



# 2015 Poster Presentation Abstracts

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July 30-August 1, 2015 – National Conference of Family Medicine Residents and Medical Students – Kansas City, MO

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The purpose of the National Conference poster competition is to stimulate research by medical students and family medicine residents, to provide a venue to share innovative and effective educational programs, and to showcase unique community projects. This year's 24 presenters offer valuable information in the categories of clinical inquiry, community projects, educational programs, and research.

## Clinical Inquiry

**CI-1 IVC Filter: A Safety Device That Can Kill: A Primary Care Primer of IVC Filter Indications, Complications, and Recommendations for Removal**

*Christina Bungo, DO, Brandon Steinberg, MD, and Corey Steinberg, MD  
Mayo Family Medicine Residency (Florida)*

The use of inferior vena cava (IVC) filters has steadily increased since 1967, with over 259,000 placed in 2013. There are few true indications for IVC filter placement, and the vast increase in utilization has occurred secondary to relative indications and prophylactic usage. While complications related to filters remain low, increasing utilization combined with low retrieval rates will likely lead to more patients presenting with long-term adverse events. The corresponding case recounts a 59-year-old male who had an IVC filter placed for a true indication in 2007. When the patient presented six years later with abdominal pain and blood in his stools, a wide differential diagnoses failed to include iatrogenic perforation. Due to a physical exam finding that triggered concern for appendicitis, the patient was triaged to the emergency department, where he was ultimately found to have a perforation of his duodenum and aorta by the IVC filter.

**CI-2 60-Year-Old Woman with Sudden Blurry Vision: Internuclear Ophthalmoparesis in Granulomatosis with Polyangiitis**

*Sandy Liao, DO  
San Joaquin General Hospital Family Medicine Residency Program*

Internuclear ophthalmoparesis is a rare ocular manifestation of granulomatosis with polyangiitis (GPA), a vasculitis that is more commonly presented with sinus, pulmonary and renal symptoms. This case describes a 60-year-old Caucasian female who presented with sudden blurry vision and inability to adduct her right eye. She had a history of hematuria, chronic rhinitis and multiple ear infections. The previous nasal cartilage biopsy was benign, and multiple chest x-rays were negative for any disease processes. Although GPA was highly suspected, it was difficult to diagnose with these negative results. Since the patient also had a history of uterine cancer, it was important to rule out infectious and malignant causes before settling with vasculitis and initiating appropriate therapy. When the patient presented this time with ocular symptoms, lab values showed elevated c-ANCA and MRI showed infarct in the pontine region. The patient was quickly given pulse corticosteroids with cyclophosphamide, and her symptoms resolved. The estimated incidence rate of GPA is 3 cases per 100,000 people in the United States, mostly affecting the older population. Most symptoms are reversible if treated promptly with steroid and immunosuppressive therapy. Therefore, it is crucial to accurately diagnose patients with vasculitis even if they present with atypical symptoms.

**CI-3 A Case of Malignant Pericardial Effusion Due to Metastatic Renal Cell Carcinoma***Cody Ryan, MD**Scripps Family Medicine Residency Program*

A 55-year-old female presented to the emergency room, sent from Cardiology Clinic, after preoperative echocardiogram showed large pericardial effusion with features of tamponade. The patient had had progressively worsening shortness of breath for the past 2 months. She reported cough, dyspnea, and hoarseness, but was otherwise asymptomatic. She had a known left supraclavicular mass and was being worked up in the outpatient setting for possible malignancy. The patient had normal vital signs and an exam that was only remarkable for muffled heart sounds and a 2 cm, firm, immobile mass in the left supraclavicular region. Chest radiography and 2D echocardiography were consistent with her history of pericardial effusion with tamponade. She underwent pericardial window with partial pericardectomy. Microscopic evaluation of the pericardial tissue and pericardial fluid was negative for malignancy. Abdominal CT demonstrated an 11 cm right renal mass with retroperitoneal, mediastinal, and left cervical lymphadenopathy, consistent with metastatic renal cell carcinoma. Finally, biopsy of the supraclavicular node was consistent with poorly differentiated metastatic adenocarcinoma, consistent with renal cell carcinoma.

