



**CENTER FOR CLINICAL AND
TRANSLATIONAL SCIENCE**

8th Annual Community Engagement and Research Symposium

Friday, March 22, 2019; 8:15 am – 1:30 pm

Albert Sherman Center

University of Massachusetts Medical School, Worcester, MA

Poster Abstracts

1. Optimizing Learner Accessibility: Adding American Sign Language (ASL) and Text-to-Speech to Online Trainings

Sarah Rulnick, MPH., UMass Medical School, E.K. Shriver Center
John Rochford, MS, UMass Medical School, E.K. Shriver Center
Derek Chaves, BS, UMass Medical School, E.K. Shriver Center
Benjamin Amankwata, MS, UMass Medical School, E.K. Shriver Center
Viet Do, MS, UMass Medical School, E.K. Shriver Center
Mabelys Rodriguez, MS, UMass Medical School, E.K. Shriver Center

The Child and Adolescent Needs and Strengths (CANS) Training Program is located at the Eunice K. Shriver Center at the University of Massachusetts Medical School in Worcester, MA. The CANS Training Program provides training and certification services for the Executive Office of Health and Human Services (EOHHS), MassHealth, Children's Behavioral Health Initiative (CBHI). Massachusetts behavioral health providers are required to be CANS certified in order to see Medicaid insured children and youth under the age of 21. The CANS Training Program has trained and certified over 26,000 behavioral health providers throughout Massachusetts in the use of the Child and Adolescent Needs and Strengths (CANS) tool. The Mass CANS on-line training and certification program is designed for clinicians who provide behavioral health services to Massachusetts children and youth under the age of 21. The abilities, learning styles, and primary language spoken among providers is quite diverse. The CANS Training program, committed to providing content accessible to people of all abilities, and has added American Sign Language (ASL) and Text-to-Speech capabilities throughout the online training. These additions to the CANS accessibility toolbox help clinicians of all abilities get the most out of their online training and certification experience. Users may use American Sign Language (ASL) insets or closed captions while using the training videos. We will discuss the recent addition of ASL interpretation and Text-To-Speech functionality to the web-based training; discuss important considerations when improving accessibility; demonstrate the features and discuss our results.

2. Challenges and Lessons Learned During Recruitment and Enrollment for an Online HPV Prevention Experimental Study.

Minjin Kim, Department of Population and Quantitative Health Sciences, UMass Medical School
Haeok Lee, PhD., RN, FAAN, Department of Population and Quantitative Health Sciences, UMass Medical School
Jeroan J. Allison, MD, MS, Department of Population and Quantitative Health Sciences, UMass Medical School

Background/Issue: The use of online-based research studies has been found to be effective in recruitment and enrollment, especially for young populations. However, when using monetary incentives in online-based research studies, researchers need to be cautious about possible fraudulent activity. Description: The purpose of this article is to describe challenges and lessons learned during online recruitment and enrollment in an online-based HPV prevention experimental study to promote Korean American college students' HPV vaccination behavior. The online experimental study was conducted using the Qualtrics platform. Lessons Learned: The online experiment demonstrated great potential. The eligibility screening survey on the study website was assessed and completed by 225 individuals within a 2-month period. During the eligibility reviewing process, we identified suspicious responses to the eligibility screening survey (e.g., suspicious GeoIP locations, IP addresses, email addresses and names). We contacted suspicious participants via email or phone to confirm their eligibility and identified 42 fraudulent entries and 6 multiple attempts. Implications/recommendations: When fraudulent activity is suspected or detected, researchers need to be aware of what to take action in order to keep the integrity of the study. The findings of this research suggest reviewing each participant's IP address, GeoIP location, email address, phone number and name can help prevent fraudulent activity. These lessons learned encourage researchers to develop a strategy to detect and prevent fraudulent activities as part of their research protocols.

3. Work and health behavior correlates of weight gain among nursing home employees.

Yuan Zhang, PhD; Solomont School of Nursing, Zuckerberg College of Health Sciences,UMass Lowell
Mumtahana Nabi, MS; Solomont School of Nursing, Zuckerberg College of Health Sciences,UMass Lowell
Laura Punnett, ScD, Solomont School of Nursing, Zuckerberg College of Health Sciences,UMass Lowell

Introduction: Overweight and obesity are important health concerns in nursing staff, which are associated with poor physical and mental health outcomes. Nursing home caregivers are at a high risk for weight gain. However, factors associated with weight gain of these employees have not been examined. Methods: Questionnaires were collected from nursing home caregivers in 23 long-term care facilities at baseline (2012-2013) and 2-year follow-up (2014-2015). Weight gain of more than 5lbs and 10lb were calculated from the cohort. Baseline demographics, lifestyles (eating habit, exercise, smoking and sleep), work factors (physical demands, psychological demands, decision latitude, social support, safety climate, schedule control, work-family conflict, violence, work shift, shift hours and weekly work hours), and health factors (musculoskeletal disorders and depression) were examined for their associations with weight gain of more than 5lbs and 10lbs separately. Results: A cohort of 1,237 employees participated at both time points, with 28.9% reporting weight gain of more than 5lbs and 15.8% more than 10lbs at 2-year follow-up. Night and rotating shift work was significantly associated with weight gain of more than 5lbs and borderline associated with weight gain of more than 10lbs. Poor eating habit was significantly associated with weight gain of more than 10lbs. Weight gain of more than 5lbs and 10lbs were both associated with younger age, single marital status, and responsibility for children. Conclusions: Interventions targeting at work schedule remodeling, shift work coping and healthy eating promotion may reduce weight gain and improve overall health of these employees.

4. Self-efficacy and social support are associated with regular participation in leisure-time physical activity among nursing staff.

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Introduction: Leisure-time physical activity (LTPA) is beneficial to physical and mental health. However, the proportion of adults in the U.S. that engages in regular LTPA is far less than desired. Nursing staff work long and irregular shifts, encounter high work stress and suffer poor health outcomes. It is important to engage nursing staff in regular LTPA as a countermeasure to their high occupational stress and poor health outcomes. However, LTPA participation and its associated factors have not been examined among nursing staff. Methods: Surveys were collected from nursing staff at an independent, not-for-profit community hospital in the northeast U.S. Regular LTPA was self-reported, calculated/converted, and defined as engaging in at least 150 minutes per week of moderate-intensity aerobic activity (after converting the duration of vigorous-intensity activity) according to the 2008 Physical Activity Guidelines for Americans. Results: A total of 363 nurses and nursing assistants participated in the study (age 41.7±12.3, female 96.7%), with 59.8% reporting regular LTPA. Multivariate Poisson regression suggested that nursing staff's regular LTPA was associated with higher exercise social support (PR=1.015, P<0.001), higher exercise self-efficacy (PR=1.006, P<0.01) and lower BMI (PR=0.941, p<0.001), after adjustment for covariates. Age, sex, race, job title, job status, and shift work were not associated with regular LTPA. Conclusions: Future workplace- and community-based interventions to promote regular LTPA among nursing staff could consider participatory programs involving nursing staff and their family members, coworkers and managers to improve their exercise social support and self-efficacy.

