Poster Session Presentations: 2016 Community Engagement and Research Symposium

Let us know how access to this document benefits you.

Follow this and additional works at: https://escholarship.umassmed.edu/chr_symposium

Part of the Civic and Community Engagement Commons, Community-Based Research Commons, Community Health and Preventive Medicine Commons, and the Translational Medical Research Commons

Repository Citation

Creative Commons License
This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 License. This material is brought to you by eScholarship@UMassChan. It has been accepted for inclusion in Community Engagement and Research Symposia by an authorized administrator of eScholarship@UMassChan. For more information, please contact Lisa.Palmer@umassmed.edu.
1. WE ACT's Environmental Health and Justice Leadership Training (EHJLT) program: A tool to help disseminate research to community members who live/work in Northern Manhattan (NYC)

David Chang, Taylor Morton

Background: WE ACT for Environmental Justice is a nonprofit organization whose work centers around three pillars: research, community organizing, and advocacy. Through long standing partnerships with academic institutions such as Columbia Center for Children’s Environmental Health and the NIEHS Center in Northern Manhattan, WE ACT has fostered opportunities for the translation of research conducted by both academic institutions and community members living in Northern Manhattan.

Methods: One tool that WE ACT uses to disseminate research is the Environmental Health and Justice Leadership Training (EHJLT) Program: a 10 week course where a cohort of 25 community members are introduced to environmental concerns affecting Northern Manhattan such as Clean Air Quality, Food Justice, Toxic Products, Affordable Transportation, Healthy Indoor Environments, among others. Guest presenters who are lead investigators or have expertise in the field are also invited to share their findings.

Results/Conclusion: Surveys collected at the beginning and end of the program demonstrated an increase in environmental health literacy. Graduates of the EHJLT program build upon the knowledge they gain by participating in campaign specific working groups, lobbying to pass statewide initiatives such as the Child Safe Products Act, and giving testimony at public hearings. Translating scientific evidence into sound policy is necessary for the creation and sustainability of healthy and equitable communities. Training programs similar to the EHJLT can be a helpful and replicable model in disseminating research and fostering capacity to decrease health disparities from the ground up.

2. Piloting "Signs of Safety": A Deaf-Accessible Toolkit for Trauma and Addiction

Melissa L. Anderson, Ph.D. Department of Psychiatry, Systems & Psychosocial Advances Research Center (SPARC) University of Massachusetts Medical School, Worcester, MA, Kelly S. Wolf Craig, Ph.D. Department of Developmental Services, East Hartford, CT, Amanda Sortwell, M.S., I.M.F., Deaf Community Behavioral Health Services, San Diego, CA, Douglas M. Ziedonis, M.D., M.P.H. Department of Psychiatry University of Massachusetts Medical School, Worcester, MA

The Deaf community - a minority group of 500,000 Americans who use American Sign Language (ASL) - experiences trauma and addiction at rates double to the general population. Yet, there are no evidence-based treatments that have been evaluated to treat trauma, addiction, or other behavioral health conditions among Deaf people.

Current evidence-based treatments fail to meet the needs of Deaf clients. One example is Seeking Safety, a well-validated therapy for people recovering from trauma and addiction. Seeking Safety includes a therapist guide and client handouts for 25 therapy sessions, each teaching clients a safe coping skill. When Seeking Safety was used with Deaf clients, unique barriers were revealed with regard to the client materials: they were presented in complex English instead of ASL, nor sensitive to Deaf people’s culture, social norms, and history of oppression.
To address these barriers, Dr. Anderson assembled a team of Deaf and hearing researchers, clinicians, filmmakers, actors, artists, and Deaf people in recovery to develop Signs of Safety, a Deaf-accessible toolkit to be used with Seeking Safety. Signs of Safety is comprised of a therapist companion guide and population-specific client materials, including visual handouts and ASL teaching stories on digital video, which present key learning points via an “educational soap opera.”

Dr. Anderson is currently leading a pilot study of Signs of Safety. Preliminary results show that participants are reporting symptom reduction from baseline to follow-up and high levels of satisfaction with the model, giving us the confidence to further pursue this line of research.

3. Coordination impairments are associated with falling among older adults
Eric G. James, UMass Lowell, Suzanne G. Leveille, UMass Boston, Jeffrey M. Hausdorff, Tel Aviv Sourasky Medical Center, Bruce Barton, UMass Medical School, Sarah Cote, UMass Lowell, Murat Karabulut, UT Rio Grande Valley, Phillip Conatser, UT Rio Grande Valley, David N. Kennedy, UMass Medical School, Katherine L. Tucker, UMass Lowell, Soham Al Snih, UT Medical Branch Galveston, Kyriakos S. Markides, UT Medical Branch Galveston, Jonathan F. Bean, Harvard Medical School

Approximately one third of older adults over the age of 65, and 50% of those over 80 years, will fall each year, leading to fractures, morbidity and mortality. The annual direct medical costs due to falls in the U.S. are approximately $19.2 billion. The identification of new treatable risk factors for falls has the potential to advance their prevention and rehabilitation. We conducted a cross-sectional study of 128 community-dwelling older adults aged 67-99 years. We used an electronic gait walkway to assess gait coordination, measured as the Phase Coordination Index during normal speed walking. We used a motion capture system to assess ankle coordination during rhythmic interlimb antiphase coordination, measured as the standard deviation of ankle relative phase. Having fallen in the previous year was self-reported retrospectively. Odds ratios for falling as a function of coordination quartiles were determined using multivariable logistic regression. Adjusting for age, sex, body mass index, number of chronic conditions and Mini-Mental State Exam score, the odds ratios for falling based upon being in the 4th (the poorest) quartiles of gait or ankle coordination were 6.6 (95% CI: 1.9-22.4) and 7.9 (95% CI: 2.2-28.9), respectively, and 4.3 (95% CI: 1.3-14.0) for the 3rd quartile of gait coordination, compared to the best (the 1st) coordination quartiles. The results support the hypothesis that impaired gait and rhythmic interlimb ankle coordination are associated with a history of falls in the past year. Prospective longitudinal research is needed to determine the possible direction of causality between falls and impaired coordination.

Alicia Cianciola, Program Manager, Community Harvest Project; data gathered and analyzed with UMASS Medical Students Elizabeth Rosen, Kathryn Bailey, Rachel Erdil, Blair Robinson and Dr. Melanie Gnazzo of Family Health Center of Worcester

Community Harvest Project has been operating the Farm to Health Initiative in partnership with Family Health Center of Worcester with the support of UMASS Medical students since 2014. We received funding from Harvard Pilgrim Healthcare Foundation to support growing the program over the next 3 years. In 2016 we are adding partners: the Healing Garden in Harvard, working with cancer patients in all stages of recovery; and Hector Reyes House in Worcester, a residential program working with Latino men in recovery from substance abuse. The distribution that was at Family Health Center of Worcester will now be focused on youth in partnership with a healthy lifestyle program, complete with counseling on nutrition and physical activity.

