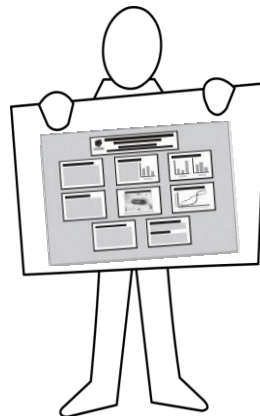


The Community Research Program at MGH Chelsea proudly presents

MGH Chelsea HealthCare Center Community Research Day

Friday, October 7, 2016
8-11 am

MGH Chelsea HealthCare Center
151 Everett Ave.
Chelsea, MA 02150



Program Guide

MGH Chelsea HealthCare Center Research Day is brought to you by the Community Research Program at MGH Chelsea. The Community Research Program at MGH Chelsea is guided by the MGH Chelsea Research Council. Support for Research Day is provided by MGH Chelsea Administration and the Mongan Institute.

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Research Day Schedule of Events

Poster Sessions

8:00 – 8:40 am Poster Session 1

8:40 – 9:20 am Poster Session 2

9:30 – 10:00 am – Group poster discussion with community members

Keynote Presentation

10:00 – 10:30 am – Keynote presentation, Dr. Margarita Alegría, Disparities Research Unit, MGH
Department of Medicine

10:30 – 11:00 am – Discussion with Dr. Alegría

Background on the Community Research Program at MGH Chelsea

Background: In May 2013 a group of 6 people with interest in community-based research gathered at the MGH Chelsea HealthCare Center. This group became a monthly research forum called the MGH Chelsea HealthCare Center Research Roundtable, now reaching 90 individuals through an email list and 10-20 participants who attend a monthly research meeting. The support of the MGH Chelsea HealthCare Center Administration, MGH Division of General Internal Medicine, and MGH Division of Clinical Research led to the formation of the Community Research Program at MGH Chelsea HealthCare Center in 2014. The Community Research Program is composed of the Research Roundtable and the MGH Chelsea Research Council. You can learn more about the MGH Chelsea Research Program online at <http://www.massgeneral.org/chelsea/research/>.

Mission Statement: The Community Research Program at MGH Chelsea Healthcare Center supports research across the lifespan. We emphasize interdisciplinary collaborations that target health disparities, advance clinical practice, and improve the well-being of the Chelsea community.

Research Day Vision: Our vision for this inaugural Research Day is to showcase the diversity of research conducted at MGH Chelsea HealthCare Center, promote collaborations, and stimulate research interest in all disciplines represented in the Health Center. Importantly, we aim to encourage relationships and collaborations between HealthCare Center staff and community members. We are thrilled to have participation from individuals from departments across MGH Chelsea HealthCare Center, MGH Revere, MGH main campus, the Institute of Health Professions, Harvard School of Public Health, and other Partners'-affiliated Departments, Institutes, and Centers. The poster presentations have been divided into six themes that reflect issues that arise when delivering health care in the community.

1. Immigrant Health
2. Practice Transformation & Health Care Redesign
3. Maternal Health & Child Development
4. Language Development & Health Communication
5. Behavioral Health
6. Medical Education

Acknowledgements: Today's Research Day is possible due to the energy, initiative, and input of those numerous colleagues who have participated in the Roundtable and Council meetings, communicated ideas over emails, and individuals and teams who submitted abstracts. We would like to thank Jeannette McWilliams and Dr. Dean Xerras from MGH Chelsea Administration, Dr. Josh Metlay and Beth Walker-Corkery of the Division of General Internal Medicine and the Mongan Institute, and the MGH Division of Clinical Research, who have all provided instrumental support to many aspects of the planning process. Thank you for joining us on this Inaugural Research Day!

MGH Chelsea HealthCare Center Research Council

Alexy Arauz-Boudreau, MD	Pediatrics
Skip Atkins, MD	Adult Medicine
Rohit Chandra, MD	Behavioral Health (Co-Chair)
Trina Chang, MD, MPH	Behavioral Health
Barbara Chase, RN, MSN	Adult Medicine/Nursing
Sofia Devine, PT, DPT	Physical Therapy
Julie Levison, MD, MPhil, MPH	Medical Specialties (Co-Chair)
Danelle Marable, MA	Community Health
Tara McCarty	WIC
Jeannette McWilliams	Administration
Amy Novikoff, MS-CCC SLP	Speech & Language (Co-Chair)
Sanja Percac-Lima, MD, PhD, DMD	Adult Medicine

Event Keynote Speaker

Dr. Maragrta Alegría, Ph.D.



Margarita Alegría, Ph.D., is the Chief of the Disparities Research Unit at Massachusetts General Hospital, and a Professor in the Department of Psychiatry at Harvard Medical School. Dr. Alegría is currently the PI of four National Institutes of Health (NIH)-funded research studies: International Latino Research Partnership; Effects of Social Context, Culture and Minority Status on Depression and Anxiety; Building Community Capacity for Disability Prevention for Minority Elders; and Mechanisms Underlying Racial/Ethnic Disparities in Mental Disorders. She is also the PI of a Patient-Centered Outcomes Research Institute (PCORI) project: Effectiveness of DECIDE in Patient-Provider Communication, Therapeutic Alliance & Care Continuation. Dr. Alegría has published over 200 papers, editorials, intervention training manuals, and several book chapters, on topics such as improvement of health care services delivery for diverse racial and ethnic populations, conceptual and methodological issues with multicultural populations, and ways to bring the community's perspective into the design and implementation of health services.

As an acknowledgement of her contributions to her field, Dr. Alegría has been widely recognized and cited. Among the many awards: the Mental Health Section Award of American Public Health Association, 2003; the Health Disparities Innovation Award from the National Institute of Minority Health and Health Disparities, 2008; and the Award of Excellence from the National Hispanic Science Network on Drug Abuse in 2011. In October 2011, she was elected as a member of the Institute of Medicine. Dr. Alegría was selected as El Planeta's (Massachusetts's largest circulating Spanish-language newspaper) 2013's Powermeter 100 most influential people for the Hispanic community in Massachusetts. Most recently, Dr. Alegria received the 2016 Cynthia Lucero Latino Mental Health Award by William James College.

Background on MGH Chelsea HealthCare Center

MGH began its partnership with the City of Chelsea in 1971. At that time a small primary care practice was established in the basement of a local church in response to the community's concern that health care be more accessible. Since that time, the Center has grown and evolved as the community and its population changed. After offices at the Chelsea Memorial Hospital in the mid 1970s through 1994, the MGH Chelsea HealthCare Center was built.

As new waves of immigrants have come to Chelsea, the Center has worked to respond to the medical and social needs of these populations. Today, the Center provides services to many cultural groups, including Hispanic, Anglo-American, African American, Haitian, Cambodian, and Russian immigrants. The HealthCare Center has established dialogues to better understand the specific needs of the populations, and provide the most appropriate services in a comfortable and high-quality environment. The Health Center has increased its public health and outreach programs and has a working relationship with the health department to collaborate efforts to improve the health status of the community as a whole. An MGH Chelsea Internist serves as the Chairman of Chelsea's Board of Health.

MGH Chelsea continues its commitment to provide an integrated program of primary and specialty care services that are sensitive to the community, and the culturally diverse needs of its residents. The most recent Quality of Life Survey conducted by MGH Center for Community Health Improvement documented the following information about the community.

- Chelsea population is 37,084 and median household income is \$48,725. 11.2% are unemployed.
 - 62% Hispanic or Latino, 25% White, 6% Black, 3% Asian, 4% Other
 - 36.3% Did not complete high school, 32.5% Higher education, 31.2% completed high school
- Graduation rate are higher than state average
- 20% of students "always" or "often" worry about their family having enough money
- 22.6% families live in poverty

Poster Session 1

8:00 am – 8:40 am

(Numbers listed correspond to poster number)

Immigrant Health

1. *Parasitic Infections in a Refugee from Cameroon: A Case Report.*
Emery, Eleanor; Rajai, Mohamad; Atkins, Elisha; Levison, Julie.
2. *CoCoSI (Comité Contra SIDA, Committee Against AIDS), a Dynamic Youth Group in Rural El Salvador.*
Hubbard, Brenda; Kasper, Jennifer.

Medical Education

3. *Social Medicine and Global Health: Essential Components of Undergraduate Medical Education.*
Kasper, Jennifer; Greene, Jeremy; Farmer, Paul; Jones, David.
4. *Novel Resident Evaluations to Correlate with ACGME Milestones.*
Goldman, Randi; Tuomala, Ruth; Bengtson, Joan; Stagg, Amy.

Behavioral Health

5. *Addressing Mental Health Disparities of Refugee Children.*
Betancourt, Theresa; Frounfelker, Rochelle; Mishra, Tej; Hussein, Aweis; Abdirahman, Abdi.
6. *Providers' Perspectives of Factors Influencing Implementation of Evidence-Based Treatments in a Community Mental Health Setting: A Qualitative Investigation of the Training-Practice Gap.*
Borba, Christina P.C; Ahles, Emily; Blackburn, Allyson; Valentine, Sarah; Simon, Naomi; Wiltsey Stirman, Shannon; Marques, Luana.

Practice Transformation & Health Care Redesign

7. *A Group Intervention for Diabetes Treatment Adherence in Spanish-speaking Patients.*
Chang, Trina; Cooper, Abigail; Aroneanu, Ada; Buoniconti, Liala; Wexler, Deborah; Yeung, Albert.
8. *A Tool for Understanding Food Cost Perception.*
Chen Cheung, Hong; Choudhury, Farhana; Fiaz, Khan; Gonzalez, Frank.
9. *Open Access Pilot at MGH Chelsea.*
Chen Cheung, Hong.
10. *Developing and Implementing a Collaborative Team Care Model for Effective Insulin Use.*
Eisentstat, Stephanie; Chang, Yuchiao; Porneala, Blanca; Geagan, Elizabeth; Wilkins, Gianna; Chase, Barbara; O'Keefe, Sandra; Delahanty, Linda; Atlas, Stephen; Wexler, Deborah.
11. *EDOP: Chelsea – Analysis of Visits to the Massachusetts General Hospital Emergency Department by People Living in Chelsea, Massachusetts.*
Dworkis, Daniel; Peak, David.
12. *Peer Mentorship in Diabetes: Implementation in a Hispanic Population.*
Essien, Utibe; Seiglie, Jacqueline; Chiou, Carolina; Castillo, Alyssa; Hwang, Andrew; Cohen, Marya.

Maternal Health & Child Development

13. *Pediatrician Knowledge and Attitudes on Bilingual Language Development.*
Brenner, Diana.
14. *Engaging School Children in Emergency Preparedness: Children as First Responders*
Simpson, Patricia; Levison, Julie.
15. *Enhancing the Police Culture through a Police-Mental Health Partnership that Responds to Children Exposed to Violence in Chelsea, Massachusetts.*
Green, Georgia; Kyes, Brian; Dunn, Thomas; McGathey, Grace.
16. *Collaborative Approach to Meet the Needs of Teen Parents and Improve Academic and Health Outcomes.*
Hampton, Jordan.
17. *Breastfeeding Rates among the Chelsea/Revere WIC population.*
McDonald, Kristy; McCarty, Tara.
18. *Puerto Rico Project: A Multilingual and Multicultural Student Initiative.*
Albrittain-Ross, Natalie; Motroni, Emilia; Sanchez, Miriam; Polanco, Claribel; Corchado, Kelly; Ortiz, Erika.
19. *Use of Maternal Health Services: Comparing Refugee, Immigrant and U.S.-born populations.*
Kentoffio, Katherine; Berkowitz, Seth; Atlas, Steven; Oo, Sarah; Percac-Lima, Sanja

Language Development & Health Communication

20. *Language Stimulation Strategies for Spanish-Speaking Parents.*
Novikoff, Amy; O'Neil-Pirozzi, Therese; Sanchez, Miriam.
21. *Are Boston Healthcare Center Websites Linguistically Accessible?*
Rodriguez, Jorge; Percac-Lima, Sanja.
22. *Raising A Reader MA: Supporting Early Literacy Skills for MGH Families.*
Johnston, Cate; Pollock DeMedeiros, Sara; Novikoff, Amy; Brondson, Jennifer; Karthik, Danielle; Wigozki, Maria Yolanda.

Poster Session 2

8:40 am – 9:20 am

(Numbers listed correspond to poster number)

Immigrant Health

1. *Bienvenidos: Resiliency & Coping Among Recent Immigrant Teens from Central America.*
Aroneanu, Ada.
2. *Foreign-Born Status as a Predictor of Engagement in HIV Care in a large US Metropolitan Health System.*
Levison, Julie; Regan, Susan; Khan, Iman; Freedberg, Kenneth.
3. *Inconsistent HIV Care Among Latino Immigrants: Patient and Provider Perspectives on Intervention.*
Levison, Julie; Bogart, Laura; Khan, Iman; Mejia, Dianna; Amaro Hortensia; Alegria, Margarita; Safren, Steven.

