A collaborative approach to greater diversity in clinical trials

The need for diversity in clinical trial populations has been a topic of discussion across regulators and the industry in general for decades. Despite the introduction of US policies, beginning with the 1993 National Institutes of Health (NIH) Revitalization Act which called for the inclusion of more women and communities of colour in clinical trials, clinical trial data has remained largely based on healthier Caucasian subjects with minimal representation from minorities (African American, Latinx, Asian, Native Americans), the elderly, young, and those with co-morbidities.

To encourage more of a focus on clinically relevant populations, the US Food and Drug Administration (FDA) recently released "Enhancing the Diversity of Clinical Trial Populations – Eligibility Criteria, Enrollment Practices, and Trial Designs Guidance for Industry" to increase participant access to clinical trials and the enrolment of underrepresented populations to ensure clinical trial data reflects the population most likely to use the drug if approved[1]. The guidance encourages sponsors to remove overly restrictive and legacy exclusions, broaden protocol eligibility criteria, and improve trial recruitment practices so trial data is clinically relevant for the end user.

Historical performance data, like that provided in FDA Drug Trials Snapshots, has shown that using traditional recruitment practices by themselves does not enhance the diversity of clinical trial populations. Fundamental barriers and deeply rooted mistrust of medical research motives among communities of colour require a more thoughtful and deliberate approach to participant outreach. PPD has seen recent successes in the recruitment of more clinically relevant trial populations through the implementation of patient-centered trial solutions designed to address the most common barriers to clinical trial participation among these diverse patient populations – mainly trust, understanding, awareness, access, time, and cost, especially when delivered in collaboration with organisations focused on communities of colour and community leaders to ensure optimal receptivity.

The issue of diversity in clinical trials spans all indications and geographies, though it is a bigger concern in the US due to the variability in healthcare, and health status, as a result of race, ethnicity, age, and social determinants. This has been further exacerbated by the COVID-19 crisis, which has forced many of these topics into the public spotlight with the development of vaccines and treatments providing hope of a return to normalcy. As the US moves closer to having approved vaccines and treatments for COVID-19, there is consensus that the data supporting regulatory approval must demonstrate safety and efficacy for representative populations that would receive the vaccine or treatment when approved. The disproportionate impact the pandemic has had on African Americans, Latinx, the elderly, and those with co-morbidities underscores the need for sufficient representation of these populations in the development of COVID-19 vaccines and treatments to ensure the data collected is relevant for the larger US population when approved.

To put this in perspective, US Census Bureau data from 2019 and the Centers for Disease Control (CDC) data through October 2020 show that African Americans make up 13.4% of the US population but represent 17.4% of COVID-19 cases and 21.0% of COVID-19 related deaths. Similarly, the Latinx population represents 18.5% of the US population but 29.4% of the COVID-19 cases and 17.4% of the COVID-19 related deaths[2]. With African Americans and Latinx populations experiencing higher incidences of COVID-19 positive cases and deaths, one might expect higher representation from these groups in current COVID-19 trials, which was not initially the case. Clearly, in order to ensure a clinical trial population represents the population of interest, a more thoughtful and deliberate approach to recruiting a truly representative sample is required to ensure optimal clinically relevant safety and efficacy data.

Effective implementation of diversity and inclusion in clinical trial populations requires a collaborative and holistic approach, as well as a willingness to learn from past experiences. Leveraging patient-centric solutions combined with data and technology collaborations is critical. At PPD, recent successes and working with highly motivated external partners have been important tools in framing best practices to help us reach and enrol more diverse trial populations into the studies we are conducting.

Leveraging data and technology

Building an effective and diverse recruitment strategy starts with understanding the profile and demographics of the target population. Who are the end users of the drug if approved?

Using a combination of data sources and subject engagement practices can help understand the nuances of the participants being sought for enrolment. Again, referring back to the COVID-19 example where there is a disproportionate impact on African Americans, Latinx, and elderly populations, recruitment strategies need to include a higher percentage of volunteers from these groups.

At PPD, we leverage data to support site and patient recruitment strategies to help us identify the right sites or intentionally place sites in areas ideally suited to support enrolment of the target population. Through AES, a business of PPD providing site and patient recruitment services, we are able to leverage a database of fully identified and pre-consented subjects, 10 million of whom have provided self-identified race/ethnicity information, to reach individuals from diverse populations with trials who have already demonstrated a willingness to participate. In addition, protocol optimisation and/or virtualising clinical trial design can significantly broaden eligibility and access for participants leading to faster recruitment with greater diversity in clinical trial populations. Experience has shown that incorporating a decentralised trial design can deliver 30-60% of participants from underserved communities versus the 2-10% seen in traditional trials[3,4].