Fresh, whole produce will be distributed to participants through each program on a regular basis, and nutrition and cooking education will be available for all participants. Each program will be responsible for measuring and reporting changes in consumption for their respective populations. Surveys for all populations need to be developed to determine baselines and changes. We anticipate that each population will have different barriers to overcome to include more produce in their diets. Each program has some element of education planned for participants – additional education partners and partners to help measure impact on participants are welcome to get involved.
5. And the survey said.... evaluating rationale for participation in gun buybacks as a tool to encourage higher yields

Rebecca E Kasper MPH1, Rachelle Damle MD, MS2, Jonathan Green MD2, Jeremy Aidlen MD3, Pradeep Nazarey MD3, Mariann Manno MD4, Esther Borer, CPST5, Heena Santry, MD6, Michael Hirsh MD3

1University of Massachusetts Medical School, Worcester MA
2Department of Surgery, University of Massachusetts Medical School, Worcester MA
3Division of Pediatric Surgery, University of Massachusetts Medical School, Worcester MA
4Division of Pediatrics, University of Massachusetts Medical School, Worcester MA
5Department of Injury Prevention, University of Massachusetts Medical School, Worcester MA
6Division of Trauma and Acute Care Surgery, University of Massachusetts Medical School, Worcester MA

Introduction
In 2013, firearms were responsible for over 84,000 injuries and 33,000 deaths. In the US, firearm death rates are seven times higher than other high-income countries. Gun buyback programs represent one arm of a multi-pronged approach raising gun safety awareness and education.

Methods
Between 2002 and 2015, Worcester, MA conducted an annual gun buyback. In 2009, a voluntary survey was administered participants. Survey responses were analyzed using descriptive statistics determining participant demographics and attitudes toward gun safety.

Results
Between 2009 and 2015, 273 individuals completed the survey, and 973 guns collected. Of participants, 49% were white males > 55. One in four were females >55 and 26% were males <55 years old. Participants represented 61 zip codes across Worcester County; 20% from rural areas. Main reasons for participation were: “no longer needed” (48.0%), “fear of children accessing the gun” (14%), “general safety concerns” (8%) and “need for gift certificates” (7%). One-third of respondents knew someone injured/killed by gun violence. 69% had formal firearms training and 80% read firearm safety information. Two-thirds of participants still have firearm(s) at home, 85% locking them. One-third of gun owners said children living/visiting the home could access guns. Of respondents, 77% felt the buyback raised community awareness about firearms risk and 57% felt their homes were safer since turning in guns.

Discussion
Between 2009 and 2015, The Worcester Goods for Guns Buyback collected 973 guns. Most firearms were handguns and automatic/semi-automatic weapons, commonly used for interpersonal violence. Participants feel the gun buyback raises community firearm safety awareness.

6. Utilizing Service Learning to Engage Students in Advocacy for Suicide Prevention

Michelle Hunt DPT, MS - College of Health Sciences, University of Massachusetts Lowell and Public Policy Council, American Foundation for Suicide Prevention

The American Foundation for Suicide Prevention (AFSP) strives to reduce suicide attempts and deaths through research, education, and advocacy. AFSP has been at the forefront of changing minds about suicide prevention and creating effective means of intervention.

Stigma and myths surrounding mental illness and suicide still prevail and contribute to its incidence. People often hesitate to admit suicidal ideation and to seek help. Healthcare professionals are in a key position to identify people who are suicidal and connect them with appropriate services. In order to do this, they need to not only know about suicide but be willing to intervene.

Advocacy is the act of creating political, economic, and social change. It is the professional responsibility of those working in healthcare to be active advocates for underserved populations where care is not optimal. This ability must be learned and practiced.

Educational opportunities are needed to address the cognitive components of suicide as a health issue and advocacy as a professional responsibility. However, the affective and procedural domains must also be addressed in order to make the transition of this knowledge to practical use. There is substantial
evidence that service learning is effective in addressing attitudes towards marginalized issues. It is also a powerful mechanism to improve self-efficacy in a skill. Establishing a partnership between UMass and AFSP to develop service learning coursework to meet the goals of educating students in health-related majors in aspects of suicide prevention and advocacy would benefit both parties. Goals would include program development and evaluation.

7. Assessing Knowledge, Attitudes, and Beliefs of Bone Health among Caribbean Latinos living in Lawrence, MA
Sabrina E. Noel¹, Sandra Arevalo¹, Bridgette Collado¹, Vilma Lora², Martha Velez³, Esther B. Carver⁴, Katherine L. Tucker⁴

¹Department of Clinical Laboratory and Nutritional Sciences, University of Massachusetts Lowell, Lowell, MA
²City of Lawrence Mayor’s Health Task Force, Lawrence, MA
³Lawrence Multipurpose Senior Center, Lawrence, MA

Most recent national data indicate that Latinos have a higher prevalence of osteoporosis than non-Hispanic whites or blacks, but this study, much like the majority of research on bone health among Latinos, has been conducted solely in Mexican Americans. Data from a large study of bone health among Puerto Ricans (n=930) suggest that Caribbean Latinos are at increased risk for osteoporosis. Despite the high prevalence of osteoporosis in this group, there is low awareness of bone health, a low perceived susceptibility and severity of developing osteoporosis, and little knowledge of behaviors that promote bone health in this population. We are collaborating with the Lawrence Multipurpose Senior Center and the City of Lawrence Mayor’s Health Task Force to design and conduct focus groups among Caribbean Latinos to understand current awareness, knowledge, attitudes and beliefs about bone health. Briefly, 30 Caribbean Latino adults aged > 50 years will be identified from the Lawrence community through flyers and in-person recruitment at the Senior Center. Three to five focus groups, with a minimum of 6 and maximum of 10 participants per group, will be conducted at the Senior Center by a trained bilingual moderator. A questionnaire on knowledge, attitudes and beliefs, as well as health behaviors, will be administered at the start of the focus group. The moderator will then lead participants in discussion around these same topics per the Moderator’s Guide. These data will inform the development of a cultural and literacy-tailored intervention to improve bone health among older Caribbean Latino adults.

8. Perceived Food Environment to Support Fruit and Vegetable Consumption among Older Consumers in Massachusetts
Qianzhi Jiang, MA, Nancy L. Cohen, PhD, RD, LDN, FAND, Department of Nutrition, UMass Amherst

Community nutrition and aging professionals consider that accessibility, affordability and social support are essential for healthy eating in older adults (OA), and food stores and congregate meal sites (CMS) are central sites to support OA nutrition. While this perspective is valuable, communities would also benefit from learning if OA consumers themselves hold similar priorities. In the current study, we investigated how OA in an urban Massachusetts community perceived their food environment and identified important enablers and behavioral settings that facilitate fruit and vegetable (F/V) consumption. Interviewer-administered surveys were conducted among 49 English-speaking adults aged 60 and above in Springfield, MA at senior centers, senior housing and CMS. The majority of the participants rated their food environment as easy to access (85.7%), having good or excellent selection of (85.4%), or easy to use their primary transportation to access (89.8%) F/V. However, over 20% of participants indicated they never or rarely received social support for F/V intake or rated the perceived cost of F/V to be expensive. Accessibility and affordability were rated the most important to facilitate F/V consumption followed by transportation. Among the 15 behavioral settings studied, supermarkets were the most highly rated for supporting F/V consumption, followed by congregate meal sites, senior centers and farmer’s markets. To promote F/V intake in urban older adults, communities should emphasize accessibility, affordability, and transportation at supermarkets and farmer’s markets, as well as places that are uniquely important to older adults such as CMS and senior centers.

