider stakeholders and field testing, we have developed a decision-support tool that is a promising approach to helping women choose the best birth control method for them. After systematic revision in response to results from field testing and stakeholder feedback, we will conduct an RCT to determine whether use of the tool improves contraceptive continuation and women's experience of contraceptive counseling.

GARDNER H, WOLF J, SABA G, LIN M, ADLER S, BODENHEIMER T, THOM D. How patients make decisions with health coaches and primary care clinicians: a mixed methods study.

Context & Objective: To characterize and compare how patients make health decisions with health coaches, primary care clinicians, and family members. **Settings/Populations:** Low-income, English- or Spanish-speaking patients aged 18 to 75 years with poorly controlled type 2 diabetes, hypertension and/or hyperlipidemia at five urban federally qualified health centers. **Interventions/Study Design:** Mixed methods study. The qualitative portion consists of: 1) videotaping patient visits with clinicians and health coaches ('direct observation') and reviewing the videos individually with each participant using stimulated recall; 2) conducting focus groups of patients and family members; and 3) interviewing patients, family members, primary care clinicians, and health coaches. Qualitative data have been analyzed using modified grounded theory, with transcripts read and passages labeled by a least two members of the research team ('open-coding'). **Outcomes/Results:** To date we have coded all six focus groups and a portion of the interviews, and we have preliminary findings regarding decision making among patients, clinicians, and health coaches. The emerging coding structure shows several factors common to patient decision making with health coaches and clinicians, as well as some striking differences. Factors that appear to be unique to patient decision making with health coaches include the social equality of the health coach to the patient (being more like a peer than the clinician), as well as emotional availability and continuity involving regular contacts and reminders. Particularly notable were examples where patients were willing to reveal information and have discussions with their health coaches they did not feel they could have with their clinicians. While health coaches and clinicians shared several common decision-support roles, their specific practices varied substantially. In addition, the combination of the health coach and clinician working with the patient provided new opportunities for support that would likely have not been available to each working separately. **Conclusions:** By providing an opportunity for patients to more actively engage in making health decisions, health coaches can promote higher quality, patient-centered care.

GOTTLIEB L, HESSLER D, LONG D, AMAYA A, ADLER N. Maximizing caregivers social needs disclosure in an urban pediatric emergency department: the iScreen study.

Context & Objective: There is growing interest around clinical screening for pediatric social determinants of health, but little evidence exists on formats that maximize disclosure rates on a range of psychosocial topics. We designed a study to examine disclosure rates and hypothesized there would be no difference in disclosure rates based on face-to-face versus electronic screening for items other than household violence and substance use. **Settings/Populations:** The study enrolled adult caregivers of pediatric patients seen in the fast-track emergency department of a large urban children's hospital to compare disclosure rates on electronic versus face-to-face social screening formats. **Interventions/Study Design:** The study was a randomized controlled trial. Consenting English- and Spanish-speaking caregivers familiar with the presenting child's household and aged over 18 years were randomized to social screening via tablet computer (with option for audio assist) versus a face-to-face interview

about contraception, few studies have examined the role played by women's social networks in shaping method perception. We conducted a qualitative study to investigate the content of social communication about contraception and its influence on perceptions of IUDs. **Settings/Populations:** From April to July 2013, we recruited a diverse sample of low-income women aged 15-45 years, from family planning clinics and via fliers at bus stops and community centers in San Francisco, for in-person interviews (n=24) and focus groups (n=14). Participants were sexually active, not seeking pregnancy, racially/ethnically diverse, and a mix of IUD users and non-users. **Interventions/Study Design:** Interview and focus group conversations were qualitatively analyzed for themes of interest using a modified grounded theory approach. **Outcomes/Results:** The majority of respondents (83%) preferred learning about contraceptive methods from women who had experience using them. In regards to IUDs, women reported that negative information—including concerns based on misinformation, potential side effects, and method failure—was more prevalent than positive information. Almost 80% of IUD users had recommended IUDs to others. IUD never-users expressed interest in learning about how IUDs feel and potential side effects from IUD users. **Conclusions:** Our findings contribute new information about the content and influence of women's communication about IUDs outside of clinical settings. Using our findings as a guide, a team of medical, social science, and media experts developed a low-cost, peer-based IUD communication intervention to harness the power of social networks to spread awareness and acceptance of IUDs. We will encourage satisfied IUD users to share their experiences with their social networks and equip them with evidence-based information to dispel myths and address concerns of non-users. The next phase of our project is to pilot our intervention at New Generation Health Center to assess its acceptability among IUD users, their social networks, and clinic staff.

ESCANDÓN M. Teaching critical health literacy to at-risk youth in East Salinas, California.

Context & Objective: Social determinants are increasingly recognized as powerful contributors to health disparities between communities. Critical health literacy, combining an understanding of the social determinants of health and the skills to advocate for change, is a potential tool to empower communities to address and rectify the socially derived upstream causes of health inequality. **Settings/Populations:** Alisal High School in East Salinas, California, is in a historically marginalized neighborhood, with a student body that is 97% Latino, 75% of whom qualify for free and reduced meals. Only 21% of graduates meet the pre-requisites to apply to the University of California and California State Universities. The Health Academy is a special track at Alisal for at risk 10th-, 11th-, and 12th-graders with an interest in health professions and includes a special curriculum, dedicated instructors, and extra resources for the students. **Interventions/Study Design:** All three classes participated in a series of three one-hour workshops introducing the social determinants of health. The students identified assets in their community and areas for improvement which might contribute to disparities in health outcomes. The students also interrogated health and education data comparing East Salinas to surrounding areas and brainstormed root causes of the inequities through a social determinants lens. In the final session, students were introduced to a community advocacy tool kit and role-played actions they can take to advocate for their community. **Outcomes/Results:** Health Academy students gained skills in community asset mapping, data interpretation, and community health advocacy. They were surveyed to determine their attitudes towards health in their neighborhood, their self-assessed preparedness to affect positive change in the social determinants of health in East Salinas, and their commitment to a career in the health professions. **Conclusions:** Teaching critical health literacy provides an effective method to engage high school students in a discussion about the social determinants of health. It also potentially motivates at-risk students to commit to a career in the health professions and serve their community to improve health outcomes in the future.

FITZPATRICK J, ANDERSON N, KUPPERMANN M, STEINAUER J, WITTMAN A, DEHLENDORF C. Developing a contraceptive counseling decision support tool.

Context & Objective: Half of all pregnancies in the US are unintended. A disproportionate amount of this burden is experienced by minority women and women of lower socioeconomic status. Non-use or discontinuation of contraception can lead to unintended pregnancy, and improved contraceptive counseling has the power to positively influence contraceptive use. We sought to develop a tablet-based, decision-support tool to help women choose the best contraceptive method for them. **Settings/Populations:** We have collaborated with the National Campaign to Prevent Teen and Unplanned Pregnancy and patient and provider advisory panels to develop and evaluate the tool, and then have field tested it in safety net clinics in the San Francisco Bay area. **Interventions/Study Design:** The tool

faces of effective integration between primary care and the medical neighborhood. Care integration is increasingly complex, and more than 42% of adults with chronic health problems report that they have experienced problems with the coordination of their care. These challenges are especially pronounced for community health center (CHC) patients, who are often disenfranchised, low-income, and uninsured or publicly insured. **Settings/Populations:** Our objective was to develop a conceptual framework for integration strategies CHCs have employed and to develop an assessment tool measuring how CHCs integrate into the medical neighborhood, through a study of interventions in safety net settings in California and across the country. **Interventions/Study Design:** The study was comprised of literature review, environmental scans, interviews, and case studies on integration strategies for CHCs in the domains of specialty care, diagnostic imaging services, pharmacy services, and hospital care, with the subsequent derivation of a conceptual model. **Outcomes/Results:** CHCs and similar settings integrate into the medical neighborhood by expanding comprehensiveness or coordination of care. Greater comprehensiveness is achieved through; a) co-location; or b) internal-capacity building. Coordination of care is enhanced through; a) a network of service providers (eg, resource networks); b) patient navigation (eg, referral coordination); or c) communication and collaboration (eg, eReferrals). **Conclusions:** CHCs are moving very consistently towards systems transformations that embrace the primary care medical home (PCMH) model and receiving recognition as such. However, it is when integration and care coordination are optimized outside the walls of a PCMH and within the larger medical neighborhood that CHCs will truly position themselves as viable, preferred providers of high-quality, efficient, accessible, timely, comprehensive, and coordinated primary care. Our conceptual model and provided resources, based on the integration strategies of innovative CHCs and other safety net providers, can offer a roadmap and a tool for others seeking to better integration.