Behavioral Health

4. *The Association of Posttraumatic Stress Disorder and Chronic Medical Conditions by Ethnicity.*
Valentine, Sarah; Nobles, Carrie; Gerber, Monica; Rakhilin, Marina; Yuan, Li; Shtasel, Derri; Marques, Luana.
5. *Delivering Cognitive Processing Therapy in a Community Health Setting: The Influence of Latino Culture and Community Violence on Posttraumatic Cognition.*
Valentine, Sarah; Mendoza, Karla; Marques, Luana.

Medical Education

6. *The Crimson Care Collaborative at MGH-Chelsea: Integration of Primary Care and Sub-Specialty Services in a Student-Resident-Faculty Collaborative Clinic.*
Larionova, Evgeniya; Cohen, Marya.
7. *Evaluating Student Perceptions of Primary Care after Participation in a Student-Faculty Collaborative Clinic.*
Jones, Meissa; Cohen, Marya.
8. *Beyond the Clinical Setting: Improving Healthcare for Refugees and Asylum Seekers through Innovations in a Residency Training Program.*
Emery, Eleanor; Stone, Geren; Zeidman, Jessica; Crabtree, Katherine; Levison, Julie.

Practice Transformation & Health Care Redesign

9. *Advancing Community-Based Research through a Novel Research Infrastructure at MGH.*
Novikoff, Amy; Chandra, Rohit; Levison, Julie.
10. *Screening for Depression at a Co-Located Behavioral Health Student-Faculty Collaborative Clinic: A Chart Review.*
Jones, Meissa; Williams, Rachel; Cohen, Marya.
11. *Evaluating shared decision-making during primary care visits at MGH Chelsea HealthCare Center using Spanish and English versions of CollaboRATE.*
Bustamante, Nitzzy; Elwyn, Glyn; Barr, Paul; Forcino, Rachel; Thompson, Rachel; Ozanne, Elissa; Percac-Lima, Sanja.

12. *Examining the Potential for Homelessness.*
Repucci, Robert; Levison, Julie; Chandra, Rohit; Chen-Cheung, Hong.
13. *Patient Navigation for Lung Cancer Screening: Navigator's Interventions and Challenges.*
Valdez, Silvestre; Quinn, Shannon; Ramos, Daniel; Oo, Sarah; Percac-Lima, Sanja.
14. *COPD: Development of a Primary Care, Subspecialty Partnership.*
Ticona, Luis; Chen Cheung, Hong; McCannon, Jessica.

Maternal Health & Child Development

15. *Trends in Contraception Use among Refugee, Immigrant, and U.S.-born Women at MGH Chelsea Health Center.*
Jarolimova, Jana; Rhodes, Corinne; Percac-Lima, Sanja.
16. *Rationale and Design of the First 1,000 Days Program to Prevent Maternal-Child Obesity and Address Social Determinants of Health.*
Perkins, Meghan; Blake-Lamb, Tiffany; Arauz Boudreau, Alexy; Matathia, Sarah; Kotelchuck, Milton; Shtasel, Derri; Taveras, Elsie.
17. *Increased Risk of Formula Feeding among HIV-Exposed Uninfected Infants in Socioeconomically Challenged Households in Botswana – Findings from the Mpepu Study.*
Powis, Kathleen; Lockman, Shahin; Ajibola, Gbolahan; Bennett, Kara; Hughes, Michael; Batlang, Oganne; Ramogothobeng, Karapetse; van Widenfelt, Erik; Essex, Max; Shapiro, Roger.
18. *Oral Health Needs Assessment in Estancia, El Salvador.*
Oparaeke, Nicole; Kasper, Jennifer.
19. *Complexity of Identifying ADHD and Comorbidities in a Disadvantaged, Latino Population.*
Spencer, Andrea; Chiang, Cindy; Plasencia, Natalie; Murphy, Michael; Cronin, Rebecca; Lyons-Hunter, Mary; Gebara, Carolina; Biederman, Joseph; Jellinek, Michael.
20. *Child Nutrition and Development in Rural El Salvador.*
Symonds, Annie; Umana, Etelvina; Perez Martinez, Abraham; Sanchez, Lucia; Cortez, Ramiro; Garcia, Samuel; Kasper, Jennifer.

Language Development & Health Communication

21. *Reach Out and Read Project Implementation at a Community Health Center.*
Rieger, Ilse.
22. *A Qualitative Study of Interpreter Issues in Clinical Settings Center for Community Health Improvement.*
Wahl, Lissie; Nathan, Michael; Hannah, Seth.

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Open Access Pilot in MGH Chelsea

Hong Chen Cheung, MD, MPH, Adult Medicine, MGH Chelsea HealthCare Center

Summary: The current pilot helped to decrease no show rate (even lowered than using a same day reminder call by provider B) and higher rate of same day scheduled patients. The usage of UC/ED decreased. Many OA users used the OA as a speedy way to follow up UC visit especially with unresolved issues. This will impact in patient satisfaction as well as health outcomes. Staff satisfaction also improved with this pilot.

Background: Due to lack of access, provider A championed a 10% carved out system to provide “open access” to her empaneled patients. The goal of this study is to analyze impact of this model in the system waste time and UC/ED usage.

Methods: Based on chart review, we measured panel size, number visits and percentage of no shows. Descriptive statistics done by via excel. Ttests done using OPENEPI.

Results:

- System balance: Provider A panel is 991 patients (1015 if weighed by gender and age). Panel by FTE is 1250 (647 if based on average 3.2 visits per year). Based on a US average age and disease burden per Altschuler formula, we need 2039.48 hours/year for 991 average patients.
- Outcomes: • Access:
 - Provider A: 26% of patients were scheduled same day and 45% scheduled same week. Provider B were 4% and 27% and provider C were 8 % and 45 % respectively.
 - Narrative by support staff indicate good satisfaction with this system.
- System waste:
 - NS rate in 2015 of provider A is 7.75% compared 9% of the clinic in January and July 2015.
 - Provider A has lower ($p < 0.001$) no show rate compared to provider B (-0.9%) and to provider C(-4.8%).
 - Approximately 42 hours per month is unused for each providers (A=41.8, B=40.5 and C=43.5).
 - UC/ED usage by OA users (09/01/15-12/31/15) of provider A: Historic comparison of usage from 01/01/15 to time 0 (any time seen in “open access”) with usage after time 0 until 03/31/16.
 - Total of UC/ED visits prior to OA visit were 67 and after was 42.
 - Paired T test: $p = 0.0452$ (95% CI 0.01 to 0.68)

Conclusions: Open access system is viable in our organization and showed improved staff satisfaction and decreases “spillage” use and no show rates.

Inconsistent HIV Care Among Latino Immigrants: Patient and Provider Perspectives on Interventions

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Margarita Alegria, PhD, Department of Medicine, Massachusetts General Hospital and Harvard Medical School, Boston, MA

Steven Safren, PhD, Department of Psychology, University of Miami, Miami, Florida

Summary: Foreign-born individuals comprise a significant and rising proportion of HIV-infected Latinos. Interventions to improve consistent attendance in HIV care have not been adequately studied in Latino immigrants. Factors specific both to Hispanic cultures and to immigrant status are essential to highlight so that these interventions are acceptable to the participants and effective in keeping clients engaged in HIV care.

Background: Interventions to improve retention (consistent attendance) in primary HIV care have not been adequately studied in Latino immigrants.

Methods: Our objective was to identify strategies to improve retention in HIV care for Latino immigrants. Bilingual Spanish-speaking staff conducted qualitative semi-structured interviews with 51 individuals, including 37 HIV-infected Latinos (aged ≥ 18 years and born in Puerto Rico or a Latin American Spanish-speaking country) and 14 HIV care providers in a metropolitan area. We explored participants' views on barriers to retention in HIV care and suggestions for improving clinic attendance. Interviews were recorded, transcribed, and translated. We developed and applied a coding scheme based on barriers and facilitators from the Andersen Model of Health Care Utilization. Data were analyzed using thematic analysis.

Results: Patients suggested three major themes to improve retention in HIV care: 1) interpersonal skills for patients to manage HIV disclosure and stigma; 2) self-care through linguistically and culturally acceptable HIV education that emphasizes HIV disease trajectory, medication side effects, and prevention of HIV transmission; and 3) referrals to community services (transportation, housing, immigration assistance). Younger patients (≤ 25 years old) were less familiar with community programming and perceived less need for attendance in HIV care. Providers uniformly highlighted the need for a multi-disciplinary healthcare team, including HIV physician/provider, case manager, mental health and substance abuse providers, and Spanish-speaking community health workers. Patients, more so than providers, were able to detail the complexity of barriers to care and the cultural elements that could be integrated to improve retention in care (e.g. family-oriented themes and cultivation of patient trust).

Conclusions: Interventions to improve inconsistent attendance in primary HIV care in Latino immigrants should emphasize an individualized assessment to appropriately address variable barriers to HIV care. Patient input will be a critical component to assure relevance and acceptability of these interventions.

Complexity of Identifying ADHD and Comorbidities in a Disadvantaged, Latino Population

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Summary: Our study reports on the complexity of diagnosing ADHD and comorbid disorders in pediatrics in disadvantaged, Latino patients and suggests strategies for improving this process. Given that underrepresented minority children are disproportionately affected by lack of diagnosis, misdiagnosis, and under-treatment, improving diagnostic strategies for ADHD is a high priority. By improving the use of tools to detect ADHD in primary care, providers have more opportunity to detect and treat ADHD and improve their functional outcomes.

Background: ADHD is one of the most common childhood disorders. Underserved, minority children are at risk for under-identification. The goal of this study was to evaluate the utility of 3 parent report psychometric screening tools to identify ADHD and comorbidities in a sample of socioeconomically disadvantaged children referred for psychiatric consultation.

Methods: Chart review was conducted on evaluated patients for demographics, psychometric screening results, and diagnoses. Analyses determined the utility of the PSC Attention Scale, CBCL Attention Subscale, CBCL ADHD Subscale, and the Vanderbilt Assessment Scale to identify children with ADHD and varying levels of comorbidity, and examined the effect of demographic factors.

Results: Of 157 patients, 90 were diagnosed with ADHD, most with comorbidities. Patients with non-English speaking parents were less likely to have a completed PSC, and female patients were less likely to have a Vanderbilt Scale. Patients from primarily English-speaking families had higher PSC attention scores, and males were more likely to have higher Vanderbilt symptom scores. All attention measures were significantly correlated with each other but had low sensitivity to detect ADHD. The PSC-35 was better correlated with ADHD diagnosis than other scales and less affected by comorbidities. The PSC Attention Scale had low sensitivity to detect ADHD at the published clinical cut-off of 7. Using ROC curve analysis, the optimal cut-off score for the PSC Attention Scale was 3. The CBCL Attention Problems Subscale was best able to distinguish highly comorbid from less comorbid ADHD and non-ADHD. Having a Vanderbilt was better correlated with ADHD diagnosis than score.

Conclusion: Patients with non-English speaking parents had significantly lower scores and were less likely to be diagnosed with ADHD. Using alternative cut-off scores, pediatricians may consider using the PSC-35 to screen at-risk children for ADHD, while the CBCL may be more helpful to distinguish comorbid ADHD cases.

Pediatrician Knowledge and Attitudes on Bilingual Language Development

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Summary: The aim of this study is to combat misconceptions and increase understanding of bilingualism in young children for providers and parents alike. A secondary goal is to foster interprofessional collaboration between speech-language pathologists and pediatricians in working with young children and their families.

Background: Pediatricians are often the first point of contact for parents wondering how to best support their young child's language development, including children exposed to a language other than English. Over the past decade, a small but growing body of research has been developed on dual language acquisition in young children, which often contradicts previous recommendations related to bilingualism. With the continued rise of a culturally and linguistically diverse population, it is important for speech-language pathologists to collaborate with doctors in disseminating information on best practices in servicing these families.

Methods: The purpose of this poster is to explore pediatrician training and viewpoints on bilingual language development, and compare them with current research via literature reviews and pediatrician surveys.

The first data gathering method consisted of an initial literature review of pediatrician education on language development, both monolingual and bilingual. This search revealed a dearth of information, suggesting that training in this area was quite limited.

The second method to gather data involved development of a small-scale survey for pediatricians to further explore perspectives and education related to bilingualism. This survey will be disseminated to pediatricians working in select community health-care centers in an urban suburb of Boston, with the goal of receiving at least 20 responses.

Finally, an additional literature review was conducted to summarize current research on bilingual language development in young children under the age of 5 in the fields of speech-language pathology, psychology, and education. This information was collected from studies in peer-reviewed journals dated 2006-2016 and will be compared with responses from the pediatrician surveys.

Results: Informal observations suggest that there will be a discrepancy between current research, and pediatrician training and practices in servicing linguistically diverse families. These distinctions will be explored in the discussion section, where best practice policies will be suggested.