9. Patient perspectives on managing Rheumatoid Arthritis: A qualitative study
Celeste A. Lemay, RN, MPH, Department of Orthopedics and Physical Rehabilitation, University of Massachusetts Medical School, Kathleen M. Mazor EdD, Meyers Primary Care Institute, University of
Massachusetts Medical School, Leslie R. Harrold, MD, MPH, Department of Orthopedics and Physical Rehabilitation, University of Massachusetts Medical School

Objectives: To understand the obstacles that patients living with rheumatoid arthritis (RA) encounter in managing their disease, specifically in acute disease exacerbations or flares.

Methods: Exploratory, descriptive, qualitative design. Convenience sample of people living with RA was recruited to participate in telephone interviews utilizing open-ended questions. Interviews were recorded and transcribed. Data were categorized using content analysis techniques.

Results: Twenty-seven participants completed an interview between March and August of 2015. Mean age was 63 years, 82% were female and 82% were Non-Hispanic White. Patients reported living with RA for an average of 12.4 years; 56% reported that their RA was very well controlled. Participants reported that living with RA was isolating and impacted mental health. The most common participant RA goal was to improve/maintain function. Barriers to RA/Flare management included: a lack of knowledge regarding managing flares and perceived risk of RA medications; inadequate communication between patient and provider in relation to flare management and; difficulty in navigating insurance, coverage gaps, and cost of medication. Facilitators to RA/Flare management included: the use of non-medication approaches to disease management and the willingness to initiate conversation about changing medications and; a positive relationship with provider, including trust and access to the provider and positive communication.

Conclusions: Findings from this study confirm the need for an intervention to improve the exchange of information between patients living with RA and their doctors. Next steps include the development of a tool that will assist patients living with RA to discuss disease and flare management with providers.

10. Co-Creating Culturally Tailored Cooking and Nutrition Classes for Local Haitians
Melanie Baskind Harvard Medical School, Marie-Louise Jean Baptiste, MD - Harvard Medical School; Department of Medicine, Cambridge Health Alliance, Arlene Katz, EdD - Department of Global Health and Social Medicine, Harvard Medical School, Noor Beckwith - Harvard Medical School; Department of Medicine, Cambridge Health Alliance, Shalini Chalana, MS, MEd, RD, LDN, CDE - Department of Medicine, Cambridge Health Alliance, David Hibbert, Anand Habib - Harvard Medical School

Background:
At the Cambridge Health Alliance, Haitians make up 5% of the primary care panel, but 11% of the diabetes registry. Building on over ten years of physician Marie-Louise Jean-Baptiste’s group diabetes care meetings, we conducted a pilot study of culturally tailored cooking and nutrition classes. We sought to determine feasibility and biosocial impact, and to further understand the barriers Haitians face in maintaining good health in the US.

Methods:
A community-based, collaboratively designed intervention was guided by iterative methodology. Six three-hour classes focused on different nutritional themes. Twelve participants cooked modified traditional Haitian dishes. Clinical data was recorded and participants took part in interactive educational sessions. At-home interviews were conducted in addition to pre- and post-intervention surveys.

Results:
Patients report carrying over what they learned - cooking with more vegetables, less oil, and less salt – and knowledge transfer between community members was evident in a number of forms. Healthy modifications to traditional meals taste and look different, and peer resistance is an ongoing challenge. Financial stress, a different lifestyle in America, and poor access to fresh and tasty food were all cited as barriers to health.

Conclusions:
The classes were feasible and deemed a “sous riches” (fountain of richness). Qualitative data indicate potential for this intervention to improve health in this Haitian community. We continue to work collaboratively to address the identified barriers, maximize effectiveness, and determine whether this intervention can result in statistically significant clinical change.
11. Developing a Food Literacy Program for Adolescents: “Just Say It Like It Is!”
Catherine A. Wickham, MS, RDN, CDN, Elena T. Carbone, DrPH, RD, LDN, University of Massachusetts Amherst, School of Public Health and Health Sciences, Department of NutritionFuelUp&Go! is an innovative food literacy program designed for and influenced by low-income adolescents in Springfield, MA. The program includes six in-person sessions and technology (fitness trackers, text messages, and website) to engage participants. Prior to implementation, adolescents were invited to join a Kid Council (KC) and provide input on program content and materials including types of music and incentives that are motivational, use of text messages, and activities to be used during the program. In addition to the KC, an evaluation survey was administered to those who completed the pilot program. Input from four KC members and eight pilot participants was used to inform the final development of FuelUp&Go! KC members wanted clear simple words and as one participant said, and others echoed: “Just say it like it is!” Terms such as exercise were preferred over physical activity and sugar-added beverage was recommended for sugar-sweetened beverage. Participants indicated emojis were appropriate to replace words in text messages; however, using abbreviations such as “u” was not an acceptable replacement for “you.” Opinions on music varied and everything from Gospel to Hip Hop and even Country was considered motivational. When asked how they liked various parts of the pilot, participants indicated they liked wearing the fitness tracker, getting weekly nutrition/exercise tips, guessing a food clue, learning about topics including nutrition labels, exercise and water, and sugar-added beverages. Participants in the KC and pilot were instrumental in helping refine the components and delivery method of this innovative food literacy program.

12. LUMBA: A Mother-Daughter Sexual Communication Intervention to Decrease HIV and STI Risk Among African American Pre-adolescent Girls
Teri Aronowitz, PhD, APRN, FNP-BC, Ijeoma Julie Ogunlade, PhD-c, APRN, FNP-BC, Chizoba Nwosu, MSN, APRN, ANP-BC, PhD Student, Philimon Gona, MPH, PhD, UMass Boston, College of Nursing & Health Sciences
Aims: African American (AA) girls 13-19 years of age comprised nearly 3 out of 4 new cases of HIV in 2009. The goal of this pilot was to deliver a theoretically-driven intervention to test the feasibility for recruitment and retention of mother-daughter dyads.
Methods: Twenty mother-daughter dyads were recruited from a community health center between February-April 2014. AA females interventionists provided a 6-hour intervention with mother and daughter separate groups for 3 hours, then combined the remaining time. Our goal was to assess the congruency of the mother-daughter pair composite scores at each phase. We computed a percent difference using the mother’s score as the referent. We hypothesized that if the intervention was efficacious, the gap in composite scores between each dyad would get narrower. We recognized that we had insufficient statistical power to conduct formal inferential testing to assess the efficacy of the intervention. We compared the differences between mothers and daughters using a paired t-test and used 0.10 as criteria for significance.
Results: The dyad difference became narrower in all the nine domains following the intervention. The percent differences pre-intervention ranged from 34.6% (reducing to 24.9%) for sexual knowledge domain; 23.0% (reducing to 15%) for Confidence to Talk domain, and 17.5% (reducing to 10.9%) for Future Time Perspective.
Conclusions: Since all domains in this small pilot appear to signal that as a result of the intervention the disparity narrows between mother and daughter, these findings need to be confirmed and reproduced using a larger number of dyads.