POULOS T, LABUGUEN R. Reducing wait times: a patient-centered needs assessment for an appointment system at the San Francisco General Hospital Urgent Care Center.

Context & Objective: At the San Francisco General Hospital Urgent Care Center (UCC), demand for services exceeds capacity for care. Wait times can exceed three hours for patients with non-emergent complaints. An appointment system may help to reduce overall wait times, but it is unclear how it would be received by patients. This project aimed to gain insight into patients' perception of an appointment system, address whether appointments should be offered at all, and offer recommendations for system design. **Settings/Populations:** Eight-four patients were interviewed over four days at the UCC waiting room; 50 patients were given the initial questionnaire, and 34 patients received the follow-up. **Interventions/Study Design:** An interview template and questionnaire were developed to educate patients about the current wait-time situation and proposed post-triage UCC appointments, and then to ask a series of questions to elicit opinions and suggestions regarding the proposal. Data were analyzed, and a follow-up questionnaire was developed and administered. **Outcomes/Results:** Analysis of responses to the first questionnaire demonstrated that, with a wait of one hour, up to 86% of patients would refuse a same-day return appointment. With a three-hour wait, up to 65% of patients would still refuse a same-day return appointment. The most frequently cited response for deciding to stay in the waiting room was medical condition: when patients present to the UCC, they feel too unwell to leave and return. Responses to the second questionnaire demonstrated that patients would like to have an appointment for follow-up care after an initial visit to the SFGH UCC (94.12%) or the emergency department (97.06%). Patients ranked the morning most preferable for appointment time. **Conclusions:** Our findings suggest that the community of patients at the UCC would not utilize a same-day appointment system, preferring to wait in the waiting room to be seen. However individuals directed to be seen at the UCC for follow-up care after initial treatment in the UCC or emergency department would like to set up appointments at the end of their initial visits. Patients would prefer that these appointments be scheduled before 12pm.

PRADO C, WILLARD-GRACE R, DeVORE D, CHEN EH, HESSLER D, BODENHEIMER T, THOM DH. How health coaching impacts medical visits: a study of primary care clinician experiences.

Context & Objective: While health coaching is growing in popularity, little is known about the impact of using health coaches from the perspective of primary care clinicians. This study sought to understand how the use of health coaches affects the experience of clinicians during a medical visit and their satisfaction with the patient encounter. **Settings/Populations:** Seventeen clinicians at two safety net clinics in San Francisco who were taking part in a randomized controlled trial of health coaching in the primary care setting. **Interventions/Study Design:** A survey was completed by the clinician at time of

patient visit six-14 months after enrollment in the study. The survey included one question about how demanding the visit was (1= far less demanding than average to 5= far more demanding than average) and six additional items regarding the clinician's experience of the visit (1=strongly disagree to 5=strongly agree). **Outcomes/Results:** Surveys were completed for 61% of patients, with a higher rate of completion for patients with a health coach compared to usual care (73.7% vs 47.9%, $p < .001$). Clinicians rated their patient visits with health coaches as being less demanding than visits with usual care patients (2.44 vs 3.06, $p < .001$). Clinicians rated their visits with health coached patients more positively for all six items, though only the item asking about being able to spend sufficient time with the patient was significantly different (3.96 vs 3.57, $p < .01$). Clinicians at the larger site also were more likely to leave the exam room feeling satisfied with the encounter for health coaching patient compared to usual care patients (4.10 vs 3.84, $p = .05$). **Conclusions:** Health coaching appears to have a positive impact on at least some aspects of clinicians' experience during patient encounters, such as the amount of time they need to spend and their overall satisfaction with a visit. With burnout high in primary care, practices are seeking not only to improve the quality of their patient care but also the work satisfaction and retention of their clinicians. Health coaching may provide a means to improve clinicians' professional experience.

SANFORD E, TIRADO S, SASSON N, ROMERO E, GRAM K. Adapting motivational interviewing and 'screening, brief intervention, and referral for treatment' for Latinos and indigenous Oaxacans.

Context & Objective: Screening, Brief Intervention, and Referral for Treatment (SBIRT) is a proven method for reducing alcohol abuse. It is recommended by US Preventive Services Task Force (USPST) guidelines. In California, implementation of the intervention has become solidified now that trained primary care providers can bill Medi-Cal using HCPCS codes H0049 and H0050 (January 1, 2014). The basis for the USPSTF "B" level recommendation for all adults to be screened was demonstrated in mostly English-speaking populations. Can SBIRT and motivational interviewing be adapted to benefit Spanish-speaking Latinos and indigenous-language-speaking Oaxacans? Are the screening tools for alcohol abuse and motivational interviewing techniques effective, let alone understood, by people without standard American education? Do these traditionally disenfranchised populations object to being questioned about personal behaviors? What happens when providers step outside the traditional role Oaxacans perceive for doctors? What are preconceptions sometimes held by Oaxacan immigrants that are barriers to successful behavior change intervention? How can providers gain the trust needed to bridge these barriers? **Settings/Populations:** The UCSF-Natividad Family and Community Medicine Residency has leveraged a five-year training grant, funded by Substance Abuse and Mental Health Services Administration to integrate SBIRT into its training program's affiliated hospital and clinics. We have adapted motivational interviewing for work with the Latino and Oaxacan populations (Triqui Alto, Triqui Bajo, Mixteco, Zapoteco) served in Salinas, California. **Interventions/Study Design:** Faculty members will present their findings from focus groups and interviews with *promotores* and indigenous-language interpreters. Latino and Spanish-speaking physicians have integrated findings into clinical experience. **Outcomes/Results:** Practical, clinically relevant tools, techniques, and appropriate counseling for SBIRT, motivational interviewing, and behavior change will be shared. **Conclusions:** General discussion around appropriate adaptation of USPSTF guidelines to special populations will conclude the presentation.

SIEGEL A. Creating a model for collaboration to bring expressive arts therapy services to a safety net county health system.

Context & Objective: To make Expressive Arts Therapy services available to an underserved population as an adjunct medical intervention to improve health outcomes. **Settings/Populations:** This collaboration is a partnership between Art of Health and Healing (AHH) in Contra Costa Health Services (CCHS), a safety net county health system, with the California Institute of Integral Studies (CIIS) Expressive Arts Therapy (EXA) master's degree program. It was initiated in Contra Costa Regional Medical Center (CCRMC) Inpatient, West County Health Center Outpatient Group Visits, CCRMC Farmers' Market, and staff programming. **Interventions/Study Design:** Since Spring 2013, CCHS and CIIS have built and integrated a team including a program director, two clinical supervisors, five interns, and one student into their EXA program. Preliminary patient outcomes have been collected. The program has provided the practice of arts interventions with patients who otherwise would not have access. The program's activities have been accomplished through a highly creative and effective use of modest resources. The program is housed within the rehabilitation department, which has provided

Interventions/Study Design: Retrospective Observational Study Design. All cases consulted on by the NCCC during 2012 to 2014 were retrospectively reviewed and the outcome of each intervention identified. Each month, one to two cases with specific questions focusing on management of patients with complex HIV/HBV/HCV issues are selected by BOP pharmacists involved in improving their care. Protected patient information, including history, antiretroviral drug and side-effect history, other drug history, adherence, laboratory and physical examination findings, CD4 count, viral load, and antiretroviral drug resistance test results, are forwarded to the NCCC physician and clinical pharmacist in advance. After a BOP pharmacist summarizes the patient presentation, NCCC clinicians will discuss the case specifics, address outstanding questions, and provide patient specific recommendations and additional strategies during the one-hour conference call attended by BOP pharmacists, students, and clinicians. Within two weeks of the call, a written summary of specific management concerns, treatment options, and guidance identified during the call, including relevant references, are sent to all BOP participants. **Outcomes/Results:** The NCCC provides consultations and education to BOP pharmacists on an ongoing basis for complex patients not achieving treatment goals. The majority of cases focus on selecting optimal ART regimens in failing patients, interpretation of resistance tests, ART toxicity, non-adherence, and HCV management. BOP participation has increased since its inception to 12-15 pharmacists per call. Calls have also focused on standard antiretroviral guidelines, HCV screening, HCV protease inhibitors in HIV co-infected patients, and their application and implications for BOP guidelines. **Conclusions:** Consultations from NCCC experts assist BOP pharmacists in ensuring excellence in management of complex HIV/HBV/HCV issues and medication regimens to achieve desired outcomes. BOP reports that this collaboration and BOP pharmacist involvement has improved patient care. Obtaining expert opinion in management of other chronic illnesses may be a model that may be considered to improve correctional care.