5. Women-reported barriers and facilitators of adherence to medications for opioid use disorder.

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Elizabeth Evans, PhD, MA, Dept of Health Promotion and Policy, School of Public Health and Health Sciences, UMass Amherst

AIM: A poorly understood challenge is why many women with opioid use disorder do not remain engaged with medications for opioid use disorder (MOUD; e.g., methadone, buprenorphine, naltrexone) long enough to achieve sustained benefits. We aimed to identify barriers and facilitators that impact women's MOUD adherence. METHODS: We conducted in-person interviews and focus groups with 20 women who had received MOUD for at least 90 days in Springfield and Holyoke, Massachusetts in 2018. Using grounded theory, we inductively identified major themes and selected illustrative quotations. FINDINGS: Gender-specific barriers to treatment are shaped by MOUD-related stigma stemming from multiple sources: (1) the internalization of messaging from social networks that equate pharmacotherapies to "substituting one drug for another;" (2) pharmacotherapy side effects related to weight gain, tooth decay, and interactions with anti-anxiety

medications; (3) negative consequences from being discovered as a MOUD client, including loss of custody, children being bullied in school, workplace-related stigma, and being associated with sex-work. Women identified the following key facilitators of MOUD adherence: avoiding pain, sickness, and death; feeling "safe" in treatment settings, particularly for those with histories of interpersonal and sexual trauma; developing positive routines that replace opioid seeking behaviors and build self-esteem; maintaining healthy boundaries with friends, family, and partners who actively use opioids; and offering "relatable" peer support to other women as a source of recovery "hope." CONCLUSION: Women encounter gendered stigma and support from individual, interpersonal, and community level sources that if addressed collectively, can inform improvements to MOUD engagement and adherence efforts.

6. A Review of Cutaneous Adverse Reactions Induced by Immune Checkpoint Inhibitors.

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Mehdi Rashighi MD; Department of Dermatology, UMass Medical School

Background: Immune checkpoint inhibitors have revolutionized the treatment of certain cancers. Despite promising results, these novel therapies are commonly associated with immune-related adverse effects. Our objective was to review case reports of cutaneous adverse reactions attributed to checkpoint inhibitors. Methods: The English-language literature from the PubMed database was reviewed through August 2018. The search strategy included "Drug Eruptions" as Medical Subject Headings (MeSH) and the name of any of the 6 Food and Drug Administration-approved checkpoint inhibitors (nivolumab, pembrolizumab, ipilimumab, durvalumab, atezolizumab, or avelumab). Results: In 99 unique reported cases of cutaneous adverse events attributed to checkpoint inhibitors, 67% were male and the median age was 64 years (range 27-87). The inciting drugs included nivolumab (n=35), pembrolizumab (n=33), ipilimumab (n=22), durvalumab (n=3), and atezolizumab (n=1). Five cases were treated with a combination of nivolumab and ipilimumab. The majority of cancers treated were metastatic melanoma (63%) and metastatic lung carcinoma (22%). The most frequent cutaneous adverse events were psoriasiform dermatitis (25%), bullous dermatosis (22%), granulomatous dermatitis (17%), exanthematous drug rash (9%) and lichenoid or interface dermatitis (6%). Stevens-Johnson syndrome and toxic epidermal necrolysis were observed in 6 patients. Due to severity of the skin reaction, a checkpoint inhibitor was discontinued in 38 cases. Conclusions: Although immune checkpoint inhibitors have dramatically transformed treatment of patients with cancer, the response to treatment is not infrequently associated with immune adverse events, including inflammatory skin reactions. It is critical that dermatologists increase their awareness to more effectively counsel patients.

7. Religiosity and Patient Engagement in their Healthcare among Hospital Survivors of an Acute Coronary Syndrome.

Abu H.O., MD, MPH [1] Kiefe C.I., PhD,MD [1], McManus D.D., MD, MSc [2], Goldberg R.J., PhD [1]
Affiliations: [1] Department of Population and Quantitative Health Sciences, UMass Medical School
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Background: Optimum management after an Acute Coronary Syndrome (ACS) requires considerable patient engagement/activation. Religious practices permeate people's lives and may influence engagement in their healthcare. Little is known about the relationship between religiosity and patient activation in hospital survivors of an ACS. Methods: We recruited patients hospitalized for an ACS at six medical centers in Central Massachusetts and Georgia (2011-2013). Participants self-reported three measures of religiosity - strength and comfort from religion, making petition prayers, and awareness of intercessory prayers for health. Patient activation was assessed using the 6-item Patient Activation Measure (PAM-6). We categorized participants as either having low (levels 1 and 2) or high (levels 3 and 4) activation in examining the association between religiosity and patient activation while adjusting for sociodemographic, psychosocial, and clinical variables. Results: Patients (n=2,067) were on average, 61 years old, 34% were women, and 81% were non-Hispanic White. Approximately 85% reported deriving strength and comfort from religion, two-thirds prayed for their health, and 89% received intercessions for their health. Overall, 57.5% had low activation. Reports of a great deal (aOR: 2.02; 95% CI: 1.44-2.84), and little/some (aOR: 1.45; 95% CI: 1.07-1.98) strength and comfort from religion were associated with high activation respectively, as was the receipt of intercessions (aOR: 1.48; 95% CI: 1.07-2.05). Praying for one's health was associated with low activation (aOR: 0.78; 95% CI: 0.61-0.99). Conclusion and Clinical Practice Implications: Patient activation was associated with religiosity, suggesting that healthcare providers may use this knowledge to enhance patient engagement in their care.

8. Decreasing Social Isolation in Adults via a Cognitive Wellness Program.

Lisa Yauch-Cadden, MS CCC-SLP, Buzzards Bay Speech Therapy
Kari Star, MS CCC-SLP, Buzzards Bay Speech Therapy
Paula Shiner, Coastline Elderly Services, Inc.