Language Stimulation Strategies for Spanish-Speaking Parents

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Summary: Research shows that parents are a child's first teachers. Children learn to understand and speak through daily interactions with their parents. Daily stress, often occurring in low-income home environments, often impacts parent/child interactions. This study explored whether Spanish-speaking parents with children who have speech/language delay and are growing up in low-income environments could benefit from the teaching of language stimulation strategies. The impact of these strategies on the language of their children was also explored.

Background: Socio-linguistic theories of language development account for parents as a child's very first teachers, and suggest that parent-child interactions are highly conducive to language development.

The goal of this exploratory study was to document the benefit of teaching facilitating language strategies to Spanish-speaking parents with children with speech/language delay in low-income environments.

It was hypothesized that following participation in this program that: 1) parents would increase their use of facilitating utterances and 2) children would increase their production of contextually-relevant utterances.

Methods: Ten parent-child pairs (i.e., families) participated in the study. Each of the 10 children was receiving group Spanish group speech/language therapy at MGH Chelsea.

A prospective, pre-test/posttest delayed intervention comparison group design was used. The study consisted of one to two pre-tests, and a posttest (each consisting of snack and book sharing), with four sessions of parent strategy training provided in between.

The interactions were audio-recorded, transcribed and coded. The transcribed intelligible utterances were divided into parent and child utterances. The parent utterances were coded as facilitating (i.e., strategy used) or non-facilitating, while child utterances were coded as contextually relevant or non-contextually relevant.

Reliability of 85% or greater was required for 12.5% of the transcripts.

Results: We are in the process of analyzing data at this time.

The three families that we have analyzed thus far indicate that parents' post-intervention increased percent use of facilitating utterances was statistically significant (paired student t test [$M = -27.2$, $t(2) = 5$, $p = 0.038$]). Paired Student t test analysis revealed that children's percent of contextually relevant utterances produced post-intervention did not change [$M = 5.83$, $t(2) = 0.767$, $p = 0.523$].

Conclusions: Interpretation and implications of the results of this pilot study will be determined based on analyses of the parent and child data of all 10 study families.

Collaborative Approach to Meet the Needs of Teen Parents and Improve Academic and Health Outcomes

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Summary: In a high school with a high teen birth rate, creating an outreach worker position that is specifically charged with case-management of the students who are expectant or parenting, and pairing this with the health care provided at a school-based health center, results in improved health and academic outcomes. Community collaborations with specific and targeted expertise are critical in supporting the needs of these high-risk students.

Background: Chelsea has the highest teen birth rate in the state, and teen parents have a very high dropout rate. The MGH Chelsea Student Health Center (SHC) nurse practitioner (NP) had worked with the population for many years to improve health outcomes, but needed a school-side liaison to help change academic outcomes.

Methods: With federal grant money available in 2011, the Chelsea Public Schools superintendent and SHC NP lobbied for and were successful in creating an outreach worker position based at Chelsea High School (CHS) to work as a case manager for the expectant and parenting students.

Two years later, the funding for the position shifted to the school budget. The liaison works closely with each expectant and parenting student (males and females), managing all academic issues, attendance issues (including maternity leave), and other personal issues affecting students' ability to attend school, including child care, housing, paternity, etc. Close collaboration with multiple other providers.

Results: Decreased dropout: in 2010-2011, dropout rate for expectant/parenting students was 37%.

In 2014-2015, it was reduced to 11.5%, with strong on-time promotion. In 2014-2015, parenting students had a 100% return rate from maternity leave. 100% of parenting students experienced stable access to child-care. 100% of expectant students receive adequate prenatal care. There were no second pregnancies 2014-2015.

Conclusions: Liaison model, paired with school-based health care, works. Legislation now proposed at MA State House to expand and fund this model in other high-risk communities.

Collaborations: CHS liaison and MGH SHC NP work closely together. Co-lead monthly motherhood groups, facilitated monthly fatherhood groups, and brought in midwives for weekly prenatal groups. Collaboration with CHS personnel (nurses, guidance counselors, social workers, administration); MGH providers (mental health, prenatal, pediatrics, community outreach); Also DCF, DTA, Child Development (child care vouchers). Mass Alliance on Teen Pregnancy very involved with promoting the model.

Developing and Implementing a Collaborative Team Care Model for Effective Insulin Use

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Summary: One of the major diabetes care challenges for patients and health care providers is starting insulin and managing the insulin dose to achieve good blood glucose control. This study demonstrated how teamwork across disciplines can be used in a primary care office setting to efficiently and effectively respond to this challenge and improve patient A1c levels. Adopting this approach widely could significantly impact patient outcomes.

Background: Improving glycemic control across a primary care diabetes population is challenging.

We describe the development, implementation, and outcomes of the Diabetes Care Collaborative Model (DCCM), a collaborative team care process focused on promoting effective insulin use targeting patients with hyperglycemia in patient-centered medical home models.

Methods: After a pilot, the DCCM was implemented in 18 primary care practices affiliated with an academic medical center.

Results: Its implementation was associated with improvements in glycemic control and increase in insulin prescription longitudinally and across the entire population, with a >1% reduction in the proportion of glycosylated hemoglobin >9% at 2 years after the implementation compared with the 2 years prior ($P < .001$).

Conclusions: Facilitating factors included diverse stakeholder engagement, institutional alignment of priorities, awarding various types of credits for participation and implementation to providers, and a strong theoretical foundation using the principles of the collaborative care model.

Peer Mentorship in Diabetes: Implementation in a Hispanic Population

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Summary: Diabetes is one of the leading causes of death in the United States with Hispanics more likely than whites to be diagnosed with the disease and to die from it. In Chelsea, a largely Hispanic city, the rates of diabetes are highest in the state. Even with increasing technology and access to physicians, the disease continues to affect the Hispanic population. We hope that the creation of a peer mentorship program will lead to improved outcomes in Hispanic patients with diabetes.

Background: Diabetes is one of the top-ten chronic diseases in the United States. Notably, Hispanics are 1.7 times more likely than whites to have been diagnosed with diabetes, and 1.5 times more likely to die from its complications. Peer mentorship has been used in various domains to help people improve particular areas of their lives. In diabetes management, active self-care is key to achieving optimal glycemic control and it has been shown that the support, both emotional and social, associated with peer mentorship can aid in accomplishing this goal. Our hypothesis is that outpatient peer mentorship will decrease HbA1c levels compared to usual care in Hispanic patients with diabetes.

Methods: Our study was designed to randomize half of patients into the intervention arm and the other into the standard care arm. We also planned to have a control group. The patients in the intervention group (mentees) were assigned a mentor who previously had poor glycemic control. The interactions between mentor and mentee will require once/week phone calls for 12 weeks and once/month phone calls thereafter for a total of 6 months.

The primary outcome of our study will be the percent change in HbA1c over 6 months in the peer mentorship group as compared to the standard care group. We will also be studying the level of motivation a patient had to change their health behaviors, at the beginning and end of the study and afterward.

Results: We assessed 1129 Hispanic patients with diabetes at the Chelsea Health Center for eligibility in our study, excluding 965. We reached out to the remaining 164, 82 mentors and 82 mentees excluding those we were unable to contact via phone call. After 2 group training sessions we consented 24 patients to the study for which we hope to have preliminary data by October 2016.

Addressing Mental Health Disparities of Refugee Children

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Summary: In the US, refugee children and families face dramatic disparities in the incidence and treatment of mental health disorders. Resettlement stressors (poverty, limited access to care and treatment) and acculturation challenges (cultural norms, discrimination) aggravate the risks for mental and behavioral health problems acquired from prior exposure to war and violence. The goal of this research project is to improve mental and behavioral health of refugee youth and children. We plan to achieve this goal by designing and adapting a family strengthening intervention that addresses children and youth's mental health problems at the family level in a culturally acceptable and appropriate manner.

Background: We sought to understand the problems, strengths, and help-seeking behaviors of Somali Bantu and Bhutanese refugees and determine local expressions of mental health problems among youths in both communities.

Methods: We used qualitative research methods to develop community needs assessments and identify local terms for child mental health problems among Somali Bantu and Bhutanese refugees in Greater Boston and Springfield, Massachusetts, between 2011 and 2014. A total of 56 Somali Bantu and 93 Bhutanese refugees participated in free list and key informant interviews.

Results: Financial and language barriers impeded the abilities of families to assist youths who were struggling academically and socially. Participants identified resources both within and outside the refugee community to help with these problems. Both communities identified areas of distress corresponding to Western concepts of conduct disorders, depression, and anxiety.

Conclusions: There are numerous challenges faced by Somali Bantu and Bhutanese youths, as well as strengths and resources that promote resilience. Future steps include using culturally informed methods for identifying those in need of services and developing community-based prevention programs.

Collaborations: Harvard School of Public Health, Chelsea Collaborative, Shanbaro Community Association

Advancing community-based research through a novel research infrastructure at MGH

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Summary: Community-based clinical research aims to address health disparities through partnerships with community stakeholders. Between May 2013 and the present, a research infrastructure at MGH Chelsea was created in response to increasing staff interest in research. The Community Research Program at MGH Chelsea consists of a monthly Roundtable for staff, a guiding Research Council and Advisory Board, as well as multiple communication channels that facilitate discussion between participants at the main hospital and community locations.

Background: Community-based clinical research focuses on research questions relevant to the target population. In order to address health disparities, community-based research is an approach of increasing interest at the MGH community health centers. Our objective was to develop a research infrastructure to promote and highlight community-based research to improve clinical practice and health outcomes at the community health center.

Methods: MGH Chelsea HealthCare Center provides multi-specialty medical care for adults and children and is located in Chelsea, MA, a culturally diverse urban suburb of Boston. Clinicians and staff pursuing research communicated an interest in the development of formal research support at MGH Chelsea. A preliminary meeting was held in May 2013 and the MGH Chelsea Research Roundtable resulted.

Results: The primary outcome of the preliminary meeting was the establishment of the monthly Research Roundtable for the purpose of research communication between investigators and interested parties. The Roundtable email list connects with over 80 individuals who work at MGH Chelsea or at other MGH locations or other community organizations. A project list documents the research projects, quality improvement initiatives, and collaborations across the HealthCare Center. Information is catalogued on SharePoint and accessible to all participants. A pilot website focuses on disseminating information about the Research Program to a larger external audience. Based on feedback from the Roundtable participants, a 12-member MGH Chelsea Research Council was established in June 2015 to establish and execute short and long-term goals for the research community.

Conclusions: Establishing a community of researchers at community health centers addresses a need for mentorship support and provides opportunities for interdisciplinary collaboration on research projects. Promoting community-based research fits with the mission of MGH to improve health and health care delivery through community partnerships.

Are Boston Healthcare Center Websites Linguistically Accessible?

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Summary: Given the language diversity of patients and the rise of health information online, it is important to create content that is accessible to everyone to prevent worsening existing disparities.

Background: The Internet has become a significant source of health information for all patients including Limited English proficiency patients (LEP). Hypothesis Healthcare center homepages serve as the online face of healthcare centers and access points for all patients. Despite the multilingual populations they serve, we posited that Boston healthcare center websites would not be linguistically accessible to their patients.

Methods: We reviewed the homepages of Boston hospitals and community healthcare centers to identify if there was an option to translate the homepage, and if so, the type of translation method provided and the number of available languages. We categorized the translations as automated (i.e. Google Translate), single translated homepage, and separate translated website. After we categorized each center, we mapped their translation capacity to the percent LEP population in their neighborhood.

Results: We reviewed 45 homepages, 20 of which were hospital websites and 25 were community health center websites. Only 44% of homepages had a translation option available.

When we looked at the type of translation methods, we found that 60% of the homepages had automated translation services, primarily Google translate, 15% had a single translated homepage in specific languages, and only the Dana-Farber had a separate translated website in Spanish. The number of available languages ranged from 1 to 83.

Among the 10 neighborhoods with >33% LEP population, only 50% of the healthcare centers had a translation option available.

Conclusions: Hospital websites serve as access points for the communities they serve. Despite the linguistic diversity of Boston neighborhoods, many health centers do not provide translated versions of their websites. With the shift of health information to the Internet, the inability to access healthcare center websites serves to extend health disparities for LEP patients.

Examining the Potential for Homelessness

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Summary: Homelessness prevention has proven to be an extremely effective tool in reducing the number of persons who enter the emergency shelter system. The process of preventing displacement from housing is simple: direct monetary and mediation resources to resolve a situation before displacement occurs. This proactive prevention approach is cost effective and protects families, especially children from the distress of the shelter system and the separation from their normal environment. The reasons that obstruct implementation of a statewide homelessness prevention program are not known by this author; however, the proven beneficial effect of preventing homelessness through this form of intervention is proven.

Background: The problem of homelessness in the Chelsea, Revere, and Winthrop area is overwhelming with literally hundreds of families waiting for public housing, rental subsidies and affordable housing opportunities. The majority of displacements require an emergency response since there is little notice; thus causing extreme pressure for those displaced and social service organizations. The scope of homelessness is difficult to determine given the absence of a single registration process, therefore it is difficult to measure need. The objective is to quantify the number of persons “at risk” of homelessness so that resources may be appropriated.