DUNCAN LG, COHN M, CHAO MT, COOK JG, ROCCOBONO J, HECHT FM, BARDACKE N. Mindfulness training for childbirth fear and pain: preliminary results from a randomized controlled trial.

Context & Objective: Fear of childbirth poses substantial risks to healthy adjustment across the perinatal period. Fear of childbirth includes maladaptive appraisals of pain (eg, pain catastrophizing) and of one's ability to cope with childbirth (ie, low childbirth self-efficacy). Fear of childbirth predicts lower pain tolerance and greater use of pain medication in labor. Fear and pain in labor may increase the likelihood of unwanted obstetric interventions, such as emergency cesarean section, lead to a reduction in birth satisfaction, and, in severe cases, can lead to post-traumatic stress symptoms following birth. Mindfulness training—long used as a method for promoting coping with chronic pain and recently shown to be beneficial for acute pain—provides a novel and potentially promising strategy for preparing women for childbirth. **Settings/Populations:** We conducted community-based recruitment in San Francisco, and placed study advertisements at area hospitals, including SFGH and UCSF. Recruitment efforts yielded a heterogeneous sample with a wide range of SES and racial/ethnic diversity. **Interventions/Study Design:** In a small, randomized controlled trial ($n=30$), we tested the impact of "Mind in Labor (MIL): Working with Pain in Childbirth," a brief, third-trimester childbirth education program that teaches mindfulness skills for coping with childbirth pain and fear. We compared MIL with an active comparison condition of high-quality childbirth education that had no mind/body focus. Participants completed pre-/post-course and post-birth questionnaires and granted access to their medical record data. **Outcomes/Results:** After receiving the intervention, MIL participants showed increased childbirth self-efficacy ($p = .04$) and a trend toward lower pain catastrophizing compared to controls. Epidural anesthesia rates were comparable across conditions, but fewer MIL participants used systemic opioid analgesia during labor (Fisher's exact test $p = .119$). MIL participants had significantly lower depression symptoms post-course than controls; the difference grew in magnitude postpartum; ($p = .04$). **Conclusions:** With more than 3.99 million births in the US per year, innovative and accessible interventions for addressing childbirth fear and pain are critically needed. Our results suggest that relatively brief mind/body training may address this need.

EMMET D, ANDERSON N, STEINAUER J, DEHLENDORF C. Social networks' role in shaping perceptions of intrauterine devices: a qualitative study informs a peer-led intervention.

Context & Objective: Despite its high efficacy and ease of use, only 7.7% of women using contraception in the US use intrauterine devices (IUDs). While studies have found that misinformation and concerns about IUDs are prevalent and that social networks are a valued source of information

medical records.

Context & Objective: Transgender people may have preferred names and pronouns which differ from those on their legal documentation. Failing to correctly document this information may negatively impact patient experiences. In addition to patient-centered reasons, correct and consistent documentation of gender identity information enhances epidemiologic tracking and research efforts, as well as direct patient care issues (ie, alerting a provider that a transgender man still has a cervix). While recent recommendations have been published, further guidance and research on this topic is still needed, and inclusion in meaningful use criteria is not planned at present. This study aimed to determine current practices for the documentation of gender-identity-related information in electronic medical records (EMRs). **Settings/Populations:** Study population was a convenience sample of self-identified providers of transgender care in the US who use an EMR in some capacity in the course of this care.

Interventions/Study Design: A survey was distributed electronically via a professional society listserv and in person at a transgender health conference (n=67). **Outcomes/Results:** Forty-three percent reported a dedicated gender identity field, 27% reported an ability to record preferred pronoun, and 55% reported an ability to record preferred name. Location within the EMR where these data were stored and the method in which they were collected from the patient were heterogeneous. **Conclusions:** Findings suggest a broad range of practices and lack of standardization, with numerous deficits in ability to collect and use all relevant information. Efforts to develop and implement standards at both the vendor and user level are essential.

DHIR N, PARK JY, VENTURINA A, LOPEZ J, IKAWA J. Impact of nutrition and physical activity interventions on knowledge and growth in sixth-grade students.

Context & Objective: Obesity is currently an epidemic in an increasingly younger population. In 2010, more than one third of children and adolescents were overweight or obese. The Centers for Disease Control (CDC) suggests that, in the last 30 years, obesity has more than doubled in children and tripled in adolescents. It has been shown that being overweight in adolescence is a stronger predictor of coronary artery disease than being overweight in adulthood. Healthy lifestyle habits, including healthy eating and physical activity, have been shown to lower the risk of becoming obese and developing related diseases. Behavioral and lifestyle changes have led to successful weight loss in adolescents. The objective of this study was to investigate the impact of educational interventions on reported eating habits, physical activity, and growth. **Settings/Populations:** The study took place in one sixth-grade classroom at an elementary school located in a lower socioeconomic area of Fresno, California.

Interventions/Study Design: A prospective study over the school year included two interventions to date with one more planned. Each intervention involved a 20-minute lecture on nutrition and physical activity followed by 40 minutes of fun exercises. A pre-intervention test was given to each student to assess baseline knowledge and behavior before the first instructional session. Each student's height and weight was measured to determine body mass index (BMI). Mid-point follow-up knowledge assessment was done and BMI recalculated after four months. This will be repeated at the end of the school year.

Outcomes/Results: Of the 31 students that were part of the initial session, seven were excluded due to absence in second session. Correct nutrition pre-intervention knowledge was 21% and increased to 38% at follow-up (p = 0.09), while for exercise correct knowledge at baseline was 50% and increased to 79% at follow-up (p=0.66). At baseline, 52% of the students were considered to have a healthy BMI based on current CDC charts, 19% were overweight, and 29% were obese. Follow-up BMI data did not change.

Conclusions: Based on limited data, educational intervention did not significantly increase students' general nutrition and exercise knowledge. Addition of physical activity during educational sessions may be associated with maintaining individual BMI.

DONG BJ, WILLIAMS M, TOKUMOTO J, BINGHAM JT, ALLEN RD. Challenging case consultations provided by National HIV/AIDS Clinicians' Consultation Center to the Federal Bureau of Prisons.

Context & Objective: To describe the collaboration and outcome of challenging cases presented by Federal Bureau of Prisons (BOP) pharmacists in consultation with National HIV/AIDS Clinicians' Consultation Center (NCCC) clinicians to improve correctional patient care. **Settings/Populations:** The NCCC is a federally funded center with a strong team of clinical pharmacists and physicians that provides expert responses to clinical questions about the diagnosis and management of HIV/AIDS, HBV, and HCV. Based on a successful pilot, the NCCC received funding in June 2010 to provide monthly case consultation and education for challenging HIV/HSV/HCV cases presented by the BOP pharmacists.

space, supplies, and logistical support. As we look towards sustainability, billing and an evaluation system are being developed to track outcomes and patient satisfaction. **Outcomes/Results:** AHH has accomplished a significant level of development and programming and has garnered the interest and support of upper administration through its clear and visible impact. EXA Students and interns are engaged in: inpatient medicine/surgery, inpatient psychiatry groups, and psych emergency; facilitation of outpatient group visits; provided staff both education and support (eg faculty development retreat); provided interactive expressive arts activities at our weekly farmers' market and our annual Health Care Workers As Creators event; Richmond High School arts-based grief group; initiation of an IPOD Project for our inpatients; joint participation in system committees working on larger initiatives. Patients experienced improvements in sleep patterns, appetite, mood, behavior, relationships, and medical compliance/outcomes, including improved vital signs and relief from pain. **Conclusions:** In this collaboration between an educational institution and a safety-net health system, it was possible to set up a successful, low-resource program. The resultant expressive arts therapy interventions are a worthwhile adjunct to conventional medical therapy.

THOM D, WILLARD-GRACE R, HESSLER D, ARAUJO C, NAJMABADI A, CANIZALEZ D, DeVORE D, PRADO C, BODENHEIMER T, CHEN E. Does health coaching reduce patients' trust in their primary care providers?