13. Healthy Homes for Older Adults: Multi-trigger, Multi-component Environmental Interventions for Asthma
David A. Turcotte, Research Professor/Principal Investigator, University of Massachusetts Lowell; Susan Woskie, Professor/Co-Principal Investigator, University of Massachusetts Lowell; Rebecca Gore, Statistical Application Programmer, University of Massachusetts Lowell; Emily Chaves, Assistant Program Manager, University of Massachusetts Lowell; Kelechi Adejumo, Doctoral Student, University of Massachusetts Lowell; Rosemary Rungu, Graduate Student, University of Massachusetts Lowell.
Housing is a significant public health issue and improvements in housing conditions have potential for primary prevention. Older adults spend up to 90% of their time in the home where many allergens are found. We propose to evaluate the hypothesis that multi-trigger, multicomponent healthy homes interventions improve the respiratory health and reduce home asthma triggers for older adults. While sufficient evidence exist that interventions are effective in improving health of asthmatic children, the CDC Task Force on Community Preventive Services stated that insufficient evidence exist for the effectiveness of healthy homes interventions with adults.

We aim to evaluate the effectiveness of conducting interventions in the homes of 90 diverse, low-income older adults diagnosed with asthma and/or COPD, residing in public and private subsidized housing. The two largest populations include Hispanics (50%) and Asians (20%). Health assessment includes collecting data on respiratory health outcomes before and after healthy homes intervention (questionnaires on symptoms, quality of life, medication use, doctor/ER/hospital visits, and exhaled nitric oxide (eNO) a measure of lung inflammation). Environmental assessment includes evaluation of asthma trigger activities (ATAs) and exposures before and after healthy homes intervention (questionnaire, home survey, measurement of nitrogen dioxide (NO2), dust samples for rodent and cockroach allergens, biomarker for cigarette smoke exposure (urinary cotinine). Interventions include education on asthma and environmental triggers of asthma; remediation including mattress/pillow covers, vacuums with HEPA filters and green cleaning supplies and changes in home as needed: commercial cleaning, integrated pest management, gas stove replacement, mold remediation, installation/repair of exhaust fans.

14. **The Worcester Alliance Against Sexual Exploitation (WAASE) “It takes a Community”: Changing perceptions and attitudes through and innovative community-based, survivor-driven program to reduce demand for prostitution and support victims of sexual exploitation**
Marianne Sarkis, Ph.D. Clark University, Athena Haddon, BS Spectrum Health Systems, Everyday Miracles, Nicole Bell Spectrum Health Systems, Karen Riley-McNary, YWCA of Central Mass, Amarely Gutierrez Oliver, MS, YWCA of Central Mass, Tracy Kennedy, Esq. City of Worcester Division of Public Health

In 2013, Worcester City Council tasked the Division of Public Health to identify long-term solutions to eliminate street-level prostitution which was partly blamed for the increasing violence in Main South. DPH convened a task force of survivors, organizations, researchers, and community members to devise collaborative research and intervention strategies to understand the drivers and determinants of prostitution in Worcester, best ways to reduce demand, and how to expand social support and treatment services. For one year, survivors, community members, organizations, and students from Clark University conducted gap analyses of services, in-depth interviews, and referral network analysis. Three main results were found: 1) Significant gaps existed in the services and referrals available to women, 2) a system-wide lack of coordination resulted in inefficient and inappropriate referrals, 3) a significant 10:1 gender imbalance in arrests furthered women’s victimization and inability to exit the streets. A small grant was secured for an evidence-based training for front-line staff to identify and respond to victims of sexual exploitation/trafficking. In 2014, the task force formalized as the Worcester Alliance Against Sexual Exploitation (WAASE) to support the emerging strong community-wide collaboration between the Worcester Police Department, survivors, outreach workers, DPH, community-organizations, and researchers. A holistic intervention model was implemented that addressed the legal, social, mental health, and addiction elements of sexual exploitation. An ongoing monitoring and evaluation of outreach and prostitution-related arrests were used to inform policies and ensure accountability of the police department and other agencies in supporting women and providing them with the needed services.

15. **Status and Potential of Community-Engaged Research to Investigate Physical Activity Interventions for Children with Autism Spectrum Disorder in Chinese-American Communities**
Qun Le, Department of Exercise and Health Sciences, University of Massachusetts-Boston, Weiyang Ding, Department of Exercise and Health Sciences, University of Massachusetts-Boston, Richard K. Fleming, PhD, Department of Exercise and Health Sciences, University of Massachusetts-Boston
Children with Autism Spectrum Disorder (ASD) engage in less physical activity (PA), and in one estimate (Curtin et al., 2010) were 1.3 times more likely to be obese than their typically developing (TD) peers. Barriers to PA in children with ASD exist at the individual, family-peer and community levels of the socio-ecological model. Research on multilevel adaptations to PA programs has been promising. With adapted coaching, adolescents with ASD have achieved fitness gains equal to those seen in TD children, and have performed high levels of moderate-intensity PA in community settings. Social skills development has also been noted. Community-engaged research is well suited to identifying barriers to PA and designing programs and lifestyle approaches to health. It may be particularly useful for research with children with ASD and their families from culturally diverse communities. Scant research has been conducted on PA in ASD, but it is almost non-existent among Chinese-American children/families, for whom familial and cultural perspectives on ASD, modes of exercise and health, and other factors may diverge from the typical American norm. This poster will: (1) review research on multi-level determinants of PA and exercise, and on programs for children with ASD in general; (2) review research on community-engaged approaches for addressing PA and related health challenges in ASD; (3) describe Chinese-American cultural variables that may influence participation in PA in families with children with ASD; and (4) propose ideas for new community-engaged research and sustainable partnerships that would address these challenges among Chinese-American children and families.

16. Knowledge and Attitudes towards HIV, HBV, and HCV Infections among Health Care Works in Malawi
Haeok Lee, RN, PhD, FAAN, Professor, Department of Nursing, University of Massachusetts Boston, MA, USA, Adjunct Professor, College of Nursing, Daeyang University, Lilongwe, Malawi, Jasinha T Mtengezo, RN/M, MPD, PhD program student, Department of Nursing, University of Massachusetts Boston, MA, USA, Former Dean, College of Nursing, Daeyang University, Lilongwe, Malawi, Susie Kim, RN, DNS, FAAN, Former Principle & Professor, Daeyang Luck College of Nursing, Lilongwe, Malawi, Rosanna DeMarco PhD, RN, PHCNS-BC, APHN-BC, ACRN, FAAN, Professor and Department Chair, Nursing Department, University of Massachusetts Boston, Boston, Massachusetts, U.S.A., Teri Aronowitz, RN, PhD, Assistant Professor, Nursing Department, University of Massachusetts Boston, Boston, Massachusetts, U.S.A., Ling Shi, PhD, Assistant Professor, Nursing Department, University of Massachusetts Boston, Boston, Massachusetts, U.S.A.

