potential avenues for dissemination in a sample of bilingual community health workers who provide services to the Latino community in the United States. METHODS/STUDY POPULATION: We piloted the video in a sample of bilingual community health workers who provide services to Latinos (n=31). After watching the video, participants filled out a survey. The survey captured sociodemographic data (e.g. education), their role and experience working with Latinos (e.g. patient navigators), acceptability of the video (e.g. general satisfaction, length of the video, amount of information), and potential dissemination (e.g., dissemination channels, preferred settings to watch the video, and preferred context). Three open ended questions captured information about how the video could be useful for the Latino community, what they liked the most from the video, and suggestions for improvement. Data was entered in SPSS version 25. We used descriptive statistics to analyze the survey, and content analysis to summarize the feedback from the open-ended questions. RESULTS/ANTICIPATED RESULTS: Participants (n = 31) had an average age of 46 years (SD=16.99), all self-identified as Hispanic or Latinos, most were female (90.3%), and worked as patient navigators (29%) or community outreach workers (25.8%). The video's general acceptability was very high. Participants reported high ratings for overall satisfaction, how much they liked the video, enjoyed it, and considered it to be interesting (all means >9.6, range 1-10). Most participants strongly agreed or agreed that the length was adequate (80.7%), that the information presented was very helpful (100%), that the video could be useful for the Latina community (96.8%), and that they would share the video with women at-risk of HBOC (100%). The highest endorsed channels for dissemination were Facebook (90.3) and YouTube (87.1%). The highest endorsed settings were community centers (100%), churches (96.8%), and hospitals (80.6%). Most participants (90.3%) considered that the best context to watch the video would be with relatives, followed by watching with other women at-risk of HBOC (71.0%), friends (71.0%), and lastly by oneself (41.9%) DISCUSSION/SIGNIFICANCE OF IMPACT: This study represents a multidisciplinary approach to intervention development that aims to reduce well-documented knowledge gaps and disparities in the use of GCRA among at-risk Latinas. A culturally targeted video has the potential to reach underserved populations with low literacy and English proficiency and it can be widely disseminated. The video was well received by community health workers who reported high acceptability. These findings are promising given that community health workers could play a key role in the dissemination of the video if it is proven to be efficacious.

#### 3235

# Acceptability of Robotic-Assisted Exercise Coaching in Diverse Youth

Amelia Barwise<sup>1</sup>, Martha Bock<sup>2</sup>, Christine Hughes<sup>2</sup>, Joyce Balls-Berry<sup>2</sup>, Christi Patten<sup>2</sup>, James Levine<sup>3</sup>, Chung-Il<sup>2</sup>, Tabetha Brockman<sup>2</sup>, Miguel Valdez Soto<sup>2</sup> and Young Juhn<sup>2</sup> <sup>1</sup>Mayo Clinic; <sup>2</sup>Mayo Clinic Rochester, MN and <sup>3</sup>Case Western Reserve University