In October 2015, Buzzards Bay Speech Therapy and Coastline Elderly Services, Inc, collaborated to address concerns regarding healthy aging in New Bedford. According to the 2014 Massachusetts Healthy Aging Data Report, New Bedford scored lowest in the state with regard to healthy aging, with 31 health indicators worse than the state average, including depression, mental illness, stroke and Alzheimer's disease. Recognizing that these indicators can lead to social isolation and further exacerbate health concerns, we developed a program focusing on cognitive wellness in order to enhance social engagement. The goal of the program is to provide evidenced based interventions to adults in order to improve social connectedness, sense of well-being, and communicative effectiveness in order to decrease social isolation, depressive symptoms and caregiver burden. The program uses class-based instruction and lively activities to educate and engage participants while practicing tips and techniques to improve thinking, memory, communication and socialization skills. Quantitative and qualitative outcome data collected from 2015-present reveals that classes are effective at decreasing social isolation, encouraging the formation/renewal of friendships and the trying of new things, and improving confidence in communication skills. Additionally, data reflects that the factor most susceptible to change following participation in our classes is a feeling of optimism, born out of camaraderie within the class, gains in self-confidence and self-acceptance, and motivation to improve. Currently we are initiating Participatory Action to enhance community engagement, expand programming, and identify resources that may be available/created in order to improve cognitive wellness and decrease social isolation.

9. Addressing Bias in LGBTQIA+ Undergraduate Medical Education: An Innovative and Community Based Approach to Curriculum Reform.

Austin, John-Marc, BS, UMass Medical School
Allison, Jeroan, MD, MS, UMass Medical School
Foscolos, Anthony, BS, UMass Medical School
Trobaugh, John, MFA, UMass Medical School

Background: Individuals who are LGBTQIA+ or gender nonconforming have specific health needs and face health disparities that are exacerbated by a lack of training and cultural sensitivity among health professionals. This study was initiated by a second year University of Massachusetts School of Medicine student in response to the lack of LGBTQIA+ health content in the first year Doctoring & Clinical Skills (DCS1) course. The DCS1 session on collecting a sexual history was selected as the primary focus for revision. Community-Based Participatory Research, because of its emphasis on joining with a community of interest as full and equal partners in all phases of the research process, served as an ideal model for the novel application to curriculum development to address this gap in training in undergraduate medical education. Methods: A sample of 13 LGBTQIA+ community members from Worcester were recruited to form a curriculum advisory committee. The committee convened for two focus-group style meetings where they reviewed the curriculum and had the opportunity to provide their feedback, which was used to rewrite the session. Additionally, the community members had the opportunity to participate in a storytelling video where they discussed their experiences in healthcare as LGBTQIA+ patients. A pre-test post-test design was used to survey the UMMS SOM students in order to evaluate the new version of the DCS1 session. Results: The percentage of M1 students reporting they had the necessary skills to treat LGBTQIA+ patients increased from pre-session to post-session (26.2% (n=130), 63.2% (n=76), $p < 0.001$). Compared to current M2 students who completed the course last year (n=65), more MS1 students (n=76) rated the overall quality of the DCS1 session as excellent or good (23.1%, 77.6%, $p < 0.0001$). **Conclusion:** CBPR serves as an efficacious model for the creation of curriculum inclusive of LGBTQIA+ health.

10. Perspectives and Perceptions of Urgent and Alert Values in Surgical and Cytopathology: A Survey of Clinical Practitioners and Pathologists.

Anthony Cretara, MD, Pathology Department, Baystate Medical Center
Christopher N. Otis, MD, Pathology Department, Baystate Medical Center

Our goal, as pathologists on the patient care team, was to better understand the treating clinician's attitudes, preferences, and concepts regarding so-called urgent/alert/critical values in anatomic pathology. This does not refer to critical values in the clinical laboratory, such as elevated potassium levels, but rather to diagnoses rendered on biopsies by surgical

pathologists and cytopathologists which may be unexpected or require prompt attention. To facilitate this goal, we developed a web-based survey regarding communication of critical diagnoses and distributed it to 1600 practicing physicians within the Baystate Health system, including attendings, fellows, and residents. This project represents the largest and most comprehensive survey-based investigation of the specific preferences of clinicians in regards to how, when, and to whom critical diagnoses should be communicated. Our survey results identified important areas of disagreement between pathologist and clinician regarding issues of what entities should be considered as critical diagnoses and who is responsible for correlating histologic findings with the larger clinical context. Identifying these discordant points of view within the medical community and fostering interdepartmental agreement on the best practices in communication of critical diagnoses is an important patient-care and safety issue and will minimize the risk of a clinician learning of an unexpected or treatment altering diagnosis by "stumbling across it in the medical record."

11. Perceptions on the Opioid Epidemic: A Qualitative Study.

Rebecca Leach

Brittany Chapman

Ailish Hanly

Stephanie Carreiro

Division of Medical Toxicology Department of Emergency Medicine UMass Medical School

Background: Opioid use disorder (OUD) and resultant opioid overdoses have amplified over the last 20 years, despite efforts to identify best practices for treatment. Little research has focused on the disconnect between individuals with OUD and their healthcare providers. Hypothesis: We hypothesize that discrepancies exist between individuals with OUD and their healthcare providers with respect to perceptions of and experiences with medical care, the opioid antidote naloxone, and current treatment paradigms. Highlighting these discrepancies will inform future healthcare models. Methods: Using electronic surveys and semi-structured interviews, we will collect qualitative data from both individuals with OUD and emergency providers to assess knowledge, attitudes, and perceptions towards OUD, and to identify perceived barriers and facilitators to OUD treatment. A sampling methodology geared toward hidden populations, respondent driven sampling (RDS), will be used to recruit individuals with OUD. The initial participants will be enrolled from the emergency department (seeds) and will be asked to recruit three individuals in their social network from the community (waves). Results: Recruitment to date has focused on individuals with OUD: we have enrolled six seeds. Recruitment of additional waves by the seeds has been a challenge; there has only been one response out of a total of fifteen possible referrals. Community Engagement: We seek to enhance our emergency department-based seed recruitment strategy by expanding into the Worcester community. We are specifically looking to partner with community based-harm reduction agencies and other groups that engage individuals with active or past OUD.