Background and Purpose: The highest prevalence of HIV infection occurs in sub-Saharan Africa and HBV and HCV prevalence are second highest in sub-Saharan Africa including Malawi. Health care workers (HCWs) play an important role in the prevention of, response to, and management of these infectious diseases. There is, however, no published research about the level of knowledge and attitudes toward HIV, HBV, and HCV infection among Malawian HCWs. The purpose of this study was to examine and determine the knowledge of and attitudes toward HIV, HBV, and HCV among a targeted population of Malawian HCWs.

Methods: A community based participatory action research project was designed to provide HIV, HBV, and HCV screening and HBV vaccination programs along with a health survey of HCWs. The project was a collaborative effort between nursing faculties at UMass Boston, U.S. and Deayang College of Nursing, Malawi as well as the Malawian stakeholders, - health care workers and nursing students.

Findings: Of 194 of Malawian HCWs surveyed, 41% were support staff, 37% were nursing students, and 22% were health care professionals. Most health care professionals and support staff provided correct answers to the questions related to knowledge of HIV infection, however, the majority did not provide correct answers about knowledge of HBV and HCV infection. The mean scores measuring knowledge and attitudes toward these diseases were higher for health care professional than support staff.

Conclusions: The findings of the research project can be used to develop interventions addressing low HBV and HCV-related knowledge and attitudes as well as a strategy to promote HBV vaccination among HCWs.

17. Medication Adherence, Health Literacy and Cultural Beliefs (RxHL) Study
Dina Gavrilyuk, Caring Health Center, Molly Totman, MPH, Caring Health Center, Cristina Huebner, Torres, MA, Caring Health Center, Sabina Dhakal, MPH, Caring Health Center, Josephine Korchmaros,
PhD, Southwest Institute for Research on Women, University of Arizona, Susan J. Shaw, PhD, School of Anthropology, University of Arizona

Medication adherence, as well as health literacy (the ability to understand and act upon health information) are important aspects of chronic disease management. However, many diverse, low income patients at a medium-sized community health center in Western MA face barriers to medication adherence and health literacy.

The RxHL study examines various barriers among five ethnic groups with chronic diseases at a community health center. Cross-sectional surveys of 500 patients assess medication adherence, medication beliefs, health literacy, and experiences with cost control measures. Manual pill counts assess medication adherence over 3 months. Ethnographic activities will be completed with a subsample (n>50). In depth interviews explore patients’ barriers to adherence, gaps in insurance coverage, and medication beliefs. Home visits directly observe medication management practices at home, and participants’ experiences at the local pharmacy. Chronic disease diaries provide qualitative assessment of health literacy in action, as participants reflect on and record facilitators and barriers to adherence.

To date, 329 participants have been surveyed (28% Hispanic, 28% Vietnamese immigrant, 19% African American, 15% Russian-speaking immigrant, and 10% white). Preliminary mixed method findings on health literacy, medication adherence, and cultural health beliefs will be presented.

Community health center continue to encounter challenges in addressing the complex barriers that low-income, diverse patients face while managing chronic conditions. Findings from this research will help identify the barriers impacting medication adherence and contribute to developing tailored, culturally-appropriate interventions.

18. The Path to Prevention: Engaging Communities to Reduce Cardiometabolic Risk in American Indian Women with Prior Gestational Diabetes

Emily J. Jones, PhD, RNC-OB, Assistant Professor, College of Nursing and Health Sciences, University of Massachusetts Boston, J. Cedric Woods, PhD, Director of the Institute for New England Native American Studies, University of Massachusetts Boston, Cheryl Frye-Cromwell, Tribal Council/Government Health Liaison, Mashpee Wampanoag Tribe

American Indians (AIs) experience type 2 diabetes (T2D) and cardiovascular disease (CVD) at twice the rate of the U.S. general population, and disparities in cardiometabolic morbidity and mortality are increasing in this population. Gestational diabetes mellitus (GDM) is considered a major risk factor for T2D and CVD; yet, women can prevent T2D by reducing weight and increasing physical activity. Culturally relevant strategies are needed to effectively translate T2D and CVD prevention in AI communities. Working with community partners in the Mashpee Wampanoag Tribe of Massachusetts and the Chickasaw Nation of Oklahoma, the specific aims of our ongoing project are to: 1) examine AI women’s knowledge and perceptions related to T2D and CVD prevention following a diagnosis of GDM; 2) develop a tailored intervention, informed by relevant individual, interpersonal, and sociocultural influences on postpartum lifestyle behaviors; and 3) test the intervention’s feasibility and acceptability in order to understand the best approach to prevent T2D and CVD in AI women with previous GDM. Using a mixed methods design in this 3-phased project, we are adapting a Diabetes Prevention Program-based lifestyle intervention for AI women with previous GDM, informed by focus group, individual interview, and survey data. In agreement with findings from our team’s prior phase one work in the Chickasaw Nation, preliminary findings from phase one in the Mashpee Wampanoag Tribe support the need for a technology enhanced, home-based intervention that is tailored to address family-based changes around healthy eating and physical activity.
19. Rural Elder Care Coordination on Cape Cod: Embarking on a Community-Based Approach to Close the Gaps
Kazmira Nedeau, Outer Cape Health Services, Andy Lowe, Director of Program Management Resources
Outer Cape Health Services

One quarter of the population of Cape Cod is over age 65, and in the eight outermost towns on the peninsula of Cape Cod, known as the Lower and Outer Cape, the challenges of caring for an older population are compounded by the effects of rural isolation. As many residents have chosen to “age in place” with little family or social support, medical and behavioral health needs often go unaddressed due to the lack of access to needed healthcare and supporting services that plagues underserved rural areas. Outer Cape Health Services (OCHS), a federally-qualified community health center and the primary medical and behavioral health provider in the area, has established a home visit program to reach isolated patients who may otherwise be denied access to these services. This program is lead by the Care Coordination team, which collaborates with local Councils on Aging, the Visiting Nurses Association, EMS, and other community resources to identify and engage these complex, high-acuity patients and provide wrap-around services. However, gaps remain in communication among agencies regarding existing and potential cases. Additionally, little data exist on the health challenges faced by this underserved population, and how care coordination can better address medical and psychosocial needs. To address these gaps, a cross-departmental team at OCHS has begun a community-based research project with the goal of developing a network of consumers, providers and agencies to develop research questions and collaborate on interventions. The team is in the process of identifying key stakeholders and developing community-building strategies.