Context & Objective: Concerns have been raised regarding whether transferring some aspects of care from the primary care provider (PCP) to other team members may negatively impact the quality of patients' relationships with their PCPs. We analyzed data from a randomized controlled trial of health coaching to test the hypothesis that health coaching reduces patients' trust in their PCPs. **Settings/Populations:** Low-income, English- or Spanish-speaking patients aged 18 to 75 with poorly controlled type 2 diabetes, hypertension, and/or hyperlipidemia were enrolled from two urban federally qualified health centers. **Interventions/Study Design:** A randomized controlled trial of health coaching versus usual care. Patients' trust in their PCPs was measured by the 11-item Trust in Physician Scale at baseline and at 12 months. Trust scores were compared between study arms using student's t-test, multiple analysis of variance. **Outcomes/Results:** A total of 441 patients were randomized to receive 12 months of health coaching (n=224) or usual care (n=217). At baseline, patients receiving health coaching were similar to those in the usual care group with respect to demographic and other characteristics (mean age 52.6 vs 52.9 years; 67.9% vs 69.6% Spanish-speaking ; 52.2% vs 58.5% female; 42.0% vs 43.8% high school graduate). Mean trust levels were also similar (72.4 vs 72.1, p=NS). Among the 353 patients with data available at 12 months, the mean trust level was significantly higher for patients receiving health coaching (76.3 vs 73.6; p=.036). Adjustment for the relatively small differences in patient demographic characteristics at baseline did not change these results (adjusted p=.02). Patients receiving health coaching also showed a significantly greater increase in trust in their PCP from baseline to 12 months (3.9 vs 1.5, p<.05). **Conclusions:** Health coaching does not appear to lower, and in fact may increase, patients' trust in their primary care providers.

TUNZI M. A new standard for incapacitated patient decision making: the clinical standard of surrogate empowerment.

Context & Objective: People are different. We are different sizes, shapes, and colors. We espouse different values, beliefs, customs, cultures, and religions. We exhibit different personalities. We have different experiences of health, wellness, and illness. Yet we throw patients and their surrogates all together into one big box, giving them only a couple of choices to facilitate complex medical decision making. It is time for a new standard to help widely diverse patients and families make these difficult, often life-and-death determinations: the Clinical Standard of Surrogate Empowerment. **Settings/Populations:** Founded upon the primacy of the principle of respect for autonomy, three methods of surrogate decision making traditionally have been promoted to help the family and friends of incapacitated patients. Unfortunately, the standards of advance directives, substituted judgment, and best interests are often inadequate in practice. **Interventions/Study Design:** Studies have shown that few patients have formal, written advance directives; that patients often change their minds about treatment over time; that many patients are simply not ready or willing to plan ahead—in part, because some patients and families simply don't believe in autonomy; that those patients who do plan ahead often do not communicate their plans; and that while some patients want their directives followed strictly, many prefer that their surrogates use judgment in making decisions. **Outcomes/Results:** After reviewing papers describing a variety of alternative approaches, a new clinical standard of surrogate

empowerment will be proposed to reconcile and integrate these observations and concepts.

Conclusions: The “procedure” for this clinical standard will be presented.

VARGAS R, GOETTE C, SCHMIDT L, SZETO M, CORDEIRO J, CHICUATTA B, MAR E. Collective impact: partnered efforts to reduce sugary drink consumption.

Context & Objective: As part of the Community Engagement and Health Policy Program’s efforts to collaborate with local partners to eliminate health disparities, we’ve launched San Francisco Health Improvement Partnerships (SFHIP). We’ve committed to addressing several priority health issues, including the reduction of obesity-related disease disparities. One effort is to reduce consumption of sugary drinks in San Francisco. **Settings/Populations:** To reduce consumption of sugary drinks, we’ve engaged in a multi-layered set of interventions, given SFHIP’s socio-ecological framework. Interventions at the community level have included education delivered by SFDPH leadership and prevention section staff, UCSF staff, and UCSF learners; community-based leaders; and health educators. We’ve partnered with the SFDPH in the Bayview Healthy Eating Active Living (HEAL) zone and city-wide with others in the Re-Think Your Drink Coalition. We’ve partnered local policymakers with UCSF and UC Hastings faculty and learners. **Interventions/Study Design:** At the community level, we’ve done health education. At the city level, we’ve worked on organizational policies and city policy via science and legal consultation. **Outcomes/Results:** UCSF staff, learners, and scientists have strengthened understandings of the politics of developing health policy. UCSF learners have learned about how to develop and deliver health education to vulnerable populations. We’ve learned how to better partner with SFDPH, communities, and policymakers. We’ve learned that when you are working to reduce consumption of a product that produces tremendous profits, the work is made difficult by fear of law suits, contrarian messaging that obfuscates science, and expensive lobbyists. **Conclusions:** With sugary drink consumption disparities nearly matched geographically and ethnically with obesity, poverty, and diabetes illness disparities, there is much work to be done toward educating the public about the science of sugary drink consumption and industry tactics. SFHIP provides valuable lessons for how to use the collective impact model for reducing disparities.

WILSON E, SAXE J. Curriculum revision to engage learners and optimize interprofessional teaching.

Context & Objective: To revise a chronic disease management course for advance practice nursing students to more actively engaged learners while capitalizing on the strengths of the interprofessional teaching team. **Settings/Populations:** The Management of Complex Health Conditions (N427) in the Department of Community Health Systems (CHS) is a required course for most students participating in nurse practitioner training programs in the UCSF School of Nursing (SON). This course introduces some of the more complex yet common clinical problems encountered in primary care and is co-taught by two faculty members, one from the SON and one from the UCSF School of Medicine (SOM). In 2008, this lecture-based course was completely overhauled from passive to active learning approaches, increasing student participation and emphasizing interprofessional teaching. **Interventions/Study Design:** To overhaul the course, three changes were employed. First, lecture material was transferred to a web-based narrative power point to be viewed before each session. Second, longitudinal case studies were designed for in-class discussion. Third, student groups were formed to work on cases as a team. In addition, SON and SOM faculty members divided teaching tasks and recruited a fourth-year medical student as the teaching assistant. **Outcomes/Results:** Summative annual evaluations reveal that N247 has been consistently ranked higher than other CHS courses. Faculty leads (SON and SOM) were ranked higher than visiting lecturers. N247 has become a model for innovative teaching methods throughout the SON. **Conclusions:** Designing a course to actively engage learners using a variety of teaching methods and capitalizing on the strengths of interprofessional teachers can be extremely successful.

WOLF J, GARDNER H, SABA G, LIN M, MA A, ADLER S, BODENHEIMER T, THOM D. How health coaches promote patient decision making in the context of team-based primary care.

Context & Objective: To characterize and compare how patients make health decisions with health coaches, primary care clinicians, and family members. **Settings/Populations:** Low-income English- or Spanish-speaking patients aged 18 to 75 years with poorly controlled type 2 diabetes, hypertension, and/or hyperlipidemia at five urban federally qualified health centers. **Interventions/Study Design:** Methods study. The qualitative portion consists of: 1) videotaping patient visits with clinicians and health coaches (direct observation) and reviewing the videos individually with each participant using stimulated

financial empowerment program to improve maternal and infant health.

Context & Objective: Current science provides strong support for developing and testing interventions focused on social factors, including those tightly linked with economic disadvantage, to improve maternal and child health outcomes among African-American women and reduce persistent black-white disparities. We developed, piloted, and revised a Financial Empowerment Program (FEP) aiming to promote African-American women’s health by strengthening their financial capacities. **Settings/Populations:** The FEP builds on and supplements California’s Black Infant Health Program (BIH), the nation’s largest statewide community-based program addressing African-American maternal and infant health. BIH staff piloted the FEP at three BIH sites during 2012; participants included BIH clients, all of whom were pregnant or postpartum African-American women. We collaborated closely with expert consultants experienced in designing financial capability programs and obtained critical input from BIH leadership at the state-level and an advisory team of local staff members at BIH sites statewide. **Interventions/Study Design:** Building on the core BIH group-based intervention, the FEP comprises four weekly 2.5-hour group sessions focused on improving participants’ financial knowledge and skills; reducing their experiences of stress through greater perceived control over their finances; and promoting behaviors that could positively influence their own and their families’ health. Qualitative and quantitative data were collected from BIH staff and FEP participants and analyzed to: a) assess changes in finance-related knowledge, attitudes, and behaviors; and b) inform ways to improve both the program intervention and implementation process. **Outcomes/Results:** Findings from the pilot program indicated that participants had positive experiences overall, but based on staff and participant feedback we made several major revisions in the program: 1) while still covering important financial information, the updated FEP curriculum places greater emphasis on helping participants understand their financial histories and values, generate visions for their families’ financial futures, and set personally meaningful financial goals; 2) updated implementation protocols include two follow-up sessions for increased support and accountability in meeting goals; and 3) updated staff training and data collection instruments reflect revised FEP content and protocols. **Conclusions:** Women may benefit most from client-centered programs with an empowerment approach to financial education, helping them identify and use information and skills with particular relevance for them and their families.

DeMARCHIS E, SHILLINGER E. Innovations in family medicine through community electives: one student’s journey.