Methods: Community Action Programs Inter-City, Inc. (CAPIC) is the designated anti-poverty agency for the three-community area and works to identify causes of poverty and establish community based solutions to remove barriers that keep people from achieving self-sufficiency. CAPIC measured the extent of those “at risk” of becoming homeless through use of a survey consisting of seven questions pertaining to housing instability among its clients.

The survey was distributed to 2000 clients over five months between 2015 and 2016. The survey was mailed to respondents, as well as given to them while receiving services. Clients were asked how much of their annual income is spent on rent; are they able to pay rent each month; is there fear of eviction or foreclosure; have you been homeless within the past two years.

Results: We received 40% response (785/~2000) to our survey request and 56% were residents of Chelsea. Over one-half of annual income was spent on housing in 47% and 71% do not live in subsidized housing. Although 64% were able to pay their rent each month, 47% feared eviction due to non-payment of rent. The result implies high risk of housing instability.

Conclusion: A substantial segment of the population in the Chelsea, Revere, and Winthrop region is on the brink of homelessness. With housing costs increasing and wages remaining stagnant, displacement is a real possibility. Since most do not live in subsidized housing they are particularly vulnerable to volatile changes in the economy. The absence of affordable housing means that there are little if any viable alternatives for families once they lose their existing housing. Housing initiatives will be a critical policy initiative in our communities.

Bienvenidos: Resiliency & Coping Among Recent Immigrant Teens from Central America

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Summary: This study suggest that Chelsea is working hard to provide appropriate services to the recent arrival teens from Central America. Yet much more must be understood about the interplay of risk factors affecting this population. While some attention is directed to levels of trauma, pervasive attachment-based challenges must also be better understood. In addition to school-clinic collaboration, it would behoove providers to identify other ways to provide much-needed services (legal, concrete resources, housing advocacy) in the context of family reunification in order to bring about positive outcomes.

Background: In the 2014-2015 school year, an unprecedented number of Central American minors (appx. 68,500) risked their lives making the journey to the U.S., representing a 77% increase from the previous year. Since then, youth continue to arrive weekly. Chelsea, MA is a gateway city that absorbed a large number of unaccompanied minor teens.

Methods: A collaboration between Chelsea High School and Massachusetts General Hospital in Chelsea resulted in the development of a number of interventions. These interventions have been developed at the structural level and individual level to support these children in achieving stability shortly after arrival. Most commonly, refugee youth present with depression, PTSD, and adjustment disorders. Frequently, the quality of family reunification upon arrival sets the tone for a child's progress in making the transition to living in Chelsea, and is a significant predictor of that child's outcome. Despite a family's best attempts, the long family separation can create significant attachment deficits.

Results: Through analyzing my own caseload at Chelsea High School (appx. 60 recently arrived teens form Central America), I have identified the incidence of specific risk factors facing these kids, including: dropping out of school, DCF/DYS involvement, sexual trauma, major loss, substance use, and gang involvement/exploitation.

Conclusions: In many cases, flooding a child and family with services has led to positive outcomes. Additionally, accepting and managing caretaker and client ambivalence may allow for a family to appropriately reunify on their own terms. This poster highlights specific risk factors among our clients, effective interventions used, and examples of positive outcomes. The poster will also highlight gaps in services to this population, and possible ways to expand services and maximize impact.

Rationale and Design of the First 1,000 Days Program to Prevent Maternal-Child Obesity and Address Social Determinants of Health

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Summary: The First 1,000 Days program could provide the foundation for a widely disseminated model of obesity prevention for our state's and nation's most vulnerable families. The program is positioned to create sustainable systems-level changes to manage obesity and disparities in low-resource settings.

Background: Mounting evidence suggests that the "First 1,000 Days" (conception through age 2) is a crucial period for the development and prevention of obesity and its adverse consequences in mother-child pairs and their families. Using a Collective Impact framework, the First 1,000 Days program aims to prevent the development of obesity and its social determinants among mother-infant pairs at MGH's Revere and Chelsea HealthCare Centers and Dothouse Health, where rates of maternal-child obesity are higher than local and national averages.

Methods: The First 1,000 Days program is a systems-level intervention that engages stakeholders in primary care (obstetrics, pediatrics, adult medicine), mental health, the Special Supplemental Nutrition Program for Women, Infants and Children, home visiting programs, nursing, administration, and community health.

Program components include 1) Enhancements to and improved use of electronic health records; 2) Staff and provider training; 3) Consistent behavior change messaging; 3) Patient education via print materials, text messaging and short videos; 4) Clinical-community linkages to support behavior change and promote child development; and 5) Individualized health coaching for mother-infant pairs at high risk of obesity. Mother-child pairs will be followed from the mother's initial prenatal visit until the child's second birthday. A quasi-experimental evaluation design will be employed examining changes in gestational weight gain and prevalence of infant overweight from 0-24 months of age. Key sociodemographic and medical risk factors will also be captured from pre-intervention through the end of the study in the intervention sites and comparison health centers.

Results: Baseline data from July 2012 to June 2013 shows 831 women received prenatal care for a singleton pregnancy at the MGH Chelsea (n=507) and Revere (n=324) Health Centers. 74.1% (n=374) of women in Chelsea and 29.1% (n=94) in Revere self-identified as Hispanic or Latina. In Chelsea and Revere, respectively, 68.2% (n=341) and 59.6% (n=192) of women entered pregnancy overweight or obese (body mass index [BMI] ≥ 25 kg/m²). Of the 786 women who delivered at term (≥ 37 weeks), 35.3% (n=156) of women in Chelsea and 34.9% (n=102) in Revere gained adequate weight in pregnancy based on Institute of Medicine recommendations which account for starting BMI. Across both health centers, the prevalence of infant overweight (weight-for-length z-score > 2 SDs) was 3.1% at 6 months; 8.0% at 12 months; and 12.9% at 24 months; much higher than the national average of 8.1%.

Preliminary exploration of baseline data at Dothouse Health was conducted through review of 50 chronologic charts of women who received prenatal care in 2013 (n=211), and similar results were found, e.g. 45.2% of women entered pregnancy overweight or obese; 33.3% gained adequate weight in pregnancy; and the prevalence of offspring obesity at age 2 years was 14.5%.

Conclusions: The First 1,000 Days Program is poised to provide the foundation for a widely-disseminated model of obesity prevention among vulnerable families throughout the life-course periods of pregnancy and infancy.

Novel Resident Evaluations to Correlate with ACGME Milestones

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Summary: Milestones are new way to evaluate resident performance and progression during the span of residency training. They are competency-based outcomes achieved by the stepwise growth of trainees over time. We developed a tool to evaluate obstetrics and gynecology residents along Milestones in multiple clinical scenarios in order to help give accurate and actionable feedback to our residents.

Background: Primary objective: design a survey to evaluate incoming first-year residents during orientation on knot tying, suturing, and the steps of vaginal and cesarean deliveries in accordance with “level 1” Milestone development. Secondary objective: expand surveys to include labor and delivery and surgical evaluations for residents of all years with assessments that mirror levels 1-5 of the ACGME Milestones

Methods: An initial online survey was developed that incorporates ACGME Milestone guidelines from basic labor and delivery and operative room techniques. Positive choices selected by evaluators during “intern boot camp” equate to the achievement of at least a “level 1” score on the Milestone scale. The survey was designed using software accessible via a direct survey link or QR code, and is fully functional using computers and Smartphones. The feasibility of the survey to assess the Milestones was examined with resident and faculty input. A novel resident evaluation tool was introduced to faculty for widespread use early in the academic year.

Results: The online survey presented during intern orientation was successful in identifying each incoming resident as achieving “level 1” in Milestones for basic labor and delivery skills and knot tying.

Conclusions: Novel resident evaluations incorporating ACGME Milestones can successfully be designed using software that allows for multiple evaluations within one survey. Survey data will provide more accurate assessments of residents in accordance with the Milestones, and may identify areas of weakness for which residents can direct future educational goals.

A Tool for Understanding Food Cost Perception

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Summary: Perceived food affordability may affect the acquisition behavior. Prior focus group revealed that some residents when given more financial resources would like to increase seafood purchase. The inaccuracy in estimating price of fruits and vegetables might be due to less frequent purchase as well as to seafood. The accuracy of meat price estimation thus indicates the frequency of purchase. Further studies that explore the reverse causation of price perception and food purchasing behavior may help to increase fruits and vegetable consumption.

Background : An hypothesis for obesity is that food insecure individuals tend to consume low-cost but energy-dense foods(8). However, national survey of household expenditures did not suggest that additional income would result increase in fruit and vegetable purchases.

Objective: This research will explore the food prices perceptions compared to the current food prices.

Method: Using free listing approach, we asked Chelsea community members to list twenty (20) basic food preference and then rank their perceived expensiveness of each item on a scale from ‘Cheap ’ to ‘Expensive’ and the perceived fair price in a likert scale of \$1 to \$10 .

We compiled the 10 most common food items and calculated the local aggregate cost of those food items on a per-pound or grams from five (5) random retail stores in Chelsea. We compared the mean of the perceived fair food prices (per group fruit, vegetables, starch, seafood, and meat) with actual market values throughout Chelsea supermarkets.

Results: According to the data, the perceived food price for Chelsea residents is higher than the market price for fruits and vegetables ($p < 0.0001$) and starch ($p = 0.006$) and lower for seafood ($p < 0.02$). No significant difference was found for meat ($p = 0.4$).

Conclusions: Fruits and Vegetables are cheaper than what Chelsea residents perceive, however, seafood is more expensive than was perceived. Residents were accurate in estimating the price for meat.

EDOP: Chelsea – Analysis of Visits to the Massachusetts General Hospital Emergency Department by People Living in Chelsea, Massachusetts.

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David A. Peak, MD, Harvard Medical School, Department of Emergency Medicine

Summary: Emergency care and community health are tightly linked and emergency departments (EDs) exist to serve the emergency needs of their communities. Here, we present an initial exploration of a project called EDOP:Chelsea, which analyzes the emergency needs of the citizens of Chelsea, MA as reflected in their visits to the MGH ED. Understanding patterns of ED visits can help MGH Chelsea and Chelsea-based community organizations learn about and improve the health of people throughout Chelsea.

Background: To better understand the connections between the Massachusetts General Hospital (MGH) Emergency Department (ED) and the communities of people it exists to serve, our team developed the ED Origins Project (EDOP), a geospatial analysis of the home addresses of all patients presenting to the MGH ED. Here, we present an initial exploration of EDOP:Chelsea, an analysis of the emergency needs of the citizens of Chelsea, MA as reflected in their visits to the MGH ED.

Methods: Data on the self-reported home address, chief complaint, discharge diagnosis, and demographics were recorded as part of each visit for all patients who presented between 7/1/2012 and 6/30/2015 to the MGH ED. Visits were geocoded by US Census Tract using the United States Census Bureau's Census Geocoder (geocoding.geo.census.gov). Basic analyses were performed using R (r-project.org).

Results: There were 15,146 visits to the MGH ED from Chelsea, including 3,956 (26%) pediatric visits. Geographically, Chelsea comprises six census tracts: substantial variability was found between census tracts both in terms of total visits per census tract (1,130 – 3,321) and in percent of pediatric visits (12%-33%). The most common cause of visits for adults was abdominal pain (533, 5%) and fever for children (349, 8%). 96 visits (0.6%) were related to ischemic stroke and 129 visits (0.8%) were related to opioid use.

Conclusions: Chelsea is responsible for approximately 5% of all visits to the MGH ED, and substantial variability exists in ED visits between different areas within Chelsea. Further exploration of the EDOP:Chelsea data and collaboration with MGH Chelsea and Chelsea community groups is needed to leverage knowledge about the emergency health needs of people in Chelsea in order to better understand and improve population level health

Puerto Rico Project: A Multilingual and Multicultural Student Initiative

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Summary: Cultural immersion has been shown to increase cultural competence in health care settings. We proposed and piloted an immersion program in Puerto Rico to interact with families, professionals, educators, and students and better our understanding of language and culture. Such experiences are suggested to enhance cultural sensitivity during interactions with diverse patients, clients, and their families. The methods required to initiate the project are examined, and the findings from the pilot trip are discussed.

Background: Cultural competence during clinical practice is an essential component of effective, client-focused care. Although service learning is shown to enhance cultural awareness, our graduate program had yet to create an abroad experience for speech-language pathology graduate students. To address this need, we created and piloted a program to (a) increase cultural sensitivity when working with individuals from diverse backgrounds, and to (b) share findings on the current educational and healthcare needs in Puerto Rico.

To initiate the program, we identified student interest, gained faculty support, and formalized a proposal that outlined our plan of action. The proposal specified a week-long itinerary and budget for five graduate students to visit two elementary schools, one university clinic, three university campuses, a public library, and the homes of community members in San Juan and Aguadilla, Puerto Rico.