20. Added sugar intake in a dietary trial among participants with metabolic syndrome
Lijuan Zhang, Christine May, Yunsheng Ma, UMass Medical School

Objective: We examined intakes of added sugars (AS) among participants with metabolic syndrome enrolled in a one-year dietary intervention in central Massachusetts.
Methods: A dietary intervention trial was conducted among 240 participants with metabolic syndrome, in which—participants were randomized at baseline to either the American Heart Association (AHA) diet or a high fiber diet. Three unannounced 24-hour recalls collected both at baseline and after the one-year intervention. AS consumption patterns were tested by using linear mixed models.
Results: There was no significant difference for AS consumption at baseline and one-year between an AHA diet and high fiber diet groups. After the one-year dietary intervention, the intake of AS was decreased from 59.08±2.62 g/d to 39.89±2.17 g/d. The intake of AS as a percentage of total energy was also decreased from 11.68±0.39% to 9.52±0.38% (p<0.001). The proportion of participants who met the 2016 USDA guideline and consumed less than 10% of their total energy from AS was increased from 44.7% to 60.33%. At-home lunch, dinner and snack intake of AS were also decreased (p<0.05). Nonalcoholic beverages contributed 10.50% of the primary food sources and decreased to 4.51%.
Conclusion: Although the consumption of AS in participants was decreased after a one-year dietary intervention, AS intake among about 40% of participants still exceeded recommended limits.
Keywords: Added sugar, Metabolic syndrome, Sugar recommendations.

21. Improving African immigrants’ participation in disease screenings and clinical trials: implications for positive health outcomes
Dr. Thidi Tshiguvho, Ph.D. Independent Researcher, Worcester, MA

Health disparities based on race and ethnicity, have been well-documented. In Worcester City, Massachusetts, minorities experience higher prevalence of chronic diseases than other populations (Worcester Health Assessment Report 2015). There are many factors behind health disparities, including poor access to health care, behavioral risk factors, family history, and social determinants of (CDC 2008). One of the challenges to addressing these disparities is the low participation by minorities in clinical trials and disease screenings. To overcome this challenge, National Institute of Health (1993) mandates health research investigators to improve recruitment of minorities for clinical trials. Based on literature, some of the factors responsible for the low participation levels of people of African ancestry in medical research studies include their distrust of the medical/scientific community, poor access to primary medical care, the
failure of researchers to recruit minorities actively, lack of knowledge about clinical trials, and language and cultural barriers (Lynnae et al. 2006).

The purpose of this poster is to identify potential collaborators for a study that will identify potential barriers and facilitators to African immigrant participation in diseases screening and clinical trials. Physicians and other professionals involved in clinical trials in the Worcester area and other Massachusetts location would be ideal. Dr. Tshiguvho is a human biologist whose research focuses on the interplay of biology and culture as it relates to human health and general well-being. She is currently an independent researcher. She has taught at Worcester State University and Worcester Polytech Institute.

22. Socio-cultural and linguistic adaptation of CDC’s CHANGE Action Guide to conduct a Community Health Assessment in a low-income community in the Dominican Republic: A multi-disciplinary and mixed methods approach

Schockling, Chloe, Clemson University Health Science, Brown, Katherine, Clemson University Biological Sciences, Fuentes, Michelle, Clemson University Language and International, Arelis Moore de Peralta, MD, MPH, PHD; Assistant Professor Department of Youth, Family and Community Studies, Clemson University

Background. Third world communities like Las Malvinas, located in the Dominican Republic (DR), often face public health challenges. Instituting healthy communities requires collaborative public health services. The US has used evidence-based initiatives including the CDC’s CHANGE tool to address community health. There is a need to adopt these initiatives to other contexts. Clemson University (CU) students have partnered with Dominican University (UNIBE) and the Las Malvinas community to improve the community’s health and well-being. Methods. The team’s ACTION steps include: assembling a community team and strategy, reviewing the CHANGE sectors, and gathering the data to use in the CHANGE tool. The Community Health Improvement Plan (CHIP) will be developed from that data. After reviewing reports on Las Malvinas and site visits alongside public health theory, students modified CHANGE data tools both culturally and linguistically. Results. Five public health priorities for Las Malvinas were identified: sanitation, education, unwanted pregnancies, vaccine-preventable diseases, and chronic diseases. CU students will travel to Las Malvinas and collect data via focus groups, interviews, and GIS household survey, created by CU students. Discussion. Adapting and translating evidence-based practices across cultures poses opportunities and challenges. CU research team designed this project by relying on expertise and collaboration with a local university and neighborhood organization. Challenges included: (a) working from abroad, (b) language barriers, (c) binational IRB approval, (d) adapting CHANGE tool, and (e) limited community organizations. Despite these challenges, this project showed the value of cross-cultural collaboration and use of public health assessment tools to reach communities worldwide.

23. Addressing Cardiometabolic Health Disparities among Asian Americans

Libin Zhang, Research Associate, Institute for Community Inclusion, University of Massachusetts Boston, Ngai Kwan, Research Associate, Institute for Community Inclusion, University of Massachusetts Boston, Ling Shi, Associate Professor of Nursing, University of Massachusetts Boston, Laura L. Hayman, Associate Vice-Provost for Research and Graduate Studies, Professor of Nursing, University of Massachusetts Boston

Background and Objective: Asian- Americans, the fastest growing ethnic group in the U.S, are the most understudied minority group particularly in regard to the prevalence of health disparities. Cardiometabolic disease (CMD) is a leading risk factor for mortality in Asian- Americans. The current study is designed to determine the prevalence of risk factors for CMD among U.S. Chinese, Filipino, Asian Indian, and other Asian/Pacific Islander (API) adults using nationally representative data.

Method: National Health Interview Survey (NHIS) 2001-2012 are pooled to ensure sufficient statistical power to examine disparities in CMD risk among Asian- American subgroups and in comparison with non-Hispanic Whites. Diagnostic tests, bivariate and multivariate analyses are used to compare the CMD risk among Asian- Americans subgroups.

Results and Discussion: Sociodemographic factors, psychosocial depressors, health insurance coverage
and cardiometabolic risk factors are compared across the four Asian Americans subgroups, and compared with non-Hispanic Whites. Results are compared at an aggregate geographic level of the East, the West, the Midwest and the South regions. Understanding the disparities in cardiometabolic risk is essential for health promotion among subgroups of Asian- Americans. NHIS data limitations will be discussed as well as implications for public health practice, policy and future research.

Chioma Nnaji, MPH - Director of Africans for Improved Access Program, Multicultural AIDS Coalition, Siede Slopadoe, BA - Program Coordinator of Africans for Improved Access Program, Multicultural AIDS Coalition, Marianne Sarkis, PhD - Assistant Professor of International Development and Social Change, Clark University, Nicole Baker, Senior Student - Worcester Polytechnic Institute, Nancy Morris, PhD, ANP, Associate Professor, University of Massachusetts Medical School, Graduate School of Nursing
Culture impacts how individuals understand, communicate, and respond to health information. Immigrants to the U.S. come from diverse cultural groups and have varying understandings of health care and the U.S. health care system. The primary aim of this study is to explore cultural interpretations and beliefs of select health concepts and to assess the health literacy of African immigrants in Massachusetts. We are a partnership between UMass Graduate School of Nursing, Africans for Improved Access program at the Multicultural AIDS Coalition and Clark University. Using a CBPR approach has been valuable in the design of the study and in our ability to access and engage African immigrants. We are recruiting 100 African immigrants during cultural events, targeted outreach and gatherings in religious communities to complete a Freelist exercise, 2 health literacy assessment tools, and a general health survey. Results of the Freelist exercise will inform development of an interview guide that will be used with 3 Focus Groups of African immigrants to help us understand the cultural interpretation of frequently used health related words and phrases. We are assessing the feasibility and acceptability of 2 health literacy instruments to determine the appropriateness of using these assessments with an immigrant population. The association of health literacy to accessing primary care will be examined. The focus group and general health survey data will help us gain a better understanding of the primary care health experiences of African immigrants and potential factors that facilitate or hinder their engagement in primary health care.