Context & Objective: At the heart of family medicine (FM) is a commitment to community outreach and advocacy. Medical education across the nation focuses on inpatient training, with many top universities leaning further still toward basic science research and sub-specialty care, evidenced by medical student residency choices and funding. Medical students often encounter limited structured opportunities to explore outpatient care; however, working with community partners, medical students and their mentors can create unique opportunities to explore innovations in primary care and engage their community. This case report details one student’s journey navigating the diverse ways FM can be delivered, highlighting opportunities for medical students to explore outpatient FM and engage with the community. **Settings/Populations:** As an elective month during her final year of medical school, a medical student and mentor constructed a FM elective in a full spectrum of settings: adult and youth homeless clinics; concierge medicine; innovative urban community clinics throughout the San Francisco Bay Area (including not-for-profit health care organizations, HMOs, university affiliated clinics); and a rural Indian Health Services clerkship. **Interventions/Study Design:** While in the different clinical settings, information was gathered regarding clinic layout, team members, on- and off-site resources, payment structure, and patient population. **Outcomes/Results:** As clinics strive to improve health care delivery, much variability exists in organizational structure, patient need, and ease of access to resources. The first-hand exposure to markedly different resources, funding structures, and composition of clinics allowed for comparative analysis and was an enlightening demonstration of resource allocation and delivery of care. **Conclusions:** Community electives in outpatient primary care afford the opportunity to explore innovations in primary care and promote student research and activity, especially important given the inpatient focus of medical schools and the current national spotlight on health care. One student’s experience serves as an example of how exploring different models of primary care delivery can help further students’ understanding of the evolving field of primary care and influence practice. Students and mentors are encouraged to coordinate these efforts to facilitate student engagement.

DEUTSCH M, KEATLEY J, SEVELIUS J, SHADE S. Collection of gender identity data using electronic

COFFA D, WANDS AC, ABDEL-WAHAB M, LISEA L, BARNES S, WHEELER E, GASPER J, BEHAR E, COFFIN P. Preventing death by overdose: naloxone for chronic pain patients.

Context & Objective: Heroin overdoses have dropped substantially over the last decade in San Francisco, thanks in large part to overdose prevention programs at needle-exchange sites. Meanwhile, prescription opiate overdoses have risen dramatically. Our effort intends to initiate a similar reversal in prescribed opiate deaths. **Settings/Populations:** About 150 people die each year from prescription overdose in San Francisco, and about half of those patients are receiving opioid prescriptions from clinics in the city's Department of Public Health (DPH). The overdose death rate on the DPH pain registry is over 1% per year, which is equal to the overdose death rate for heroin users nationally. At the Family Health Center (FHC), a primary care clinic serving nearly 13,000 uninsured and publically insured patients, a quality improvement team has been working to decrease unsafe opioid prescribing and increase detection of high-risk patients. **Interventions/Study Design:** This year, our team instituted a program of prescribing intranasal naloxone to all patients who receive chronic opioid prescriptions. Following in the footsteps of remarkable success in reducing heroin overdose, we hope to reduce prescription drug overdoses using this novel approach. Two clinics have published data about a similar intervention, both with excellent results. We will describe our implementation strategies, which involved engagement of a multidisciplinary team including pharmacists at local community pharmacies, lobbying successfully for the passage of a state bill that protects prescribers of naloxone, and clinic-wide education about the program. We will also present qualitative data describing provider experiences and impressions of naloxone prescribing, along with quantitative data describing provider uptake of the program. **Outcomes/Results:** Thus far, 30% of patients in the pain registry have received prescriptions for the medication and the number continues to rise. **Conclusions:** Providers state that their discussions of naloxone with patients encourage them, and their patients, to take more seriously the risks of opioids and to make both parties more cautious about prescription opioids. We will share materials, developed in conjunction with DPH partners, that can be used to educate providers and patients about the program.

DEKKER M, EGERTER S, BRAVEMAN P. Evaluating a state-wide program for African-American pregnant and postpartum women.

Context & Objective: Although the Black Infant Health Program (BIH) was established in 1989 to address high infant mortality rates among African-Americans in California, infant mortality rates remain high among African-Americans and the black-white disparity in poor birth outcomes persists. Since 2008, we have collaborated with California Department of Public Health Maternal, Child and Adolescent Health Division (MCAH) leadership to: 1) revise the BIH program model based on current knowledge about the causes of adverse birth outcomes and health disparities affecting African-American women and infants, and 2) design and conduct an evaluation of the updated model, which features a 20-week group-based intervention with complementary one-on-one support. **Settings/Populations:** BIH serves pregnant and postpartum African-American women in 15 local health jurisdictions (LHJs) statewide where more than 75% of California's African-American births occur. The evaluation to date has focused on experiences at the 14 LHJs that have implemented the updated program model since November 2011. **Interventions/Study Design:** During the initial implementation evaluation phase, we and MCAH collaborators collected data to develop an operational profile of each BIH LHJ, ascertain BIH staff perceptions of the current program model, and measure the extent of participation in the program. We have analyzed these data to assess fidelity to implementation protocols and applied findings to improve program quality. **Outcomes/Results:** Findings revealed striking differences across BIH sites in key factors—including staffing, funding, and program settings—that have clearly limited adherence to implementation protocols. Despite general staff enthusiasm for the current model, levels of participation in the group-based intervention are lower than expected. We are currently working with MCAH collaborators and local BIH staff to develop strategies to improve model fidelity, including establishing benchmarks and developing performance measures to monitor progress. **Conclusions:** Particularly in multi-site programs, ongoing monitoring of program performance is critical to ensure model fidelity and sustain program quality. Engaging program staff and leadership are also essential for successful program implementation. Evaluation findings can facilitate practical approaches to quality improvement and contribute to clearer understanding of program progress towards meeting intended outcomes.

DEKKER M, EGERTER S, BRILLANTS M, BEASLEY M, BRAVEMAN P. Experiences developing a

recall; 2) conducting focus groups of patients and family members; and 3) interviewing patients, family members, primary care clinicians, and health coaches. Qualitative data have been analyzed using modified grounded theory, with transcripts read and passages labeled by a least two members of the research team (open-coding). **Outcomes/Results:** To date we have coded approximately one-third of the 80 completed interviews and have preliminary findings regarding decision making in the patient, clinician, and health coach team. The emerging coding structure shows a complex dynamic of decision-making roles within the team. Additionally, we found that family and friend involvement can be supportive, but it can also be complicated by certain aspects of those personal relationships. While interviews revealed patients acknowledging responsibility for enacting decisions, they also showed that patients want and feel supported by involvement of providers and coaches. Team roles of providers include acting as educators and authority figures. Health coaches were seen as being integrally involved in education around health decisions. Coaches had unique roles in emotional and logistical support for decisions. Other key themes include issues of trust, communication, and the importance of addressing emotional and non-medical aspects of a health decision. **Conclusions:** As part of the patient care team, health coaches can promote a comprehensive, shared decision-making process. Different members of the team play essential roles in the making of health decisions. Possible implications include opportunities for training health coaches and further development of programs which support the patient-centered primary care.

WONG J, RICHARDSON C. 10 Building Blocks coaching program: implementing the 10 Building Blocks of High-performing Primary Care into practice.

Context & Objective: Primary care is at a critical juncture as millions of uninsured and underinsured patients become eligible for health insurance coverage through health care reform. Primary care clinics must transform in order to meet this increased patient demand while simultaneously delivering high-quality, patient-centered care. Practice coaching, an idea based on the widespread Agricultural Extension program, is mentoring clinical practices in practice transformation. The University of California, San Francisco (UCSF) Center for Excellence in Primary Care's practice coaching program is based on the 10 Building Blocks Model of High-Performing Care; this model is a roadmap to help clinics in their transformation journey toward becoming high-performing primary care practices. The building blocks are: engaged leadership; data-driven improvement; empanelment; team-based care; patient-team partnership; population management; continuity of care; prompt access to care; comprehensiveness and care coordination; and template of the future. We are evaluating the effectiveness of practice coaching in primary care practices to implement the 10 Building Blocks model. **Settings/Populations:** Twenty-eight primary care clinics affiliated with the San Francisco Department of Public Health, the San Francisco Community Clinic Consortium, and the UCSF Medical Center. **Interventions/Study Design:** Of the 28 clinics eligible to participate in the coaching program, 13 are actively receiving coaching. The overarching goal of the program is for practice coaches to help clinics build infrastructure for sustainable change, using the 10 Building Blocks model as a guide. **Outcomes/Results:** As of January 2014, a total of 157.5 coaching hours were spent in 13 clinics active in the program. Analysis of semi-structured interviews conducted with all participating clinics in Fall 2013 demonstrated that clinics felt the program met their expectations and helped them to meet their improvement goals. The program is also tracking the progress of clinics toward transformation through clinic-wide surveys and traditional QI outcomes data (eg, improved access metrics, increased% of patients empaneled, etc). **Conclusions:** The 10 Building Blocks program has demonstrated the effectiveness of practice coaches in assisting clinics to make sustainable, positive changes. It has become apparent that coaching efforts are more successful in clinics that are ready for and motivated to change.