12. Dietary Quality among Cambodian Americans: A Community-Engaged Project.

Michelly Santos, UMass Lowell

Sherman Bigornia, University of New Hampshire

Sovanna Pou, Cambodian Mutual Assistance Association of Lowell

Sabrina E. Noel, UMass Lowell

Cambodian Americans are at greater risk of type 2 diabetes when compared with other Massachusetts residents. The City of Lowell is home to the 2nd largest Cambodian community in the U.S (n=14,470). Mistrust in researchers and government has been noted as a barrier to engaging this high-risk population in health research. Few studies examine overall dietary quality among Cambodian Americans, despite the fact that the U.S. Dietary Guidelines emphasize healthy dietary patterns for overall disease prevention. This poster demonstrates our efforts in engaging the Cambodian community in two studies that center around culture, the food environment, and access to healthy food in the Greater Lowell area. Using community-engaged participatory research methods, we are recruiting 120 participants (60 aged 18-40 y and 60 aged ≥41 y) in collaboration with the Cambodian Mutual Assistance Association (CMAA) and other community partners. To address barriers to participation, we formed an Advisory Board comprising of key community stakeholders, such as the CMAA, which serves as a trusted organization. We developed a short video to highlight academic-community partnerships and to explain the purpose of the two projects and the potential impact for the community. This video, in addition to other approaches, will be part of a comprehensive recruitment strategy. Further, study interviews will be conducted by a trained community health outreach coordinator from the CMAA. This project aims to engage this underserved population in health research with mutual goals of identifying priority areas and strategies to address health needs in the Cambodian community.

13. "Me voy por el camino al norte" - I am taking the path North: a qualitative exploratory study with Ecuadorian Indigenous Migrants.

Germán Chiriboga
Jeroan Allison
David Chiriboga
Population and Quantitative Health Sciences UMass Medical School

Ecuadorians make roughly about 10% of the population of Milford, MA and are an increasing presence in the Brockton, MA community. What is unique about many, if not most of the Ecuadorians living in these communities is that they come from a very specific area in the southern highlands of Ecuador, the Province of Cañar. Many of them identify as indigenous and with this, they bring a very different worldview that includes varied perspectives in social interaction, social and family roles, as well as health perspectives. Many of the members of these growing communities have endured long and potentially traumatic journeys to get to the United States. This study was aimed at developing a qualitative exploratory study in two communities in Massachusetts and one in Ecuador aiming at understanding the lived experience and perspectives of health for Ecuadorian immigrants to Massachusetts who originally come from the region of Cañar in the southern highlands of Ecuador. We inquired into the experience and impact (direct and collateral) of immigration and/or deportation through a series of interviews that included migrants (and future migrants) in Massachusetts and Ecuador as well as other figures who are involved in community work here in Massachusetts. The insight and understanding we gained, will directly aid in the development of specific research and design questions for larger scale studies or interventions that are tailored to populations such as this.

14. Forming a New Community-Academic Coalition to Support School Gardens - The Academic Gardening to Enrich our Students (AGES) Conference.

Martha Assefa, Worcester Food Policy Council, Pat Barnosky, Regional Environmental Council, Michelle Beaulieu, Worcester State University, Amy Borg, UMass Worcester Prevention Research Center at UMass Medical School, Casey Burns, Coalition for a Greater Healthy Worcester, Marguerite Cawley, Worcester County Food Bank, Jennifer De Jordy, Worcester State University, Daina Harvey, College of the Holy Cross, Kelsey Hopkins, Worcester, Division of Public Health, Sue Hunt, College of the Holy Cross, Joanne Jaber Gauvin, Worcester State University, Isabelle Jenkins, College of the Holy Cross, Eliza Lawrence, Regional Environmental Council, Anna Marinescu, Clark University, Mackenzie May, Central Mass Grown, Gina Plata-Nino, Central West Justice Center, Grace Sliwoski, Regional Environmental Council, Adam Saltsman, Worcester State College

Research suggests that there are many benefits of school gardens for students, teachers and community. Not only can they help children eat more fruits and vegetables and be more physically active, they can help to create learning opportunities and increase teacher satisfaction. In Worcester, Massachusetts, a city with high poverty and food insecurity rates, a broad community coalition formed to brainstorm novel implementation models to improve the use and sustainability of school gardens. The group decided to foster new collaborations among higher education, K-12 schools and community organizations. The innovative idea was that higher education could meet their need for real-world application of various curricula, such as education, business, urban agriculture, marketing, horticulture, sustainable development, and engineering, through the implementation of school gardens. The resulting conference called AGES (Academic Gardening to Enrich our Students) united school teachers, professors, administration and community partners. The sessions featured information on: 1) successful models of higher education-K12 school garden partnerships, 2) building school gardening into the curriculum (psychosocial skills, STEM, environmental sciences, project-based learning, nutrition, healthy lifestyles), 3) research evidence on the benefits of school gardens, 4) strategies for building community through gardening, and 5) garden planning and maintenance. US Representative Jim McGovern was the keynote speaker, highlighting the importance of this collaborative work.

15. Case Review: Opioid Related Asystolic Arrest.

Seth Peters, MPH, Ph.D. Candidate in Health Science: Addictology First Faculty of Medicine, Charles University, Prague, Czech Republic Public Health Epidemiologist, Rhode Island Department of Health .

It is well known that opioid use and addiction is an ongoing epidemic in the U.S. A well-known side effect of opioid use is respiratory depression, which can lead to respiratory arrest and cardiac arrest. The CDC reports opioid related fatal overdoses were six times higher in 2017 than in 1999. Narcan, or naloxone, is a medication that can be administered following an opioid overdose to restore respirations. It is available not only for healthcare providers, but also for opioid users, their friends, as well as family members to have on hand. Synthetic opioids may require multiple doses of Narcan to reverse their effects. According to CDC's analysis of Cardiac Arrest Registry to Enhance Survival (CARES) system data, asystole is the arrhythmia with the lowest survival rate (2.3%). We review a case of a 28-year-old female opioid overdose,

she was given Narcan at the scene without change. EMS brought her to an Emergency Department (E.D.) with a cardiac rhythm of asystole and CPR in progress. After lengthy intense efforts, the E.D. physician and staff were able to restore the patient's pulses and respirations. The patient recovered without neurological deficits. The details of this case are useful to identify treatment options and improve outcomes of patients in asystolic arrest after opioid overdose with extended down time. More research is needed to evaluate the potential contributing factors including hypothermia, high-dose Narcan, and continued resuscitation efforts to the positive outcome of this case.