Methods: After 8-months of planning and fundraising, we traveled to Puerto Rico, gave presentations and held meetings at universities and community centers, built awareness of speech-language pathology, initiated discussion forums with students, and examined our interests in education and healthcare in Puerto Rico. We experienced the culture from families who invited us into their homes, prepared and served traditional meals, and told stories about life in Puerto Rico. We filmed these experiences to maximize our trip's learning potential and to share these findings with our community.

Results: Our planning and documentation methods enabled us to identify themes from our experience including the "Brain Drain", stigmas, the impact of limited resources, and differences in bilingual education. We addressed these topics in presentations for professionals at Massachusetts General Hospital and students in a graduate-level Language, Culture, and Cognition Course. The experience increased cultural awareness for the program participants and their extended community.

Conclusions: Findings from the project can be applied in settings that seek to create immersion opportunities.

Beyond the Clinical Setting: Improving Healthcare for Refugees and Asylum Seekers through Innovations in a Residency Training Program

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Summary: Medical professionals in the United States are suboptimally trained in caring for the unique needs of refugees and asylum seekers. To address this need, we created an elective in Refugee and Immigrant Health at Massachusetts General Hospital to expose medical residents to the multidisciplinary systems affecting the health of these patients. This elective offers insight into how medical training programs can provide trainees with the context and clinical skills to appropriately care for these vulnerable communities.

Background: In 2015 there were over 455,000 refugees and asylum seekers living in the United States. These individuals face multiple barriers to accessing quality health services. The United Nations, the United States government and the American College of Physicians have called for all medical professionals to be trained in how to appropriately care for these communities. Unfortunately, rates of provider adherence to national guidelines governing the care of these patients are low.

Methods: At Massachusetts General Hospital, we responded to this need by creating an elective in Refugee and Immigrant Health. Through this elective, medical residents are exposed to the unique social determinants of health affecting these vulnerable communities, to the variety of multidisciplinary programs across Boston that are providing care within this context, and to the essential role of physician advocacy in this field. The elective was designed by two medical residents and is unique on account of the exposure it provides to stakeholders at multiple institutions across the city, many of whom operate outside of the medical setting. Highlights include observing hearings at immigration court, shadowing community health workers at Chelsea Community Health Initiative, and receiving training on eliciting trauma narratives by mental health experts at the Harvard Program for Refugee Trauma.

Results: The elective was piloted during the 2015-2016 academic year by five residents. During the 2016-2017 academic year it will be integrated with the elective in Global Health and will have space for ~22 residents annually.

Conclusions: This elective offers valuable insight into how medical training programs can provide trainees with the clinical skills to care for refugees and asylum seekers by exposing them to the broader systems that impact health in this arena.

Screening for Depression at a Co-Located Behavioral Health Student-Faculty Collaborative Clinic: A Chart Review

Meissa Jones, MS, MGH Division of General Internal Medicine

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Summary: Research has shown that co-located behavioral health primary care clinics improve access to care and overall health outcomes. However, little is known about the impact on patients seen at student clinics. To evaluate the incorporation of interdisciplinary services, we designed a study to examine the behavioral health referral process for patients seen at the first and only co-located behavioral health student-faculty clinic in the U.S.: CCC-Chelsea.

Background: Due to an aging population and over 3 million people being insured under the Affordable Care Act, the need for primary care services has drastically increased. However, studies have shown that the number of medical students choosing primary care residencies will not satisfy this high demand. The Crimson Care Collaborative (CCC), a student-faculty collaborative clinic, was created in the hope of establishing a pipeline to primary care at Harvard Medical School. To determine the effectiveness of CCC, we evaluated student perceptions of primary care before and after participation in CCC.

Methods: We compared data from surveys aimed at assessing attitudes toward and knowledge about primary care that were administered to students before and after participation in CCC. CCC students were asked to rate the frequency of positive and negative comments about primary care heard from faculty/administration, residents, and peers during medical school. They also rated the extent to which they agreed or disagreed with the comments. In addition, we also asked students to share the comments that they have heard regarding primary care.

Results: A total of 47 matching pre/post surveys were collected. After participation in CCC, students heard more positive comments about primary care from residents ($t = -2.470$, $p = 0.018$). In addition, students significantly agreed more with the positive comments from faculty/administration, residents, and peers after participation in CCC ($t = -2.150$, $p = 0.038$). There were no significant differences in the frequency of negative comments heard from faculty/administration, residents, and peers.

<i>Positive Themes about Primary Care</i>	<i>Negative Themes about Primary Care</i>
<i>Long-term Relationships with Patients</i>	<i>High Burnout</i>
<i>Meaningful and Innovative Work</i>	<i>Not Challenging</i>
<i>Holistic Care</i>	<i>Low Salary</i>

Conclusions :After participation in a primary care based student-faculty collaborative clinic, positive perceptions towards primary care increased. Programs designed to offer students early exposure to primary care, such as CCC, are needed to meet the high demand for primary care services.

Evaluating Student Perceptions of Primary Care after Participation in a Student-Faculty Collaborative Clinic

Meissa Jones, MS, Division of General Internal Medicine

Marya Cohen, MD MPH, MGH Chelsea HealthCare Center, Division of General Internal Medicine

Summary: Research has shown that co-located behavioral health primary care clinics improve access to care and overall health outcomes. However, little is known about the impact on patients seen at student clinics. To evaluate the incorporation of interdisciplinary services, we designed a study to examine the behavioral health referral process for patients seen at the first and only co-located behavioral health student-faculty clinic in the U.S.: CCC-Chelsea.

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- Positive Themes about Primary Care: 1.) Long-term Relationships with Patients, 2.) Meaningful and Innovative Work, 3.) Holistic Care
- Negative Themes about Primary Care: 1.) High Burnout, 2.) Not Challenging, 3.) Low Salary

Conclusions: After participation in a primary care based student-faculty collaborative clinic, positive perceptions towards primary care increased. Programs designed to offer students early exposure to primary care, such as CCC, are needed to meet the high demand for primary care services.

Increased Risk of Formula Feeding among HIV-Exposed Uninfected Infants in Socioeconomically Challenged Households in Botswana – Findings from the Mpepu Study

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Summary: We demonstrated that Botswana's national public health policy promoting formula feeding of all infants born to HIV-infected women results in significantly increased infant morbidity/mortality in households without electricity, running water, or gas as a cooking source. We are working with the Botswana's Ministry of Health to modify infant feeding recommendations to improve survival and health of HIV-exposed infants, as > 25% of all infants born in Botswana are born to HIV-infected women.

Background: A South African study, conducted when policy promoted HIV-infected maternal infant feeding choice based upon formula feeding acceptability, feasibility, affordability, sustainability, and safety, identified > 3-fold increased mortality risk among HIV-exposed formula fed infants in households without piped water, electricity, or gas for fuel, defined as socioeconomically challenged households, compared with breastfed infants. We sought to determine the applicability of these findings in Botswana, where exclusive formula feeding for HIV-exposed uninfected (HEU) infants is promoted.

Methods: Demographic and health outcomes data from the Mpepu study, a Botswana-based randomized clinical trial investigating prophylactic cotrimoxazole as a means of reducing mortality among HEU infants, were used to quantify differences in the combined end point of hospitalizations and mortality between breastfed and formula fed HEU infants residing in socioeconomically challenged households. Infant feeding was according to maternal choice. Formula fed infants received free formula from the Botswana government.

Results: A total of 680 (21%) of 3,164 Mpepu enrolled infants resided in socioeconomically challenged households, 552 (81%) formula fed and 128 (19%) breastfed. Formula fed infants experienced a higher prevalence of hospitalization or death in the first six months of life (10.0% versus 3.9%; $p = 0.04$). In multivariate analysis including infant feeding practice and randomized treatment, formula feeding was associated with increased odds of hospitalization or death in the first six months of life (aOR 2.73; 95% CI 1.07-6.96; $p=0.04$), but there was no benefit of Cotrimoxazole prophylaxis (aOR 0.97; 95% CI 0.57-1.65; $p=0.91$).

Conclusions: Formula fed HEU infants from socioeconomically challenged Botswana households experienced significantly higher hospitalizations or mortality through 6 months, supporting the South African study's generalizability. Mpepu infants were confirmed HIV-uninfected, with overall low study morbidity/mortality rates, highlighting the excess risk associated with formula feeding even in African regions where formula feeding may be considered "safe".

Raising A Reader MA: Supporting Early Literacy Skills for MGH Families

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Maria Yolanda Wigozki, MBA, Healthy Families

Summary: At kindergarten entry, the number of words a child knows and uses, as well as his language skills, predicts his future success. RAR MA works with partners at MGH Chelsea and Revere and in the communities to help families strengthen their shared reading routines. The program is based upon research of brain development, the importance of parent-child interactions, and, specifically, the ongoing impact of shared reading experiences.

Background: Approximately 35% of children enter school lacking critical pre-literacy skills, and in Chelsea, 76% of third graders were not proficient in reading in 2015. Raising A Reader Massachusetts (RAR MA) was started in Chelsea in 2006 to support families of young children to develop, practice, and maintain such skills. RAR MA now serves over 2,000 children via 18 partnerships in Chelsea/Revere, including three MGH departments: Speech and Language (2011), Chelsea Healthy Beginnings (2006), and Revere Healthy Steps / Parents As Teachers (2013).

Methods: RAR MA is an evidence-based dual intervention, which provides tools for shared reading via red book bag rotations, and skills via caretaker education. At MGH Chelsea and Revere, we adapted the model to fit partners' settings. Speech and Language clinicians rotate bags at weekly appointments, while Healthy Beginnings and Healthy Steps/Parents As Teachers rotate at regular home visits. Caretakers receive education and resources via MGH staff and workshops led by RAR MA. We maintain communication with MGH staff, offering support for using the program and talking to families about early literacy and language development.

Results: From ten years of data collection across Massachusetts, we know that RAR MA positively impacts families' early literacy attitudes and behaviors. 2015-16 results will include assessment of caretaker behavioral change in reading frequency and reading behaviors after participating in RAR MA, and qualitative data from parents and partners. Data are collected via surveys, interviews, and focus groups, and will be shown for the state and specifically for Chelsea/Revere families.

Conclusions: Based on our history and results gathered, we will present guiding conclusions and questions for next steps in our MGH partnerships, as well as thoughts on where we might grow in the community. We will examine how to efficiently serve a greater number of families, and what additional data we can collect to inform adaptations to the program model.

Engaging School Children in Emergency Preparedness: Children as First Responders

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Summary: Health care providers can engage schools in preparing for public health emergencies such as natural disasters, acts of terrorism, or disease outbreaks. Locations that are geographically isolated may experience delays in access to professional first-responders. Furthermore, low English language proficiency in households may limit families from mainstream public health messaging in emergency preparedness. We found that school-based instruction, tailored to elementary students can prepare young individuals for disasters. Expansion of these programs in school settings may be a critical public health approach to emergency preparedness in similar populations.

Background: Charlestown is a dense urban community, geographically located between the City of Boston, Somerville and Cambridge. In the event of a natural disaster, disease outbreak, or act of terrorism, movement of people and access to services would be severely hampered by the geographic isolation of Charlestown. The school is located in an extremely dense urban community with limited road access. School-based education on emergency preparedness is crucial since most families are unaware of an emergency plan.

Methods: The objective of this intervention was to educate fourth grade students on a) immediate responses to an injured person as well as b) items that should be contained in their household emergency preparedness toolbox.

We developed four, forty-five minute interactive lectures tailored to fourth grade students, which included storytelling and informational lectures by a trained emergency preparedness instructor and story sharing by the students. The third class consisted of a lively, interactive discussion reviewing the list of items that the students would have in their Family Preparedness Toolbox.

The students chose from 4 different colors of paper, and were given pencils and magic markers to make their drawing of their toolkits. The student's homework assignment for class #4 was an essay on what they learned in the Family Emergency Preparedness class.

We delivered a pre-emergency preparedness knowledge test at the first session, and the post emergency preparedness knowledge test was given at the last session. The assessment evaluated two aspects of the "Family Emergency Plan" a) immediate response to an injured person and b) items that should be contained in their family household emergency preparedness toolbox

Results: Twenty-one fourth-grade students participated. All children were proficient in English. At baseline, 30% of students knew about an emergency plan for food and water, 5% were aware of what constitutes an emergency toolkit, and 20% were aware of basic first aid concepts. At completion, this knowledge increased to 80%, 95%, and 53%, respectively.

Conclusion: In a geographically urban setting, children may be first-responders in emergency events. We found that a brief school-based program can increase fourth grade student preparedness on potential public health emergencies.

The Crimson Care Collaborative at MGH-Chelsea: Integration of Primary Care and Sub-Specialty Services in a Student-Resident-Faculty Collaborative Clinic

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Marya Cohen, Harvard Medical School/John D. Stoeckle Center for Primary Care Innovation

Summary: Fostering an environment that empowers everyone to collaborate with each other and deliver an excellent and compassionate care gives students exciting first-hand exposure to systems-based primary care delivery. We hope that this unique experience at CCC will help students to understand what primary care is all about, will encourage them to pursue careers in primary care field and motivate them to serve vulnerable and underserved populations worldwide.