WONG S, LEUNG L, CHASE J, DONG B, SHIN J, STEBBINS M, WOODS D, LAM R, HAMMER H. Broadening team-based care: Pharmacist-led, post-hospital-discharge clinic visits at the Family Health Center.

Context & Objective: Family Health Center (FHC) patients discharged from hospitals must be seen by a provider within seven to 14 days. Ideally, primary care providers should see their own patients, but this is hindered by a lack of appointment slots within the desired time frame. As a result, patients are scheduled with non-PCP providers who are less familiar with patients' medical histories. This unfamiliarity, coupled with time spent on medication reconciliation, affords little time for providers to focus on addressing the clinical issues causing patients to be hospitalized in the first place. The FHC implemented a pilot to schedule patients for pharmacist visits within seven days of hospital discharge in

hopes of improving the effectiveness and efficiency of the first PCP hospital discharge visit. **Settings/Populations:** For a six-week period, all FHC patients discharged from the Family Medicine Inpatient Service (FMIS) were scheduled with pharmacists for follow-up. **Interventions/Study Design:** At the visit, medication-related problems (MRPs) were identified, addressed, and remedied. Any other medication recommendations that were complex or required an in-depth knowledge of the patient's medical history were documented for the PCP to review. **Outcomes/Results:** A total of 23 patients were enrolled, and MRPs were detected in 95.6% of patients. Twenty-nine MRPs were detected in 22 patients. The most common were non-adherence, under-treatment, incorrect dose/frequency, and need for increased medication monitoring. About 50% of these MRPs were rated as moderate in potential to cause harm—an intervention by a health professional was required. An average of 1.77 pharmacist interventions were made per patient with the most common interventions being: 1) changing the dose; 2) stopping a drug; 3) substituting a drug; and 4) referring to pharmacist clinic for follow-up. A survey showed that: 71.4% of providers strongly agreed that the pilot made the visit more efficient and effective when discussing medications with the patient; 85.7% agreed that the recommendations made by the pharmacist were appropriate; and 100% of providers would recommend this program to their colleagues. **Conclusions:** With expertise in safe and optimal medication therapy, pharmacists serve as indispensable members of team-based care for complex patients during transitions of care.

ADACHI K, KING J, HANSEN M, GONZALEZ-MENDEZ E. Beyond these walls: creating an effective curriculum in culturally responsive medicine.

Context & Objective: Meeting the needs of our increasingly diverse population necessitates the development of health care providers skilled in culturally responsive medicine. Going beyond becoming "competent" in learning about the "other," culturally responsive medicine emphasizes an approach of cultural mindfulness through self-reflection and lifelong learning. Skills are further developed as we step outside the walls of ourselves and our residencies to engage with the community through community partnerships and outreach. **Settings/Populations:** Through ongoing collaborations between the faculty and residents, incorporating feedback from the residency, we have created a more complete and comprehensive longitudinal curriculum at the Santa Rosa Family Medicine Residency. **Interventions/Study Design:** As an update to the work presented at a prior colloquium, we will share innovative additions and approaches we have implemented in the culturally responsive medicine curriculum. We will review the strengths and weakness of the recent iteration of our curriculum as understood from the resident feedback survey. **Outcomes/Results:** We will present ideas, strategies, and resources including a curricular outline that can be used to facilitate the development of a curriculum on culturally responsive medicine at other programs. **Conclusions:** Important to developing effective training in culturally responsive medicine is an awareness of the spectrum of racial identity development, so that training is appropriate to learners' needs and stage of development. Building on a strong foundation in self-awareness, it is important that residency programs provide residents with the opportunity to further develop skills through direct community engagement. Through community partnerships, outreach, and service learning opportunities, a residency curriculum takes the learning beyond the walls of the residency and immerses residents in creative ways of meeting community needs.

ANDERSON N, DEHLENDORF C, STEINAUER J, LICHTENBERG S. Does a history of prior uterine

amount of decision support and ensure informed decision making.

CHODOS A, WONG S, HAMMER H, PIERLUISSI E, RITCHE C. Piloting a geriatrics outpatient consult service to support primary care providers.

Context & Objective: Until this pilot, there were no outpatient geriatrics consult services in the San Francisco Department of Public Health (DPH), where approximately 10% of patients are aged 65 years and older. This population is growing and is expected to increase from 13.7% to 21% of the city's population by 2030. Complex older patients will increasingly be seen in DPH primary care and the need for geriatric expertise may grow. With the support of the Family Health Center (FHC), which donated space and clinical staff, the Division of Geriatrics has piloted geriatrics consult clinic. **Settings/Populations:** Patients from the FHC and General Medicine Clinic (GMC) who are aged 65 years and older and who are referred by their primary care physicians for consultation. **Interventions/Study Design:** The pilot service began accepting consults for eligible patients from FHC and GME primary care providers in October 2012. Via the eReferral platform, we respond to a referral by providing advice based on the clinical question and a thorough chart review and, if needed, a comprehensive geriatrics assessment. The assessment is done in a clinic held one half-day per month in the FHC with four appointments per clinic. On-going communication with primary care providers regarding clinical management is case based. **Outcomes/Results:** The service is in the process of evaluating multiple aspects of the pilot: 1) processes such as number of patients seen, primary reasons for consult, recommendations made; 2) provider satisfaction and acceptability of service via provider surveys and semi-structured interviews; and 3) short-term (6-month) outcomes of patients seen with regard to geriatric conditions and health care utilization. In the first year, we received 100 consults, approximately two per week. Approximately half were seen in clinic. Two-thirds of patients were referred for more than one issue. The most common clinical questions were related to cognitive impairment (2/3), medication review (1/3), psychiatric complexity or falls (both about 1/5). Data on provider satisfaction and patient outcomes are still being collected. **Conclusions:** The Geriatrics Consultation Service will use this pilot data to expand the service in those areas most useful to primary care providers and older patients seen in SF DPH primary care clinics.

CHOW M, LINOS E, XIE L, DANESH M, SPIEGEL E, VELEZ E, MANRRIQUEZ E, STUART S, MAURER T, YU A, CHREN M. Skin cancer knowledge, attitudes, and behaviors in the Chinese-speaking population of San Francisco.

Context/Objectives: In individuals of Chinese descent, skin cancers are less common but are associated with greater morbidity and mortality compared to those in persons of other ethnic groups. However, skin cancer awareness and behaviors in this population are not well described. We aimed to characterize skin cancer and sun protection knowledge, attitudes and behaviors in the Chinese speakers of San Francisco. **Settings/Populations:** We conducted a cross-sectional, survey-based analysis of Chinese- and English-speaking San Francisco residents presenting at the Chinatown Public Health Center, SFGH Family Health Center, and SFGH Dermatology Clinic between March 2013 and January 2014. Participants were divided into the 'Chinese-speaking' and 'English-speaking' groups. **Interventions/Study Design:** A questionnaire developed from previous skin cancer awareness surveys was employed. It consisted of 51 Likert-scale-based questions regarding participant demographics; skin cancer risk; previous history of skin cancer; knowledge, attitudes, and behaviors related to skin cancer; and the counseling received from physicians about risk reduction. The survey was available in written English and Chinese. Differences in responses between the Chinese- and English-speaking participants were compared using Chi-square analyses. Sun protection behaviors of the Chinese speakers were also compared with those of White American participants in the NHANES database. **Outcomes/Results:** The sample included 58 Chinese speakers and 40 English speakers. The Chinese speakers included recent immigrants with few years of education. Almost half of the Chinese speakers reported poor understanding about avoiding skin cancer. Most of their responses to the knowledge-related questions on the survey were incorrect. Nonetheless, they were unlikely to have suffered sunburn in the past and to believe that suntans are attractive. The Chinese speakers were also unlikely to have seen a dermatologist or have received skin screening. However, they used long sleeves and staying in the shade for sun protection more frequently than average White Americans. The vast majority of participants had not received counseling about how to check for skin cancer. **Conclusions:** Overall, the Chinese speakers had poor knowledge about skin cancer and were unlikely to have received skin screening. These results highlight an opportunity to improve skin health for Chinese speakers through targeted interventions.

are a poor proxy for traumatic injury. **Conclusions:** Further analysis of SES is necessary to apply our results to county-wide public health and safety policies regarding alcohol regulation.

