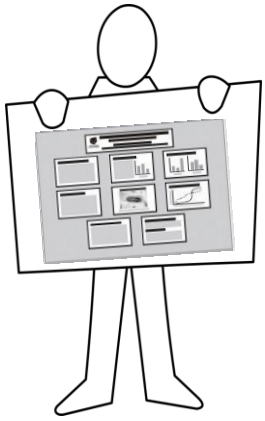
The Community Research Program at MGH Chelsea proudly presents the second annual

MGH Chelsea HealthCare Center Community Research Day

Friday, October 13, 2017
8-11 am

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

MGH Chelsea HealthCare Center



MASSACHUSETTS GENERAL HOSPITAL
THE MONGAN INSTITUTE

MASSACHUSETTS GENERAL HOSPITAL
DEPARTMENT OF MEDICINE

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, the Mongan Institute, and the Department of Medicine Community Council.

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Schedule

Poster Sessions

8:00 – 8:40 am - Poster Session 1
8:40 – 9:20 am - Poster Session 2

Researcher/Community Panel: 9:30 – 10:00 am

- **Georgia Green**, LICSW (MGH Chelsea Behavioral Health) & **Eve Valera**, Ph.D. (MGH Psychiatric Neuroimaging Program/Assistant Professor of Psychiatry, Harvard Medical School)
- **Hong Chen Cheung**, MD (MGH Chelsea Adult Medicine/Instructor of Medicine, Harvard Medical School), **Rubén Rodriguez** (Hope of Christ Ministry) & **Robert Repucci,** B.A. (Community Action Programs Inter-City Inc)

Keynote Presentation: 10-11 am

10:00 – 10:30 am –Dr. Elsie Taveras, MGH Division of General Academic Pediatrics and Kraft Center for Community Health
10:30 – 11:00 am – Discussion with Dr. Taveras

Background on Community Research Program & Research Day

Background

In May 2013, a group of 6 people with interest in community-based research gathered at the MGH Chelsea HealthCare Center. This group of people evolved into a monthly research forum called the Research Roundtable, which expanded to include a Research Council, and Advisory Board, becoming the MGH Chelsea Community Research Program. The Research Program reaches over 200 individuals by email, has sparked collaborations across Partners and the greater Boston area, increased interest and support for research, and brings together 10 and 20 participants each month and over 100 people to Research Day annually. The Community Research Program has been supported by MGH Chelsea HealthCare Center Administration, the MGH Division of General Internal Medicine and its Community Council, and the Mongan Institute.

> ***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.***

You can learn more about the MGH Chelsea Research Program online at http://www.massgeneral.org/chelsea/research/.

Council & Advisory Board

The Community Research Program has grown tremendously due to the input from our Research Council members who serve a 3-year term and Advisory Board members who represent a diverse range of programming that supports research throughout the Partners system.

Research Council Member	MGH Chelsea Department Representing
Chandra, Rohit	Behavioral Health
Chen Cheung, Hong	Adult Medicine
Da Silva, Camila	Pediatrics, Nursing
Devine, Sofia	Physical Therapy
Izen, Amy	Speech, Obstetrics (Susan Hernandez, contact)
Kasper, Jennifer	Pediatrics
Levison, Julie	Medical Specialties, Imaging (Patricia Daunais, contact)
Marable, Danelle	MGH Chelsea Community Health Improvement (CCHI)
McCarty, Tara	WIC
McWilliams, Jeannette	Administration
Miller, Pam	Behavioral Health
Percac-Lima, Sanja	Adult Medicine

Advisory Board Member	Constituency Representing
Alegría, Margarita	MGH Disparities Research Unit, Department of Medicine

Banister, Gaurdia	MGH Institute for Patient Care/Munn Center for Nursing Research
Fava, Maurizio	MGH Division of Clinical Research
Tan-McGrory, Aswita	MGH Disparities Solutions Center
Johnson, Alex	MGH Institute of Health Professions
Metlay, Josh	MGH Division of General Medicine
O'Rourke, Pearl	Partners IRB
Quinlan, Joan	MGH Center for Community Health Improvement (CCHI)
Taveras, Elsie	MGH Division of General Pediatrics
Thorndike Anne	MGH Executive Committee on Research & ECOCH
Xerras, Dean	MGH Executive Committee on Community Health (ECOCH) and Chelsea Board of Health

Vision

Our vision for Research Day is to showcase the diversity of research conducted at MGH Chelsea Healthcare Center, promote partnerships, and stimulate research interest in all areas of the Health Center. Importantly, we hope to nurture relationships and collaborations between HealthCenter staff and community members. We are thrilled to have participation from Departments across the MGH Chelsea HealthCare Center, the other MGH Community HealthCare Centers including 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 reflect themes we commonly consider as we deliver health care in the community of Chelsea. The themes encountered in this year's posters include the following:

- Immigrant Health
- Practice Transformation & Health Care Redesign
- Maternal Health & Child Development
- Language Development & Health Communication
- Behavioral Health
- Medical Education

Today's Research Day is possible due to the energy, initiative, and input of those numerous colleagues who have participated in the Community Research Program. We are deeply grateful and proud of this program, and thank you for being a part of it.

Amy Izen, M.S., CCC-SLP; Julie Levison, MD, MPhil, MPH; & Rohit Chandra, MD
Co-Chairs of the Community Research Program

Information about Chelsea

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.

Highlights from the Quality of Life Survey 2015:

- 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

Keynote Speaker

Dr. Elsie M. Taveras

Elsie M. Taveras, M.D., M.P.H. is Chief of the Division of General Academic Pediatrics and Executive Director of the Kraft Center for Community Health at Massachusetts General Hospital. She is also Professor of Pediatrics at Harvard Medical School and Professor in the Department of Nutrition at Harvard T.H. Chan School of Public Health. She received her Bachelor of Science and medical degrees from New York University and completed her internship, residency, and chief residency at the Boston Combined Residency Program in Pediatrics, and holds an MPH from the Harvard School of Public Health.

Dr. Taveras is a Pediatrician and a childhood obesity researcher. Her main focus of research is understanding determinants of obesity in women and children and developing interventions across the life course to prevent obesity and chronic diseases, especially in underserved populations. Her work spans the spectrum of observational studies and interventions—to identify and quantify risk factors— and to modify these risk factors for health promotion and disease prevention. She has published over 150 research studies and has received extensive research funding from the National Institutes of Health, the Centers for Disease Control and Prevention, the Patient-Centered Outcomes Research Institute, the American Diabetes Association, the Robert Wood Johnson Foundation, the Boston Foundation, among many other federal and foundation sources. In 2016, she received the Public Health Leadership in Medicine Award from the Massachusetts Association of Public Health for her extensive work improving health and health care in community-based settings. In 2017, she was named Executive Director of the Kraft Center for Community Health, a national center devoted to catalyzing and spreading innovative best practices in community health to improve health outcomes for underserved patients, families and communities.

POSTER SESSION 1
8:00 am – 8:40 am

Immigrant Health

1. *Implementation of the Family Strengthening Intervention for Refugees: Lessons Learned from the Field.*
   Frounfelker, Rochelle; Berent, Jenna; Farrar, Jordan; Beardslee, William; Betancourt, Theresa.
2. *Identifying Gaps in Patient Knowledge to Create Educational Resources on HIV/AIDS and HCV in CCC Chelsea Patient Population.*
   Larionova, Evgeniya; Williams, Rachael; Cohen, Marya; Chu, Jacqueline; Blanchfield, Bonnie.
3. *HIV Testing Outcomes in a Multi-National Cohort of Latino Migrants with Substance Use and Mental Health Problems.*
   Levison, Julie; Wang, Ye; Markle, Sheri; Fuentes, Larimar; Mejia, Dianna; Albarracin, Lucia; Cellerino, Lucia; Alegria, Margarita.

Behavioral Health

4. *Can Short Term Pain Control Result in Long Term Suffering? Analysis of Imaging Findings, Mortality and Opioid Prescription History among Patients with Intravenous Substance Use Disorders (IV-SUDs) Presenting to Emergency Radiology.*
   Almeida, Renata; Mansouri, Mohammad; Canedo Bizzo, Bernardo; Flores, Efren.
5. *Patient Navigation for Colorectal Cancer Screening for Patients with Mental Health and Substance Use Disorder – A Pilot Randomized Control Trial at MGH Charlestown Health Center.*
   Abuelo, Carolina; Ashburner, Jeffrey; Morril, James; Percac-Lima, Sanja.
6. *Enhancing the Police Culture Through a Police-Behavioral Health Partnership That Responds to Children Exposed to Violence in Chelsea, MA.*
   Green, Georgia; Kyes, Brian; Dunn, Thomas; McGathey, Grace.
7. *Barriers to the Implementation of an Evidence-based Transdiagnostic Mental Health Treatment in Safety-Net Settings.*
   Ahles, Emily; Patrick, Kaylie; Starks, Billie; Sauer-Zavala, Shannon; Shtasel, Derri; Marques, Luana.

Practice Transformation & Health Care Redesign

8. *Chelsea Outreach Program: Bringing Health Care Where the Patient Is.*
   Chen Cheung, Hong; Rodriguez, Ruben; Valentin-Agneta, Gladys; Repucci, Robert.
9. *Gap in Preventive Care: How to Increase CVD Risk Screening in Chelsea, MA.*
   Chen Cheung, Hong; Arango, Ana; Ragar, Brent; Jordan, Jane.
10. *Improving the Transition from Acute to Post-acute Care: A Collaborative Model with TEAMHealth/IPC.*
    Rusinak, Donna; Kuchaculla, Vishal; McKenzie, Rachael; Sullivan, Nancy; Simmons, Paul
11. *Improving Holistic Patient Care through Social Services at Student-Faculty Collaborative Clinic.*
    Wang, Christine; Larionova, Evgeniya; Thatcher, Emily; Williams, Rachael; Chu, Jacqueline; Cohen, Marya.
12. *Reasons for Non-Adherence with Recommended Surveillance Colonoscopies in Community Health Center Patients.*
    Enogieru, Imarhia; Percac-Lima, Sanja.
13. *A Geospatial Analysis of Asthma-related Emergency Department Visits: Leveraging an Academic-community Partnership to Support Community-based Programs.*

Carlson, Lucas; Repucci, Robert; Dworkis, Daniel; Peak, David.

Language Development & Health Communication

14. *The Language Accessibility of Community Health Center Websites*
    Rodriguez, Jorge; Percac-Lima, Sanja.

Maternal Health & Child Development

15. *Correlation Between Family Support, Edinburgh, & ASQ Scores.*
    Wigozki, Maria Yolanda; Oo, Sarah; Marable, Danelle; Hirsi, Fadumo; Anorga, Manuella; Sanchez, Olga; Mujo, Yeymi; Hernandez, Roselyn; Burgos, Marcia.
16. *The Health Starts at Home Initiative: A Partnership Between CONNECT, Roca, and MGH Chelsea to Address Housing Insecurity.*
    Marable, Danelle; Gerber, Monica; Spira, Anna; Tavarez-Vargas, Jeisel; Shull, Stefanie; Munoz, Rosie; Taveras, Elsie.
17. *The Association of Food and Housing Insecurity with Adverse Maternal Health Behaviors in Early Pregnancy.*
    Gonzalez, Julie; Duhaney, Leanne; Gerber, Monica; Roche, Brianna; Blake-Lamb, Tiffany; Perkins, Meghan; Taveras, Elsie.

Medical Education

18. (Display only)
    Measuring Clinical Decision-Making and Clinical Skills in DPT Students Across a Curriculum
    Brudvig, Tracy.

19. *Jobs for Youth: A Future of Possibilities.*
    Simpson, Patricia.

20. (Blank)

POSTER SESSION 2
8:40 am – 9:20 am

Immigrant Health

1. *The "Trump Effect" on No-Show Rates at a Student-Faculty Collaborative Practice.*
   Williams, Rachael; Blanchfield, Bonnie; Cohen, Marya.
2. *Contraceptive Use Patterns Among Refugee, Immigrant, and U.S.-born Women at MGH Chelsea Health Center: A Retrospective Cohort Study.*
   Jarolimova, Jana; Corona, Patricia; Rhodes, Corrine; Percac-Lima, Sanja.
3. *The Complex Patient Population Community Health Worker Program at Massachusetts General Hospital*
   Gerber, Monica; Oo, Sarah; Schettini, Tatiana; Abdulahi, Ali; Wigozki, Maria Yolanda; Spira, Anna; Marable, Danelle.

Behavioral Health

4. *Bienvenidos! Resiliency and Coping Among Unaccompanied Immigrant Minors.*

Aroneanu, Ada; Aguila, Celia; Alvarez, Kiara.

5. *Social Determinants of Cognitive, Academic and Mental Health Status in Children from Diverse, Low-Income Community-Based Clinic*
   Grieco, Julie; Capel, Leila; Lyons-Hunter, Mary; Seligsohn, Karen; Pulsifer, Margaret.

6. *A Neural Network Basis of Brain Injury in Women Experiencing Intimate-partner Violence.*
   Valera, Eve; Kucyi, Aaron.

Practice Transformation & Health Care Redesign

7. *Lung Cancer Screening Patient Navigation Program for Smokers at MGH Community Health Centers – Providers' Perspective.*
   Percac-Lima, Sanja; Ashburner, Jeffrey; Rigotti, Nancy; Park, Elyse; Poles, Emily; Atlas, Steven.

8. *Expansion of the Cancer Navigation Program to Other Types of Cancer.*
   Valdez, Silvestre; Ramos, Daniel; Oo, Sarah; Marable, Danelle.