25. Factors Associated with HPV Vaccinations among Cambodian American Teenagers
Haeok Lee, PhD, RN, FAAN, Professor, Department of Nursing, College of Nursing & Health Sciences University of Massachusetts Boston, Boston, MA, Minjin Kim, MSN, RN, PhD Candidate Department of Nursing, College of Nursing & Health Sciences University of Massachusetts Boston, Boston, MA, Peter Kiang, EdD, Professor Asian American Studies Program, School for Global Inclusion and Social Development, University of Massachusetts Boston, Boston, MA, Ling Shi, PhD, Associate Professor Department of Nursing, College of Nursing & Health Sciences University of Massachusetts Boston, Boston, MA, Kevin Tan, BS, MBac, Development Associate, Cambodian Mutual Assistance Association, Lowell, MA, Phala Chea, EdD, Coordinator of English Language Education Program in Support of English Language Learners & Families/McKinney Vento Education Liaison Lowell Public Schools, Lowell, MA, Sonith Peou, Program Director Metta Health Center of Lowell Community Health Center, Lowell, MA, Dorcas C. Grigg-Saito, MSPH, PT, Chief Executive Officer Lowell Community Health Center, Lowell, MA
Background: Parents have influence over their children’s health and health behavior, however, there is a dearth of literature on knowledge level and the social and cultural factors influencing HPV vaccination behaviors among Cambodian American (CA) parents. As a result, it is difficult to develop an effective public health program.
Methods: 130 CA mothers completed a health survey by face-to-face interviews in either English or Khmer.
Results: Daughters’ vaccination rates are 29% while sons’ are only 16%. Awareness and knowledge of HPV among CA mothers was very low and they thought that their daughters who speak English and were educated in the U.S. had more knowledge about health than they did. Logistic regression analysis showed that Cambodian daughters had significantly higher odds of vaccination if their mothers possessed higher level of English reading ability, and had awareness and knowledge of HPV.
Conclusions: The strikingly low rates of HPV vaccination among CA daughters and sons underscore the
need to improve vaccination. The findings can be used to develop targeted public health HPV vaccination programs for CAs which, in turn, will help to prevent continued cervical cancer disparities.

26. HPV Awareness and Attitudes toward HPV Prevention: Stories by Korean American College Students
Minjin Kim, MSN, RN, PhD Candidate Department of Nursing, College of Nursing & Health Sciences University of Massachusetts Boston, Boston, MA, Haeok Lee, PhD, RN, FAAN, Professor Department of Nursing, College of Nursing & Health Sciences University of Massachusetts Boston, Boston, MA, Peter Kiang, EdD, Professor Asian American Studies Program, School for Global Inclusion and Social Development, University of Massachusetts Boston, Boston, MA

Background: Korean Americans (KAs), the fastest growing Asian subgroup in the United States, are at high-risk of cervical cancer. Despite cervical cancer is preventable through HPV vaccination, the HPV vaccine coverage rate is significantly low in Asian American women. Moreover, there is a paucity of information available of HPV prevention behavior in young KA women.

Aim: To explore KA female college students’ awareness of HPV and cervical cancer and attitudes toward its prevention and to understand social and cultural barriers and facilitators that influence the delivery of HPV prevention

Design: A qualitative descriptive pilot study was conducted on KA female college students.

Methods: A purposive sampling method was used to recruit 20 college students who were identified themselves as KA women and were aged 18-26 years. A total of 5 semi-structured focus groups were performed. Content analysis was conducted guided by the situation-specific theory.

Results: Emergent major themes regarding HPV prevention were: 1) lack of awareness of HPV vaccine and knowledge about HPV and cervical cancer; 2) misperceptions of HPV vaccine; 3) feelings and concerns of receiving HPV vaccine; 3) intentions to receive HPV vaccine; 4) unfamiliarity with the term HPV vaccine or cervical cancer in English; 5) the influence of other people and social media; and 6) HPV education preferences.

Conclusions: The findings suggest the need and importance of developing culturally and linguistically sensitive and appropriate prevention education interventions targeting KA female women who are at high risk of cervical cancer.

27. Community Engagement in Aging Services: Bridging Evidence to Practice
Raeann G LeBlanc, University of Massachusetts Amherst; Roseann Martoccia, Executive Director Franklin County Home Care Corporation; Barbara Bodzin, Director of Client Services at Franklin County Home Care Corporation

This poster will describe community engaged projects between University of Massachusetts Amherst College of Nursing and Franklin County Home Care Corporation, an Area Agency on Aging/Aging Service Access Point in Western Massachusetts. The project in its beginning stages of development seeks to enhance home care services by adding a home visiting advanced practice nurse in the community setting. Based on a house calls model the collaboration will engage advanced practice nurses, community stake holders, agency leaders, primary care health providers and members of the community to enhance home care options for community dwelling older adults. Past collaboration on a medication safety home care intervention and program to address the needs of animal companions among clients transitioning to acute or long-term care will also be highlighted as examples of how evidence is bridged to practice through community engagement.
28. Text Mining From Drug Surveillance Report Narratives
Susmitha Wunnava, Tabassum Kakar, Xiao Qin, Prof. Elke A. Rundensteiner
Computer Science Department Worcester Polytechnic Institute

Analysis of postmarket drug surveillance reports is imperative to ensure drug safety and effectiveness. FAERS (FDA Adverse Event Reporting System) is a surveillance system that monitors Adverse Events (AEs) from drugs and biologic products. The AEs are reported through MedWatch voluntary reports (initiated from patients and healthcare providers) and mandatory reports (initiated from manufacturers). Much of the information in the voluntary AE reports is narratives or unstructured text. The increasing volume of individual reports, estimated at more than one million per year, poses a challenge for the staff to review large volume of narratives for drug clinical review. We are developing a computational approach using Natural Language Processing and UMLS MetaMap biomedical software to parse the narratives, recognize named-entities in the text and extract consumer/patient and related drug indications and adverse drug reaction information. The goal is to develop a text mining tool that automatically extracts relevant information from the report narratives which can be stored in pre-defined data fields in the FAERS database for efficient searching and querying during clinical review process.

Tabassum Kakar, Xiao Qin, Susmitha Wunnava, Prof. Elke Rundensteiner

Adverse Drug Reactions (ADRs) are a major cause of morbidity and mortality in world. There is thus a growing need of methods facilitating the automated detection of drugs-related ADR, especially ADRs that were not known from clinical trials but later arise due to drug-drug interactions. In this research our goal is to discover the severe unknown Adverse Drug Reactions caused by a combination of drugs, also known as Drug-Drug-Interaction. We propose to use Association Rule Mining to find the ADRs caused by using a combination of drugs yet not known to be caused if these drugs were taken individually. For evaluation, we will test out the proposed strategies on real-world medical data extracted from the spontaneous adverse drug reaction reporting system called FAERS. The results mined by our tool will be checked both manually by literature review and then verified by domain experts for interestingness and accuracy.