CHIAO S, FAN J, RAJAN J, CHOU J, KAKIGI C. Design and administration of a gratitude and mindfulness journal for postoperative patients: a pilot study.

Context & Objective: Patients in the postoperative period experience varying degrees of psychological stress. Studies have reported that up to 30% of postoperative patients experience disabling anxiety or depression, which has been shown to worsen postoperative pain. Management of depression and anxiety should therefore be a component of postoperative management. In this study, we evaluate an evidence-based mindfulness intervention, gratitude journaling, as a tool to reduce psychological stress and postoperative pain in the inpatient setting. **Settings/Populations:** Postoperative patients at UCSF hospitals undergoing abdominal surgery for gastrointestinal malignancies were surveyed.

Interventions/Study Design: Prior to intervention, surveys were designed to assess the degree of psychological stress and to identify journaling themes specific to postoperative patients. A journal was designed with both gratitude and mindfulness prompts. Patients were asked to journal for three consecutive days and were surveyed after the intervention. Morphine-equivalent pain medication requirements were compared between intervention and control cohorts in an intention-to-treat analysis. **Outcomes/Results:** On a scale from 0-10 (10=highest level of psychological stress), patients reported their average postoperative anxiety levels to be 3.7 and mood to be 2.1 (n=15). Of the 15 patients in the intervention cohort, only five patients completed the journaling task and post-intervention survey. These patients journaled an average 19 minutes per day. The intervention was found to decrease anxiety by 6.3, improve happiness by 4.3, and ease pain by 3.3 points; these patients were all willing to continue using the journal outside of the study. Pain requirements were 417.8 ± 308.5 in oral morphine equivalents for the intervention group versus 439.8 ± 241.1 for the cohort group. **Conclusions:** Survey results suggest that certain patients may derive significant benefit from journaling in the management of their anxiety, depression, and pain. Difference in pain medication requirements was not statistically significant between the intervention and control groups; this was not surprising given the low adherence rate and short duration of the intervention. These findings suggest benefits of journaling during the postoperative period and motivate future studies that assess analgesic usage with a longer-term journaling intervention.

CHIU C, FEUZ M, McMAHAN R, MIAO Y, SUDORE R. "I don't want to make my own decisions": decision control preferences in a diverse elderly population.

Context & Objective: Older adults from diverse cultures may hold differing views on the amount of control they prefer over their medical decisions. Decision control preferences (DCP) for medical care may have a profound effect on informed decision making and patient-doctor communication. The goals of this study were to explore the DCP of diverse, older adults and whether DCP were associated with participant characteristics, question-asking behavior, and satisfaction with communication. **Settings/Population:** Participants (n=146) were recruited from outpatient clinics, senior centers, and cancer support groups in San Francisco. **Interventions/Study Design:** We assessed DCP using the control preference scale within three categories: doctor makes all decisions (low DCP); share decisions with doctor; and patient makes own decisions. We assessed participant characteristics (age, race/ethnicity, gender, education, etc.), question-asking behaviors (self-efficacy and readiness, 5-point Likert), whether patients ask doctors questions (yes/no), and satisfaction with patient-doctor communication (5-point Likert) using Chi-square tests and Kruskal-Wallis analysis of variance. **Outcomes/Results:** The mean age of participants was 71 ± 10 years; 47% were White, 27% were Black, 7% were Latino, 13% were Asian/Pacific Islander, and 6% were multi-ethnic. Eighteen percent wanted their doctors to make decisions, 33% wanted to share decisions, and 49% wanted to make their own decisions. Older age, not race/ethnicity, was the only characteristic associated with low DCP (75 ± 11 years, low DCP; 69 ± 10 years, share decisions; and 70 ± 9 years, make own; $p=0.003$). Readiness was the only question-asking behavior associated with DCP (3.8 ± 1.2 , low DCP; 4.1 ± 1.2 , share; 4.3 ± 1.2 , make own; $p=0.05$). DCP was not associated with asking questions, self-efficacy, or satisfaction with communication. **Conclusions:** Close to one-fifth of diverse, older adults want their doctors to make medical decisions for them. Low decision control preferences (DCP) are associated with older age and lower readiness to ask questions, but not with race/ethnicity. Yet, diverse older adults with low DCP still ask doctors questions with confidence and report satisfaction with communication. Our results imply that regardless of DCP, clinicians can encourage questions from all patients. Clinicians may also need to ask about DCP to provide the desired

scarring increase the likelihood of intervention among women undergoing medication abortion?

Context & Objective: Medication abortion is growing in popularity as a way to safely terminate early pregnancy up to 10 weeks' gestation, and can be administered by clinicians in primary care outpatient settings. Early medication abortion now accounts for 23% of all abortions in the US, up from 6% in 2001. Most women undergoing abortion have given birth, and one-third of US births are delivered by cesarean section. The overall efficacy of medication abortion is high, but its efficacy in women with a uterine scar may be lower due to abnormal implantation. This association has not been studied in the current US dosing regimen for first-trimester medication terminations. We sought to determine whether a history of uterine scarring, either from prior cesarean section or myomectomy, was associated with need for additional intervention after 200mg mifepristone/800mcg misoprostol. **Settings/Populations:** Data was abstracted from the charts of 2,054 patients at two Chicago clinics who underwent a medication abortion in 2011. **Interventions/Study Design:** Using multivariate logistic regression, we assessed the odds of failure after medication abortion among this retrospective cohort, defined as either: 1) need for uterine aspiration; or 2) need for any additional medication or uterine aspiration during the follow-up period. **Outcomes/Results:** Twenty-one percent of women did not return to the clinic for follow-up. We conducted the analysis on the remaining 1,627 patients, controlling for age, race, parity, and gestational age. Lost-to-followup was not correlated with variables that were correlated to uterine scarring. Thirteen percent of women in the sample had a history of uterine scarring, and 4.5% of cases required additional medication or uterine aspiration to complete the abortion. Women with histories of uterine scarring had 1.7 times the odds of needing additional intervention (95% CI 0.87-3.2) than women with no prior scarring (6.6% vs 4.2%). **Conclusions:** Medication abortion failure is rare, and family medicine clinicians can feel comfortable offering this option to patients with prior uterine scarring. This is the largest sample size in which this association has been studied, and our findings are consistent with previous studies of other regimens.

ANGEL L, CHAN R, MA A, AYAR E, FERNANDEZ L, CHIRINOS C. Volunteer health coaches in primary care chronic care clinic model.

Context & Objective: The Family Health Center (FHC) has a long history of testing various health coaching (HC) models. Recently, the lack of HC staff and high demand for HCs motivated the initiation of a volunteer-based HC program. In June 2013, the volunteer HC and chronic care model was introduced to FHC. The intention was to incorporate volunteer HCs into the patient care team to provide self-management skills and counseling to patients with chronic conditions. **Settings/Populations:** Implemented at the FHC, providers selected a number of their diabetic patients who could benefit from HC. Most patients belong to socioeconomically disadvantaged and culturally diverse urban populations and often have language and/or cultural barriers with their clinicians. Volunteer HCs who possessed cultural sensitivity and linguistic abilities mirroring the patient population were selected. **Interventions/Study Design:** Five selected volunteers were trained by the UCSF Center for Excellence in Primary Care to learn, gain, and practice HC skills. Clinic dates were set for each HC to meet with a provider and selected patients before, during, and after the visit. Using patient-centered techniques, including motivational interviewing and "ask-tell-ask," HCs created action plans with patients and established a support system to assist patients in making changes and decisions congruent with the health goals set forth by the providers. **Outcomes/Results:** In this year-long project, the HCs have worked with 11 providers and more than 100 patients. Overall, patients experienced a decrease in HbA1c levels and were more confident and compelled to make better-informed decisions to achieve positive health outcomes. A huge challenge encountered was the poor integration of the HC program within clinic operations. Other challenges regarding direct patient care included maintaining effective communication and scheduling meeting times in which the patient, provider, and HC were all available. **Conclusions:** This project has been successful and beneficial to patients, providers, and volunteer HCs. The implementation of similar programs may be valuable for other clinics, although a better framework may be needed for our model to be more effective in team-based care settings.

BEZA M, TOMPSON M, LUI PL, DURDEN-FAY C, CARDIARELLI M, CHINN T, YAN S, COLVARIO S, JAMES C. Improving patient access to Maxine Hall Health Center.