16. Promoting communicative competence among researchers working with LGBTQ research participants.

Jesica Pagano-Therrien, PhD, RN, CPNP Assistant Professor Graduate School of Nursing UMass Medical School
Shauna M. Simpson, MS Research Project Director Population and Quantitative Health Sciences UMass Medical School
German Chiriboga, MPH Program Director Population and Quantitative Health Sciences UMass Medical School
Joanne L. Calista, MS, LICSW Executive Director Center for Health Impact
Kendra Marien Director of Central Massachusetts AHEC Center for Health Impact

The ethical principles of respect and justice oblige the use of culturally sensitive approaches when engaging participants in research, however cultural competence training is lacking for researchers who work with LGBTQ populations. The purpose of this study was to explore how researchers can create a welcoming research environment for LGBTQ research participants in the context of historical distrust of medical research as a barrier to research participation among minority populations. Grounded by a framework of communicative competence, this study explored elements of preferred communication during recruitment and informed consent for research involving LGBTQ participants. Grammatical, sociolinguistic, strategic and discourse competence domains aided exploration of the preferences held by participants in LGBTQ sub-groups, as well as the perceived barriers to research. Thirty-six participants, who self-identified as part of the LGBTQ community and were recruited through our community partner, the Center for Health Impact, took part in either focus groups or individual interviews. Preliminary analysis reveals community engagement and building trust are key, particularly in an academic medical center where a patient's clinical experiences may impact their willingness to become a research participant. Participants offered insight into each competence domain, covering: terminology to promote inclusivity, body language to avoid, reducing stigma by being up front and feedback on crafting a more LGBTQ-friendly basic demography questionnaire. These findings will aid in the refinement of an LGBTQ-focused version of our Simulation-based Community-engaged Research Intervention for Informed Consent Protocol Testing and Training (SCRIIPTT) to build communicative competence among clinical researchers.

17. The Power of Community Partnership: Development of the Distracted Practice Scale.

Lynn K. D'Esmond, PhD, College of Nursing, UMass Dartmouth
Matthew Machado, Senior Nursing Student, UMass Dartmouth
Kelly Shanley, MSN, RN, Southcoast Health System, MA
Paula Moreau, PhD, RN Quinisigamond Community College
Carol Bova, PhD, RN UMass Medical School

Background: Distracted practice has been linked to medical errors which are now classified as the third leading cause of death in the United States. Distracted practice is defined as the diversion of a portion of available cognitive resources that are needed to effectively perform or carry out an activity and has been found to be the result of individuals interacting with the environment and technology in the performance of their jobs. Working Closely with a community partner to develop and test the scale was critical to conducting this multi-disciplinary study. Purpose: To develop a valid and reliable scale to measure a healthcare practitioner's level of distracted practice. Methods/Results: This was a multi-method eight step instrument development study. Qualitative data from a previous study on Distracted Practice was used to generate scale-items (97). Face validity and content validity were conducted with two different expert panels that included nurses, physicians and pharmacists from the community partner. After a series of item reviews the scale was reduced to 25 items resulting in a CVI of 0.88. After pilot testing with the community agency was concluded, the scale was completed by 341 health care providers at the community agency. Full psychometric evaluation is currently in progress. Conclusions: Establishing a strong and consistent working relationship with the community partner was critical to accomplishing this study. A reliable and valid distracted practice scale resulted; which is essential for future testing the effectiveness of interventions to reduce distracted practice and preventing errors in the acute care setting.

18. The All of Us Research Program: Engaging the Community for the Future of Health.

Mara Meyer Epstein, ScD - Department of Medicine and the Meyers Primary Care Institute, UMass Medical School
Kathleen Mazor, EdD - Department of Medicine and the Meyers Primary Care Institute, UMass Medical School
Joann.Wagner, Meyers Primary Care Institute
Peggy Preusse, RN - Reliant Medical Group Department of Research

Candace LeBlanc, RN, BSN, CCRC - Reliant Medical Group Department of Research
Brenda Valenti, BSN - Reliant Medical Group Department of Research

The All of Us Research Program (AoURP), funded by the National Institutes of Health, is an ambitious ten-year effort to enroll over one million participants across the country. The AoURP is a key part of the Precision Medicine Initiative and seeks to build a national cohort collecting self-reported health data, medical record data, biospecimen samples and physical measurements to accelerate precision medicine. Precision Medicine is an emerging approach for healthcare treatment and prevention that takes into account individual variability in genes, environment, and lifestyle for each person. Researchers at the Meyers Primary Care Institute and the University of Massachusetts Medical School have partnered with Reliant Medical Group to enroll over 10,000 participants in 5 years. The Meyers/Reliant team is actively working to engage the local community, educational institutions, and community organizations to increase awareness of the program and encourage participation. Our efforts have focused specifically on populations previously underrepresented in biomedical research, including older adults, racial and ethnic minority group members, and others. We are hoping to grow new relationships and build strong community partnerships to help us achieve our enrollment goals and communicate the great potential of the AoU Research Program to change the future of medical research with a focus on precision medicine.

19. Using Social Media to Recruit Caregivers.

Charlene Neu, VP Client Care, Mature Caregivers PFAC, Co-Chair, Milton Hospital

Social media offers a unique opportunity to provide a narrative of the benefit, opportunity and impact of a career in health care. The poster will reference recruitment and retention campaigns found on Instagram, Linked IN, Facebook and Twitter.

20. Stakeholder Engagement through Participatory Action Research at iSPARC.

Celine Larkin, Ph.D., Dept of Emergency Medicine, UMass Medical School
Amanda Costa, Dept of Psychiatry SPARC, UMass Medical School
Melissa Anderson, Ph.D., Dept of Psychiatry SPARC, UMass Medical School

The Implementation Science & Practice-based Advances Research Center (iSPARC) is a new DMH-funded collaborative effort between the former Systems and Psychosocial Advances Research Center, Quantitative Health Sciences and Boston University's Center for Psychiatric Rehabilitation. With 52 core and affiliate investigators, iSPARC features five interacting programs: Stakeholder Engagement, Public Mental Health and Implementation Research, Technical Assistance and Consultation, Workforce Development, and External Funding. The mission of the Stakeholder Engagement Program is to lead the mental health research community and beyond in working in partnership with individuals with lived mental health experience, their families, and the agencies that serve them. This program intersects with several of iSPARC's activities. It includes three active advisory groups with more than 20 members representing youth, individuals with lived mental health experience, and family members. These advisory groups adopt a participatory action research (PAR) approach and seek to engage community stakeholders at every stage of research, from development through enrollment and dissemination. Starting in 2018, the Stakeholder Program will seek to increase engagement and diversity through several additional initiatives. A new community provider advisory group is currently being developed and the Program is working to assess and assure diversity across all advisory groups. The Program will use a structured assessment tool and continuous quality improvement approach to measure and facilitate participatory action research across all iSPARC's projects. The Program will develop and disseminate products to assist other organizations in initiating and maintaining stakeholder engagement. The proposed poster will summarize these activities and include examples of products created.