**CI-4 Acute Cryptosporidiosis in an Immunocompetent Pediatric Patient***Asim Alshanberi, MD, Patrick Huddleston, and Caitlin Tallant**Texas Tech University Health Sciences Center*

Severe diarrheal illness in children can be related to a number of different microbiological agents. Diarrheal diseases are the second most common cause of death in children under the age of 5 years worldwide. Nearly 375 million episodes of acute diarrhea occur each year in the United States, causing more than 900,000 hospitalizations and up to 6,000 deaths. Without appropriate microbiological testing of stool samples, patients who present with multiple days of severe diarrhea might have a delay in proper diagnosis and treatment. Here, we report a case of an immunocompetent pediatric patient presenting with acute cryptosporidiosis. Adding diagnostic tests for cryptosporidium like Ziehl-Neelsen staining of stool or fecal rapid antigen detection techniques should be considered in the workup of patients presenting with undifferentiated, severe diarrheal illness.

**Community Project****CP-1 Changing the Face of Sex Education in Rhode Island***Naomi Adjei, Dorothy Liu, Vinay Rao, Kunal Sindhu, and Michael Yacovelli**Warren Alpert Medical School of Brown University*

Sex Ed by Brown Med is a collaboration between the Warren Alpert Medical School and the Board of the Central Falls School District with the aim of improving the sexual health knowledge of adolescents in Rhode Island. We designed a comprehensive sexual education curriculum and recruited 41 medical student volunteers to deliver seven lessons to 168 eighth grade students in Fall 2014. To assess baseline knowledge and knowledge acquisition, the middle school students were administered a 17-question, mixed format assessment before and after the course. Our students demonstrated statistically significant improvements in sexual health knowledge. Over the course of the semester, their average assessment score rose from 68.3% to 78.1% ( $p<0.001$ ). They also scored significantly better in both the sexual health and reproductive anatomy sections of the post-assessment (76.3% vs 66.7%,  $p<0.001$  and 91.1% vs 80.1%,  $p<0.01$ ). In light of the initial success, we have included seventh grade students to the program.

**CP-2 Student-Run Free Clinic Universal Food Insecurity Screening and Referral Project**

*Jannie Chang and David Malinak*

*University of California San Diego School of Medicine*

Food insecurity is a significant health issue associated with increased health care utilization and worse clinical outcomes. We sought to assess the prevalence of food insecurity at the University of California San Diego (UCSD) Student-run Free Clinic Project (SRFCP). All patients seen at the UCSD SRFCP from January through April 2015 were given the 6-item U.S. Department of Agriculture Food Security Survey. Food insecure patients were offered referrals to food banks and government food assistance programs. Unpaired t-tests and  $\chi^2$  analyses were used to assess significant differences between diabetic and non-diabetic groups. Results indicated that 72.3% (226/368) of all patients reported food insecurity, with a mean score of 2.91 (SD=2.08). Additionally, 80.6% (145/180) of diabetics reported food insecurity compared to 64.9% (122/188) of non-diabetics ( $p<0.001$ ). The food insecurity rate at the UCSD SRFCP was higher than previously reported food insecurity rates in the United States and other safety-net clinics.