9. *An Alternative Pathway to Admission: The MGH/PHH Home Hospital Experience.*
   Hussain, Umar; Bergeron, Marcy; Rusinak, Donna; Ticona, Luis; Sheer, Dana; Fong, Danielle; Yun, Brian; Diamond, Keren; Zackon, Susan; Thompson, Ryan.

10. *Examining Barriers to Healthcare.*
    Repucci, Robert; Wolfgang, Kerry; Valentin-Agnetta, Gladys; Chen Cheung, Hong; Prado, Luis; Rodriguez, Ruben.

11. *MAT Mobile: What Is the Need on the Spot?*
    Chen Cheung, Hong; Rodriguez, Ruben.

12. *Traffic-light Labels and Financial Incentives to Reduce Sugar-sweetened Beverage Purchases by Low-income Families: A Randomized Controlled Trial.*
    Thorndike, Anne; Franckle, Rebecca; Rimm, Eric; Macias-Navarro, Lorena; Levy, Douglas.

Language Development & Health Communication

13. *Integration of a Caregiver-Centered Curriculum in a Speech/Language Group Therapy Program*
    Motroni, Emilia; Novikoff, Amy; Sylvia, Maria.

Maternal Health & Child Development

14. *Enrolling in the WIC Program during the First Trimester may help reduce the incidence of childhood obesity in WIC children.*
    McCarty, Tara; Greene, Corey.

15. *The Effects of early Childhood Development Centers on Child Development and Nutritional Status in Estancia, El Salvador.* (display only)
    Symonds, Ann; Umana, Etelvina; Martinez, Abraham; Garcia, Samuel; Kasper, Jennifer.

16. *Men's Perceptions During Prenatal Care: The 2016 MGH Heath Center Fatherhood Obstetrics Survey*
    Kotelchuck, Milton.

Medical Education

17. *The Creation of a Joint HMS/MSDM Course, "Global Health Professionalism".* (display only)

Kasper, Jennifer; Seymour, Brittany.

18. *Measuring Clinical Decision-Making and Clinical Skills in DPT Students Across a Curriculum*
    Brudvig, Tracy.

19. (Display only)
    Jobs for Youth: A Future of Possibilities.
    Simpson, Patricia.

20. (Blank)

Presented abstracts will be eligible for The Department of Medicine Community Council's, "Chelsea Research Day Abstract Award." A finalist from each thematic category will be nominated, and a winner from all the finalists will be selected in December 2017.

Authors

Listed by Last Name, First Name (Poster #, Session #)

98. Seligsohn, Karen (5,2)
99. Seymour, Brittany (17,2)
100. Sheer, Dana (9,2)
101. Shtasel, Derri (7,1)
102. Shull, Stefanie (16,1)
103. Simmons, Paul (10,1)
104. Simpson, Patricia (19,1)
105. Spira, Anna (16,1) (3,2)
106. Starks, Billie (7,1)
107. Sullivan, Nancy (10,1)
108. Sylvia, Maria (13,2)
109. Symonds, Ann (15,2)
110. Tavarez-Vargas, Jeisel (16,1)
111. Taveras, Elsie (16,1) (17,1)
112. Thatcher, Emily (11,1)
113. Thompson, Ryan (9,2)
114. Thorndike, Anne (12,2)
115. Ticona, Luis (9,2)
116. Umana, Etelvina (15,2)
117. Valdez, Silvestre (8,2)
118. Valentin-Agneta, Gladys (8,1) (10,2)
119. Valera, Eve (6,2)
120. Wang, Christine (11,1)
121. Wang, Ye (3,1)
122. Wigozki, Maria Yolanda (15,1) (3,2)
123. Williams, Rachael (2,1) (11,1)
124. Wolfgang, Kerry (10,2)
125. Yun, Brian (9,2)
126. Zackon, Susan (9,2)

Implementation of the Family Strengthening Intervention for Refugees: Lessons Learned from the Field

Rochelle Frounfelker, ScD, MPH, MSSW
Jenna Berent, MPH
Jordan Farrar, PhD
William Beardslee, MD
Theresa Betancourt, ScD, MA

Theme: Immigrant Health

Summary: The Research Program on Children and Global Adversity (RPCGA): Refugee Program is implementing a community based participatory research study pilot to understand trajectories of risk and resilience in children and families among the Somali Bantu and Bhutanese refugee communities in New England. The pilot is seeking to assess feasibility of administrating a family strengthening intervention (FSI) program to 80 families in the Somali Bantu and Bhutanese communities.

Background: Refugee youth are at increased risk for mental health problems compared to other youth in the United States. The well-being of children and adolescents is closely tied to family functioning and positive child-parent interactions. This research discusses lessons learned from implementing a small pilot study of a family strengthening intervention (FSI) adapted for use with Somali Bantu and Bhutanese refugees in the Greater Boston and Springfield, Massachusetts areas.

Methods: Researchers used findings from qualitative research with refugees to inform the adaptation of an evidence-based home-visiting intervention for families. This intervention is currently being piloted for feasibility and acceptability with 80 refugee families [N=40 Somali Bantu, 40 Bhutanese] through collaboration between community, academic, and social service providers. Twenty families from each group will be randomly assigned to receive the intervention, while the other 20 will receive usual care.

Results:

- We have currently enrolled 35 Bhutanese families and 29 Somali Bantu families. Two families have completed the 10-module intervention.
- We found challenges in implementation related to both providers and consumers of the FSI. In terms of consumers, factors such as within-family language barriers, literacy issues, intense case management service needs, and limited availability for scheduling intervention visits have proven to be significant barriers.
- Provider challenges include training and supervision of community health workers and delivering services in a challenging political environment.

Conclusions: We anticipate to complete the pilot by late winter of 2018. Findings will be used to refine the family strengthening intervention for a larger effectiveness-implementation study in New England.

Identifying Gaps in Patient Knowledge to Create Educational Resources on HIV/AIDS and HCV in CCC Chelsea Patient Population

Evgeniya Larionova[1], RN, BSN
Rachael Williams[2 5], AB
Marya Cohen[2 4 5], MD, MPH
Jacqueline Chu[5], MD
Bonnie B. Blanchfield[3 4], ScD

[1]Massachusetts General Hospital Institute of Health Professions
[2]John D. Stoeckle Center for Primary Care Innovation
[3]Brigham and Women's Hospital, Center for Clinical Innovation, Division of General Internal Medicine
[4]Harvard Medical School
[5]Massachusetts General Hospital

Theme: Immigrant Health

Summary: This prospective study aims to identify gaps in knowledge around the treatment, prevention and transmission of HIV/AIDS and HCV among the most vulnerable CCC patient population. Identification of gaps in patient knowledge on HIV/AIDS and HCV will make it possible to make effective targeted education materials and promote health literacy on HIV/AIDS and HCV at a student-faculty collaborative clinic.

Background: Despite innovations and breakthrough treatments, an estimated 6,721 people died from HIV/AIDS in the United States (U.S.) in 2014; and 19,659 people died from HCV-related causes. The Crimson Care Collaborative (CCC) in Chelsea, one of six student-run clinics that serves a predominantly Latino population, many of whom have been previously incarcerated. As future clinicians, tasked with the challenge of preventing disease transmission in this vulnerable population, understanding the gaps in patient knowledge around HIV/AIDS and HCV will allow us to develop, target and distribute patient education materials that can improve our patient's health outcomes.

Methods: One survey consisting of 2 different questionnaires will be administered to all patients visiting the CCC Chelsea clinic assessing their general knowledge about HIV/AIDS and HCV, prevention, treatment and cost. One of the questionnaires is the self-administered brief HCV Knowledge scale, a psychometrically sound and useful tool in novel HCV educational intervention studies. The other questionnaire is the validated HIV Knowledge questionnaire (HIV-K-Q). We will administer only part 1 of this questionnaire consisting of 13 questions. The survey will be set in the English and Spanish languages and it will include a total of 31 dichotomous close-ended (true/false) questions. The survey will be administered by the CCC research team in the CCC MGH Chelsea Fall session 2017 until the end of the volunteer cycle. The survey will be available in a paper form. Patients will be approached by a survey-trained CCC research volunteer during each clinic night and will be asked the survey questions in a confidential manner. At the end of the clinic, all closed-ended responses from the paper will be entered into a RedCap survey for analysis by the research team. RedCap survey data will be downloaded to an Excel spreadsheet and both descriptive and thematic analysis will be used to summarize all responses. Themes for analysis include knowledge of transmission, treatment, prevention and cost.

Results: Educational materials addressing identified gaps in patient knowledge will be piloted in the CCC Chelsea Clinic with the goals of decreasing HIV/AIDS and HCV transmission rates and facilitating the ability to seek out care and appropriate disease management in our CCC Chelsea patient population.

Conclusions: Preliminary data will be obtained in November, 2017. The study will help clinicians to identify gaps in knowledge about HIV/AIDS and HCV that exist among the CCC Chelsea patient population. Specifically, we will identify knowledge around transmission, treatment and prevention among the most vulnerable CCC patient population. Data from this prospective study will then be used to develop or adapt targeted education materials to pilot in the clinic with the goal of promoting health literacy on HIV/AIDS and HCV in this specific patient population.

HIV Testing Outcomes in a Multi-National Cohort of Latino Migrants with Substance Use and Mental Health Problems

Julie H. Levison, Massachusetts General Hospital, Harvard Medical School
Ye Wang, Massachusetts General Hospital
Sheri Markle, Massachusetts General Hospital
Larimar Fuentes, Massachusetts General Hospital
Dianna L. Mejia, Massachusetts General Hospital
Lucia Albarracin, Massachusetts General Hospital
Lucia Cellerino, Val d'Hebron University Hospital
Margarita Alegría, Massachusetts General Hospital

Theme: Immigrant Health

Summary: Migrant populations face an elevated risk for poor health outcomes and psychosocial shifts due to circumstances of migration and reduced access to services. High levels of HIV-related stigma, social isolation, and "double discrimination" (HIV infection and migrant status) delay diagnosis and access to treatment in migrants in the US and Europe. Our objective assessed uptake of HIV/STI testing in a high risk population for infection and disconnection from health services.

Background: Individuals with substance use disorders and migrants are at high risk for undiagnosed HIV and are key populations to achieve the United Nation's 90-90-90 targets.

Methods: We used HIV and sexually transmitted infection (STI) biomarkers from a multi-national randomized trial of a behavioral intervention for Latino migrants. Eligibility criteria were: age 18-70 years; positive screen for substance use and mental health problems; and not enrolled in substance or mental health care. Risk behaviors and clinical history were assessed at baseline. HIV and STI testing was offered at week-6 using rapid HIV testing (OraQuick, OraSure Technologies, Inc) and urine nucleic acid amplification for Chlamydia trachomatis and Neisseria gonorrhea. A multinomial logistic regression examined potential predictors of HIV or STI test decline or loss to follow-up (LTFU) compared with acceptance.

Results: Of the 341 participants, 252 (74%) accepted HIV/STI testing, 15 (4%) refused, and 74 (22%) were LTFU. Lifetime injection drug use was low (3%) and 16% (n=53) reported condomless anal sex. The multivariate model suggests a lower odd of test refusal when participants were recruited at a community agency or by personal referral compared with primary care site (OR=0.66 [95% CI 0.44-1.00]), and when the main partner had undergone HIV testing (OR=0.32 [95% CI 0.14-0.75]). LTFU prior to testing was lower in those with a college degree or higher (OR 0.14 [95% CI 0.13-0.15]) and higher in those who reported a high concern for HIV compared with no concern (OR=1.49 [95% CI 1.14-1.96].

Conclusions: Nearly three-quarters of Latino migrants accepted HIV/STI testing. Those most concerned for HIV and with lowest education were more likely to drop out prior to test offer. Mechanisms to personalize the delivery of testing, such as community-based delivery or referral by a known person, may help overcome these barriers to HIV/STI services in this population.

Can Short Term Pain Control Result in Long Term Suffering? Analysis of Imaging Findings, Mortality and Opioid Prescription History among Patients with Intravenous Substance Use Disorders (IV-SUDs) Presenting to Emergency Radiology

Renata Almeida, MD
Mohammad Mansouri, MD
Bernardo Canedo Bizzo, MD
Efren J Flores, MD

Theme: Behavioral Health

Summary: Understanding factors associated with IV-SUDS imaging complications is fundamental to designing responsive patient care models that can better support the health and survival of this vulnerable population.

Background: Assess the prevalence and type of IV-SUDs imaging complications, mortality rate, and history of opioid prescriptions (OP) and in patients presenting to the ER.

Methods: HIPAA compliant-IRB approved retrospective study of 1031 patients who presented to ER (2005 to 2016) to assess IV-SUDs complications. Demographics, clinical symptoms, imaging diagnosis, history of OP, and dates of death were recorded. Exams were categorized by imaging diagnosis, modality and specialty. Analyses for significant differences were done.

Results: In 1031 patients (65% men; mean age 36 yrs; 78% white; 95% English speakers), 1673 exams (779 X-rays, 544 CT, 292 MRI and 58 US) were performed (1-13 exams per patient). 52% of patients had 1 or more positive studies with IV-SUDs complications.

Rates of positive imaging per imaging specialty were: GI 77% (113/146), MSK 52% (419/802), Vascular 48% (77/162), Neuro 47% (97/206), and chest 25% (90/356).

Most frequent clinical symptoms were local complications of injections (27%, 450/1673), respiratory (15%, 251/1673) and back pain (13.4%, 224/1673). History of OP before the first imaging was present in 30% (310/1031) of cases (mean 10 prescriptions per patient); significantly more often in women (37%, 128/348), than men (27%, 182/673, p=0.008).

Mean time from OP to first imaging was 51 months (SD 39); significantly shorter in men (45 months) than women (51 months, p=0.01). Overall death was recorded in 11.7% (121/1031) of patients; significantly higher in patients with positive imaging diagnosis of IV-SUDs complications (14%, 73/534) than in those without (10%, 48/449, p=0.04).

