BRIDGING THE GAP: UNDERREPRESENTED COMMUNITIES CAN CONTRIBUTE TO THE CONVERSATION ON AI/ML AND HEALTHCARE

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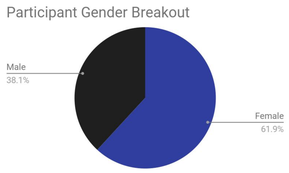
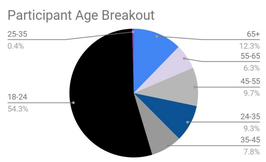
Background and Hypothesis

The Bridging the Gap initiative by Acclinate aimed to empower underrepresented communities to use AI/ML to address health disparities. Historically, underrepresented communities have been excluded from health and technology conversations, and have faced the brunt of disparities that arise as a result of bias in healthcare and technology. Bridging the Gap focused on enhancing community understanding of AI/ML in healthcare, identifying impactful areas for intervention, and developing a practical framework for leveraging AI/ML to address health disparities. Community meetups engaged participants in shaping research and action plans. Surveys were used to track learning progress. Bridging the Gap participants were primarily African American in Birmingham, AL.





Execution: Leveraging Affective Trust

While Acclinate typically works with clients to apply its Affective Trust Framework to improve clinical trial diversity, the framework also proved useful in the context of community participatory research.

"Affective Trust Framework" for Clinical Trial Diversity

Inclusive Study Design	Affective Community Engagement	Trust-Enabling Technology
• Participant Selection • Targeted Site Selection	• Activation Points • Cultural Communications	• Digital Engagement • AI/ML Integration

Applied to Bridging the Gap for Community Participatory Research

The Curriculum

- Focused on establishing a baseline understanding of AI/ML and community participatory research before applying to learnings to address community health challenges.
- Participant selection included partnerships with historically black colleges and engaged community members from underrepresented communities.

Engagement

- Across in-person and digital touchpoints, we engaged 443 community members.
- To sustain engagement, we shared highlights from community meet-ups on Instagram. Reach (1852 accounts) and views support awareness, while interactions and new followers show engagement and can increase access for future initiatives.
- WBRC Fox 6 News highlighted Bridging the Gap in two television segments. For impact that extends beyond the participants and the six community meet-ups, awareness and representation in key outlets are key.

Adaptable Options

- For the Miles College participants, we progressed to using QR codes for survey collection.
- The curriculum content was delivered through a combination of recorded videos and live facilitation through six community meet-ups
- Communications leveraged email and text messaging to retain participants.

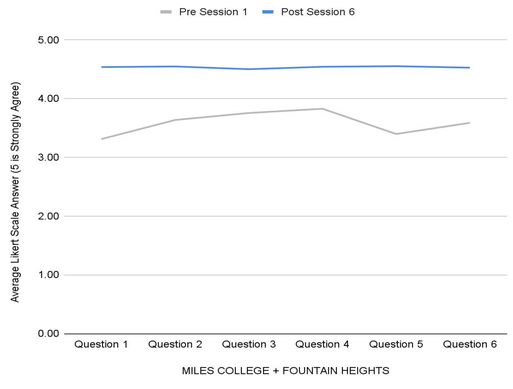
Community at the Heart: Commitment & Curiosity

70% of participants attended 4 out of six community meet-ups. At every session participants shared personal stories about why it was important to them to learn more about the intersection of AI/ML and healthcare. As their understanding of AI/ML progressed, they came to the sessions asking about examples of AI/ML they heard about on the news and in contexts outside of the community meet-ups. Participants included retired healthcare professionals, community leaders, students, college faculty, and working families.

Impact and Results

Across all key measures, participant understanding and self-reported ability improved by as much as 37%.

Increased understanding of Artificial Intelligence and Machine Learning and health equity, and increased ability to identify opportunities where AI/ML can impact individual and



I came to learn about heart disease, hypertension because it runs in my family…and cancer… it's been beneficial working with other people, learning to take responsibility for my health, and how to maintain a healthy lifestyle, and how AI can help me with that. - Linda

Key Measures					
I am informed on topics related to Artificial Intelligence and Machine Learning.	I am informed on topics related to health equity and health disparities.	I feel comfortable identifying opportunities where Artificial Intelligence and Machine Learning can potentially impact my own health outcomes.	I feel comfortable identifying opportunities where Artificial Intelligence and Machine Learning can potentially impact my community's health outcomes.	I understand the relationship between artificial intelligence and machine learning.	I understand the ethical challenges and biases that can occur within the field of artificial intelligence.

Discussion

The Bridging the Gap Curriculum improved participant understanding of topics related to Artificial Intelligence and Machine Learning, topics related to health equity and health disparities, ability to identify opportunities where Artificial Intelligence and Machine Learning can potentially impact individual and community health outcomes, and understanding of ethical challenges and biases that can occur within the field of artificial intelligence.

During the final community meet-ups, participants presented their own ideas for how AI/ML could be used to positively impact health topics of their choice including: infant mortality rates and maternal health, accurate and timely diagnosis of autism, management of mental health conditions.

Additional Successes

- Execution of a hybrid approach that is scalable with the support of live facilitation, e.g. community health workers
- Qualitative feedback expressing appreciation and ongoing interests
- Support for the affective trust framework in the context of community participatory research.

Challenges

- Use of digital logistics processes (QR code check-in and surveys) with older participants was more difficult due to limited experience with technology or lack of internet access.
- High demand required Acclinate to decline participants who wanted to participate mid-way through the program. They were still connected to the B-INCLUDED platform.

Next Steps: A scalable approach

- Participants remain engaged with opportunities to make more informed health decisions via the B-INCLUDED.com platform and tailored communications
- Submission to a peer-reviewed journal to inform researchers in health equity, community engagement, and AI/ML fields about key learnings from Bridging the Gap.
- Acclinate has submitted for Year 2 AIM-AHEAD to build on the success and learnings of the year 1 pilot to utilize Participatory Action Research to develop a Community-Based AI/ML Health Equity Task Force with the knowledge, skills, and abilities to identify and raise awareness of AI/ML health solutions that have the potential to create greater health disparities due to AI/ML bias.

Scan to see Bridging the Gap in Action

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