**CP-3 A New Perspective on Preventive Medicine: The Farm to Health Center Initiative**

*Kathryn Bailey, Rachel Erdil, and Elizabeth Rosen*

*University of Massachusetts Medical School*

Food insecurity (FI) is linked to poor health outcomes, and 1-in-10 households are FI in Worcester, Mass. The Farm-to-Health-Center-Initiative seeks to reduce FI at a community health center (CHC) and increase vegetable consumption by assessing FI, offering weekly free farm-fresh vegetables, and promoting provider-patient conversations about FI. The Initiative is a medical student-initiated partnership between a CHC physician and a farm. A convenience sample of 115 patients identified favorite vegetables from pictures, allowing the farm to grow crops matching patients' cultural palates. In 2014, we distributed 772-1148 pounds of vegetables/week to 75-157 households/week. Lists of food pantries and WIC/SNAP referrals were also provided. Based on the two-question Hunger Vital Sign, 67% of patients were found to be food insecure. Cost (45%) and dislike (21%) were determined as barriers to vegetable consumption. Also, 55% of patients worried about running out of food before they had money to buy more; and 48% reported never having spoken to their healthcare provider about their food situation. Through this pilot program, we determined that food insecurity is significantly more prevalent among patients at this CHC compared to the surrounding population. When free and accessible, patients are willing to eat more fruits and vegetables. CHCs can play a key role identifying and addressing food insecurity and connecting patients to local resources.

**CP-4 Cooks for a Cause: Adapting a Community Outreach Program Based on Community Partners**

*Alyse Dicenzo and Lauren Evans*

*Albany Medical College*

Cooks for a Cause (C4C) is a medical student run community outreach cooking program targeting the at-risk inner city youth of Albany, N.Y. As site program coordinators we created strategies based on the program's cornerstone goals in an effort to tailor the program to the participants and our two community partners. The five goals were: 1. Help address the hunger issue that many children face; 2. Cultivate a lifelong interest in food; 3. Foster a respect for commitment and teamwork; 4. Establish and nurture positive mentoring relationships between medical students and inner-city youth; and 5. Teach about healthy eating habits to provide a basis for a future healthy lifestyle. By implementing strategies targeting the main goals we were able to amplify the positive effect of the program. The changes were assessed quantitatively with attendance at each session and qualitatively through feedback from participants, medical students, and representatives from our community partners. The regular attendance of participants and medical students, combined with strongly affirmative feedback confirmed that changes implemented at each center had a positive impact on C4C.

**CP-5 Refugee Health Initiative**

*Trevor Dickey and Stephanie Ngo  
Duke University School of Medicine*

The Refugee Health Initiative (RHI) is a new service program at Duke University that seeks to provide health education and to improve access to care for newly resettled refugees in Durham, N.C. The program is an expansion from the University of North Carolina at Chapel Hill RHI with support from the Schweitzer Fellowship and in partnership with Church World Service, a refugee resettlement agency. The goal of RHI is to assist newly resettled refugees in developing skills and knowledge related to the navigation of the United States healthcare system. We recruit graduate/professional students from the medical, nursing, PA, and global health schools. These students are grouped and matched with refugee partners. Volunteer groups conduct 6-9, one hour long in-home health sessions over the course of a semester. Topics are discussed based on the refugee clients' interests and needs. Through this program we have recruited 22 volunteers who worked with 13 families from the Central African Republic, Afghanistan, Burma, Somalia, etc.

**CP-6 Using the Medical Student-Run Free Clinic to Address Health Disparity for Adults with Intellectual Disabilities**

*Olivia Ruth and Christine Schultheiss  
Drexel University College of Medicine*

Adults with intellectual and developmental disabilities (I/DD) represent one of the most medically underserved populations in the United States. Despite being insured, many lack access to primary care providers and have poorer health outcomes than their non-disabled counterparts. We sought to explore the feasibility of addressing the health disparities of this population in the model of a medical student-run free clinic. After developing a partnership with The Arc of Philadelphia, a community organization serving adults with I/DD, a small group of dedicated medical students and faculty advisors succeeded in establishing a weekly student-run clinic serving these patients in conjunction with The Arc. Subsequently, we began a literature search and intra-institutional curriculum review exploring the dearth of instruction regarding the care of adults with I/DD in medical education.