OBJECTIVES/SPECIFIC AIMS: Approximately 80% of adolescents do not meet the current national guidelines of engaging in 60 minutes or more of physical activity daily. Physical activity is widely recognized as being beneficial for healthy growth as well as important for good mental health and fitness. Interventions are needed that promote and encourage physical activity among this population to reduce the risk of obesity and to encourage maintenance of a healthy weight. Since adolescents enjoy digital technologies, robotic-assisted platforms might be a novel, innovative and engaging mechanism to deliver physical activity interventions. The objective of this study was to assess the potential acceptability of robotic-assisted exercise coaching among diverse youth. METHODS/STUDY POPULATION: This was a pilot study that used a cross-sectional survey design. Adolescents ages 12-17 were recruited at 3 community-based sites. We obtained written informed consent from participants' parents and guardians as well as assent from participants. We demonstrated the robotic system human interface (also known as the robotic human trainer) to groups of adolescents. We delivered the exercise coaching in real time via an iPad tablet placed atop a mobile robotic wheel base and controlled remotely by the coach using an iOS device or computer. After the demonstration participants were asked to complete a 28- item survey that included questions about socio demographics, smoking history, weight, exercise habits, and depression history. The survey also included the 8- item Technology Acceptance Scale (TAS). RESULTS/ANTICIPATED RESULTS: Participants (N = 190) were 55% (103/189) male, 43% (81/190) racial minority, 6% (11/190) Hispanic, and 28% (54/190) lived in a lower-income community. The mean age of participants was 15.0 years (SD=2.0). Approximately 25% (47/190) of participants met national recommendations for physical activity. Their mean body mass index (BMI) was 21.8(SD\_4.0) kg/m2. Of note, 18% (35/190) had experienced depression now or in the past. The mean Technology Acceptance Scale (TAS) total score was 32.8 (SD 7.8) of a possible score of 40, indicating high potential receptivity to the technology. No significant associations were detected between TAS score and gender, age, racial minority status, median income of participant's neighborhood, BMI, meeting national recommendations for physical activity levels, or depression history. Of interest, 68% (129/190) of participants agreed that they and their friends were likely to use the robot to help them exercise. DISCUSSION/SIGNIFICANCE OF IMPACT: This pilot survey study demonstrated that among a racially and socioeconomically diverse group of adolescents, robotic-assisted exercise coaching is likely acceptable. The discovery that all demographic groups represented in this sample had similarly high receptivity to the robotic human exercise trainer is encouraging for ultimate considerations of intervention scalability and reach among diverse adolescent populations. Next steps include a study to assess the impact of robotic-assisted exercise coaching on adolescents' exercise and health outcomes.

## Adapting Community Engagement Studios to Accommodate Participants from Diverse and Rural/Frontier Communities

Barbara Heather Coulter<sup>1</sup>, Brieanne Witte<sup>1</sup> and Louisa A Stark, PhD<sup>1</sup> <sup>1</sup>The University of Utah School of Medicine

OBJECTIVES/SPECIFIC AIMS: Our goals in developing adaptations to the Community Engagement Studio model have been to: (1) enable investigators to consult with as broad a range of community "experts" (stakeholders) as possible, (2) make Studio participation feasible for stakeholders from rural and frontier areas, (3) create a safe environment for stakeholders from communities facing health disparities, who have had low participation in research, and (4) enable stakeholders to speak in the language in which they are most comfortable. METHODS/STUDY POPULATION: We have used several strategies to enable investigators to gain input from stakeholders in rural and frontier areas. If the research focuses on rural populations, we hold the Studio at a central location, usually at a restaurant in a private room, if this is available. If the investigator wants to hear from both rural and urban residents, we use videoconferencing via Skype or FaceTime when individuals have enough bandwidth to support it and/or feel comfortable using this technology. For those who have dial-up or no internet access, we provide a conference call line Trusting relationships are essential to creating a safe space in which stakeholders from communities facing health disparities can provide consultations to researchers. When an investigator wishes to consult with stakeholders from one racial/ethnic community, we contract with a leader or trusted member of that community to recruit appropriate stakeholders. The Studio is co-facilitated by a CCET staff member and a community leader in the community's preferred language, with the leader translating for the CCET staff member. For Studios that involve stakeholders from multiple communities and that are conducted in English, we provide translators, if appropriate. Stakeholders using translation may be present in the room with other Studio participants or may be on the phone. RESULTS/ANTICIPATED RESULTS: Of the 35 Studios we have held, five have been held in rural locations and another five have included one or more rural/frontier stakeholders participating via phone or videoconferencing. Six Studios have been co-facilitated with community leaders and four others have included translators. Almost all Studios we have held in English have included individuals representing diverse communities. Anonymous surveys completed at the end of Studios show that participants report the following on 5-point Likert scales:. The facilitator managed the allotted time so that my voice was heard (67% strongly agree; 33% agree). The relevant experts were present at the Studio (78% strongly agree; 22% agree). I was satisfied with the Studio session (78% strongly agree; 22% agree). The Studio process was worth my time (89% strongly agree; 11% agree). The feedback provided by the community experts will improve the research project (68% strongly agree; 44% agree). Participants were also asked what they felt was their contribution to the research project. Among the most common themes were: increased researcher's understanding of the community, increased researcher's sensitivity to the community, provided feedback on the feasibility of the project, provided ideas on recruiting research participants, provided ideas for how to use the project results to benefit the community, and provided ideas on how to inform the community about the project. All participants said that they would participate in a Studio again. DISCUSSION/SIGNIFICANCE OF IMPACT: Studies at all stages in the research life cycle can be strengthened through consultations with community experts. These stakeholders can inform needs assessments, provide input on study design, supply critical information on supports and barriers to research participation, review study instruments for readability and cultural appropriateness, provide feedback on recruitment and educational materials, and inform dissemination of research results, among others. These consultations provide the most benefit to researchers when they include the voices of as broad a range of stakeholders as possible. We have shown that it is feasible to include stakeholders who live in rural and frontier areas in Studio consultations. We also have developed successful methods for holding Studio consultations with stakeholders who are members of communities facing health disparities and who speak multiple languages. This expanded representation in Community Engagement Studios strengthens research studies.

