Working on DATAcc, I learned from the diverse stakeholders. Developing inclusive devices is not a job for one part of the industry – it requires a collaborative community to gain a common consensus.

— Md Mobashir Hasan Shandhi, Ph.D., Postdoctoral Researcher, BIG IDEAS Lab, Biomedical Engineering, Duke University

The Opportunity

» Researchers at Duke BME published a paper on methods for intelligent allocation of diagnostic testing by leveraging data from commercial wearable devices during COVID-19.

» Upon completing the research, authors acknowledged that the study population was biased towards white communities compared to Black and Latin communities, as is the case in much of biomedical research.

» Authors began to strategize how to right size the demographic imbalance in future research. At the same time, Duke BME was working as a member of DATAcc to develop toolkits that outline the steps necessary to develop and deploy inclusive to digital health measurement products.

The Impact

» By participating in DATAcc, the Duke BME team could engage with people who bring different perspectives in healthcare - from bench to bedside - and learn how they approach digital health equity.

» Leveraging experience from DATAcc and prior research, authors from Duke BME and partnering organizations published Demographic Imbalances Resulting From the Bring-Your-Own-Device Study Design, which proposes the Demographic Improvement Guideline to address imbalances.