**CP-7 Application of an Interdisciplinary Student Educator Model in Increasing Health Insurance Enrollment**

*Warren Yamashita  
Keck School of Medicine of the University of Southern California*

Starting with 7 million uninsured Californians over the last 2 open enrollment periods, Covered California has enrolled over 4 million new individuals in Covered CA and Medi-Cal plans. However, there are approximately 2.5 million people still uninsured. In order to increase enrollment, University of Southern California Connecting Californians to Care (USC CCTC) launched in October 2013 to train undergraduate and graduate interdisciplinary healthcare students to provide Covered CA, Medi-Cal, and My Health LA insurance consultations to consumers at community health fairs. To date, 56 trained student educators have held five 1.5 hour Covered CA training workshops. One workshop attendee remarked, "This is the most meaning organization I've seen on campus." Student educators represent medical, MPH, pharmacy, MSW, occupational therapy, and undergraduate programs. The student educators have scored an average of 92 +/- 7.9% on a competency assessment exam after each workshop (N=38). Eight students have been trained as Covered CA Certified Enrollment Counselor status. The community impact consists of 7 community health fairs where 77 total consultations were provided to consumers (66 = Covered CA, 1 = Medi-Cal, 10 = My Health LA).

## Educational Program

### **EP-1 BLSO Increases Interest In and Understanding of Family Medicine in M1 and M2 Students**

*Emily Barker, Billy Burrough, and Kristin Magliocco*

*University of Wisconsin School of Medicine and Public Health*

The University of Wisconsin-Madison Department of Family Medicine is a leader in obstetrical training for family medicine residents. Unfortunately, UW medical students have little, if any, exposure to obstetrical care done by family physicians. Because of this, students interested in women's health may discount family medicine as a career choice. We hypothesized that if M1 and M2 students were taught obstetrical concepts by family medicine physicians in an interactive environment, they would be more interested in, and have a better understanding of, family medicine as a career. The goal of this educational project was to provide curricular enhancement to showcase women's health and maternity care in family medicine – and to present this early-on in medical student training. To do this, we recruited a total of 15 volunteer faculty instructors from the UW Department of Family Medicine to provide our school's first BLSO course. The sixty M1 and M2 students enrolled took a pre-course survey identifying their knowledge of different obstetrical topics, and their initial interest in family medicine. Students then filled out the same post-course survey to identify change. Overall, students felt more knowledgeable about obstetrical care, and more interested in family medicine.

### **EP-2 Student-led Interventions in Preclinical Years Improve Students' Knowledge of Lesbian, Gay, Bisexual, and Transgender Health Issues and Confidence to Provide Care**

*Julia Chang, Andrea Grosz, MD, Daniel Gutierrez, and Andrea Lui*

*Case Western Reserve University School of Medicine*

Lesbian, gay, bisexual, and transgender (LGBT) individuals face significant health disparities. Barriers to care include physicians' lack of adequate training regarding LGBT-related healthcare issues. We designed an educational session for first-year medical students on LGBT-specific health concerns to better prepare them to care for this population. With faculty oversight, second- and fourth-year medical students conducted a 2-hour session on LGBT health for 167 first-year medical students at Case Western Reserve University in Cleveland, Ohio. The mandatory session consisted of a student-delivered presentation, a patient panel, and a small-group case discussion and reflection. Assessments measuring students' knowledge of LGBT terminology and health concerns, as well as their confidence in providing care were administered before and after the session. A total of 73 complete, matched pre-/post-session assessments were received. Students' knowledge of LGBT terminology and health concerns improved significantly after the session, as did their confidence in providing care. Students found the session helpful and hoped it would continue in the future. Student-led educational sessions on LGBT health effectively improve first-year medical students' knowledge and confidence to provide LGBT-specific care.

### **EP-3 Be Aware, Be A Hero: A High School Peer Mentoring Program in Social Awareness and Gender Equity**

*Andrew Wei and Denise Yu*

*University of California San Diego School of Medicine*

We designed and implemented medical student-led small group educational sessions on gender inequity-related topics in underserved high schools. At a public high school in downtown San Diego, 10 medical students participated in sessions from October 2013 to February 2014. Post surveys assessed high school and medical student satisfaction, while t-tests assessed change in medical student attitudes and compared differences between male and female high school participants. Adolescents enjoyed the course with a mean rating of 4.32 out of 5, gained a better understanding of the topics (4.17), and enjoyed working with the medical students (4.35). Overall, medical students showed increased interest in working in primary care (3.13 to 3.50,  $p=0.64$ ), felt they gained practical clinical skills (4.30), and became more comfortable working with adolescents (4.50). Medical students successfully designed and implemented gender-related educational sessions that were well-received.