# Addressing Community Health Needs through Community Engagement Research Advisory Boards Christi Patten, PhD<sup>1</sup>, Monica L. Albertie, MHA<sup>1</sup>,

Chara A. Chamie, MPH<sup>1</sup>, Tabetha A. Brockman, MA<sup>1</sup>, Mary Gorfine<sup>1</sup>, Rosa Nicholas<sup>1</sup>, Martha J. Bock, BA<sup>1</sup>, Janet M. Okamoto, PhD<sup>1</sup>, Sumedha G. Penheiter, PhD<sup>1</sup> and Joyce E. Balls-Berry, PhD<sup>1</sup> <sup>1</sup>Mayo Clinic

OBJECTIVES/SPECIFIC AIMS: Over 80% of CTSA programs have a community advisory board (CAB), an effective strategy to increase community engagement (CE) in research. Little is known about how the research discussed with CABs aligns with community priorities (i.e., bi-directionality). This program evaluation assessed the health topics presented by researchers to the CABs linked to our CE Program at all three Mayo Clinic sites (MN, AZ, and FL) for relevance to local community needs. METHODS/STUDY POPULATION: Two coders classified Mayo researcher presentations to our CABs from 2014-2018 for relevance to needs identified in the local 2013 and/or 2016 County Health Needs Assessments and specific topic(s); with high levels of agreement (Kappa=0.90). RESULTS/ANTICIPATED RESULTS: Overall, of the 65 presentations 41 (63%) addressed one or more local health needs (47% MN, 60% FL, 80% AZ). Cross-cutting health topics addressed at 2 sites were physical activity/obesity/nutrition and mental health. DISCUSSION/SIGNIFICANCE OF IMPACT: Findings were shared with our CABs to obtain input on future directions. The FL and AZ CABs are systematic in seeking out or initiating research projects that address local health needs, an approach the MN site is interested in adopting. Ultimately, it is important to demonstrate improved health outcomes with CTSA-based CE research strategies. Understanding community health needs and depth of researchers in those areas may help to focus priorities for demonstrating such outcomes.

#### 3191

### Adolescent Substance Use: School and Community Perspectives on School-Based Interventions Sycarah Fisher

University of Kentucky Center for Clinical and Translational Science

OBJECTIVES/SPECIFIC AIMS: Fifty percent of adolescents have tried an illicit drug and 70% have tried alcohol by the end of high school. Further, despite 7-9% of youth 12-17 meeting criteria for a substance use disorder only 1 in 10 actually receive it. Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an evidence based process that facilitates early identification and treatment for adults and adolescents in community (primary care) facilities. Despite the documented effectiveness of SBIRT, no research has examined the implementation of SBIRT in school settings by schoolbased mental health personnel. The purpose of the present study was to identify facilitators and barriers to SBIRT implementation by school-based personnel in secondary schools. METHODS/STUDY POPULATION: Participants included 30 school and community service providers including: teachers, school counselors, school psychologists, school administrators (principals and central office staff), city council members, school board members, community mental health services providers as well as state level individuals from the department of Adolescent Substance Use and the Office of Drug Control Policy. Interview guides were developed using the