21. Feasibility of engaging school nurses in monthly BG uploads and insulin dose adjustments as part of a pediatric diabetes program in an underserved area.

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Low socioeconomic status is an overarching barrier for optimal pediatric diabetes care. We sought to evaluate the collaborative efforts to enhance diabetes care at school between the Baystate Pediatric Diabetes Program and public school nurses of Springfield, second poorest city in MA. We conducted a 2-year prospective feasibility study. Monthly BG uploads were performed by nurses with feedback from the diabetes team. School nurses were asked to implement insulin adjustments and discuss behavioral changes with patients and families. We enrolled 30 students (13 males) from K-12 grades; mean age 12.71 (3.67) yrs., median A1C 9.1% (5.4 to >15%); 7pts. dropped out. The study patients were ethnically diverse with a large Hispanic subgroup; 80% were publicly insured. We established BG uploads for 16 patients from 9

schools and a total of 63 BG reviews were completed. Over a 2-year period, we also provided 3 case-based and 2 hands-on educational sessions on DSM. We observed a trend to A1C decrease/no change during the school year and increase in A1C over the summer in the majority of patients contrary to previously described seasonal variation in A1C. Study revealed a high turnover of school nurses, lack of skills to navigate pumps in school nurses and families and a high prevalence of behavioral and social concerns in our patients. The study pointed to the need to further train school nurses on DSM and diabetes technology and enhance diabetes care support by addressing social and behavioral challenges faced by children with T1DM and their families.

22. Engaging Emergency Department Patients and Clinicians in the creation of a Shared Decision Making Tool Regarding CT Scanning in First Time Kidney Stones.

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Maggie Breslin, Director The Patient Revolution

Background: Every year approximately 2 million patients are seen in US EDs for suspected renal colic, and the majority receive CT scans. The objective of our study was to develop a stakeholder-informed conversation aid to help clinicians use SDM regarding CT scanning in patients with suspected renal colic. **Methods:** Using a published decision aid development framework, and under the direction of a multi-disciplinary Steering Committee, we engaged a diverse set of stakeholders via qualitative methods. EM clinicians, urologists, radiologists, researchers, and emergency department patients participated in focus groups and semi-structured interviews. All groups were recorded, transcribed, and analyzed in an iterative process by a four-person coding team. Emergent themes were identified and used to develop a decision aid which was iteratively refined. **Results:** A total of 8 interviews and 7 focus groups were conducted with 36 stakeholders (including local ED patients) The following three themes emerged: 1. Patient participants reported a desire to be involved in this decision and wanted more information regarding risks and benefits of CT scans. 2. Clinicians were comfortable diagnosing kidney stones without a CT scan, however, some felt that clinical uncertainty was a barrier to SDM. 3. All stakeholders identified strategies to facilitate this conversation such as check-lists and visual aids. **Conclusion:** Using stakeholder input, we developed a communication tool to facilitate an SDM conversation around the use of CT in suspected renal colic. Further testing will assess whether this tool can safely improve patient engagement and decrease low yield CT usage.

23. Development, Current Capacity and Training Priorities of Core Capabilities that Support Engagement in Land Use and Transportation Decision Making: A Survey of US Local Health Departments, 2015-2017.

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Introduction: Increasing active transportation is critical to improving physical activity levels. National public health organizations have called for local health departments (LHDs) to participate in transportation and land use policy decision making processes, but few LHDs report engagement in decision making and instruction on how to engage is lacking.

Methods: A three-round modified Delphi study involving interviews (n=49), a ranking and rating survey (n=46), and a validation survey (n=43) among a multidisciplinary expert panel from public health, transportation, and land use was conducted to define core capabilities to engage in in land use and transportation policy decision making to improve built environment. A random sample of US LHDs serving <500,000 residents across the US (n=209) reported capacity and training priorities for each core capability.

Results: The study resulted in the identification of ten core capabilities that were categorized by required LHD resource level. The core capability that the greatest proportion of US LHDs (32.9%) reported as a major responsibility for one or more staff members/contractors was *participation in community education, engagement, mobilization, and promotion to educate the public and build support for active community environments*. This capability also had the highest reported interest in

training or technical assistance (42.3%). Few LHDs (8.6%) reported *help develop transportation or land use plan or policy (e.g. researching and writing policy, participating in budget development or providing relevant health data)* as a major responsibility. This capability also had one of the lowest reported interest in training or technical assistance (15.5%).

Conclusions: The capabilities presented can help LHDs meaningfully participate in cross-sector collaboration in the face of ongoing resource constraints. The capacity and training priority data provide information to guide development of targeted training and technical assistance mechanisms.

24. Racial/Ethnic differences in dietary intake among low-income children and their parents.

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Background: Dietary intake in the U.S. is not optimal and it may be even less optimal among minorities. Research evaluating racial/ethnic differences in dietary intake is needed to inform effective promotion of healthy eating among ethnic minorities. This study quantified intakes of fruits, vegetables, unhealthy snacks and sugar-sweetened beverages (SSBs) in low-income children and their parents, and evaluated racial/ethnic differences. Methods: Baseline surveys of the Healthy Kids and Families Study conducted in Worcester, MA, were analyzed cross-sectionally. The sample included low-income parent-child dyads. Intake of fruits, vegetables, unhealthy snacks and SSBs were assessed through interviewer-assisted questionnaires. Analyses were done overall and by race/ethnicity. Chi-square analyses tested for racial/ethnic differences. Results: 228 parent-child dyads, including 57% Latino, 25% Whites and 18% Blacks, had complete data. Overall, 15.8% and 18.0% of parents consumed fruits and vegetables >2 times/day. A total of 21.1% and 82.0% consumed unhealthy snacks and SSBs on a daily basis, respectively. None of these intakes differed by race/ethnicity. In children, 28.5% consumed fruits >2 times/day; and 57.9% consumed unhealthy snacks and 77.6% SSBs on a daily basis, respectively. None of these intakes differed by race/ethnicity. Lastly, a greater proportion of White children (26.8%) consumed vegetables >2 times/day than Black (19.1%) and Latino children (10.0%; $p=0.004$). Conclusion: Low-income children and their parents had frequent consumption of unhealthy snacks and SSBs and infrequent consumption of fruits and vegetables. Consumption of vegetables was even poorer among minority children, specifically in Latinos. Interventions that improve dietary intake among low-income racial/ethnic minorities are needed.