Background: The Crimson Care Collaborative at MGH –Chelsea is a student-resident-faculty collaborative clinic, launched in October 2011. The clinic primarily serves non-English-speaking immigrants, high utilizers of urgent care, and recently incarcerated individuals. MGH Chelsea is one of six CCC sites to address challenges that exist in the post-healthcare reform era by providing affordable health care to people who do not have a primary care provider and by connecting them to social services.

Methods: CCC Chelsea is comprised of students from different educational backgrounds and disciplines. We have integrated nurse practitioner (NP) and physician assistant (PA) students within the primary care model as well as undergraduate, social work, and other health professional students.

Students are involved in learning and providing mental health care services, as well as dental and optometry care. Students work in collaboration by conducting patient interviews, performing physical exams, collecting data for referral programs, presenting findings to the attending physician and discussing appropriate plans of care.

The Clinic Operations Team facilitates workflow of the clinic and develops projects to improve quality of care.

The Research team collects the data to assess patient demographics, medical-social needs and patient's overall experience at the clinic.

The Social Services Team serves as a bridge to appropriate social services.

Resident teaching sessions at the end of the clinic provide a unique learning experience between multi-disciplinary students.

Results: 52 graduate students, 4 undergraduate students are involved in CCC Chelsea this summer semester. The clinic team is composed of 26 graduate students from Harvard Medical School, 9 physician assistant and 5 nurse practitioner students from MGH Institute of Health Professions, 8 students from Harvard School of Dental Medicine, 3 students from New England College of Optometry, and 1 student from UMASS Medical School. The clinic runs every Tuesday evening from 6:00pm to 9:00pm.

Conclusions: CCC Chelsea successfully utilizes a multidisciplinary approach in providing a robust educational experience and exposing students to specialty of family medicine. Students are not only involved in providing clinical care, but they also actively participate in quality improvement interventions by implementing different research projects, innovations, data collection methods and research instruments.

Enhancing the Police Culture through a Police-Mental Health Partnership That Responds to Children Exposed to Violence in Chelsea, Massachusetts

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Summary: Police officers and social workers represent seemingly disparate cultures, yet share a common goal of ensuring the safety and well-being of children. The authors speculate that the enduring police-mental health partnership in Chelsea affects the culture of the police department in ways that support and enhance officers' responses to children and improved interagency collaboration. Measuring police attitudes and changes in practices have implications for improving police and healthcare responses to children in other communities.

Background: Chelsea, Massachusetts has historically high rates of childhood abuse and neglect. Research demonstrates that the amount of traumatic stress that a child experiences during childhood places her at increased risk of health and mental health conditions throughout the lifespan. The higher the ACE Score, or categories of Adverse Childhood Experiences endured, the higher the risk of these poor health outcomes, disability and early death.

Methods: Police officers are often the first responders when children are victims or witnesses to family or community violence and trauma. In this capacity they have a unique role in identifying and responding to children who might otherwise not come to the attention of health and mental health care providers. The Police Action Counseling Team (PACT) is currently a partnership between an MGH mental health clinician and the Chelsea Police Department. PACT's trauma informed interventions are designed to educate parents about the effects of violence and trauma on children and to provide interventions to children that mitigate against the effects of trauma.

Results: The efforts of this strong and evolving eighteen year collaboration have resulted in outreach and the provision of voluntary clinical interventions to children and families initiated by Chelsea police officers. In FY 2015 alone 119 cases were referred to PACT, representing 153 children. Of these, 39% were also referred to DCF; 58% involved domestic violence; and 71 referrals were made for other services.

Conclusions: While clinicians know experientially that these interventions are helpful to children, it is difficult to measure and to demonstrated that they are clinically significant. A different approach is to measure the affects of the police-mental health partnership on the culture of the police department in taking on a helping role with children. This inquiry is particularly timely in the current climate of negative police stereotypes.

Parasitic Infections in a Refugee from Cameroon: A Case Report

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Summary: Cameroon, a country of West Africa, carries endemic levels of three parasitic infections: onchocerciasis, loiasis, and lymphatic filariasis. In patients from this geographic area, careful evaluation for the possibility of co-occurring tropical parasitic infections is crucial to avoid severe or fatal complications of treatment. Community health worker participation is also valuable to assist refugee patients in order to maximize participation in their health care upon arriving in a new culture and health care environment.

Background: This is a 26 year old male refugee from Cameroon who emigrated to the US in 2014.

Methods: During the refugee health assessment, blood work revealed 13.4 percent eosinophils, suggestive of a possible parasitic infection. He underwent a workup that included two stool examinations that were both negative for ova and parasites. However, his blood test for a specific parasitic infection, strongyloides, was markedly positive, as were two blood tests for nematodes (roundworms) called filaria that inhabit the lymphatic tissue and subcutaneous tissue.

On further history he recalled diagnosis with filarial disease when he was 10 years old when he developed total body itching and a swollen left hand. He recalls treatment with ivermectin. At age 13 years he developed a painful, enlarged calf vein with itching. At age 23 years, he developed daily white urethral discharge after stooling. His physical exam was notable for nontender lymph nodes (<1cm) on both sides of his groin. The right posterior leg had tender, enlarged veins. Testicular ultrasound showed an enlarged left groin lymph node and small hydroceles (swelling of the scrota) but no clear evidence for active filaria.

A CT abdomen pelvis was performed with contrast and was unremarkable. HIV antibody was negative and liver function tests were normal.

Results: This history is suggestive of chronic filariasis as the presence of the roundworms in the lymphatic system can lead to impaired lymphatic drainage producing symptoms such as swelling of the veins in the legs and the scrota.

Conclusions: After multi-disciplinary consultation by infectious diseases and urology, a plan was made for the patient to commence treatment of likely lymphatic filariasis and strongyloidiasis. However, the patient's course was delayed due to premature discontinuation of medical insurance. A consultation with a patient navigator was performed, which identified several barriers to the patient's consistent medical attendance.

Foreign-born status as a predictor of engagement in HIV care in a large US metropolitan health system

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Summary: Foreign-born persons, many of whom are members of racial and ethnic minorities, represent an understudied but rising subset of the US population disproportionately affected by the HIV epidemic. Given their likelihood of remaining in HIV care once diagnosed, earlier HIV diagnosis of foreign-born individuals may portend improved clinical outcomes. Interventions should optimize universal HIV screening in foreign-born individuals targeting local communities, health systems, and correctional facilities.

Background: We sought to determine linkage to and retention in HIV care after HIV diagnosis in foreign-born compared with US-born individuals.

Methods: From a clinical data registry, we identified 619 patients aged ≥ 18 years with a new HIV diagnosis during 2000-2012. Timely linkage to care was the proportion of patients with an ICD-9 code for HIV infection (V08 or 042) associated with a primary care or infectious disease physician within 90 days of the index positive HIV test. Retention in HIV care was the presence of an HIV primary care visit in each 6-month period of the 24-month measurement period from the index HIV test. We used multivariable logistic regression analysis of timely linkage to HIV care and retention in care adjusting for hypothesized confounders (foreign-born status, age, sex, race/ethnicity, substance abuse, and location of HIV diagnosis).

Results: Foreign-born comprised 36% ($n=225$) of the cohort. Index CD4 count was $225/\mu\text{l}$ (IQR 67-439/ μl) in foreign-born compared with $328/\mu\text{l}$ (IQR 121-527/ μl) in US-born ($p<0.001$). The proportion linked to care was 87% (196/225) in foreign-born compared with 77% (302/394) in US-born ($p=0.002$). In multivariable analysis, foreign-born status predicted linkage (OR 2.31 [95% CI 1.38-3.87]). In an alternate model that included index CD4 count, the odds of timely linkage to care was attenuated (AOR: 1.79 [95% CI 1.00-3.22]). Once linked, there was no difference in retention in care or virologic suppression at 24 months.

Conclusions: These results suggest that interventions that promote HIV screening among foreign-born are a promising way to improve outcomes in this population.

A Group Intervention for Diabetes Treatment Adherence in Spanish-Speaking Patients

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Summary: If PRISM-D proves effective for Spanish-speaking patients, it promises to benefit a population that is hard to reach through existing diabetes self-management efforts, making chronic illness management programs more comprehensive in a cost-effective and scalable way. It could be adapted for use with other chronic medical illnesses. Ultimately, by teaching skills to cope with the fundamental causes of disease, this intervention could herald a new—and sustained—treatment approach that could also reduce disparities.

Background: Diabetes is a highly prevalent and costly chronic illness, one that is even more common in Hispanics than non-Hispanic whites.

Diabetes management often entails major lifestyle changes as well as complicated treatment plans, and thus treatment adherence can be problematic, particularly among populations that face high levels of stress and socioeconomic disadvantage.

Our hypothesis is that for the large population of patients with diabetes and depression who are not in a place to put diabetes self-management education into action, an intervention that boosts skills, confidence and motivation can fill the gap and empower them to make changes.

Thus, in this study, we are testing a Spanish-language version of an intervention that includes components of PRoblem-solving, Information, Support and Motivation for Diabetes (PRISM-D), with the goal of improving diabetes self-management as well as psychological and diabetes-related outcomes.

Methods: Intervention subjects attend 12 group visits, led by a person with mental health expertise and a person with diabetes expertise. Sessions include elements of group support, motivational interviewing, educational interventions, and problem-solving treatment. We plan to conduct analyses of covariance (ANCOVA) to assess the effect of the intervention on our main and secondary outcomes, including treatment adherence and other diabetes self-management behaviors, diabetes-related distress or depression, and hemoglobin A1C.

Results: To date, we have randomized 28 subjects. We plan to conduct and report on an interim analysis of the primary and secondary outcomes discussed above.

Conclusions: We hope to demonstrate feasibility of this adapted version of PRISM-D and effectiveness for promoting diabetes treatment adherence and improved psychological or diabetes-related outcomes. If successful, this intervention could provide a cost-effective way to reach a large, high-need population and to empower them to overcome treatment barriers.

COPD: Development of a primary care, subspecialty partnership

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Summary: COPD (chronic obstructive pulmonary disease) is a chronic respiratory illness most often related to smoking or biomass fuel exposure affecting many in the community served by MGH Chelsea. Caring for the sickest patients with COPD requires formal collaboration between lung specialists and primary care physicians. This collaboration improves provider knowledge, empowers patients, and importantly improves care and quality of life for these patients.

Background: Chronic obstructive pulmonary disease (COPD) is predicted to be the third leading cause of death worldwide by 2030 and has significant impact upon patients' ability to work, move, as well as their quality of life.

Despite its prevalence and impact, not only upon patients but upon our health care system, COPD is a relatively neglected disease when compared to other high-prevalence and high-risk conditions like heart disease, stroke, cancer.

As the care of patients with COPD is shared among primary care providers, subspecialty providers, inpatient and outpatient care settings, multidisciplinary partnerships are required to improve care of patients with COPD in MGH Health Centers. Effective partnerships can lead to high-impact care redesign (or pilots) for patients with COPD.

Methods: The Massachusetts General Physician's Organization (MGPO) catalyzed a partnership between subspecialty and primary care providers based at MGH Chelsea team up with expertise in administration and health care policy primary care, and pulmonary critical care.

These providers collectively reviewed literature and brainstormed each step of the journey of care for a COPD patient, mapped out current care pathways for COPD patients at MGH, and began to identify critical moments representing opportunities for improvement in diagnosis, patient education, providers training, patient engagement and empowerment, and improvement in disease management.

These moments formed the focal point for the development of a focused pilot for high-risk patients with COPD at MGH Chelsea (high risk as defined by history of exacerbations and high health care utilization). At the time of this submission, the pilot intervention is in the process of designed; by the time of the poster session, the pilot will be one month underway.

Results: We have identified a process for collaboration between primary care physicians, specialists and other care providers (RT, PT) that will impact the care of high-risk patients with COPD in MGH Chelsea. This process could potentially be replicated for similarly high-impact conditions.

Conclusions: Primary care-specialty partnerships are required to impact care of patients with chronic medical illnesses.

Breastfeeding Rates among the Chelsea/Revere WIC population

Kristy McDonald, BS, CLC, WIC
Tara McCarty, BS, CLC, LDN, WIC

Summary: WIC utilizes their breastfeeding rates, to gain a better understanding of where our program stands in comparison with the state of Massachusetts. Comparing rates has helped support our mission to support a mother's decision to breastfeed, because it allows us to see what areas we are doing well in, and what areas need improvement. Implementing the same processes in WIC that are used in other departments at the Health Center supports a strong message to prenatal mother's that we are here to support their infant feeding decisions.

Background: WIC promotes breastfeeding as the optimal infant feeding choice, unless medically contraindicated.

The American Academy of Pediatrics and World Health Organization recommend babies be exclusively breastfed for the first 6 months of life.

MGH has been recognized for providing optimal care to breastfeeding mother infant dyads, receiving their Baby Friendly designation in 2015. The MGH WIC Program collaborates with MGH medical providers to help deliver the same breastfeeding education during the prenatal period to help mother infant dyads breastfeed longer.