Conclusions: There is a high prevalence of multisystem IV-SUDs imaging complications among patients presenting to the ER. Patients with positive imaging findings and prior OP have a higher overall mortality rate compared to patients with negative imaging.

Patient Navigation for Colorectal Cancer Screening for Patients with Mental Health and Substance Use Disorder – A Pilot Randomized Control Trial at MGH Charlestown Health Center

Carolina Abuelo, MD MSc, Internal Medicine/Charlestown HealthCare Center
Jeffrey Ashburner, PhD, General Internal Medicine, MGH
James Morril, MD, PhD, Internal Medicine/Charlestown HealthCare Center
Sanja Percac-Lima, MD, Internal Medicine/Chelsea HealthCare Center

Theme: Behavioral Health

Summary: Patients with Mental Health or Substance Use Disorder are less likely to complete cancer screening and have high cancer mortality. We implemented and evaluated a patient navigation program to improve colorectal cancer screening rates in this vulnerable population. We showed that patients with MH or SUD can be successfully navigated to complete colorectal cancer screening. Patient navigation might help decrease cancer disparities among patients with MH or SUD.

Background: Patients with mental health (MH) and substance abuse disorder (SUD) have significantly lower rates of cancer screening. Patient navigation (PN) has been shown to increase colorectal cancer (CRC) screening and linkage to care in vulnerable populations. The objective of this study is to develop and evaluate PN for CRC screening in patients with MH and/or SUD receiving care at Massachusetts General Hospital Charlestown Community Health Center (MGH Charlestown).

Methods: Patients overdue for CRC screening, with history of MH or/and SUD and receiving primary care at MGH Charlestown were randomized in 1:1 ratio, stratified by disease to receive PN or usual care. Patient navigators identified patients' barriers to CRC screening and helped them complete colonoscopy or fecal occult blood testing. The primary outcome is the proportion of patients screened in the two groups during the 6-month study period.

Results: There were 252 eligible patients: 20% had SUD, 68% had MH, and 12 % both conditions. In the population, 126 were randomized and 52% were women, the average age was 58, and 81% were Non-Latino White. During the first 5 months of the study, PNs were able to contact 86 (68%) patients in the intervention group. Of these 25 declined to participate and 19 completed screening.

Of the remaining 42 patients, 5 could not be screened because they died (1 from overdose,1 from lung cancer), were imprisoned (1), or were currently undergoing treatment for other cancers (3). Navigators are still working with 37 patients to complete screening.

We will assess our primary outcome when the trial ends on June 30, 2017.

Conclusions: The results of this pilot study will show the impact of a PN program on CRC screening rates in patients with MH and SUD, a population known to have significantly higher cancer mortality.

Enhancing the Police Culture Through a Police-Behavioral Health Partnership That Responds to Children Exposed to Violence in Chelsea, MA

Georgia Green, MSW
Chief Brian Kyes, JD
Captain Thomas Dunn, MA
Grace McGathey, MSW

Theme: Behavioral Health

Summary: Police officers are first responders to children who are victims and witnesses to violence. Repeated responses to such traumatic situations can negatively affect officers; well-being and job satisfaction. PACT training in dealing with traumatized children is a factor in improving the quality of officer responses to children and in improving their well-being and job satisfaction.

Background: Police officers are first responders to child victims and witnesses to violence and trauma. These repeated responses often take a toll on officers and can lead to negative behavioral, cognitive and emotional effects which impact their well-being and job performance. PACT (Police Action Counseling Team) is a partnership between an MGH behavioral health clinician and the Chelsea Police Department. A clinician responds to children identified by officers at the scenes of 911 calls. The purpose of the program is to provide these children with a voluntary trauma informed intervention designed to mitigate against the negative effects of trauma. One measure of this partnership's effectiveness is measured in how this training and experience enhances the police culture and increases experiences of success and job satisfaction among police officers.

Methods: The PACT clinician also provides every officer in the Chelsea Police Department with training about trauma and its effects on children; about an officer's unique role in identifying and interacting with children; about involving a behavioral health clinician, DCF worker and/or other community partner who can help children and their families; and about how police interactions with children can improve officer safety.

Results: Several measures will be considered in obtaining results, including a review of the number and percentages of 51-A's filed by police officers over several years of the program's longevity; the increase in the number of community policing initiatives that have followed PACT; and a measure of the increased number of community partners directly involved with police officers in the Chelsea Police Department.

Conclusions: The current climate of negative police stereotypes provides an opportunity to study the culture of police departments and the important functions police officers provide in a community. Community oriented policing has great promise not only for improving police and healthcare responses to children, but also in improving successful experiences of police officers and more positive perceptions of officers in the community. A study of more granular factors which contribute to experiences of officer success would enhance this body of knowledge.

Barriers to the Implementation of an Evidence-based Transdiagnostic Mental Health Treatment in Safety-Net Settings

Emily M. Ahles, BA; Community Psychiatry Program for Research in Implementation and Dissemination of Evidence-based Treatments (PRIDE), Massachusetts General Hospital
Kaylie A. Patrick, MPH; Community Psychiatry Program for Research in Implementation and Dissemination of Evidence-based Treatments (PRIDE), Massachusetts General Hospital
Billie Starks, LICSW; Boston Health Care for the Homeless Program
Shannon Sauer-Zavala, PhD; Center for Anxiety and Related Disorders, Boston University
Derri L. Shtasel, MD, MPH; Division of Public and Community Psychiatry, Massachusetts General Hospital/Harvard Medical School
Luana Marques, PhD; Community Psychiatry Program for Research in Implementation and Dissemination of Evidence-based Treatments (PRIDE), Massachusetts General Hospital/Harvard Medical School

Theme: Behavioral Health

Summary: Past research has identified barriers to implementation before applying evidence-based treatments in new settings. This study aimed to identify mental health needs of homeless patients in a safety-net setting, and barriers to implementing the Unified Protocol for the Transdiagnostic Treatment of Emotional Disorders (UP). Administrators, providers, and patients participated in focus groups, and reported a variety of patient mental health disorders and barriers to implementation. Participant feedback supported selection of the UP for pilot implementation.

Background: Despite research suggesting that evidence-based treatments (EBTs) offer rapid improvement, better outcomes, less relapse, and are more cost effective than other treatments, EBTs are scarcely implemented in community settings (Drake et al., 2001). Past research has systematically identified setting-specific barriers to implementation before applying EBTs in new settings (e.g., Marques et al., 2016).

This qualitative study aimed to 1) determine the stated mental health needs of patients seeking treatment in a safety-net setting that provides homeless individuals with a variety of medical and mental health services, and 2) identify the unique barriers to implementation present in this setting, as a precursor to pilot implementation of the Unified Protocol for the Transdiagnostic Treatment of Emotional Disorders (UP; Barlow et al., 2011).

Methods: Seven focus groups were conducted from February–March 2017, with administrators (n=15), providers (including behavioral health providers, nurses, and case managers; n=32), and patients (n=22). Focus group audio was transcribed and imported into NVivo 10, where thematic analysis was conducted.

Results: Participants reported four levels of barriers to implementation of the UP: 1) Organizational barriers, including staff turnover and the physical location of the organization; 2) Provider barriers, including limited time to practice new skills, and hesitance of non-behavioral health providers to deliver components of behavioral health interventions; 3) Patient barriers, including comorbidity of mental health needs and disorders (e.g., substance abuse, anger, trauma, depression, anxiety, and psychosis), infrequent attendance to appointments and therapy groups, and preconceived expectations of therapy content; and 4) Treatment barriers; including belief that the intervention is inflexible.

Conclusions: Participant feedback supported the selection of the UP for pilot implementation. It demonstrates fit for the wide range of mental health disorders endorsed in this patient population, and could address some of the specific barriers to implementation described by participants.

Chelsea Outreach program: bringing health care where the patient is

Hong Chen Cheung, MD, MPH
Ruben Rodriguez
Gladys Valentin-Agneta
Robert S. Repucci

Theme: Practice Transformation & Health Care Redesign

Summary: "Meet the patients where they are at….physically, mentally and emotionally" calls for a change in approach of the health care system. One of the proposed models to improve SUDs care is the reverse co-location. Our team advanced this approach by placing a primary care provider to be immersed where SUDs client's environment. This approach engaged effectively clients to access and trust healthcare and helped to decrease barrier for behavioral change.

Background: Eleven percent of Massachusetts residents suffer from substance use disorder (SUDs). Sadly, only 14.2% receive publicly funded treatment. The direct and indirect cost of failure to treat SUDs exceeded $548 million in 2003. Despite universal health care coverage, health insurance did not translate into access to care for MA residents. Although medication assisted treatments proved to be effective, few mental health and primary care providers are available. Other common barriers for access include providing required documentation, not having contact information, time-consuming enrollment process, and unclear procedures of health care systems. Fortunately, a closely knitted social network within substance users offers opportunity to access them.
One of the proposed models to improve SUDs care is the reverse colocation. Our team advanced this approach by placing a primary care provider to be immersed where SUDs clients frequent.

Methods: Our outreach team is staffed with a MAT provider, an outreach worker team, and few SUDs navigators that have earned trust within the community. The team carries narcan and basic equipment for simple wound care. The initial engagement by peer navigator or outreach worker is to determine the client's needs. The team assists and refers to appropriate detox services, medical insurance application or wrap around services. Together, the client is seen by the MAT provider to determine medical need and expedite clinical encounters within the health care guidelines. The goal is to start MAT as soon as possible and to build a permanent relationship of trust with the
client and initiate primary care and clinical preventive services.

Results: Taking advantage of the close collaboration with the different community stakeholders such as CAPIC, police department, North Suffolk Mental Health and Mr. Ruben Rodriguez (well known by people in the streets of Chelsea) we has been able to get access to this population. Increasingly, we are being asked for help and inquired about the MAT services. In the last year, we have informally given clinical advice to 37 patients and provided clinical service (flu vaccine, prescription and wound care) to additional 38 patients. We helped to connect 4 patients with their primary care physicians for medical care. Sixteen patients proceeded to establish primary care, of those,
10 have advanced to a more stable MAT regime. Our clients are pleasantly surprised to find medical services accessible on site, and perceive this as particularly helpful as they had negative experiences with the health care system. Our main challenge was the integration of clinical services with community social service providers, and to facilitate referrals in order to ensure that patients' physical and mental health is properly addressed.

Conclusions: "Meet the patients where they are at….physically, mentally and emotionally" calls for a change in approach of the health care system. By placing a primary care provider to be immersed where SUDs client's environment engaged effectively clients to access and trust health care and helped to decrease barrier for behavioral change.

Gap in preventive care: how to increase CVD risk screening in Chelsea, MA

Hong Chen Cheung, MGH Chelsea Adult Medicine
Ana Arango, MGH Chelsea Adult Medicine
Brent Ragar, MGH Chelsea Urgent Care
Jane Jordan, MGH Chelsea Urgent Care

Theme: Practice Transformation & Health Care Redesign

Summary: Prevention can decrease cardiovascular diseases but only half of the US population receives clinical preventive services (CPS). This "prevention gap," is higher in low SES population such as in Chelsea, MA. The lack of symptoms in young patients and insurance barriers affected the perceived need of testing for cardiovascular screening tests. We need promotion programs to increase awareness.

Background: Cardiovascular deaths are more prevalent in Chelsea, MA (258.2 compared to state 192/100000) and hospitalization due to diabetes is 27.6 vs 20.4 per 100000. Screening services (cardiovascular and health behavior counseling) can decrease disease burden, but only half of the US population receive clinical preventive services (CPS). This "prevention gap," is higher in low SES population. Thus the goal of our project is to increase cardiovascular screening for residents of Chelsea, who do not have access primary care and seen in Chelsea Urgent Care from 0% to 10% by December, 2017.

Methods: We surveyed via phone to Chelsea residents over 50 years who do not have a PCP and was seen at MGH Chelsea CHC on October 2016 about their perception of health status and care access. We had performed 4 PDSA cycles consisting of asking Urgent Care (UC) providers to offer hba1c and lipids testing to patients, posting flyers at the registration window to advertise about learning the American Health Association score and recruiting patients from a summer community event and school events.

Results:

• The survey respondents consider themselves in good health. 2/ 12 patients over 50 years old did not have primary care due to insurance barrier

• The median age of the population who uses the UC health services and do not have a PCP is young (32).

• We only had 3 patients performed CV risk screening in the first 2 PDSA cycle. All scored low risk (<5%) but there were signs of metabolic syndrome and diabetes.

Conclusions:

• Young age and insurance barriers affected the perceived need of cardiovascular screening from urgent care setting.

NEXT STEPS:

• We have planned other PDSA cycles targeting community open events to raise awareness of CV risk screening.

Improving the transition from acute to post-acute care: a collaborative model with TEAMHealth/IPC

Donna Rusinak, Massachusetts General Hospital
Vishal Kuchaculla, MD, TEAMHealth/IPC
Rachael McKenzie, RN, Massachusetts General Hospital
Nancy Sullivan, MBA, Massachusetts General Hospital
Paul Simmons, MD, Massachusetts General Hospital

Theme: Practice Transformation & Health Care Redesign

Summary: This pilot is designed to help improve the care we provider MGH patients when they are transferred to another facility like a skilled nursing facility. Discharge notes are sent from MGH to the new facility, but it is always better when the provider at MGH can actually speak with the provider at the Skilled Nursing Facility. This sounds simple, but it is actually a hard thing to do and doesn't always happen. This pilot developed an easier way for this to happen more often.