## Research

### **R-1 Initial Presentation to Generalist Provider Versus Subspecialist for Fertility Treatment, Use of In Vitro Fertilization, and Time to Pregnancy**

*Mandy Ward Boltz*

*University of Arizona College of Medicine - Phoenix*

We sought to determine the association between the initial type of clinician seen by infertile women, type of treatment received, and time to pregnancy. We analyzed questionnaire data from 279 population-based Utah women with primary infertility. We compared women presenting first to generalist providers with women presenting first to fertility subspecialists, with the main outcomes of receiving in vitro fertilization (IVF), time to pregnancy, and live birth. The first point of contact for most (84%) women with infertility was a generalist provider. Only 5% of women presented directly to a subspecialist, and these women had higher incomes, were older, and had been trying for longer periods of time to conceive before seeking care. Women who presented first to a generalist provider were less likely to receive IVF (aOR 0.17; 95% CI: 0.05, 0.57), were equally likely to achieve pregnancy, and had similar times to pregnancy (aHR 0.80; 95% CI: 0.38, 1.69) as women who presented first to a subspecialist, after controlling for age, time attempting to conceive before seeking care, and income. Primary care and other generalist providers are frequently the first point of fertility care and may be uniquely positioned to promote a balanced management of infertility.

### **R-2 Prevalence and Correlates of Depressive Symptoms Among a Structurally Vulnerable Population in Tijuana, Mexico**

*Natalie Kang Ferraiolo*

*University of California San Diego School of Medicine*

Little is known about depression among socially and structurally vulnerable groups living in Tijuana, Mexico, who may be at high risk for depression. We sought to determine the prevalence and correlates of depressive symptoms among vulnerable patients at a free clinic in Tijuana. Eligible participants were  $\geq 18$  years of age and spoke either Spanish or English. A convenience sample of 584 patients completed a questionnaire including the NIH-PROMIS depression short form as well as measures of individual, social, and structural factors affecting health. Descriptive statistics and multivariate logistic regression were performed. The prevalence of clinically significant depressive symptoms was 55%. In the multivariate analysis, female gender, poor/fair self-rated health, recent illicit drug use, feeling rejected, history of forced sexual act, and history of violence were independently associated with depressive symptoms. The prevalence of depressive symptoms at this Mexican free clinic exceeds prevalence rates reported for other populations in the region. Public health efforts to support mental health, such as interventions to address socioecological risk factors for depression (e.g., interpersonal and sexual violence, drug abuse) are needed. The clinic is piloting a walk-in mental health clinic as a model for mental health service provision for vulnerable patients.

**R-3 Differential Experience With Men's and Women's Healthcare Visits Between Male and Female Family Medicine Residents**

*Natalie E. Gentile, MD and Benjamin Lai, MBBCH  
Mayo Clinic Family Medicine Program*

Female family medicine (FM) residents have more exposure to women's health (WH) than their male colleagues but few studies have addressed the converse. The association between panel demographics and the differential experience with gender specific healthcare is unclear. For every resident in a FM program in a specific time period, their gender, number of WH and MH visits, total number of male and female visits, and number of visits with patients assigned to their primary care panel were recorded for each year. To determine which visits pertained to gender specific healthcare, software was used to map ICD-9 codes into a useful ontology. Compared to colleagues of the opposite gender, female residents had significantly more WH visits and male residents had significantly more MH visits. There were no significant differences in continuity, gender percentage, or mean age of panels. Conclusions: This study confirms that male and female residents acquire more experience with same gender healthcare visits during training. Panel demographics and continuity do not explain the differential experience. Patient preferences and/or biased scheduling selection may explain why residents accumulate same gender healthcare visits at twice the rate of opposite gender healthcare visits.