25. Collaborative Care for Kids: A Resident Driven School Nurse Education Initiative.

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After Springfield was named the worst city in the county to live with asthma, a group of pediatric residents came together to try to come up with a way to help alleviate the burden asthma has on our patient population. In a brainstorming session with Springfield school nurses, the idea of Collaborative Care for Kids was conceptualized. Through this initiative, residents would teach 5 courses throughout the year about caring for common complaints and urgent situations that could arise in the school setting including asthma management, GI complaints, and other topics specifically requested by the nurses that see our patients on a daily basis. In addition, we are working on opening communication between school nurses and pediatricians so that crucial information such as asthma action plans is easily transferred between pediatric clinics and schools. We were fortunate to receive the American Academy of Pediatrics Community Access to Child Health (CATCH) grant to help fund this project. Our first session focused on asthma and nurses were given a pre-test and a post-test to assess knowledge of common asthma facts. The average pre-test score was 66.1%. Nurses were then educated on asthma physiology and acute and chronic asthma management. The subsequently administered post-test scored an average of 74.5%. Our next teaching session will be held on March 15th and will focus on allergies and anaphylaxis. Once all of our teaching sessions are complete, we plan to conduct full statistical analyses on the effectiveness of our project.

26. Familial Clustering of Ideal Cardiovascular Health in Parent-Offspring Dyads: Analysis of the Framingham Heart Study.

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Laura L. Hayman, PhD, MSN, FAAN; Professor, UMass Boston, College of Nursing and Health Sciences

Background: Familial aggregation of cardiovascular disease (CVD) is well documented. Minimal information is available on familial aggregation of cardiovascular health. Ideal cardiovascular health (iCVH) is defined as simultaneous presence of recommended levels of three health behaviors (physical activity, smoking, healthy diet) and four health factors (body mass index, blood pressure, total cholesterol and blood glucose). Maintenance of healthy lifestyle behaviors through adulthood reduces the risk of incident CVD. Aim: To examine the trend in familial clustering of iCVH metrics at identical mean age of parents and their offspring. Methods: Secondary data analysis of Original and Offspring Cohorts of the Framingham Heart Study (FHS). The parent/offspring exam cycles were selected where mean age of both cohorts was similar. T-tests and chi-square tests estimated iCVH differences between parents and offspring. Results: Total of n=2872 parents and n=3492 offspring from 1,044 families met inclusion criteria. Both cohorts had a balanced number of males and females; female participants were slightly higher than males in both cohorts (parents: 47.4% vs 52.6%, offspring: 48% vs 52%). Few participants in both cohorts (<5%) achieved at least 5 iCVH metrics with none attaining ideal iCVH score. Conclusion: Similarities in parent-offspring iCVH patterns indicate familial aggregation of iCVH in FHS family dyads and point to the need for additional efforts focused on primordial prevention with family as unit of intervention. Implications: Community-based family-heart health promotion programs are one potential mechanism for improving the heart health of all families particularly those from diverse and marginalized populations.

27. Healthy Bodegas: Bringing the Community Together to Eat Healthier.

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Background: Colorectal cancer (CRC) incidence rates have remained stable in the United States (U.S.) the past 30 years, however, there has been a significant increase in CRC incidence among the millennial generation. The association between the Western diet and CRC, and racial and gender disparities in CRC is well-established. Public health and community efforts are needed to address barriers to healthy nutrition in this population. One identified barrier is food access in lower-income communities, sometimes called "food deserts." Local stores, or "bodegas," have potential to increase access to healthy affordable foods and contribute to risk reduction for the development of chronic diseases such as CRC.

Objectives: Assess the effectiveness of the Healthy Bodega Initiative (HBI), designed to increase availability and promotion of healthy foods; engage community participation by mobilizing community-based organizations and local store owners to participate in the initiative; and, facilitate positive dietary changes.

Methods: Guided by the Conceptual Logic Model of community-based participatory research, this study will evaluate the intervention through in-store observations and pre- and post-intervention surveys of participating store owners, in addition to surveys with customers at a subset of stores.

Major findings: This study is in planning phases; no findings are available.

Conclusions and implications: Prospective longitudinal research with long-term follow-up should be conducted to explore the social determinants affecting low-income populations, changes that result after improved access to healthy foods, and long-term disease outcomes.

Keywords: diet, food access, community participatory research, colorectal cancer, young adult, United States, social determinants of health

28. Community Engaged Research Academy at University of Massachusetts Dartmouth: Reflections, Visions, and Plans.

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Mary Hensel, UMass Dartmouth

The Community Engaged Research (CER) Academy at UMass Dartmouth began in 2015 to develop and support dynamic research efforts, in partnerships with community organizations, agencies, and public services, with the goal of seeking external funding to support substantial CER projects. Its primary aim is to engage research-active faculty who are working, specifically, with community partners in the UMass Dartmouth catchment area. Further, the CER Academy actively seeks to build a community of like-minded scholars in interactive, supportive, and didactic processes. The coordinator of the CER Initiative facilitates modules, with activities designed to mentor CER Academy scholars during and after their participation in the structured curriculum of the CER Academy. Beyond the interactive curriculum with a cohort of CER Scholars, ongoing mentorship continues for as long as CER Scholars want/need support to develop durable community partnerships. Plans going forward include 1) working with community-based professionals in UMass Dartmouth catchment area agencies and organizations to participate in the structured CER Academy with their respective CER Scholars; and 2) to incentivize and recruit, and then to educate and engage, undergraduate students to develop skills and experience in community engaged research in an academic CER Student-Scholar Partnership Program. This poster articulates the development, curriculum, work, and plans of the UMass Dartmouth Community Engaged Research Academy, to disseminate our experience and vision, and to invite collaborations with potential community partners and CER colleagues across the UMass System.