Background: The Joint Commission (2013) reports several activities that had positive effects on patient transitions between settings including: Strong leadership support for new transition processes; Positive relationships between the sending and receiving providers; Handoffs that involve interpersonal communications (instead of only written or electronic communications); Assigned accountability for transitions-related tasks. [1]In 2013, MGH faced inconsistent physician coverage which raised concern about the quality of care provided to MGH patients going to SNF. As a possible solution to this issue, MGH approached TeamHealth (formerly IPC Healthcare), a national physician group staffing hospitals and post-acute care facilities, to collaborate and provide clinical services to MGH patients in SNFs. Since that time, TEAMHealth has been actively involved in MGH's post-acute strategies to improve patient care in post-acute care facilities and has expanded to more SNFs in the MGH target regions. In 2015, as part of MGH's post acute strategy, MGH identified eleven local SNFs to be part of the MGH SNF Collaborative Network.

The objectives include: sharing best practices and developing initiatives to improve care, reducing length of stay, and readmissions. The eleven SNFS were identified as having (1) a high volume, (2) a proven track record of collaborating, especially with challenging and vulnerable patients, and/or (3) clinical coverage by TEAMHealth, which practices in eight of the eleven MGH SNF Collaborative facilities. While the MGH has been working for years on reducing readmissions, in 2016 it was elevated further to a top priority. The Transition of Care (TOC) pilot was launched as part of the MGH Stay Connected Program, a bundle of programs designed to reduce readmissions at MGH. The TOC pilot ratchets up the connectedness between TeamHealth and the MGH.

Methods: Ouslander and colleagues highlight the critical importance of "warm handoffs" at the time of hospital discharge to SNF and the prevention of rapid transfers back to the ED. [2]The Transition of Care pilot (TOC) was designed to improve the handoff among acute hospitals, post-acute facilities, and primary care clinicians. TOC is the post-acute pilot in The Stay Connected Program, a bundle of readmission initiatives at the MGH. By embedding a TeamHealth nurse practitioner at the MGH, TOC is designed to create a seamless transition for a patient discharging to SNF. Following usual procedures, the MGH inpatient case manager processes the SNF referral using 4next, the electronic Partners' developed referral tool. Once the patient accepts the bed, a notification is sent via 4next to the TEAMHealth NP. Once notified, the NP reviews the chart with an eye on what would be important for a post-acute provider. The process includes a medication review with a specific focus on psychotropics, antibiotics, and pain medications. Additionally, the NP looks for the health care proxy (HCP), advanced directives, and MOLST form. If necessary the clinical team is consulted and also reminded to send the HCP and MOLST along with the patient The NP meets with the patient bedside and addresses any questions about the SNF and the upcoming transition. The NP then sends a detailed e-mail to the receiving TEAMHealth MD, the patient's primary care doctor (and specialists), as well as the iCMP care manager ,if applicable. The NP is on-site at MGH Monday through Friday from 1pm – 4pm, peak SNF discharge hours, and has access to the pertinent clinical systems.

Results:
Sample email exchanges:
"....She is nervous about rehab but knows it will help her build strength and get back on her feet. Of note, she is concerned about receiving her daily meds but reassured her a med list will be sent with d/c paperwork. She felt better after the discussion..."

"Dear XXX (PCP), Patient does not want to stay at the facility. PT did see him and cleared him for home with PT and services. Facility will make an appointment with your office for next week." "Thanks. Would hold off on ASA, since she has had so many GI bleeds and several undiagnosed vaginal bleeds and very borderline
HCT. Appreciate the coordination. Call or email any time."

"…..I am waiting on pathology on biopsy. Once I get this I will know what type of oncologist he needs and can arrange follow-up. He's hoping not to be at rehab for too long, mainly needs help with the macerated tissue in his perineum and wound."

"Thanks for taking care of her. I'd be happy to see her in follow up. Please let me know when she is closer to discharge so I can schedule her."

"I am currently away but am ccing my OP coverage Dr.XXX for his kind review. I am also ccing Dr. XXX, Ms. XXX's Cardiologist."

"Thanks for your detailed transition note. I am glad he's leaving the hospital but am curious if there was any discussion of him going home with hospice? In previous conversations with niece, she had spoken that he wanted to be home and she would support this. MOLST is clear for non invasive, DNR DNI, no vent, no hospital…."

"Dear XXX (PCP) Mr. XXX is a very fragile patient, and I have some concern about his long term plan and limited pulmonary reserve. Extremely congested …… Please don't hesitate to call me directly."

Conclusions:
The pilot launched in November 2016; 350 patients have been seen with warm-handoff provided. Too early to see any direct effect on readmission rates though baseline data indicate an opportunity to improve readmissions. Patients and providers across the continuum are very satisfied with the program and find the communication valuable. Clearly a great quality and safety initiative. SNFs note improvements in discharge summaries, prescriptions, and MOLST forms at the time of transfer Provider communication outside the firewall is cumbersome, but a modifiable program barrier. Opportunities to intercept bounce backs in the ED, to be explored. While too early to show ROI for TOC, the program should also be seen as a gateway to Bundles and risk agreements. Funding and sustainability strategies (including the model from NP to Social Work or Nurse Case Manager) should be explored.

Improving Holistic Patient Care through Social Services at Student-Faculty Collaborative Clinic

Christine Wang, B.A, Harvard Medical School
Evgeniya Larionova, BSN, Massachusetts General Hospital
Emily Thatcher, B.A, Massachusetts General Hospital
Rachael Williams, B.A, Massachusetts General Hospital
Jacqueline Chu, M.D, Harvard Medical School, Massachusetts General Hospital
Marya Cohen, M.D, Harvard Medical School, Massachusetts General Hospital

Theme: Practice Transformation & Health Care Redesign

Summary: Through this project, students volunteered numerous hours to impact health outcomes by dealing with traditionally non-medical concerns. This student initiative has created a holistic healthcare model. By implementing this innovative social services program in a demographically disadvantaged area, CCC-Chelsea's efficient use of community resources will help ensure better health outcomes.

Background: Social factors like socioeconomic status have a strong impact on health (Taylor 2016). Research consistently demonstrates lower socioeconomic status leads to worse health outcomes and places with higher ratios of social services spending to health care spending have better health outcomes (Bradley 2016). This implies an investment in social services is associated with better health. Recognizing that social determinants of health are fundamental to health outcomes, student clinicians at Crimson Care Collaborative at Chelsea (CCC-Chelsea) piloted an innovative project including patient assessment forms and a training curriculum to capture patient needs and provide community resource referrals.

Methods: Through our project, students learned about resource landscapes, discussed stigma surrounding social services, and taught how to sensitively discuss resource needs/documentation status. We implemented a patient assessment form featuring 16 questions in English and Spanish and 7 categories of resources including food pantries, housing help and free cellphone services. New resources including ESL/GED classes and resources available for undocumented immigrants were added. Even if patients currently have no social service needs, the encounter is documented in our records and EMR to ensure patients are screened.

Results: Since the project's initiation, 48 patients were screened. Preliminary results show 37.5% of patients had social service needs and given an appropriate resource referral, for a total of 45 referrals. Food assistance (31% of referrals), utilities and employment assistance (15.6% of referrals each) represented the most requested resources.

Conclusions: These results help us understand our patients' needs and factors affecting their health. For our patients, lack of food and job insecurity were predominant concerns. Based on these popular requests, we can now better help patients address these needs by creating external partnerships with relevant community organizations to streamline the referral process. Our goal is to have a liaison at each organization that patients can contact directly for assistance.

Reasons for Non-Adherence with Recommended Surveillance Colonoscopies in Community Health Center Patients

Imarhia Enogieru, BA, Harvard Medical School
Sanja Percac-Lima, MD, PhD, Massachusetts General Hospital Chelsea Health Center

Theme: Practice Transformation & Health Care Redesign

Summary: Despite effective screening, colorectal cancer is the second leading cause of cancer-related deaths in the United States. Patients with history of polyps are at increased risk of colorectal cancer and require follow-up colonoscopies. Our study found multiple reasons why community health center patients do not complete or complete delayed follow-up colonoscopies. Understanding these reasons can help guide initiatives that could increase follow-up colonoscopy rates and improve colorectal cancer prevention and early detection.

Background: Colorectal cancer (CRC) is the second leading cause of cancer-related deaths in the United States. Screening colonoscopy reduces mortality by removing precursor lesions. Post-polypectomy patients require surveillance. Despite effective screening, there is a disproportionate burden of CRC in minority populations. Our objective is to identify reasons for non-adherence with recommended surveillance colonoscopies in community health center patients.

Methods: In this retrospective study, we reviewed electronic medical records (EMR) of patients who received colonoscopies between 2010-2011 with a documented abnormality. The patients were age 50-74 and received care in community health centers. We identified patients recommended for one or three-year follow-up. We examined EMR of patients who never received or received delayed surveillance colonoscopy to determine reasons for non-adherence. Delayed surveillance was defined as colonoscopy not completed within one year of the recommended date.

Results: Of 155 patients included, 39.4% were women, 52.3% were Caucasian, 49.0% were non-English speakers and mean age was 59.8. 26 patients (16.7%) had recommendation for one-year follow-up and 92 (59.3%) for three-year follow-up. Four patients (15.4%) in 1-year group and eleven (12.0%) in 3-year group never received recommended colonoscopy.

In the 1-year group, reasons for non-adherence were: patient declined (75.0%), comorbidities (25.0%) and providers' miscommunications (25.0%).

In the 3-year group, reasons included: providers' miscommunications (36.4%), patient's comorbidities (18.2%), patient moved (27.3%), declined (18.2%) or died (9.1%). Three colonoscopies (11.5%) were delayed in the 1-year group because: patient cancelled/deferred (66.7%), providers' miscommunications (33.3%) and comorbidities (33.3%).

Eight colonoscopies (8.7%) were delayed in the 3-year group because: patient cancelled/declined (37.5%), late referral (25.0%), patient moved (12.5%), miscommunication (12.5%) and comorbidities (12.5%).

Conclusions: Reasons why patients did not complete or completed delayed surveillance colonoscopies were patient-based or systems/physician based. Patients who decline colonoscopies after incomplete prep could receive other testing for surveillance. A standardized method of communicating recommendations could minimize confusion about follow-up.

A Geospatial Analysis of Asthma-related Emergency Department Visits: Leveraging an Academic-community Partnership to Support Community-based Programs.

Lucas C. Carlson, MD, MPH, Department of Emergency Medicine, Massachusetts General Hospital
Robert Reppuci, BA, Community Action Programs Inter-City, Inc.
Daniel A. Dworkis, MD, PhD, The Lever Institute
David A. Peak, MD, Department of Emergency Medicine, Massachusetts General Hospital

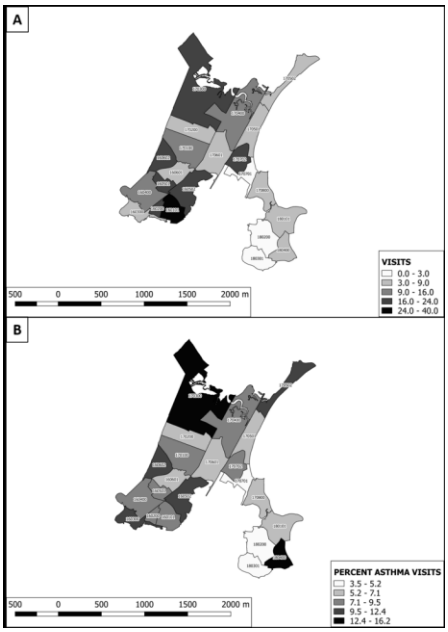
Theme: Practice Transformation & Health Care Redesign

Summary: We performed a geospatial analysis of pediatric asthma-related ED visits at MGH from the Chelsea, Winthrop, and Revere area, in order to support health programs led by Community Action Programs Inter-City, Inc. (CAPIC). Our findings demonstrate large differences in the burden of acute asthma across census tracts served by CAPIC. Furthermore, our efforts demonstrate that academic community partnerships such as this can be a highly effective means of leveraging data and supporting community program development.

Background: Community Action Programs Inter-City, Inc. (CAPIC) is a private, non-profit corporation founded in 1967 to eradicate the root causes of poverty and support families and individuals with complex social needs in the greater Boston area, specifically in the communities of Chelsea, Revere and Winthrop. The emergency department (ED) at the Massachusetts General Hospital (MGH) also serves these communities, and formed a collaborative academic-community partnership with CAPIC to provide analysis of ED visit data to help develop targeted, evidence-based interventions for a variety of health needs. CAPIC identified pediatric asthma as a key issue within the community – a condition that affects over 6 million people under 18 years of age, a disproportionate number of whom live in urban, underserved areas such as Chelsea, Winthrop, and Revere. To support these efforts, we performed a geospatial analysis of pediatric asthma-related ED visits at MGH from within the CAPIC service area.

Methods: We performed a geospatial analysis of de-identified patient record data extracted from MGH ED records of all patients who presented between July 1, 2012 and June 30, 2015 from the CAPIC service area (Chelsea, Winthrop, and Revere). Self-reported home address, chief complaint, diagnosis on discharge from the emergency department, and basic demographics were extracted from the medical record of each visit during this time period. Pediatric asthma-related ED visits were defined as any visit by a patient age 2-12 years (CAPICs service definition) with a chief complaint or discharge diagnosis matching one of the following: “"ASTHMA", "WHEEZING", or "REACTIVE AIRWAY DISEASE". Home addresses were geocoded using the US Census Geocoder and aggregated at the census tract level. Choropleth maps were built in QGIS. This work was reviewed and approved by the MGH Institutional Review Board.