**R-4 Assessing Quality of and Implementing Improvements in HPV Vaccination Delivery at a Family Medicine Residency Clinic**

*Anton Grasch, MD  
University of Illinois - Peoria Family Medicine Residency*

HPV-associated diseases are common and burdensome. Over 7 years, HPV-vaccines have been found to be effective and safe; however, their uptake is lagging. The purpose of this study was to assess the quality of HPV vaccination delivery and implement improvements to that delivery. Chart review was conducted before and after implementation of interventions including: strengthened HPV-vaccine recommendations, scheduling 2nd and 3rd dose follow-up visits at time of 1st dose, patient-reminder cards and appointment-reminder calls. No significant changes in HPV vaccinations rates were seen following 4 months of implementation. Significant disparities were seen with females being vaccinated more than males and blacks more than whites. Interventions were easy and inexpensive to implement. The normal HPV vaccine course extends a minimum of 6 months, surpassing our 4-month implementation. Given this and burden of disease, an extended trial of 1 year seems warranted to truly assess effectiveness.

**R-5 Breast Engorgement: Clinical Course, Home Treatment, and In-Office Education**

*Sheila Kredit  
Case Western Reserve University School of Medicine*

Engorgement is a major cause of pain and weaning early postpartum. We sought to identify home engorgement treatments breastfeeding mothers use and determine if education on breast massage and hand expression was helpful at initial newborn visit. This was a prospective descriptive cohort study. Subjects received engorgement specific support at the initial pediatric visit. Follow-up data was collected via email surveys at 1, 2, and 12 weeks postpartum. The most frequently reported home treatments were massage, pumping, and warm compresses. Engorgement for subjects began at 3 days, peaked at 5 days, and stopped at 7 days postpartum. After the initial pediatric visit, more women tried feeding more frequently and massaged toward the axilla. More mothers were able to massage without pain. We found that while maternal engorgement symptoms were present at the initial newborn post-hospital visit, education at this visit significantly changed home treatment techniques. Mothers found the instruction helpful.

**R-6 Screening for Osteoporosis in Men Age 70 and Above in a Primary Care Setting in the United States**

*Dan Nguyen*

*Texas Tech University Health Sciences Center*

Osteoporosis in men is an under-recognized and undertreated condition. Despite the National Osteoporosis Foundation recommending osteoporosis screening in men age 70 and above since 2008, screening rates remain undefined. In our study, we analyzed dual-energy X-ray absorptiometry (DXA) screening rates in a primary care setting. Overall, screening rates were low (11.3%). Although there was an increase with age in both the 10-year osteoporotic and 10-year hip fracture probabilities, no association was found between increased age and bone mineral density testing using DXA. Only 23.2% of patients were prescribed bone protective treatments. The performance of DXA screening strongly predicted prescription of bone protective treatment. Increased age raised the likelihood of bone protective treatment prescriptions; however, smokers were less likely to be prescribed these medications. As the population in the United States ages, an increased awareness of this major public health problem is warranted.

**R-7 Primary Care Physicians Are More Likely to Participate in Medicare EHR Incentives than Other Eligible Physicians after Considering Differences in Income**

*Troy Russell, MD, MPH*

*Georgetown University-Provident Hospital Family Medicine Residency Program*

The American Recovery and Reinvestment Act of 2009 directed \$27 billion for the creation of incentive programs designed to offset the initial costs of implementing electronic health record (EHR) technology. Incentive payments were disbursed to “eligible professionals” (EPs) only after demonstrating meaningful use of certified EHR technology and passing an attestation process. An EP’s ability to incur the average cost of \$15,000 to \$70,000 per provider to install an EHR suggests that factors such as income and practice environment may influence participation in the incentive program. We performed a logistic regression analysis of EP demographics, percentage of Medicare inpatient and emergency room E&M codes, and total Medicare allowed payments to investigate the characteristics of EPs in 2013. After adjusting for practice demographics and Medicare-derived income, family medicine physicians and general internists were found to be more likely to participate in the incentive program. These results suggest primary care physicians may be more responsive to incentive assistance and therefore more likely affected by the termination of payments in December 2014. Reforms to the Medicare program in 2015 should direct cost relief to smaller practices and specialties facing a relatively higher cost to implement EHR technology.