Methods:

2 WIC Program breastfeeding metrics:

- ✦ **Breastfeeding duration:** % infants breastfed at least 1x/day at 3 and 6 months.
- ✦ **Breastfeeding exclusivity:** % infants at receiving only breast milk at 3 and 6 months.

- MGH OB and MGH WIC Program deliver consistent breastfeeding education found in “*Breastfeeding guide, how to get off to a great start*”.
- Coordinate breastfeeding care plans through inbasketing.
- Implementing our Breastfeeding Peer Counselor Program, providing 24 hour telephone support
- All WIC staff are Certified Lactation Counselors.
- WIC provides breastfeeding education groups during the pregnancy and postpartum period.
- WIC nutritionists assess mother infant dyad to ensure sufficient growth of the baby.

Results: The Breastfeeding Duration at 3 and 6 months rates have been higher than the state average the last 4 years.

Breastfeeding exclusivity at 3 and 6 months rates have been very close to the state average. Last year our program was 1 % higher than the state average.

Conclusion: Coordination between MGH medical providers is crucial in helping families breastfeed longer. MGH OB collaborates with WIC by having a strong referral process, helping increase the percentage of women who enroll within the first trimester.

The earlier a woman comes to WIC, the more breastfeeding education she receives. Families are receiving more consistent breastfeeding messages from all providers since MGH became Baby Friendly.

Trends in contraception use among refugee, immigrant, and U.S.-born women at MGH Chelsea Health Center

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Summary: This study is examining patterns of contraceptive use among different groups of women seen in primary care at the Massachusetts General Hospital Chelsea HealthCare Center (MGH Chelsea). Specifically, the contraceptive use of refugee women, Spanish-speaking immigrant women, and English-speaking U.S. born women is compared. Trends noted in contraceptive use within a group, or differences between the groups, can help show primary care providers where there are gaps in knowledge and access to contraception.

Background: Access to contraception is a crucial component of women's reproductive health. Rates of unmet need for family planning vary widely worldwide.

Refugee and immigrant women have increased rates of unmet family planning needs. The Massachusetts General Hospital Chelsea HealthCare Center (MGH Chelsea) serves a diverse community, providing a unique setting to examine women's contraceptive use.

The objective of this study is to compare contraceptive use among refugee, immigrant, and U.S.-born women receiving care at MGH Chelsea.

Methods: This is a retrospective matched cohort study.

Refugee women 18-40 years old, who arrived in the US between 2004 and 2013 and received care at MGH Chelsea, were matched by age, gender, and date of care initiation in a 1:1 ratio to immigrant and US-born controls. Data on demographics were drawn from an electronic health record. We designed and validated an abstraction tool to obtain clinical data from the charts.

The main outcome is type and duration of contraception use in refugee, immigrant and US-born women.

The secondary outcome is the number of incident pregnancies. Basic descriptive statistics will be used to depict patterns in women's contraceptive use, and to compare rates and method mix among the three groups. The differences will be adjusted for age, gravidity, parity, marital status, region of origin, and education level.

Results: There are 576 women in our cohort, 192 in each group.

Conclusions: The results of this study will inform contraceptive care provision by primary care providers at MGH Chelsea. Understanding trends in contraceptive use and method mix among different groups of women can help providers better target their counseling to individual patients and the health center to understand how to invest in educational tools on contraception. The study results can additionally serve as a basis for follow-up qualitative assessments of women's family planning preferences.

The Association of Posttraumatic Stress Disorder and Chronic Medical Conditions by Ethnicity

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Summary: If a person belongs to the Latino ethnicity group and has posttraumatic stress disorder (PTSD), the person has a higher likelihood of also having diabetes and cardiovascular diseases (CVD). Therefore, it is important to assess for PTSD among Latinos, and to monitor CVD and diabetes among PTSD patients.

Background: The extant literature indicates a high medical morbidity for PTSD. Despite observed ethnic health disparities, there is a dearth of research examining PTSD-health associations among Latinos.

Methods: We obtained data from Latino ($n = 3,224$) and non-Latino white ($n = 4,180$) respondents from the Collaborative Psychiatric Epidemiology Surveys. A series of unadjusted and adjusted logistic regression models were constructed to test for the modification of the effect of lifetime PTSD on chronic medical conditions by ethnicity.

Results: We found a significant interaction between Latino ethnicity (aggregated) and PTSD for odds of CVD (Latino: OR = 3.23; 95% CI = 1.55-6.73; non-Latino white: OR = 1.28 95% CI = 0.77-2.12; interaction $p < .05$) and diabetes (Latino: OR = 2.18; 95% CI = 1.23-3.86; non-Latino white: OR = 0.81; 95% CI = 0.48-1.36; interaction $p < .05$).

Among U.S.-born Latinos, we found a significant interaction between ethnicity and PTSD for odds of CVD (Latino: OR = 4.18; 95% CI = 1.47-11.91; interaction $p < .05$) and diabetes (U.S.-born Latino: OR = 2.27; 95% CI = 1.03-5.01; interaction $p < .05$).

Among foreign-born Latinos, we found a significant interaction between ethnicity and PTSD for odds of diabetes (foreign-born Latino: OR = 2.12; 95% CI = 0.98-4.60; interaction $p < .05$).

Findings attenuated in adjusted models, with trends ($p < .08$) remaining for odds of CVD and diabetes.

Conclusions: Our findings support the need for further research on complex PTSD-health relations among Latinos and Latino sub-groups.

Delivering Cognitive Processing Therapy in a Community Health Setting: The Influence of Latino Culture and Community Violence on Posttraumatic Cognitions

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Summary: Identifying stuck points is an important component of using Cognitive Processing Therapy to treat post-traumatic stress disorder (PTSD). However, our study revealed fewer identified stuck points for Latino clients, which could mean that therapists are less skilled at extracting stuck points in Latino clients. Therefore, it is important for clinicians to stay open-minded and curious about clients' values and beliefs, especially those related to family, religion, poverty and violence, as these are reoccurring themes for Latino clients.

Background: Despite the applicability of Cognitive Processing Therapy (CPT) for Posttraumatic Stress Disorder (PTSD) to addressing sequelae of a range of traumatic events, few studies have evaluated whether the treatment itself is applicable across diverse populations.

Methods: The present study examined differences and similarities amongst non-Latino, Latino Spanish-speaking, and Latino English-speaking clients in rigid beliefs – or “stuck points” – associated with PTSD symptoms in a sample of community mental health clients. We utilized the procedures of content analysis to analyze stuck point logs and impact statements of 29 participants enrolled in a larger implementation trial for CPT.

Results: Findings indicated that the content of stuck points was similar across Latino and non-Latino clients, although fewer total stuck points were identified for Latino clients compared to non-Latino clients. Given that identification of stuck points is central to implementing CPT, difficulty identifying stuck points could pose significant challenges for implementing CPT among Latino clients and warrants further examination.

Conclusions: Thematic analysis of impact statements revealed the importance of family, religion, and the urban context (e.g., poverty, violence exposure) in understanding how clients organize beliefs and emotions associated with trauma. Clinical recommendations for implementing CPT in community settings and the identification of stuck points are provided.

Providers' Perspectives of Factors Influencing Implementation of Evidence-Based Treatments in a Community Mental Health Setting: A Qualitative Investigation of the Training-Practice Gap

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Summary: We interviewed community providers to investigate providers' attitudes about evidence-based treatments (EBTs) prior to training them in EBTs. Specifically, we examined what attitudes (both positive and negative) influence whether providers will accept the use of EBTs or not. Factors identified fall into 4 categorical levels: system, provider, client and treatment. Identifying such perspectives on EBTs ensures that these perspectives can be addressed in training, making EBTs ultimately more acceptable to providers and more widely used.

Background: The present study aimed to elucidate relations between provider perceptions of aspects of the Consolidated Framework for Implementation Research (CFIR; Damshroder et al., 2009) and provider attitudes towards the implementation of evidence-based treatments (EBTs) in an ethnically diverse community health setting.

Methods: Guided by directed content analysis, we analyzed 28 semi-structured interviews that were conducted with providers during the pre-implementation phase of a larger implementation study for Cognitive Processing Therapy for Posttraumatic Stress Disorder (CPT-C for PTSD, Resick et al., 2008).

Results: Our findings extend the existing literature by also presenting provider-identified client-level factors that contribute to providers' positive and negative attitudes towards EBTs. Provider-identified client-level factors include: client motivation to engage in treatment, client openness to EBTs, support networks of family and friends, client use of community and government resources, the connection and relationship with their therapist, client treatment adherence, client immediate needs or crises, low literacy or illiteracy, low levels of education, client cognitive limitations, and misconceptions about therapy.

Conclusions: These results highlight the relations between provider perceptions of their clients, provider engagement in EBT training, and subsequent adoption of EBTs. We present suggestions for future implementation research in this area.

Patient navigation for lung cancer screening: Navigator's interventions and challenges

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Summary: Lung cancer mortality in high-risk smokers can be decreased by lung screening. We implemented a patient navigation program to screen current smokers at MGH health centers. This study describes the navigators' interventions that enabled providers to screen 84% of their eligible patients. Additionally, navigators provide brief smoking intervention to all current smokers that could further prevent lung cancer.

Background: Lung cancer mortality in high-risk smokers can be decreased by annual computed tomography lung screening. Patient navigation (PN) has been shown to increase cancer screening in vulnerable populations. We implemented PN for lung screening in high-risk current smokers at Massachusetts General Hospital health centers. The objective of this study was to evaluate the navigators' interventions and challenges during the initial part of the trial.

Methods: In February 2016, we randomized 1200 current smokers aged 55-77 receiving care at five MGH health centers to navigation or usual care. Two navigators were assigned 400 patients.

They use TopCare lung screening populations management system to track patients, monitor their screening status and appointments with providers, and document patients smoking status. Additionally, navigators write notes in Topcare and document interventions using standardized tags. Each week a summary of navigators' interventions is generated by MGH Laboratory of Computer Sciences staff.

Results: During the first 12 weeks of the study navigators contacted 96 patients and reached 77 (80%). They determined eligibility for 73 patients: 36 were not eligible because of smoking history or previous chest CT.

Navigators provided 37 eligible patients education about lung screening, helped scheduling appointments with providers and initiated shared decision making about lung screening. After the appointment navigators checked whether lung screening was scheduled/ordered and reminded patients about the test.

Of 37 eligible patients, 31 (84%) were screened. Navigators provided brief smoking cessation intervention to all current smokers (71) regardless of their eligibility for lung screening and referred them to tobacco treatment.

The main challenges were determining eligibility and multiple patients' social/medical needs.

Conclusions: Navigators determined that about half of current 55-77 year old smokers at MGH health centers were not eligible for lung screening. Navigators' interventions were successful and enabled providers to screen 84% of eligible patients for lung cancer.

Reach Out and Read Project implementation at a Community Health Center

Ilse Rieger, MS, MD, CHC Pediatrics Department

Summary: Reach Out and Read (ROR) is an evidence-based early literacy nonprofit organization of medical providers who promote reading aloud in exam rooms nationwide. It has been shown that parents who receive books and literacy counseling from their pediatricians are more likely to read to their young children and to bring more books into the home.

Background: Reach Out and Read (ROR) is an evidence-based early literacy nonprofit organization of medical providers who promote reading aloud in exam rooms nationwide. It has been shown that parents who receive books and literacy counseling from their pediatricians are more likely to read to their young children and to bring more books into the home.

In virtually every state, minority and low-income children are less likely to be read to every day than their non-minority and higher income peers.

Any community health center or private pediatric office can use the ROR model to provide books both new and used to promote literacy at every well child visit. During a child's pediatric visit there are many opportunities to hand out books and model reading out loud.

Methods: ROR volunteers introduce and read books in the waiting room, and parents are given books to read to their child while waiting in exam rooms.

Results: The Reach Out and Read Program is very straightforward to implement and does not require a large amount of time to manage.

Conclusions: The evidence is clear, ROR is an excellent model to increase literacy and promote school readiness. Reading books together promotes family bonding, improved speech/communication and overall happier children. Ideally all pediatric offices in Massachusetts would have some form of a ROR model. There are likely many pediatric offices that are not familiar with the ROR program. There are opportunities for volunteers and community fundraisers to support the program. With an enthusiastic supporter any pediatric office can start ROR and the benefits are quickly recognized by both the practice and the patients.

Evaluating shared decision-making during primary care visits at MGH Chelsea HealthCare Center using Spanish and English versions of CollaboRATE

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Summary: CollaboRATE a three-item, patient-reported measure was developed to evaluate patient engagement and shared decision-making during clinical encounters. In this study we developed and assessed the accuracy and interpretability of a Spanish translation. We then administered English and Spanish Collaborate to 1687 patients at a community health center. The response rate was 73%. 86% patients experienced shared decision-making, same in patients using English and Spanish versions. Both versions were found to be feasible measures for administration in a diverse population.

Background: Patient engagement and shared decision-making have become health care policy priorities in the US. In 2013, CollaboRATE, a three-item patient-reported measure, was developed to evaluate patient engagement and shared decision-making during clinical encounters.