Results: There were 298 pediatric asthma-related visits to the MGH ED from the CAPIC catchment area during the study period. Figure 1A shows a choropleth map of pediatric asthma visits per census tract, and Figure 1B shows a choropleth map of pediatric asthma visits as a percent of all pediatric visits. Census Tract 160101 had the greatest number of asthma-related visits, with 40 visits, however, after adjusting for total number of ED visits by census tract, these accounted for only 8.0% of ED visits by this age group within this census tract, similar to that seen in other surrounding census tracts. Census Tracts 170300 and 180400 had the highest proportion of ED visits related to asthma within this age group, representing 14% of visits, although tract 170300 had 24 visits and only seven were from 180400. Census Tracts 170701, 180301, and 180200 had the relatively low percentages of asthma-related visits with 4.6%, 3.3%, and 4.9% respectively.



Conclusions: Our findings indicate that there are large differences in pediatric visits to the MGH ED for asthma among census tracts served by CAPIC. These communities have been accordingly targeted by CAPIC for intervention and further investigation has been initiated to explore lessons from other high-performing communities that were also identified by our analysis. Vast swaths of data are available to and interpretable by healthcare researchers working in academic settings, but for the findings of this work to be effectively harnessed, it is essential that community partners are identified to guide priorities and to ultimately drive impact. We believe that potentially the most effective way to accomplish this is by building and fostering academic-community partnerships such as this.

The Language Accessibility of Community Health Center Websites

Jorge A. Rodriguez, MD, BIDMC Division of Clinical Informatics
Sanja Percac-Lima, MD, PhD, MGH Department of General Internal Medicine

Theme: Language Development & Health Communication

Summary: The Internet is an important source for health information. However, limited English proficiency (LEP) patients struggle to find health information in their language. Since most LEP patients receive care at community health centers (CHC) we explored if CHC websites offered translated information. Of 1401 US CHC websites reviewed only 480 (34%) had translated information. CHC in counties with high LEP populations were more likely to have translation. Translated CHC websites may improve equity in care.

Background: For limited English proficiency (LEP) patients, the digital divide has narrowed, creating a new population of non-English speaking Internet users. However, language-appropriate health information is difficult to find. Community health center websites serve as online health information resources for LEP patients. In particular, Health Resources and Services Administration (HRSA) supported community health centers provide care to a significant proportion of LEP patients. We sought to determine the number of HRSA supported community health center websites providing translated website content.

Methods: In February 2017, we performed a cross-sectional analysis of the language accessibility of HRSA-supported community health centers websites. The primary outcome was availability of translated website content on a community health center website. Secondary outcomes were type of translation, languages offered and the association between the likelihood of having a translated website and community health center county and state demographics, including percent LEP population as well as economic, education and Internet access characteristics.

Results: Of the 1401 community health center websites, 480 (34.3%) provided translated website information. Half of the centers with translated content relied on Google Translate™. We found a higher odd of having a translated website as the percent of LEP residents by county rose (OR: 1.26, CI: 1.07-1.49, p = 0.005), with higher Internet subscription at the state level (OR: 1.19, CI: 1.02-1.38, p=0.026) and if health centers were in metropolitan areas (OR: 1.81, CI: 1.31-2.51, p<0.001). Low employment (OR: 0.55, CI: 0.36-0.82, p=0.004) and persistent poverty (OR: 0.46, CI: 0.26-0.77, p=0.004) were found to have a lower likelihood of having a translated website.

Conclusions: Despite increased Internet use among LEP patients and linguistic diversity of the community health center populations, there is significant lack of language-appropriate content on community health center's homepages. Language appropriate online content may help achieve equity in care.

Correlation between Family Support, Edinburgh and ASQ Scores

Marai Yolanda Wigozki, BA, MGH Chelsea CHI Department
Sarah Oo, MSW, MGH Chelsea CHI Department
Danelle Marabelle, MGH Chelsea CHI Department
Fadumo Hirsi, CHW
Manuella Anorga, CHW
Olga Sanchez, CHW
Yeymi Mujo, CHW
Roselyn Hernandez, CHW
Marcia Burgos, CHW

Theme: Maternal Health & Child Development

Summary: It is well documented that children's development is affected when their parents are overwhelmed with stressors like poverty, violence, immigration status, housing, and food insecurity. When parents are enrolled in programs that support them, this impact parents and their children positively. Stressors decrease and children have better chances to learn and use words to communicate wants and needs.

Background:

- Thanks to brain development research we know that stress overload in parents affect child development.
- We want to correlate support to parents with child development.

Methods:

- We routinely use the Edinburgh Post-Partum Depression Screening and the Ages and Stages Questionnaire, so we conducted a review of both measures.

Results:

- As a result of parents receiving support Postpartum Depression indicators decrease and Communication and Language increase in children.

Conclusions: Programs that aim to support parents raise their children benefit children's developmental indicators.

The Health Starts at Home Initiative: A Partnership between CONNECT, Roca, and MGH Chelsea to address housing insecurity

Danelle Marable, MA
Monica W. Geber, MPH
Anna Spiro, MA
Jeisel Tavarez-Vargas
Stefanie Shull, MPA, MS (CONNECT)
Rosie Munoz, (Roca)
Elsie M. Taveras, MD, MPH

Theme: Maternal Health & Child Development

Summary: The Health Starts at Home (HSAH) initiative is a partnership between CONNECT, Roca, and MGH Chelsea and aims to work with MGH Chelsea pediatric patients and their families who are experiencing housing insecurity to stabilize their housing and improve their economic mobility. By addressing housing, HSAH will improve health outcomes. The initiative is funded by The Boston Foundation, CONNECT, and the MGH Center for Community Health Improvement.

Background: Housing insecurity is a critical social determinant of health and one experienced by many in Chelsea. In 2015, the MGH Community Health Needs Assessment identified housing affordability as a major concern in Chelsea. In response to housing concerns, MGH partnered with The Neighborhood Developers on a housing insecurity grant from The Boston Foundation.

Methods: Caregivers of MGH pediatric patients under 12 years, who meet MassHealth income guidelines, and are currently experiencing housing insecurity, are eligible to enroll. A survey is conducted at baseline, 6 months, and 12 months to assess housing quality and satisfaction, caregiver health, and child development Data on well child visits, diagnoses, and immunizations is obtained from the medical record. Participants are warmly referred to CONNECT, an existing platform of co-located, multi-partner workforce development, financial capabilities and housing assistance programming.

Short-term housing stabilization services include housing counseling, housing search assistance, and access to state-funded short-term, flexible financial assistance to stabilize current housing or to secure new housing.

Other services include public benefit enrollment, free tax preparation, employment services, credit counseling, adult education, financial coaching, and referrals and access to food, domestic violence, immigration, and legal resources.

Results: As of March 31, 2017, 57 participants have enrolled. At baseline, the median monthly income is $1,161 and 55% of families have at least 2 children. Sixty-eight percent spend more than half of their income on housing, 31.6% were homeless in the past year, 61.4% could not pay rent in the past year, and 26.3% moved >=two times for economic reasons in the past year. Fifty-three percent of caregivers are experiencing symptoms of anxiety. In the past six months, 45.6%, 36.8%, and 12.3% of children have had one or more urgent care visits, ED visits, or hospitalizations, respectively. Fifty percent of children are experiencing psychosocial impairments, as measured by the Pediatric Symptom Checklist.

Conclusions: By partnering to address a critical social determinant of health, we can build capacity to solve a need for our patients.

The Association of Food and Housing Insecurity with Adverse Maternal Health Behaviors in Early Pregnancy

Julie J. Gonzalez, BS, Division of General Academic Pediatrics, Department of Pediatrics, Massachusetts General Hospital
Leanne Duhaney, AB, Division of General Academic Pediatrics, Department of Pediatrics, Massachusetts General Hospital
Monica W. Gerber, MPH, Division of General Academic Pediatrics, Department of Pediatrics, Massachusetts General Hospital
Brianna Roche, Division of General Academic Pediatrics, Department of Pediatrics, Massachusetts General Hospital
Tiffany Blake-Lamb, MD, MSc, Department of Obstetrics and Gynecology, Massachusetts General Hospital
Meghan Perkins, MPH, Division of General Academic Pediatrics, Department of Pediatrics, Massachusetts General Hospital
Elsie M. Taveras, MD, MPH, Division of General Academic Pediatrics, Department of Pediatrics, Massachusetts General Hospital; Department of Nutrition, Harvard T. H. Chan School of Public Health; Kraft Center for Community Health Leadership, Partners Healthcare

Theme: Maternal Health & Child Development

Summary: Food and housing insecurity in early pregnancy were highly prevalent among women at MGH Chelsea and Revere, supporting the need for routine screening in this population. Additionally, food insecurity was predictive of poor dietary behaviors including low fruit and vegetable intake and high SSB consumption. Future interventions for food insecure pregnant women should not only aim to address access to healthy foods, but should also include individualized nutrition education with a particular focus on these dietary behaviors.

Background: Few published have examined associations of food or housing insecurity with health behaviors such as sleep duration, fruit and vegetable intake, fast food consumption, physical activity, or tobacco use in early pregnancy. Understanding poor health behaviors associated with these psychosocial risk factors could inform clinical and public health efforts to maximize both individual and population based interventions aimed at improving maternal health and birth outcomes through provision of appropriate services and risk reduction strategies.

Methods: We conducted a cross-sectional study of 540 women in their first trimester of pregnancy enrolled in the First 1,000 Days Program between 9/1/2016 to 4/27/2016 at MGH Chelsea and MGH Revere. Food insecurity, housing insecurity, and health behaviors were assessed using self-administered surveys of women at the time of their first prenatal care visit. Bivariate analyses were used to examine associations of food or housing insecurity with poor health behaviors.

Results: Of the 540 participants, 52.3% were Hispanic/Latino, 29.8% white, 8.4% black/African American, and 9.5% Asian/other ethnicity. 20% screened positive for food insecurity and 24% screened positive for housing insecurity. Food insecurity, was associated with low fruit and vegetable intake (<2x/day) and high sugar-sweetened beverage (SSB) consumption (>1x/week) (OR 0.54, 95% CI (0.32, 0.91); 0.52 (0.30, 0.85). Housing and food insecurity were not significantly associated with increased fast food intake, decreased physical activity, high screen-time, poor sleep, or smoking status.

Conclusions: Food and housing insecurity in early pregnancy were highly prevalent among women at MGH Chelsea and Revere, supporting the need for routine screening in this population. Additionally, food insecurity was predictive of poor dietary behaviors including low fruit and vegetable intake and high SSB consumption.

Future interventions for food insecure pregnant women should not only aim to address access to healthy foods, but should also include individualized nutrition education with a particular focus on these dietary behaviors.\

Jobs for Youth: A Future of Possibilities

Patricia B. Simpson, RN, MGH Chelsea HealthCare Center

Theme: Medical Education

Summary: High School students are often interested in pursuing health care as a career path. The students begin their internship with an idea of their career goal, and then they learn what the steps are in pursuing that goal. In order to attain this goal, there are many decisions and actions that will lead them to their future endeavor. Jobs for Youth allows the students that participate in the program an opportunity to gain the basic professional skill set to become successful adults, as well as offers them an opportunity to learn about career choices within the health care community.

Background: The current Jobs for Youth have been in existence for four years. It is a two month paid internship that matches high school juniors and seniors in a diverse, urban town to a health care department in a community health center. Interns are required to attend weekly enrichment seminars that involve skill training, a speaker series and shadowing opportunities. I have informally observed students' tremendous professional and personal growth. I wanted to start qualitatively measuring the growth of exposure and potential opportunities for the interns in the health care field.

Methods: Articulate the goals of the program and then develop a pre/post test for each student. I will pilot the pre/post test with five students this summer. I will assess their general skills, communication and writing.

Results: Results will be reported on the poster. Informally, I have observed that students greatly increased their awareness of career possibilities and possible college courses of study. Students increase their ability to break down a long-term goal into achievable and short term steps. Students learn interpersonal and professional writing and communication skills.

Conclusions: Conclusion-Suggestions for modifying the Jobs for Youth curriculum and measuring intern performance and change will be discussed in the poster presentation.

The "Trump Effect" on No-Show Rates at a Student-Faculty Collaborative Practice

Bonnie Blanchfield, CPA, ScD, DGIM BWH
Marya Cohen, MD MPH, DGIM MGH

Theme: Immigrant Health

Summary: This study seeks to examine the no-show rates in a student-faculty collaborative practice (SFCP) pre- and post- election of President Trump. The clinic population is primarily composed of Spanish speaking immigrants from Central and South America, as well as individuals recently released from jail. With 44% of Chelsea residents born outside of the US, Chelsea has been deemed a sanctuary city (https://www.chelseama.gov/sites/chelseama/files/uploads/final_booklet_state_of_the_city_2017.pdf

Background: During the 2016 United States presidential election, the Republican presidential nominee, Donald Trump, espoused rhetoric around deportation that has created fear and instability in the lives of many undocumented immigrants.

In 2001, a study in California found that 39% of undocumented immigrants expressed fear in receiving medical service due to their status. Those reporting fear were less likely to seek medical attention (https://www.researchgate.net/profile/Marc_Berk/publication/7537202_The_Effect_of_Fear_on_Access_to_Care_Among_Undocumented_Latino_Immigrants/links/565c6fde08aefe619b252c0c.pdf).

This study seeks to assess whether there is an association between Trump's victory and no-show rates in a student-faculty collaborative practice (SFCP) that serves a large immigrant population.

Methods: Descriptive analysis will be used to identify patient no-show rates at the Crimson Care Collaborative (CCC) located at MGH Chelsea HealthCare Center and at the SFCP host clinic, MGH Chelsea HealthCare Center. The no-show rates 9 months prior to the election of a new president, during the 3 months of transition time between presidents, and 9 months post-inauguration will be calculated and compared within the SFCP and the host clinic.