Context & Objective: Maxine Hall Health Center (MHHC), a clinic in the San Francisco Department of Public Health (SFDPH), strives to improve the quality of care for its patients. **Settings/Populations:**

Located in the Western Addition, MHC sees San Franciscan adult patients, many of whom are neighbors to the clinic and are in the medical safety net. **Interventions/Study Design:** We identified areas in which we wanted to improve: 1) patient experience, including reducing cycle time and decreasing wait time to become an established patient; and 2) staff experience, including work flow mapping and streamlining successful practices for all members of the care team. **Outcomes/Results:** Instituting Orientation Clinics led by RNs enabled the clinic to go from having a wait-list for new patients to having no wait-list. Surveys from the Orientation Clinics suggest high levels of patient satisfaction. In switching to a team-based care model, we wanted to “triage” calls to the appropriate person on the patient’s team, instead of most calls being routed to a triage nurse. The provider’s team nurse and, when within the scope of practice, the provider’s medical assistant, was to receive the call. A new workflow was developed through a PDSA cycle involving representatives from each of the disciplines affected, with successful results. We are continuing to pilot new projects for SFDPH’s COPC and will continue to pilot and continually evaluate our own initiatives to see how we can improve the quality of primary care we deliver. **Conclusions:** Many of our plan-do-study-act cycles have changed how all levels of staff—eligibility workers, receptionists, medical assistant, nurses, behaviorists, and primary care providers—do our work. In addition to sharing the most recent data and resources from our improvement initiatives, we will share revised clinic workflow materials to share our evolving best practices.

BOGGIANO V, SCHILLINGER E, WU Y. Patient-centered care: student perspectives on the benefits and challenges.

Context & Objective: The patient-centered care model for healthcare delivery encourages medical providers to respect patients’ preferences and give patients more autonomy over their healthcare decisions. In light of the increasing emphasis on students’ and doctors’ incorporation of patient-centered care techniques into healthcare services, we sought to explore the greatest impediments to (as well as the benefits from) student engagement in patient-centered care, from the perspectives of doctors, students, and patients themselves. A secondary aim of this research was to use student responses to explore possible improvements in the way patient-centered care is taught to medical students. **Settings/Populations:** We conducted our study with third-year medical students on family medicine rotations at Stanford University School of Medicine. **Interventions/Study Design:** Students were provided the following open-ended prompt: “Describe a patient-centered care challenge or surprise in the family medicine core clerkship.” A total of 326 free responses were collected. Transcripts were inductively coded by a primary researcher and reviewed by two secondary researchers. Coding discrepancies were resolved through a multi-step adjudication and consensus process. The primary researcher reviewed coded transcripts to identify preliminary themes. The research team worked collaboratively to iteratively refine representative themes until consensus was achieved. **Outcomes/Results:** Four primary aspects of patient-centered care were mentioned by medical students. First, several students discussed the meaning of patient-centered care and its impact on patient health and adherence. One student wrote that “letting patients take control and guide their own action plans gets them motivated and excited in a way that having a physician tell them exactly what to do doesn’t.” Second, students frequently discussed the relationship between doctor and patient in the patient-centered care model. Third, students discussed communication issues that impact patient-centered care, such as language or cultural barriers. Finally, students discussed how the patient’s psychosocial context affects patient-centered care. **Conclusions:** Our study suggests that students find the patient-centered care model for healthcare delivery to be challenging but worthwhile. Our results demonstrate a need for improved medical education about patient-centered care that will better enable students to implement the model in a variety of psychosocial and medical contexts.

BOGGIANO V, WU Y, SCHILLINGER E. Practice-based challenges and improvement opportunities: clerkship students’ perspectives.

Context & Objective: Medical students are immersed in complex healthcare settings but receive limited standard education in evaluating, analyzing, or improving these environments. There is a current need for undergraduate medical education to integrate practice-based learning and improvement (PBLI), which is the ability to engage in life-long learning; identify strengths, deficiencies, and limits to one’s own knowledge; and partake in quality improvement (QI) of a practice. To date, there are limited reports regarding students’ PBLI in clinics, their challenges and insights, and how to implement this material into curricula. Our study aims to identify the PBLI challenges faced by students on an outpatient clinical rotation. Second, we will examine students’ perceived PBLI challenges during clerkships, so that methods

of teaching ways to tackle these challenges or alleviating them can be developed. **Settings/Populations:** The study population was comprised of third-year medical students at Stanford University School of Medicine during their family medicine core clerkships. **Interventions/Study Design:** Data was collected from student logs during these clerkships. One of the log questions required students to: “please log a patient encounter in which you experienced a practice-based challenge or improvement opportunity, and how you addressed the challenge or what unfolded.” The study authors collected and inductively coded 206 qualitative responses. A team-based approach was used to identify representative themes. The themes were revised and condensed through an iterative process until study authors reached consensus. **Outcomes/Results:** Four general clusters of themes emerged: 1) students were moderately proficient in skills required for PBLI; 2) students commonly faced a set of personal challenges (eg, limited time during patient encounters, difference in patient’s and provider’s perspective of care); 3) students commonly recognized a set of system challenges (eg, lack of patient continuity, limited medical resources and staff); and 4) students’ proposed insightful ideas for QI, whether personal or systems-based. **Conclusions:** This report reveals students’ practice-based challenges and their perspectives regarding QI opportunities. The data on students’ proficiency of their PBLI skill sets, their perspectives on challenges faced, and their proposed QI methods reveal potential gaps in PBLI education that may inform curricular changes both at the pre-clerkship and clerkship levels.

BOWYER V, FISHER L, HESSLER D, AREAN P, MASHARANI U. Interventions to reduce diabetes distress also reduce depression.

Context & Objective: Depression among patients with diabetes in primary care has been linked to poor glycemic control, poor self-management, higher health care costs, and higher mortality. It remains unclear, however, if the depression observed among these patients should be considered a co-morbid psychiatric condition or part of a broader experience of diabetes distress (DD)—the worries, concerns and fears among patients struggling with a demanding chronic disease like diabetes. In studies that included measures of both depression and DD, DD contributed to most of the significant relationships with outcomes, whereas depression did not. Therapies that focus on DD, rather than depression, may be more effective in addressing the emotional side of living with diabetes. In this study we asked if treatments to reduce DD also reduced depression in adults with type 2 diabetes in primary care. **Settings/Populations:** Adults aged 21 years and older with moderate DD were identified through community primary care registries and diabetes education centers. **Interventions/Study Design:** Participants were randomly assigned to one of three DD-reduction interventions: diabetes management information only (Leap Ahead); a web-based diabetes self-management program (CASM); or CASM plus DD-focused, problem-solving therapy (CAPS). Outcome measures, assessed at baseline, four, and 12 months, included the regimen distress (RD) subscale of the Diabetes Distress Scale and the eight-item Patient Health Questionnaire (PHQ). **Outcomes/Results:** The interventions led to significant reductions in DD in all study arms at four and 12 months ($p < .001$). PHQ scores were also significantly reduced by the DD intervention in all arms ($p < .001$). Of the 56 participants who scored 10-14.9 on the PHQ at baseline (moderate depression, 14.3% of sample), 78.6% and 83.9% were no longer in the moderately depressed range at four and 12 months, respectively. **Conclusions:** These findings suggest that depression in adults with type 2 diabetes can be reduced by DD-focused interventions alone. They add evidence that much of what is labeled depression in these patients may best be viewed as the distress associated with the expected worries, concerns, and fears of struggling with a demanding chronic condition.

BRONDFIELD M, FLEISHER P, SCHMIDT L, NELSON M, DICKER R. Influence of alcohol on urban trauma: a spatial model for San Francisco County.

Context & Objective: The connection between alcohol availability and violence has been well established for urban centers. Many studies have demonstrated increased rates of trauma in areas where alcohol is readily available, but none has sought to definitively link alcohol to the incidents. **Settings/Populations:** Our work seeks to model traumatic injury across San Francisco County using SFGH trauma registry data that includes blood alcohol levels (BAL) for each 900-level trauma. **Interventions/Study Design:** A spatial model relating trauma, off-sale alcohol outlet density, and SES variables has been created using ArcGIS. Analysis of BALs for trauma cases is ongoing. **Outcomes/Results:** Initial linear regressions using violent crimes as a proxy for trauma show a statistically significant relationship between violence and off-sale alcohol outlet density, population density, and unemployment rate across 195 census tracts ($p < 0.05$ for all variables). However, R-squared ranged from .26 to .32 as violent crimes