29. Researcher Trauma in Dangerous Places: Navigating Peril in Physical and Psychological Milieux.

Robin A. Robinson, PhD, PsyD, Professor of Sociology, UMass Dartmouth
Ariana Markowitz, University College London

Many community-engaged research studies in health and allied health conclude that challenges to individual and public health are mediated by trauma in any of its forms. Researchers who investigate such challenges - e.g., interpersonal violence, sexual abuses and assaults, addictions - may well acquire a traumagenic burden from their research partners, subjects and/or the community milieu in which they conduct their studies, resulting in acute trauma and/or vicarious traumatization (VT). This poster summarizes the content and interactions of a recent workshop on researcher trauma that explored psychodynamics of VT in a translational approach that shows: 1) implications for principal investigators and research staff; 2) education they need about researcher-respondent trauma transmission; and 3) supports that can help to mitigate researcher trauma. We present an interdisciplinary theoretical model to consider how burdens of VT can impact researchers' work, health, and personal lives. How do researchers perceive their work and provisions of care and healing? What are their experiences of the work, and the harm it may promulgate? While VT has been most thoroughly studied amongst psychotherapists who provide individual treatment, a few studies show that VT symptoms and chronicity appear to be quite similar amongst others who work in trauma-saturated environments. Indeed, this workshop advanced our understanding of this and other forms of secondary trauma, and signposted important lessons for the education and practice of researchers engaged, and immersed, in community-engaged health and allied health studies, broadly defined.

30. ENT Education at a Community Hospital.

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Tina Parsons

Early student experiences should promote knowledge, skills and positive attitudes that contribute to successful health-care careers. As a small Otolaryngology (Ear, Nose and Throat) specialty service at Baystate Wing Hospital in Palmer, MA, we regularly receive high school students, medical assistant trainees and first-year UMASS medical students for short sessions intended to introduce our subject area as well as the medical practice environment generally. Given the sporadic and limited time afforded to interact with these students, and their different levels of background, we are developing a scalable training options. While brevity limits the amount of new material for a given session, we immerse the student in that small domain in a manner calibrated to his or her level of training. To optimize student engagement and build confidence, we introduce a few medical terms and have them practice using them during patient encounters. The terminology is supplemented with hands-on, practical introduction to a couple diagnostic instruments. Clear communication between providers, staff, students and patients, is emphasized. We find that students at the various levels respond favorably to this focused, albeit brief, exposure to our part of the medical world. Even in a single session, most students come away with a few solid clinical pearls. Continued experience with these methods should lead to a compendium of core teaching points based on the most successful student experiences, and will potentially enhance otolaryngology clinical knowledge in the general healthcare community.

31. An assessment of current resources to help adolescents quit vaping.

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Background: E-cigarette use, more commonly known as *vaping* to our youth, has been a growing epidemic with adolescents in the United States. The recent advisory from the U.S. Surgeon General emphasizes that we must act now to protect the health of our nation's youth from a lifetime of nicotine addiction. According to a recent 2018 Center for Disease Control MMWR article, more than 3 million high school students (grades 9 – 12) and 570,000 middle school students (grades 6 – 8) in the United States are currently vaping; defined as ≥ 1 e-cigarette in the past 30 days. Researchers from the *Monitoring the Future Survey* (MTS) report current e-cigarette use of a nicotine substance among middle school and high school students increased nationally by 78% from the year 2017 to 2018. This is the largest increase ever recorded for any substance in the 44 years the MTF has tracked adolescent drug use. Data from the 2017 Massachusetts Youth Risk Behavior Survey (MYRBS) reports a prevalence rate for high schoolers who ever used an e-cigarette is 41.1% and 20.1% for high schoolers who have used an e-cigarette in the past 30 days. Additional data from the MYRBS reports the prevalence rate for middle schoolers ever using an e-cigarette at 9.9%. Given this epidemic, we conducted a literature search to identify potential interventions to assist adolescents who vape to quit.

Methods: A review of literature dated 2018 from the PubMed database and materials retrieved in 2018 from professional tobacco cessation organization websites were reviewed. The search included “E-cigarette Cessation” and “Vaping Cessation” as Medical Subject Headings (MeSH) for the PubMed literature review. The following search terms were used to search for professional organization websites: 2018 + vaping cessation + adolescents, vaping cessation, vaping + teens, youth vaping cessation and adolescent vaping cessation. The research questions for this literature and website review were: 1. Does this article or website provide any vaping/e-cigarette cessation tools? 2. Do the authors recommend future research for vaping/e-cigarette cessation? and 3. Do the authors recommend using current tobacco cessation programs to help adolescents quit vaping? Results: The review identified 14 published articles and 13 websites. Among the articles and websites reviewed, only one website was identified as providing a vaping/e-cigarette cessation tool. Future research to provide evidence-based vaping cessation was recommended by 35.7% of the published article authors and 7.7% of the professional website organizations. 23.1% of the websites reviewed recommend using current tobacco cessation programs to quit vaping, while in comparison, only 7.7% of the authors of the published articles made a recommendation to use current cessation tools to help adolescents quit vaping. Conclusion: Based on the literature and website reviews, only one cessation tool was found that specifically targets vaping among adolescents. No other websites and no peer-reviewed published literature presented cessation tools to support teens in their efforts to quit vaping. This presents a significant gap in resources to assist adolescents who are already dependent on nicotine through vaping. Funding Source: Massachusetts Department of Public Health

32. Mixed methods in process evaluation of a Total Worker Health® intervention in public healthcare facilities.

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Background: A Total Worker Health® research center worked with five public healthcare facilities in New England to create Design Teams of front line workers, and management Steering Committees, that develop interventions to improve safety, health and well-being. Methods: To encourage program ownership and sustainability, two staff from each facility were trained by a coach from the research team to facilitate the Design Team meetings. Among the data collection methods, a Qualtrics "coach notes" post-meeting survey was used to record information after each meeting about quality and fidelity of program implementation. Survey domains included protocol adaptations, group dynamics, and quality of team facilitation. For quantitative rating scales, scores from 1 to 4 were computed for each survey domain, using SPSS. Qualitative data (open-ended questions) were analyzed using NVivo; thematic content analysis employed survey domains as main themes. Results: Results are presented for one facility to show the utility of the process data for monitoring success and barriers to the intervention. The coach's scores averaged over the first four months were: group dynamics 3.5 (SD: 0.5), satisfaction with materials 2.7 (SD: 0.8), and quality of facilitation for two co-facilitators 3.3 (SD: 0.8) and 3.5 (SD: 0.5). Adaptations to materials were described for future upgrades of program manual. The open text confirmed that co-facilitators created a safe and welcoming environment during the meetings. Conclusions: A mixed methods approach in the process evaluation of interventions contributes to a better understanding of intervention progress and should facilitate successful program adoption.