30. Implementation of an Algorithm for Providers to Utilize when ordering Esophageal Diagnostic Tests (High Resolution Manometry, Catheter-Free Ambulatory pH Monitoring and the Catheter-Based Impedance/pH)
Donna Gladney DNP(c), UMass Memorial Medical Center; Vinetta McCann DNP; UMass Memorial Medical Center

Background: Diagnostic tests are essential tools for disease screening, diagnosis, treatment and monitoring. Improving clinician knowledge and accuracy in selecting and ordering the appropriate diagnostic test(s) can decrease overall costs and improve patient outcomes. Decreasing knowledge gaps can reduce variations in test ordering behavior which can improve diagnosis, treatment and outcomes. The aims of this Quality Improvement Project were: (1) engage providers with an evidence-based decisional support Algorithm to increase knowledge, (2) improve the accuracy of selecting the most appropriate esophageal diagnostic test for their patient’s unique presenting symptoms, and (3) ultimately decrease wait times for the patient undergoing any of these procedures by eliminating missing or inaccurate information.

Method: An evidenced-based Algorithm was developed and distributed to assist the Providers ordering these three esophageal diagnostic tests. The algorithm outlines each specific test with the evidence-based guidelines. Incoming orders were reviewed. A post survey was sent to assess the value and utilization of this algorithm in the selection of the most appropriate diagnostic esophageal test(s).

Results: The algorithm was sent to 52 ordering providers and practices. A post survey was sent after a five month implementation phase. A return of 33 survey responses was achieved. Survey results were
positive with 91% stating they would continue to utilize the support tool when ordering these diagnostic tests. Eighty-eight percent (88%) of the providers stated that the support tool (algorithm) also increased their knowledge of the guidelines related to the merits of these diagnostic tests.

Conclusions: Education and practice guideline implementation along with feedback utilization can aid in decreasing a knowledge gap as well as increasing accuracy of tests ordered thereby decreasing variations in test ordering behavior.

31. Show Back Checklist: A Strategy to Identify Self-Management Medication Problems of Older Adults
Laura Sandford, BS, University of Massachusetts Medical School, Janice B. Foust, PhD, RN, University of Massachusetts Boston, College of Nursing and Health Sciences, Alok Kapoor, MD, MSc, University of Massachusetts Medical School

Purpose
Home healthcare nurses work with older adults to promote self-management of medications. The study purpose was to test the feasibility of a checklist to screen for problems older adults may have managing medications after discharge from a hospital or nursing home facility.

Background
Older adults self-manage their medications after hospital discharge, which can include high-alert drugs associated with Adverse Drug Events (ADEs). Few, if any, studies have described older adults’ cognitive and psychomotor abilities to manage their medications after being discharged home.

Methods
Patients were enrolled if they were aged 65 and older, recently discharged from a hospital, rehabilitation center, or nursing facility, and were prescribed at least one antidiabetic, anticoagulant, or opioid medication. A physician and homecare nurse observed and documented patients’ proficiency managing medications. Based on the experiences in the first 20 visits, the research team created a protocol and a detailed scoring manual for determining proficiency in each domain. The subsequent home visits were conducted using the developed materials to determine inter-rater reliability.

Results
Twenty-nine older adults participated. During the nine visits completed after the protocol and scoring guide were developed, a total of 80 medications were scored with an average of 8 (SD±2.05) medications per patient. The most reliably scored domain was explanation, with an inter-rater reliability Kappa of 0.867 (p<0.0001), while the least was administration, with a Kappa of 0.107 (p=0.3049).

Conclusions & Implication: The Show Back Checklist shows promise to identify domain-specific problems faced by older adults’ managing their medications at home.

32. Rating and visualizing the walkability and bikeability of transportation routes in Nassau County: preparing an evidence base for Complete Streets improvements
Jessica Holzer, PhD, MA, Hofstra University

Background: A Complete Streets law was passed by NY Governor Andrew Cuomo in 2011, and Long Island towns and cities have slowly been adopting Complete Streets plans. However, little is known about the current state of transportation infrastructure for pedestrians and cyclists. The objective of this project is to visualize through photography and video, and rank through validated measures, the current routes most frequented by pedestrians and cyclists. Our goal is to use the findings to help prioritize areas for Complete Streets renovation.

Community Involvement: I am part of an organization, Car-less Long Island, composed of community members who advocate improving the quality of, access to, and safety of transportation alternatives on Long Island. We formed in August 2015 and have created relationships with local bus-riders unions, community advocacy organizations, and others to create a coalition for transportation alternatives on Long Island. We will use community involvement at every stage to interpret the data, facilitate dissemination of the findings, and identify priorities for future research.
Methods: We will use validated measures from Walk Bike Score, AARP, and other researchers to evaluate and document infrastructure.

Results: The program is in the planning phases and we expect to have data by the end of the summer. Anecdotal evidence suggests that our findings will demonstrate issues of safety and accessibility of existing infrastructure on Long Island.

Conclusions: The data we gather will be used to advocate for prioritization of improvements of routes used by citizens for transportation on foot or by bike.

33. Spanning Boundaries: The Engaged Department Initiative
Gloria Meliva, Danielle Lake, Heather Carpenter, Paula Lancaster, Dillon Carr, Todd Yarbrough

The Engaged Department Initiative (EDI) is a place-based cross-institutional collaboration located in the Grand Rapids region. Participating organizations include Michigan Campus Compact (MiCC), Grand Valley State University (GVSU), Grand Rapids Community College (GRCC), and Aquinas College (AQ). This innovative ethnographic case study is focused on evaluating how well the initiative completes their goals of increasing faculty knowledge and skills, expanding students’ community engagement, fostering intra- and inter- collaborations between the three institutions of higher education, and enhancing community partnerships. The hopes of this initiative is to make a real difference in the community and to create engaged citizens. By disseminating this research, we aspire to offer recommendations for people interested in spanning boundaries and working on place-based change in their own region.

34. Facilitating Dissemination and Implementation in Palliative Care Transformation and Advance Care Planning through Community-ACademic-Health Systems (COACH) Partnership
Jennifer Tjia, MD, MSCE, Associate Professor of Quantitative Health Sciences

Clinicians and health systems across the nation are eager to integrate and implement innovative palliative care interventions into their local systems, but face serious challenges in their efforts. Dissemination and implementation science is predicated on the fact that it takes at least 10 years for meaningful evidence-based practice to reach the patient. Effective implementation of evidence-based interventions requires explicit assessment and engagement of sociopolitical and cultural forces affecting the health care delivery environment. Engagement with community and health system ‘connectors’ enhances the probability of successful dissemination and implementation. This project involves a partnership with Elder Services of Worcester Area to develop connections with community-based organizations committed to promoting the well-being of at-risk and serious ill elders. The goal of the COACH Project is to establish a community-engaged process of health system culture change in palliative care, specifically focused on advance care planning.