**R-8 Evaluating the ECHO After-school Health Education Program: Results from the Pretest Survey**

*Iman Hassan, MD, Nina Massad, Jenny Yuan Wang, and Jonathan Witonsky*

*Albert Einstein College of Medicine*

Through the Einstein Community Health Outreach (ECHO) health education program, first-year medical students from Albert Einstein College of Medicine teach health topics once a month to fourth and fifth grade students enrolled in the after-school program at PS64 in the Bronx. Health topics include anatomy, staying active, nutrition, peer pressure, first aid, puberty, and harmful effects of tobacco. Baseline knowledge, attitudes and beliefs for the preteens prior to the start of the 2013-2014 ECHO health education program were measured using a 45-question survey. The mean overall knowledge score for all preteens (N=95) was 0.51. Pretest performance on health related knowledge questions suggests a strong need for additional health education. Preteens had positive attitudes about exercise, tobacco prevention and nutrition and less positive attitudes regarding puberty and peer pressure. Results for behavior questions indicate a need to encourage increasing preteens’ amount of exercise and vegetable intake.

**R-9 Depressive Symptoms as a Barrier to Breastfeeding in a Racial/Ethnic Minority Sample**

*Kim Ann Dang, MD and Emily Zachowski, DO*

*Jamaica Hospital Medical Center*

There are significant racial disparities in breastfeeding, with black and Latina women reporting lower rates of breast feeding than white women. Additionally, black and Latina populations have higher rates of depressive symptoms and greater severity than whites. In this study we examined barriers to breastfeeding and investigated the role of depressive symptoms as a predictor of low rates of breastfeeding status. Our sample included 80 mothers drawn from a local hospital-based primary care practice, serving a low income community, of whom 42 were black, and 38 were Latina (mean age = 38.7 years, range=18 to 66). Depressive symptoms were assessed on the SCL-90 score. Participants were asked if they breastfed their children and were asked to identify the degree to which any of nine circumstances presented a barrier to breastfeeding. There was a significant correlation between depressive symptoms and breastfeeding status, as well as several qualitative barriers to breastfeeding. The data suggest experiencing depressive symptoms may create barriers to breastfeeding and undermine the degree to which women can persist when facing challenges in post-natal care.

**R-10 Characterizing the Scope and Impact of Care Coordination Provided in the Outpatient**

*Stuart Zeltzer*

*Cleveland Clinic Lerner College of Medicine*

The scope and distribution of Care Coordination needs are not well characterized while current measures of successful Care Coordination are inadequate. In order to gain a comprehensive understanding of the impact of Care Coordination, two trained reviewers evaluated 1,506 encounters representing 198 unique patients enrolled in Care Coordination noting care coordinator intervention and outcomes in each encounter. The most common interventions were "medical assessments of need" (32% of encounters) and "addressing a communication gap" regarding patient medical history (23% of encounters). The most common outcomes were "physician addressing a patient concern" (28% of encounters) while other common outcomes were "change in condition or new problem detected" (17% of encounters), "patient scheduled appointment directly because of the encounter" (15% of encounters), "medication discrepancy or compliance corrected" (13% of encounters), and "patient demonstrates improved understanding of disease self-management" (13% of encounters). Our data demonstrates that care coordinators function as essential assessors of medical conditions, communicators of information between patient and treatment team, and facilitators of medical care and education. These results are important to define so that care coordinators are recognized as significant players in health care as attention is shifted to chronic disease management and preventative care.