Additional analysis may be conducted in part two of this study to control for and identify the impact of immigration status on no show rates. Multivariate or difference in difference methods will be used. Finally, in part 3 of the study, we will compare the no-show rates at the SFCP to those at the health center.

We predict that the SFCP will show an increase in no show rates, but not as high of an increase as the host clinic, potentially due to patients feeling more comfortable and/or secure in an evening clinical setting with students.

Results: Pending.

Conclusions: A difference in the no-show rates post Trump election will imply that SFCPs are not immune to the effects of a contentious political climate. More rigorous techniques as discussed will be carried out to assess these associations. With this information and results we will be able to pilot new initiatives to help our patients maintain trust in the healthcare system, and navigate care regardless of immigration status.

Contraceptive Use Patterns Among Refugee, Immigrant, and U.S.-born Women at MGH Chelsea Health Center: A Retrospective Cohort Study

Jana Jarolimova, MD, Department of Medicine, Massachusetts General Hospital
Patricia Corona, BS, Harvard Medical School
Corrine Rhodes, MD, MPH, Department of General Medicine, Massachusetts General Hospital
Sanja Percac-Lima, MD, MPH, PhD, Department of General Medicine, Chelsea Health Center, Massachusetts General Hospital

Theme: Immigrant Health

Summary: This study examines patterns of contraceptive use among refugee women, Spanish-speaking immigrant women, and English-speaking U.S. born women seen in primary care at MGH Chelsea over time. Initial results have shown some differences among the groups in contraceptive use at time of their first visits to MGH Chelsea adult medicine. Patterns noted in contraceptive use within or among groups can reveal gaps in knowledge and access to contraception, informing their primary care providers.

Background: Access to contraception is important for the advancement of women's reproductive health worldwide. Rates of unmet family planning need remain high in the United States, especially among refugee and immigrant women. The MGH Chelsea HealthCare Center (MGH Chelsea) serves a diverse community, providing a unique setting to study women's contraceptive use patterns. The objective of this study is to examine contraceptive use among U.S.-born English-speaking, immigrant, and refugee women receiving primary care at MGH Chelsea.

Methods: In this retrospective cohort study we matched 192 refugee women aged 18-40 years who arrived in the U.S. between 2004-2013 by age and date of care initiation at MGH Chelsea to 192 Spanish-speaking immigrant and 192 English-speaking women. Data extracted by chart review consists of demographics, contraceptive use documented at clinic visits, and pregnancies. We compare the patterns in women's contraceptive use, rates, and method mix between the three groups. The differences will be adjusted for potential confounders, including age, gravidity, parity, marital status, region of origin, and education level.

Results: Preliminary results from review of 90 charts (30 from each group) revealed that, at the first visit, 53% Spanish-speaking immigrant women used contraception compared to 43% English speakers and 10% refugee women. At the third visit, the proportion of use increased in all three groups, however, differences remained. At their initial visit to MGH Chelsea, refugee women had the highest parity and gravidity. This study will provide the final results from review of the remaining 486 charts.

Conclusions: The preliminary results revealed that contraception is underused in refugee women. The final results will inform contraceptive care provision and development of educational tools by primary care providers at MGH Chelsea with a goal to increase understanding and access to contraception in these vulnerable populations.

The Complex Patient Population Community Health Worker Program at Massachusetts General Hospital

Monica W. Gerber, MPH
Sarah Oo, MSW
Tatiana Schettini, MSW
Ali Abdulahi, MSW
Silvestre Valdez
Maria Yolanda Wigozki
Anna Spiro, MA
Danelle Marable, MA

Theme: Immigrant Health

Summary: Interventions by community health workers (CHWs) are effective for improving health system navigation and chronic disease management among vulnerable populations. As an embedded part of the care team, CHWs are poised to reduce barriers to care and to increase the capacity of the health center to better serve the needs of vulnerable patients.

Background: Interventions by community health workers (CHWs) are effective for improving health system navigation and chronic disease management among vulnerable populations. Using a patient-centered, community-oriented approach, the Complex Patient Population (CPP) program at Massachusetts General Hospital Chelsea HealthCare Center aims to improve access to health care services, decrease emergency department (ED) visits, and increase quality of life among economically disadvantaged and racial/ethnic minority patients.

Providers refer patients to the CPP program, which matches a culturally competent CHW to (1) proactively address the social determinants that affect health and serve as barriers to health care and prevention, (2) set goals for chronic disease management, and (3) provide social support to help increase self-efficacy.

Methods: We will employ a quasi-experimental design to examine changes in ED visits, missed appointments, and patient-reported physical and mental health, and to evaluate intervention fidelity.

Results: Baseline data from October 2015 to July 2016 shows that CHWs worked with 498 patients. Mean (SD) age was 49 (18), 73% were female, and 57% identified as Hispanic. The primary languages spoken were Spanish (57%), English (27%), and Bosnian (4%). 38% had housing insecurity, 35% had food insecurity, 10% received a shut-off notice in the past year, and 87% had low health literacy. 19% rated their general health as “Fair” or “Poor.”

Conclusions: As an embedded part of the care team, CHWs are poised to reduce barriers to care and to increase the capacity of the health center to better serve the needs of vulnerable patients.

Bienvenidos! Resiliency and Coping among Unaccompanied Immigrant Minors

Ada Aroneanu, LICSW
Ceila Aguilar, MSW
Kiara Alvarez, PhD

Theme: Behavioral Health

Summary: This study utilizes a review of medical records to characterize mental health risk and protective factors among unaccompanied immigrant minor adolescents receiving school-based therapy services, in order to identify key areas for mental health assessment and intervention.

Background: In the 2014-2015 school year, an unprecedented number of unaccompanied Central American minors (approximately 68,500) risked their lives making the journey to the U.S. These young people are an underserved population at risk of negative mental health outcomes, but few empirical studies in the U.S. have documented specific mental health challenges and outcomes among these recent immigrants. Chelsea, MA is a gateway city that welcomed a large number of unaccompanied minor teens. Our study aims to provide a qualitative understanding of mental health risk factors and symptoms experienced by youth receiving services in a school based mental health clinic.

Methods: We conducted a retrospective chart review of the initial evaluations of 40 clients randomly selected from a group of 70 unaccompanied minor youth attending Chelsea High School who received a mental health evaluation between 8/1/2014 and 7/1/2016. We created a standardized data extraction form and recorded data on mental health presentation and history, mental health diagnosis at time of evaluation, family history, migration history, comorbid medical conditions, educational attainment, involvement of outside agencies, and number of sessions attended after initial evaluation.

Results: Descriptive data analysis is in progress and will consist of 1) client demographics; 2) descriptive statistics regarding mental health symptoms reported, diagnosis recorded, risk factors reported, and number of sessions attended; and 3) qualitative analysis of mental health presentation, mental health history, and sociocultural context.

Initial themes identified include the impact of prolonged separation from primary attachment figures, trauma associated with migration, and protective factors associated with family and peer relationships.

Conclusions: This study will highlight specific mental health risk and protective factors experienced by unaccompanied immigrant minors and will identify key sociocultural factors relevant to initial psychiatric evaluations with this population. The study will also identify gaps in services available to this population. We plan to discuss possible ways to expand services and maximize positive mental health outcomes in light of our findings.

Social Determinants of Cognitive, Academic and Mental Health Status in Children from Diverse, Low-Income Community-Based Clinic

Julie Grieco, PsyD, Massachusetts General Hospital-Chelsea Neuropsychology Assessment Center
Leila Capel, BA, Massachusetts General Hospital-Chelsea Neuropsychology Assessment Center
Mary Lyons-Hunter, PsyD, Massachusetts General Hospital- Chelsea Neuropsychology Assessment Center
Karen Seligsohn, PhD, Massachusetts General Hospital-Psychology Assessment Center
Margaret Pulsifer, PhD, Massachusetts General Hospital-Psychology Assessment Center

Theme: Behavioral Health

Summary: Children examined in an urban, low-income, ethnically diverse community were at higher-risk for reading disability and mental health conditions (anxiety, depression, autism, ADHD, PTSD). Prevalence rates of psychiatric conditions were 4- 25 times higher than the general population. Diagnosis of autism was 6- 7 years delayed relative to the national average. Timely detection and intervention of neuropsychological conditions is critical to improve health, development, and quality of life for children in this and similar communities.

Background: Neuropsychological practice in community-based settings requires appreciation of environmental factors and diversity of the population. This study examined children at a newly established neuropsychology practice in an urban, low income outpatient clinic to characterize their demographic, intelligence, academic and mental health profiles to inform service/treatment needs.

Methods: Intelligence and academic skills were assessed (WPPSI-IV; WISC-V; WIAT-III; GORT-5) in 100 children (66% male) ages 3-16 (mean=8.79; sd=3.99). (Mental health status was assessed with rating scales (BASC 3; BYI-2), clinical interviews, and structured observation (ADOS-2, when indicated). Diagnoses were compared to DSM-5 prevalence rates. Demographic variables were compared to the U.S. Census Bureau. This study was approved by the hospital IRB.

Results: Median family income was $18,000 below the state median. Twice as many families were living below the poverty line (19%); 3 times as many parents were of foreign origin (42%); and crime density per square mile was 15 times higher compared with national averages. Mean overall intelligence (FSIQ=80.95, s.d.=16.04), Index scores, and math skills (SS=83.37; sd=16.65) were low average; mean reading skills were very low (SS=72.52; sd=18.67). DSM-5 diagnoses (anxiety, depression, autism, ADHD, PTSD) were identified 4-25 times higher prevalence. Mean age of newly diagnosed autism was 6-7 years later than reported in the literature (mean=9.65; sd=4.89).

Conclusions: Preliminary results suggest that children in this and similar communities are at high-risk for reading disability, academic underachievement, and mental health problems. Neuropsychology in diverse, community-based settings requires greater appreciation of demographic factors that impact learning and quality of life. Timely detection and proactive intervention are critical to support academic progress and improve mental health.

A Neural Network Basis of Brain Injury in Women Experiencing Intimate-partner Violence

Eve Valera, PhD, Harvard Medical School, Massachusetts General Hospital
Aaron Kucyi, PhD, Stanford University

Theme: Behavioral Health

Summary: There is an ever increasing awareness of the negative health effects of repetitive traumatic brain injuries (TBIs or concussions). However, very little is known about the effects of the TBIs women sustain from their boyfriends, girlfriends, husbands, and significant others. Here we show that these TBIs affect connections in the brain that help us remember and learn information. Understanding this in the context of women in abusive relationships is critical for successful intervention and treatment.

Background: Traumatic brain injury (TBI) in women experiencing intimate-partner violence (IPV) is common, and IPV afflicts 30% of women worldwide. However, the neurobiology and related sequelae of these TBIs have never been systematically examined. Consequently, TBI treatments are typically absent and IPV interventions are inadequate. There has been a call for a comprehensive assessment of IPV-related TBIs and their relationship to aspects of women's cognitive and neural functioning. We respond to that call here.

Methods: We examined brain-network organization associated with TBI and its cognitive effects using clinical interviews and neuropsychological measures as well as structural and functional Magnetic Resonance Imaging (fMRI) in women experiencing IPV-related TBI.

Results: Severity of TBI was negatively associated with inter-network intrinsic functional connectivity indicative of TBI, between the right anterior insula and posterior cingulate cortex/precuneus (FLAME1+2; family-wise error-corrected $Z>2.3$, cluster- based $p<0.05$). This association remained significant when controlling for partner-abuse severity, age, head motion, childhood trauma and psychopathology. Additionally, intrinsic functional connectivity between the same regions correlated positively with cognitive performance on indices of memory and learning.

Conclusions: These data provide the first mechanistic evidence of TBI and its association with cognitive functioning in women sustaining IPV-related TBI. These data underscore the need to address and consider the role TBI may be playing in the efficacy of IPV interventions ranging from emergency first responder interactions to specific treatment plans.

Lung Cancer Screening Patient Navigation Program for Smokers at MGH Community Health Centers – Providers' Perspective

Sanja Percac-Lima
Jeffrey Ashburner
Nancy Rigotti
Elyse Park
Emily Poles
Steven Atlas

Theme: Practice Transformation & Health Care Redesign

Summary: Lung cancer screening can decrease lung cancer mortality in high-risk smokers. Patient navigation increased LCS in MGH community health centers patients. Providers reported improvements in the LCS process, and time saving navigator interventions such as determining patient eligibilities and reminding providers to order LCS. By helping screen more community health center smokers, navigation might improve equity in lung cancer screening and decrease lung cancer mortality in this vulnerable population.

Background: Annual chest computed tomography (CT) screening can decrease lung cancer mortality in high-risk smokers. We implemented a lung cancer screening (LCS) patient navigation program for current smokers at five MGH community health centers. During an 11-months study patients assigned to LCS program had nearly a three-fold higher rate of LCS CTs compared to patients receiving usual care. The objective of this study was to evaluate community health center providers' perspectives about this LCS program.

Methods: An eight-item survey asked about the number of LCS CTs that a provider ordered over the past year and provider perceptions about the nature and value of the navigator's activity. Providers were eligible if at least one of their patients received assistance from the navigator during the study period. Surveys were administrated after completion of the trial at a practice team meeting or via e-mail.

Results: So far, of 54 eligible providers, 31 (28 physicians, 3 nurse practitioners) completed the survey (57% response rate). Seventeen providers (55%) reported that they ordered more than 5 LCS CTs over the past year. Twenty-three (71%) of 31 respondents felt that the LCS process had improved in their practice. Ten providers listed determining patients' eligibility and reminders to order LCS as extremely useful navigator interventions, followed by engaging patients in shared decision making, smoking cessation and reminders to follow-up abnormal results as very useful. According to 16 (59%) providers, navigators saved them time by engaging patients in shared decision-making, determining eligibility, referring to smoking cessation treatment and reminding providers to order LCS.