The objective of this study was to develop and assess the accuracy of a Spanish translation of CollaboRATE and to evaluate the feasibility of administering both versions to measure patient engagement during primary care visits in a community health center.

Methods: The Translate, Review, Adjudicate, Pre-test, Document survey translation protocol was followed. Cognitive interviews were conducted with Spanish-speaking adults at MGH Chelsea HealthCare Center. During May 2015, we asked all adult patients seen at the practice to complete English or Spanish version of CollaboRATE.

The primary outcome was the proportions of respondents who experienced shared decision-making, defined as those who gave the highest score on all three questions.

Results: Of 1687 patients seen by 18 providers, 1230 completed the survey (73% response rate).

- 624 patients (51%) used English 606 (49%) used Spanish survey.
- 848 (69%) were female and 375 (30%) were male.
- 1059 patients (86%) experienced shared decision-making.

The proportion of responders who experienced shared decision-making ranged from 76 - 99% across providers.

- Rates of shared decision-making were the same in patients using English and Spanish versions (86%) and similar among men and women (85% and 87%, respectively, $p=0.319$).
- However, different rates were observed among different age groups (78% vs 95% in older patients $p=0.003$).

Conclusion: The newly translated Spanish and English CollaboRATE versions were found to be feasible measures for administration during primary care visits in a diverse population. The response rate was high. While patients' perceptions of levels of engagement were high, considerable variation was observed by provider and among some patient subgroups, addressing questions about 'ceiling effects' in measurement.

A Qualitative Study of Interpreter Issues in Clinical Settings

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Summary: Interpreters in medical care settings mediate between patients, clinicians, and institutions in complex and varied ways. Sometimes their ability to do this in the best possible way is hampered by constraints on the way in which they are allowed to practice, either because of institutional policy or because of power dynamics in clinical visits.

Background: All three authors have been engaged in interpreter issues over many years in various ways: As sociologist, anthropologists, physician, and interpreter. We have found the position of interpreters and the elements of their practices highly varied, but often oversimplified or constrained by systemic policy and processes.

Methods: (number of interviews) Ethnographic in depth interviews of interpreters, clinicians, staff, and administrators.

Results: We found significant differences in interpreter practices, positionality, power, and role.

Conclusions: Official policy regarding interpreter roles and responsibilities are often at odds with the demands of their practices.

The role responsibilities vary even within a single institution. Managers attempt to control practices toward some kind of ideal, most often that of the transparent communication conduit (though we note that navigators bridge many of the roles we identified).

Interpreters report that they frequently find themselves undervalued members of the care team. This can be due to institutional job descriptions that limit the scope of their engagement in facilitating patient care, or provider demands that constrain their attempts to move beyond language to engage patient's care in deeply rooted social context.

We argue for an expanded role of the medical interpreter as an integral member of the medical care team, as they are in the middle of all attempts to assure full patient engagement with the clinician, the practice, the institution, and neighboring institutions that support and engage the patient in best medical practice.

Use of maternal health services: comparing refugee, immigrant and U.S.-born populations

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Summary: Data is limited on refugee utilization of maternal health services in the US, although disparities are known to exist in other high-income countries. Our study found delayed use of prenatal care among refugee and immigrant women in the US despite high rates of insurance coverage. However, refugee and immigrant women were more likely to attend postpartum follow-up, suggesting that population management interventions for these groups should center around introducing women to early care.

Background: The objectives are to determine use of recommended maternal healthcare services among refugee and immigrant women in a setting of near-universal insurance coverage.

Methods: Refugee women age ≥ 18 years, who arrived in the US from 2001-2013 and received care at the same Massachusetts community health center, were matched by age, gender, and date of care initiation to Spanish-speaking immigrants and US-born controls.

The primary outcome was initiation of obstetrical care within the first trimester (12 weeks gestation). Secondary outcomes were number of obstetrical visits and attending a postpartum visit.

Results: We included 375 women with 763 pregnancies (women/pregnancies: 53/116 refugee, 186/368 immigrant, 136/279 control).

More refugees (20.6%) and immigrants (15.0%) had their first obstetric visit after 12 weeks gestation than controls (6.0%, $p < 0.001$). In logistic regression models adjusted for age, education, insurance, BMI, and median census tract household income, both refugee (Odds Ratio [OR] 4.58, 95% Confidence Interval [CI] 1.73–12.13) and immigrant (OR 2.21, 95% CI 1.00–4.84) women had delayed prenatal care initiation.

Refugees had fewer prenatal visits than controls (median 12 vs. 14, $p < 0.001$). Refugees (73.3%) and immigrant (78.3%) women were more likely to have postpartum care (controls 54.8%, $p < 0.001$) with differences persisting after adjustment (refugee [OR 2.00, 95% CI 1.04-3.83] and immigrant [OR 2.79, 95% CI 1.72–4.53]).

Conclusions: Refugee and immigrant women had increased risk for delayed initiation of prenatal care, but greater use of postpartum visits. Targeted outreach may be needed to improve use of beneficial care.

CoCoSI (Comite Contra SIDA, Committee Against AIDS), a Dynamic Youth Group in Rural El Salvador

Brenda Hubbard, CoCoSI

Jennifer Kasper, MD, MPH, Doctors for Global Health

Summary: HIV, gender violence, and domestic violence are serious problems in many parts of El Salvador, including Santa Marta, in Cabanas. CoCoSI is a dynamic youth group that has been working since 2000 to address these problems in creative preventive and curative ways.

Background: CoCoSI is a dynamic, community based non-profit organization that works towards gender justice and AIDS prevention in rural El Salvador. It was founded in 1999 by Salvadoran youth who were born in the Mesa Grande Refugee Camp in Honduras during the 12-year Civil War in El Salvador and a North American woman who had made her life in Santa Marta, El Salvador, providing services with Health Promoters from the community to the war-wounded.

CoCoSI provides a comprehensive approach to HIV prevention and Gender-based Violence, the only grass roots organization doing this kind of work in rural communities in El Salvador. They have been partnering with Doctors for Global Health since 2000.

Methods: Many factors put people at risk of contracting HIV, including poverty, discrimination, gender, sexuality, machismo, and lack of access to education. CoCoSI addresses these through its prevention, accompaniment, and social and political advocacy programs.

Results: Teen pregnancy rate in Santa Marta decreased greatly in comparison to other neighboring communities; women are challenging their abusers and taking steps to denounce them and change their situation; CoCoSI trained peer facilitators who now conduct their own educational sessions on HIV, STI and Tuberculosis and provide HIV Counseling and Testing at prisons; Prison staff and inmates recognize and respect individuals living with non-conforming sexual identity; in communities and schools where CoCoSI has conducted its activities, people are more accepting of other people with non-conforming gender identity, and bullying has diminished. More detailed quantitative results forthcoming.

Conclusions: CoCoSI has been instrumental in transforming the lives of people living with HIV/AIDS, victims of domestic violence, non-conforming gender identity, and in prison. Collaborations: CoCoSI, Doctors for Global Health

Child Nutrition and Development in Rural El Salvador

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Summary: Childhood malnutrition is a leading cause of childhood death worldwide and is known to cause poor growth and lower intelligence. One-fifth children in El Salvador are short (i.e. stunted, a sign of chronic undernutrition). In Estancia, El Salvador, Campesinos para el Desarrollo Humano and Doctors for Global Health have created and implemented a number of projects and programs to address child malnutrition. This study will explore complex interplay among poverty, food insecurity and how nutritional and economic programs offered by CDH affect childhood growth and development.

Background: Childhood malnutrition is a leading cause of childhood death worldwide and is known to cause poor growth, delayed cognitive development and lower intelligence quotients.

One-fifth children between 3 and 59 months of age in El Salvador have low height for their age, i.e. are stunted (a sign of chronic undernutrition). In Estancia, El Salvador, La Asociación de Campesinos para el Desarrollo Humano (Peasants for Human Development, CDH) and Doctors for Global Health have created and implemented a number of projects and programs to address child malnutrition.

The goal of this project is elucidate complex interplay among poverty, food insecurity and how various nutritional and economic programs offered by CDH affect childhood growth and development.

Methods: Conducted in-person interviews with caretakers of children age 6 months to 6 years and collected anthropometric data on the children in eight communities where CDH works.

Results (forthcoming): “Kinder Study” 76 children between ages 2 – 7 years who attend one of the two early child development centers in Estancia, El Salvador.

Data collected: Anthropometric Measurements (weight, mid-upper arm circumference (MUAC), and length or height), Sociodemographics, Program Participation, Food Security, Nutritional Information, using Food Frequency Questionnaire, Child Development, using Ages & Stages. “Community Study” 180 children between ages 6 months – 6 years who do not attend child development centers but live in one of six communities neighboring those of the children in the “Kinder Study.” Same data collected.

Conclusions: forthcoming

Collaborations: Doctors for Global Health, Campesinos para el Desarrollo Humano

Oral Health Needs Assessment in Estancia, El Salvador

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Summary: The World Health Organization states that El Salvador has a very high rate of poor dental health and an insufficient number of dentists to care for the population. Estancia is a rural, mountainous cluster of communities with high rate of poverty. This study found that the people of Estancia have many unmet dental needs. Doctors for Global Health is collaborating with our partner organization Campesinos para el Desarrollo Humano to address these needs.

Background: Burden of oral disease continues to affect millions worldwide, especially people with low socioeconomic development.

WHO estimates that El Salvador has 3x higher rate of oral disease, 4x higher rate of edentulism, and ¼ the number of dentistry personnel as compared to the United States. Estancia is a cluster of rural communities in the mountainous, northeastern part of the country. In Estancia, many realities exacerbate oral health: poverty; minimal potable water; limited access to toothbrushes/toothpaste; lack of accessible, affordable, sophisticated dental services.

Doctors for Global Health and Campesinos para el Desarrollo Humano conducted the first oral health needs assessment in area using community based participatory approach with key informants including clinic staff, Salvadoran dentists, and patients.

Methods: Face-to-face interviews with community members during clinic and home visits to identify oral health problems, knowledge, and practices.

Results: 396 participants:

- 56% can read, 52.5% can write
- 84% have homes with dirt floor, 73% have electricity
- 60% access water from well, 43% always treat water.

Self-report, health of teeth and gums:

- Excellent 3.5%, Good 20%, Average 26% Bad 22%, No teeth 27.5%.

Caregiver report, health of child's teeth and gums:

- Excellent 14%, Good 25.5%, Average 16%, Bad 11%, No response 32.5%.

35% respondents cite transportation cost as the main barrier to dentist. 22% respondents report their child does not own toothbrush.

Conclusions: Estancia has significant oral health needs. This assessment will help CDH create and implement local educational materials and methods. We will share findings with another local NGO ASAPROSAR, who is working on oral health in another region of El Salvador and discuss with CDH and ASAPROSAR how to use the data to inform national health policy makers.

Collaborations: Doctors for Global Health, Campesinos para el Desarrollo Humano, ASAPROSAR, Salvadoran Ministry of Health

Collaborations: Doctors for Global Health, Campesinos para el Desarrollo Humano, ASAPROSAR, Salvadoran Ministry of Health.

Social Medicine and Global Health: Essential Components of Undergraduate Medical Education

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Summary: As physicians work to achieve optimal health outcomes for patients, they struggle to address the issues that arise outside the clinic. Social, economic, and political factors influence patients' illness, access to treatment, and health outcomes. Who is most likely to get sick? Why? How can doctors intervene upstream to prevent disease? Once a person is sick and presents for health care, what can be done to make them well? Harvard Medical School teaches students about these issues and how to address them.

Background: As physicians work to achieve optimal health outcomes for patients, they often struggle to address the issues that arise outside the clinic. Social, economic, and political factors influence patients' burden of disease, access to treatment, and health outcomes. Simultaneously, advocates have called for increased attention to global health.

Each year, more U.S. medical students participate in global health experiences. In 2007, Harvard Medical School implemented a new course, required for all first-year students, that teaches social medicine in a way that integrates global health.

Methods: Pre and post-test of first year Harvard Medical Students who took Introduction to Social Medicine and Global Health (ISM) course in 2013 to gain understanding of diversity of knowledge prior to and after taking the course.

Results (subset):

Pre-test:

- 25% students completed relevant coursework as undergraduates.
- 35% reported experiential learning in social medicine.
- 31% felt confident that they knew what was meant by social determinants of health.
- 14% felt confident that they knew distinction between a difference and a disparity in health outcomes.

Post-test:

- 64% students reported deeper understanding of social medicine concepts and their relevance for clinical practice in US and overseas.
- 81% felt better equipped to conduct social history and understand its significance.
- 80% stated that social medicine was very important to their overall education.

Conclusions: Even though students arrive at medical school with self-reported knowledge of and experiences relevant to social medicine, ISM has been instrumental in teaching students about foundational concepts in social medicine and how to apply them in clinical settings both in US and abroad.

Collaborations: we work with 10 community-based organizations to teach the students.