Conclusions: Most primary care providers felt that the LCS patient navigation program was helpful by providing time saving actions such as determining patients' eligibility for LCS and reminding the provider to order the test.

Expansion of the Cancer Navigation Program to Other Types of Cancer

Silvestre Valdez
Daniel Ramos
Sarah Oo
Danelle Marable

Theme: Practice Transformation & Health Care Redesign

Summary: Despite the proven success that the MGH Chelsea CHI breast and colorectal cancer navigation programs have had over the years, there was a dire need to provide patient navigation services to other types of cancer to our most vulnerable patients. The creation of this new program is allowing the CHI cancer navigation team to effectively fill that void.

Background: The city of Chelsea has historically had higher incidence and mortality rates for certain cancers compared to the state. Most of the disparities cited in Mass General health center communities could be reduced – at least in part – through prevention, by focusing on the social determinants of health, and by helping patients negotiate the barriers to screening and care. The breast and colorectal cancer navigation programs have been instrumental in reducing disparities for these cancers.

Methods: With funding from the non-profit Golf Fights Cancer, CHI implemented a program in May 2016, in which a full time navigator was hired to offer navigation services to patients in need of any type of cancer screening or diagnostic follow-up. This staff works as a direct link to supportive services at the main campus, the MGH Cancer Center and within the Chelsea community.

Results: During the first year of the program: 169 patients were served. 177 diagnostic evaluations were conducted to rule out or confirm cancer. 16 were diagnosed with cancer. 79 patients remained as active cases.

Patients were screened for 26 different types of cancer, and 66% of patients were screened or tested for cervical, lung and skin cancers.

Conclusions: This effort has been a particularly beneficial resource for patients who without the direct assistance of a patient navigator would, most likely, fall through the cracks of the system. The above results are a testament that maintaining and expanding this program over the years should be considered a priority for CHI and the health center.

An Alternative Pathway to Admission: The MGH/PHH Home Hospital Experience

Umar Hussain, MHA, Massachusetts General Hospital
Marcy Bergeron, APRN, Massachusetts General Hospital
Donna Rusinak, Massachusetts General Hospital
Luis Ticona, MD, Massachusetts General Hospital
Dana Sheer, NP, Partners Healthcare at Home (PHH)
Danielle Fong, NP, Partners Healthcare at Home (PHH)
Brian Yun, MD, Massachusetts General Hospital
Keren Diamond, RN, Partners Healthcare at Home (PHH)
Susan Zackon, RN, Massachusetts General Hospital
Ryan Thompson, MD, Massachusetts General Hospital

Theme: Practice Transformation & Health Care Redesign

Summary:
1) Improve our patients' care and their experience of care by optimizing the site of care.
2) Increase inpatient capacity
3) Reduce ED overcrowding

Background:

- Inpatient care constitutes a large percentage of total medical expense in our healthcare system.
- A large proportion of patients that present to the Emergency Department for evaluation are triaged for an inpatient admission.
- There is evidence that some care that is delivered in a hospital unit can be safely and effectively provided in a patient's home.
- Success in at-risk financial models (ACOs) requires a multimodal approach that leverages a multidisciplinary team to identify the most appropriate level of care for the complex patients seen at the Mass General Hospital.

Methods: We enrolled 11 patients in Home Hospital over a 4 week period. We limited the scope of the pilot to the following Ambulatory Care Sensitive Conditions: bacterial pneumonia, urinary tract infection, dehydration, chronic obstructive pulmonary disease (COPD), asthma, and chronic heart failure. On Monday through Friday from 8am 4:30pm, a physician in the ED monitored the admission dashboard for candidate patients, and evaluated candidates based on clinical inclusion and exclusion criteria. Non-clinical criteria for Home Hospital included patients that lived outside of a 5 mile radius from MGH. When a candidate patient was identified, the enrolling physician alerted the entire care team to initiate the process of transferring the patient from the ED (or Observation Unit) to the patient's home. The Home Hospital "admission" consisted of daily visits to the patient's home by the PHH NP, and twice daily visits by the PHH RN. The MGH Home Hospital physician visited the patient at home within 24 hours of admission, and reviewed patient updates and plans via phone with the PHH clinicians on non-visit days. Overall, 8 patients remained at home following their Home Hospital admission; 3 patients returned to MGH for clinical reasons.

Results: Phone surveys with the patients in the pilot indicate high satisfaction with the Home Hospital pilot. Patient experience analyses like HCAHPS will be helpful in measuring the patient experience and opportunities for improvement to support program modification.

Conclusions: Based on the results and experience of the pilot, we recently re-launched Home Hospital at MGH, with increased support and plans for scaling the program. Our re-launch features a new "Alternative Pathways Navigator" to facilitate Home Hospital admissions and other alternative care pathways for patients.

Examining Barriers to Healthcare

Robert S. Repucci, CAPIC Executive Director
Kerry Wolfgang, CAPIC Planner
Gladys Valentin-Agneta, CAPIC SUDS Director
Hong Chen-Cheung, MD, MGH Chelsea Health Center
Luis Prado, MSPIH, Director, Chelsea HHS
Ruben Rodriguez, Director/Missionary, Hope of Christ Ministry

Theme: Practice Transformation & Health Care Redesign

Summary: Accessibility to healthcare can be hindered due to circumstances and barriers that vary among differing segments of the population, but especially among those who have unstable living situations that may be due to homelessness, substance use, legal status and complications of mental illness. There is a need to examine the extent to which this problem exists, with a goal toward eliminating barriers to healthcare.

Background: Community Action Programs Inter-City, Inc. (CAPIC) together with the City of Chelsea, Hope of Christ Ministries and a clinician of MGH Chelsea Health Center have formed a collaboration to explore and address the needs of "street involved" persons struggling to overcome alcohol and opioid addition. Partners have discovered disparity among that population who do not seek preventative medical care.

Methods: CAPIC's SUDS Mobile Outreach Team and Private Physician conducted interviews to determine the type, extent and reasons that stand as barriers to accessing healthcare. The Chelsea Health Department provided data; Hope of Christ street ministry identified the keys elements that typically prevent homeless substance users from seeking medical care and a survey conducted by CAPIC also examined data.

Results: 469 participants completed the CAPIC Health Care Access Survey; 77% have health insurance and 67.5% have seen a physician within the last year. Thirty-one percent of respondents from another survey indicate that "health" is a barrier to self-sufficiency, further examination is indicated. The City of Chelsea, Health Department determined the number of persons without health insurance. Mobile Outreach Team identified barriers, together with Hope of Christ and the MGH Clinician determined that 61 of 249 street clients do not have health insurance.

Conclusions: Findings reveal that the majority of respondents surveyed and interviewed from Chelsea, Revere and Winthrop feel they have sufficient access to healthcare; however, those persons who are living in an unstable environment have circumstances that inhibit them from accessing the healthcare system, specifically, linguistic barriers, substance use, cultural differences, poor hygiene, legal status, fear, mental illness, stigma.

MAT Mobile: What is the Need on the Spot?

Hong Chen Cheung, MD, MPH
Ruben Rodriguez

Theme: Practice Transformation & Health Care Redesign

Summary: We need to meet the client not only geographically and physically but also mentally and emotionally. The surveyed population voice out the urgency of accessing MAT on the spot. Furthermore, SUDs respondents believe in the power of their stories to help others.

Background: Only 11% of SUDs patients receive treatment. Moreover, despite a high rate of health insurance coverage in Massachusetts, there is an estimate that 20-30% of SUDs patients did not have insurance at the time of service. The patient's opinion can help to close this gap. For the addicted mind, it takes a split second to lose the focus of the desire to start recovery. Predominantly, patients focus their attention to what is immediately visible: seeing the dealer enhances their desire to use and seeing the outreach worker enhances their desire to seek recovery. Treatment needs to be where the patients are.

Methods: Using convenience sampling method, an experienced SUD navigator has approached SUDs patients in Bellingham Sq., Chelsea, MA during daytime. With implicit consent, respondents filled out an anonymous survey of 5 open ended questions. Two coders worked independently to identify themes.

Results: There is a recurrent theme of actionable terms: "travel to, get to, make it to, transition to, wait to, need to" but also reflection of some sensation of lack of pushing through…, still some notion of recovery is mentioned: "start with, in right track" Other emerged themes reflect sense of urgency: "killing Chelsea, ASAP, on the spot, right at the moment." 8/15 of the respondents mentioned need of detoxification resources and 5/15 need health/clinical. 4/15 mentioned transportation needs, interestingly, only 2/15 mentioned shelter need. The main theme in regard of usefulness of suboxone is the notion of easing up withdrawal symptoms to start recovery. 9/15 felt the capacity to help others either now or someday.

Conclusions: The recurrent theme from the voice of a diversity of SUDs patients of the different phases of recovery is the need of expedited access to MAT providers.

Traffic-light Labels and Financial Incentives to Reduce Sugar-sweetened Beverage Purchases by Low-Income Families: A Randomized Controlled Trial

Anne N. Thorndike, MD, MPH
Rebecca L. Franckle, ScD, MPH
Eric B. Rimm, ScD
Lorena Macias-Navarro, MSc
Douglas E. Levy, PhD

Theme: Practice Transformation & Health Care Redesign

Summary: This study demonstrated that financial incentives combined with supermarket traffic-light labels reduced sugar-sweetened beverage purchases by low-income, Latino families who purchased their groceries in a community supermarket.

Background: Regular consumption of sugar-sweetened beverages (SSBs) is associated with adverse health outcomes. Consumption of SSBs in the United States remains high, particularly among low-income and racial/ethnic minority populations. The objective of this study was to conduct a randomized controlled trial to test effectiveness of financial incentives and traffic-light labels to reduce purchase of sugar sweetened beverages (SSBs) in a community supermarket.

Methods: Participants were customers of an urban supermarket in Chelsea, Massachusetts who had at least one child living at home. After 2- month baseline period (Feb-March 2014), in-store traffic-light labels were posted to indicate healthy (green), less healthy (yellow), or unhealthy (red) beverages. During the 5- month intervention (April-Aug. 2014), intervention group subjects were eligible to earn a $25 financial incentive for refraining from purchasing red beverages each month. Outcomes were monthly in-store purchases tracked with a store loyalty card and self-reported consumption of red-labeled beverages.

Results: The proportion of intervention subjects who purchased any red beverages decreased 9% more per month than control subjects (p=0.002). Comparing baseline to end of study, more intervention than control subjects reduced their weekly consumption of red beverages (-23% vs. -2% for consuming >=1 red beverage, p=0.01).

Conclusions: Financial incentives paired with in-store beverage traffic-light labels modestly reduced purchase and consumption of SSBs by customers of a community supermarket.

Integration of a Caregiver-Centered Curriculum in a Speech/Language Group Therapy Program

Emilia Motroni, M.S., CF-SLP Speech-Language Pathologist, MGH Chelsea HealthCare Center Department of Speech Language and Swallowing Disorders & Reading Disabilities
Amy Izen, M.S., CCC-SLP Speech-Language Pathologist, MGH Chelsea HealthCare Center Department of Speech Language and Swallowing Disorders & Reading Disabilities
Maria Sylvia, M.S., CCC-SLP Speech-Language Pathologist, MGH Chelsea HealthCare Center Department of Speech Language and Swallowing Disorders & Reading Disabilities

Theme: Language Development & Health Communication

Summary: Los Pollitos is a Spanish language group that combines caregiver education with child-focused direct therapy, to provide effective speech and language intervention. During weekly sessions, preschool-aged patients identified as having delays in expressive and receptive language participate in group therapy targeting language goals, while caregivers engage in a curriculum of caregiver education sessions. This alternative therapy model is based on a family-centered approach that treats both the child and the caregiver for improved patient outcomes.

Background: Traditional clinic-based speech/language therapy is typically child-centered and does not directly involve caregivers in intervention. At the MGH HealthCare center, a clinician-led child-centered Spanish language group was adapted to include caregivers in the sessions. The current literature suggests that involving caregivers in speech and language intervention, along with home carryover enhances the patient's speech and language development (Baxendale, J., & Hesketh, A., 2003; Hart & Risley, 1995; O'Neil-Pirozzi, 2009). In addition, previous studies from this department have suggested that a caregiver-training component may have a profound positive effect on a child's language development (Novikoff, 2017).

Methods: Groups of six patients and their caregivers meet weekly with 2-3 Speech and Language Pathologists to participate in a 10-week curriculum targeting language stimulation and child development. Caregivers engage in caregiver-education sessions based on a weekly theme with one of the Speech Pathologists, while the children engage in a series of lessons that target expressive and receptive language with 1-2 Speech Pathologists. Following each session, parents receive homework based on the topic of the week and a rotating bag of books to implement strategies at home. To assess the efficacy of the program, caregivers complete a pre-survey at the start of the program and post-survey when the program is completed with regards to child language development and parent satisfaction. Responses from the surveys are coded 1-5 based on frequency of behavior and analyzed. Anecdotal feedback is also considered.

Results: Preliminary results based on surveys analysis and anecdotal feedback suggest that a family-centered, group therapy approach for preschool-aged children with expressive and receptive language delays is associated with language improvement in children, and parental satisfaction. Additional analysis will be explored in the poster.

Conclusions: Continued monitoring of the program and of measuring outcomes will be completed to further derive implications of this treatment model.

Enrolling in the WIC Program during the First Trimester may help reduce the incidence of childhood obesity in WIC children

Tara McCarty, LDN, IBCLC, MGH Chelsea/Revere WIC Program
Corey Greene, IBCLC, MGH Chelsea/Revere WIC Program

Theme: Maternal Health & Child Development

Summary: Data shows the increase in the percentage of children with an obese BMI may be a result of the decrease in women enrolling on WIC during their first trimester. OB providers play a crucial role helping deliver this message to prenatal women. Enrolling in the 1st Trimester helps provide more nutrition counseling and healthy foods. Enrolling in the WIC Program during the First Trimester may help reduce the incidence of childhood obesity in WIC children.

Background: WIC is a Special Supplemental Nutrition Program that provides free nutrition counseling and healthy foods free of charge to women in the prenatal and postpartum period, infants and children up to the age of 5 years old. MGH WIC had the highest percentage of children with an obese BMI compared to other MA WIC Programs. The 1st 1000 Day grant project helped to reinforce the importance of preventing obesity at the earliest possible moment, before and at conception.

Methods: WIC provides intense outreach to OB's to increase the number of referrals to increase first trimester enrollment. During the prenatal period, the WIC nutritionist measures anthropometrics, plots their progress on the weight gain grid and discusses this at each visit. Nutritionists measure infants and children's anthropometrics twice/year at minimum. A dietary assessment is completed and recommendations are made based upon the needs of the participants.

Results:

2 WIC metrics tracked on a monthly basis over a 3 year period:
1. % enrolling in the 1st trimester
2. % children with an obese BMI

According to the data over the past 3 years, less women enrolled on WIC during their first trimester and the percentage of children with an obese BMI also increased.

Conclusions: Enrolling in WIC during the first trimester would help WIC measure their anthropometrics more frequently, increase frequency of nutrition and breastfeeding counseling, help provide healthy foods earlier on, and help them resolve other contributing factors affecting household nutrition.

The Effects of early Childhood Development Centers on Child Development and Nutritional Status in Estancia, El Salvador

Ann Symonds, MD (graduate of HMS 2017)
Etelvina Umana, La Asociacion Campesina para el Desarrollo Humano
Abraham Martinez, La Asociacion Campesina para el Desarrollo Humano
Samuel Garcia, MD, La Asociacion Campesina para el Desarrollo Humano
Jennifer Kasper, MD, MPH, Assistant Professor, Harvard Medical School; Associate Pediatrician, MGHfC

Theme: Maternal Health & Child Development

Summary: Centers for Integrated Child Development that have activities to promote motor, language, and socio-emotional development; materials for use in both the CICD and home to promote fine motor skills; and nutritional supplementation with a locally produced protein-energy beverage and four meals per week help children grow and develop to their potential, even children living in poverty.

Background: Despite overall economic growth and poverty reduction in Latin America, in El Salvador an estimated 35% of households experience food insecurity and more than 50% live in multidimensional poverty with limited access to education, employment and basic services[1, 2]. In Estancia, Morazán, a cluster of rural isolated villages in northeastern El Salvador, more than 50% of the population faces high levels of poverty, unemployment and food insecurity. Globally, poverty and food insecurity are associated with increased rates of childhood malnutrition; an estimated 45% of under five childhood mortality is associated with undernutrition[3,4,5]. The World Food Programme estimates that 19% of Salvadoran children ages 3 to 59 months are stunted[6] ;Estancia has even higher rates of childhood malnutrition: a 2014 study of children 6 to 24 months of age found 29% of children were acutely malnourished and 69% stunted[7]. Stunting reduces child survival and is associated with suboptimal development leading to cognitive decline, poor school performance and diminished future earnings[8]. In El Salvador, an estimated 25% of 3 and 4-year-old children have a low Early Childhood Development Index (ECDI) score[9]. Yet, less than 2% of children under 4 years of age attend early education programs, and only 51% of children ages 4-6 years attend preschool[10]. Doctors for Global Health partnered with a local non-governmental organization, La Asociación de Campesinos para el Desarrollo Humano (Peasant Association for Human Development, CDH), and facilitated the creation of Centers for Integrated Child Development (CICD) for children 2-6 years of age in 2 communities.

Children receive a robust curriculum that includes: Activities that promote motor, language, and socio-emotional development. Access to materials in the CICD and for use in the home to promote fine motor skills. Nutritional supplementation with a locally produced protein-energy beverage and four meals per week[11]. Identify the extent of food insecurity and multidimensional poverty in the region. Understand the risk factors leading to developmental delay and undernutrition. Determine the impact of the CICDs on household food insecurity, nutritional and developmental outcomes for children 2-6 years of age.

Methods: We conducted 256 in-home surveys with families who had children ages 6 months to 6 years in eight communities in Estancia. Two of the eight communities had CICDs, while the six neighboring communities did not. Surveys consisted of four sections: sociodemographic information, program participation, food security using the Latin American and Caribbean Food Security Scale (ELCSA) (5), and a food frequency questionnaire. Childhood development data was collected using the Spanish Version of the Ages & Stages Questionnaire. All activities were performed with the child when appropriate, while the remaining questions were answered by the caregivers. Anthropometric measurements - weight and height/length - were collected for all participants. Harvard Medical School IRB and CDH approved this study.

Results:

Food Security: All of the communities we surveyed had high rates of food insecurity and poverty, with 68% of families experiencing moderate to severe food insecurity, a 78% unemployment rate, and limited available assets. The families of children who attended the CICD's had significantly reduced food insecurity.

Nutritional Outcomes: The children who attended CICD's had significantly higher average weight-for-age z-scores than those who did not attend CICD's. However, these effects did not extend to height as there was no effect of CICD attendance on average height-forage z-scores.

Developmental Outcomes: Controlling for age and socioeconomic status, children who attended CICDs had significantly lower rates of developmental delay in all developmental categories: Communication; Gross Motor; Fine Motor; Problem Solving; and Socio-individual.

Conclusions: Centers for Integrated Child Development had a significant, positive impact household food security, dietary diversity, growth, and developmental outcomes among children in rural Estancia, El Salvador. CICDs may serve a protective role for children by reducing malnutrition and developmental delay in households with high levels of poverty, as the effects were seen across all socioeconomic scores. The effect on developmental outcomes may lead to improved school performance, higher rates of graduation from 8th grade, possibly higher rates of participation in high school and university, which may lead to increased economic productivity in this region. Additionally, school-based feeding programs in regions with high rates of food insecurity can play a key role in improving food security and reducing household hunger. The combined nutrition and early child stimulation may prove to be an effective model for reducing developmental delay and improving child health. CICD's may help achieve at least three Millennium Development Goals: eradication of extreme hunger through school-based feeding, reduction of child mortality through improved nutrition, and universal primary education through enhanced school-readiness.

Men's Perceptions During Prenatal Care: The 2016 MGH Heath Center Fatherhood Obstetrics Survey

Milton Kotelchuck, PhD, MPH
Chandra E. Khalifian, MA
Hiyam Nadel, RN, MSN
Raymond A. Levy, PsyD

Theme: Maternal Health & Child Development

Summary: Little research exists on men/fathers during the prenatal care period. Seventy fathers accompanying their partners to prenatal care at MGH Health Centers completed a one-time anonymous survey. 54.3% of men perceived fatherhood as stressful. 47.1% lacked sources of fatherhood support. 33% reported depressive symptoms. 41.8% were obese. Many had muted responses to current MCH recommendations. ~82% perceived the obstetrics services positively, but ~38% were not asked any questions. Fathers desired more fatherhood information and involvement.

Background: Despite substantial literature documenting the positive impact of father involvement, little research exists about father's early involvement and needs during the prenatal period, especially from men utilizing health centers. The goals of this research were to assess men's experiences, perceptions, and needs during prenatal care, including perceptions of current MCH child health recommendations.

Methods: 70 men attending prenatal care with their partners at MGH Chelsea and Revere Health Centers completed a one-time, anonymous, two-part Fatherhood Survey using iPad-minis (in English, Spanish, Portuguese or Arabic) during a three-week period in the summer of 2016.

Results: Participation was high— 85% of fathers approached participated. Participants seemed representative of health center patients—predominantly Hispanic/Latino (55.7%) and White (34.3%). Income was below 40k for 65.7% of families. 55.7% of families were insured by Medicaid; 7.1% had no insurance. About 25% of families reportedly ran out of food or were unable to pay bills over the past year. 42.9% were first-time fathers. While 94.3% of men felt confident in their fatherhood abilities, 54.3% perceived becoming a father as stressful, and 47.1% lacked people/places to go for fatherhood encouragement.

Significant men's health issues were noted: 41.8% were obese; 33.3% reported depressive symptoms; and 31.5% reported their pregnancy as unplanned. Many men reported hesitation with current MCH recommendations: 12.9% prefer (and 35.7% feel neutral toward) formula rather than breastfeeding, 21.5% of men prefer (31.4% neutral toward) co-sleeping, and 27.1% of men are weary of (28.6% neutral toward) vaccinations. Men perceived MGH obstetrics services positively (~82%), but 37.7% were not asked any questions by providers. Men expressed substantial desire for more fatherhood information— preferably written/media information.

Conclusions: Fatherhood begins before birth. Men have significant health needs, stresses, and joys during the antenatal period. These findings should help inform MGH health center efforts to strengthen men's inclusion in prenatal services.

The Creation of a Joint HMS/MSDM Course, "Global Health Professionalism"

Jennifer Kasper, MD, MPH, Assistant Professor, Harvard Medical School; Associate Pediatrician, MGHfC
Brittany Seymour, DDS, MPH, Harvard School of Dental Medicine

Theme: Medical Education

Summary: The goals for the creation of this Global Health Professionalism course is to train medical and dental students in the following ways:

- Students will acquire knowledge, attitudes and skills to improve the quality and effectiveness of their global health scholarly projects.
- Students develop the knowledge, attitudes and skills to be effective and professional global health practitioners.
- Support students in developing "lessons learned" from their scholarly project that will inform their future professional careers and global
- engagement.
- Instill in HSDM and HSM students an appreciation, humility and practice for lifelong learning in global health.

Background: Global health experiences among medical and dental students quadrupled in last 30 years. Approximately 50% dental schools offer international experiential learning opportunities (ADA 2016).
30% of graduating medical students report global health experiences (2015 AAMC Grad Quest). Academic institutions are finding it challenging to keep pace with the rapidly growing demand for preparing students to work globally. 2011 Inauguration of Scholars in Medicine Scholarly Project Program: HMS/HSDM students design and implement mentored scholarly project and written thesis. Annually, 25% students select global health project.Project Goals: Develop longitudinal course to support students engaging in global health scholarly projects; Acquire knowledge, attitudes and skills to improve quality and effectiveness of projects; Develop knowledge, attitudes and skills to be self-aware, reflective, effective and professional global health practitioners, addressing learning experiences unique to global health work; Distill "lessons learned" from scholarly projects that will inform future professional careers and global engagement; Instill in HSDM and HSM students an appreciation, humility and practice for lifelong learning in global health.

Methods:
Phase 1. Pre-Course Preliminary Data Collection and Analysis (Competed); we are in the process of analyzing results of 3 focus groups of medical and dental students and online student and faculty mentor surveys.
Phase 2. Development of Course Learning Objectives (Completed) Encompass the following themes and activities: Bias, attitude, and implicit associations; Humility; Health as a human right; Leadership, partnership, collaboration; Ethics; Participatory research, optimal learning experience for all; Scholarly project optimization; Standards of conduct, safety, emergencies; Culture shock, reverse culture shock; Lifelong learning, reflection.
Phase 3. Content and Pedagogy Selection (In Process)
Phase 4. Implementation (Spring 2018) Cyclical annual course schedule
Phase 5. Evaluation and Revision (Forthcoming)
Phase 6. Institutionalization (Forthcoming) Course will be mandatory and supported by HMS/HSDM on an ongoing basis for all global health scholarly project students.

Results:
Will be forthcoming.

Conclusions:
Challenge: HMS and HSDM curriculum schedules beyond student year 1 *Solution*: Continual revision, cross-collaboration with HMS and HSDM leadership and course directors; course flexibility and cyclical design. *Challenge*: Student feedback was very project/site specific for what they are looking for in this course. Faculty feedback was broad and more global in nature. *Solution*: Blend peer and faculty design and teaching; learning labs provide students with opportunities to discuss specifics while didactics and online modules are broad and foundational. More conclusions will be forthcoming.

Measuring Clinical Decision-Making and Clinical Skills in DPT Students Across a Curriculum

Tracy J. Brudvig, DPT, PhD
Kelly Macauley, DPT
Noam Segal, PT, MSPT

Theme: Medical Education

Summary: This study examined a survey tool meant to assess PT students' skills and decision making at the clinic during their practical training. The study demonstrates that the survey tool is indeed testing what it was meant to test- i.e. it has sufficient validity. It also demonstrates this survey tool, when measuring the same thing by different people, will still produce similar results- i.e. it has high internal consistency and is reliable.

Background: Healthcare is a fast-paced, dynamic atmosphere. Clinical decision-making and clinical skills have been identified as necessary skills for autonomous practitioners in physical therapy. However, there are limited tools to measure these skills, which are cumbersome to implement and not validated. This research aimed to validate a survey tool across three cohorts of Doctor of Physical Therapy students and one cohort of physical therapy interns.

Methods: This is a cross-sectional, descriptive study using a 25-item survey tool to measure clinical decision-making and clinical skills. The survey tool was sent and data collected online via REDCap (Research Electronic Data Capture).

Results: The survey response rates were between 19% and 47%. The Cronbach's alpha was ≥0.964 across domains and the total scale. Mann-Whitney U-tests demonstrated significant differences between all cohorts except between the second and third-year students. The interns demonstrated less variance in their answers than students earlier in the curriculum.

Conclusions:
The survey demonstrated excellent internal consistency and construct and face validity. The psychometric properties of the tool and the possibility of a ceiling effect need to be studied further.