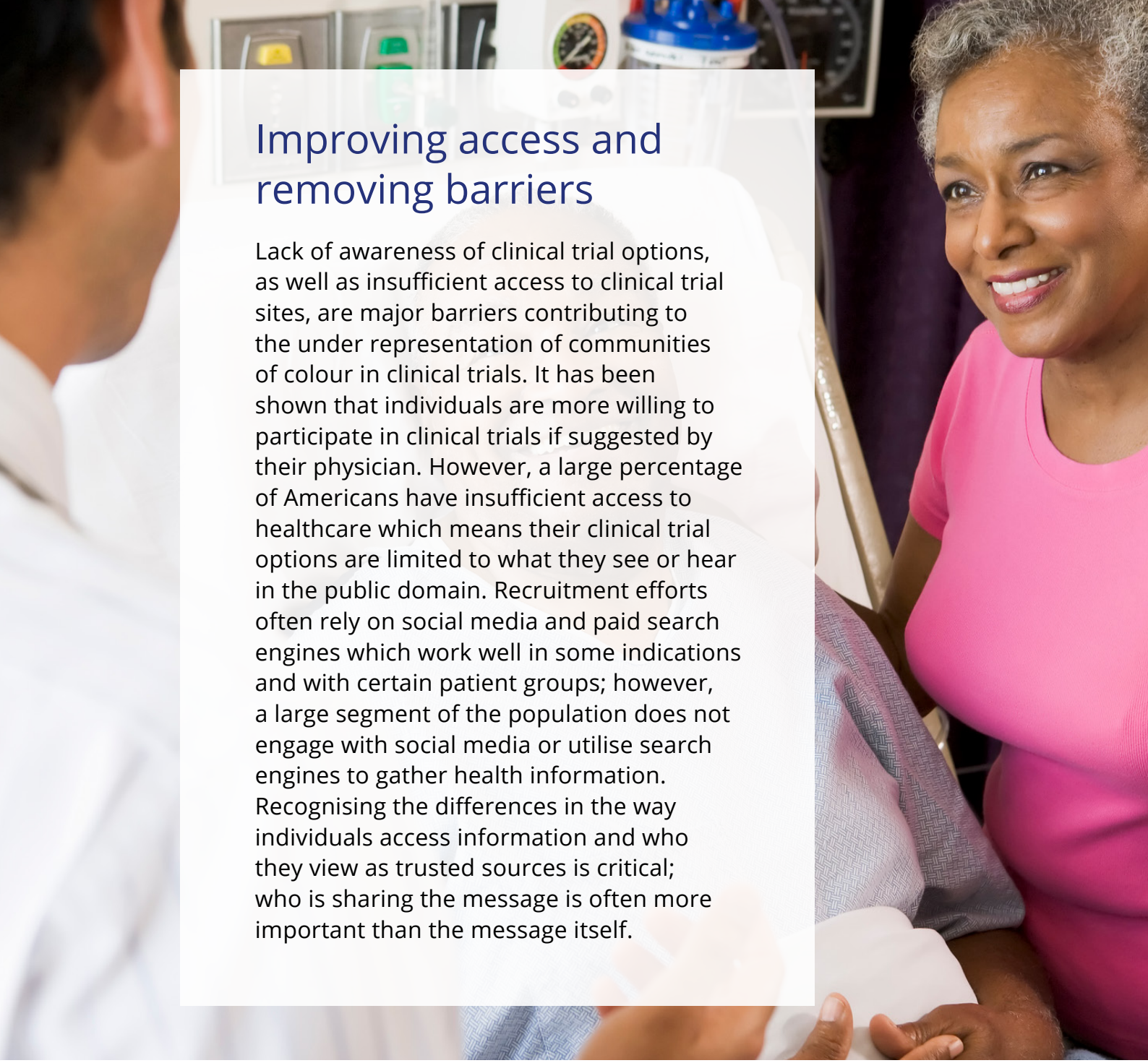
Building trust while increasing awareness and understanding

Traditional social determinants of health equity are wrought with bias and a historical lack of applied ethics. In order to successfully bolster more diverse participation in clinical trials we must first acknowledge the role history plays in the mistrust – if not outright distrust – of those populations when approached about participating in a clinical trial.

Certain communities of colour remain sceptical about promoting participation within their communities when social contracts such as the Tuskegee Syphilis Experiment and Havasupai Diabetes Project are still top of mind. Thus, any meaningful collaboration within the African American, Native American, and Latinx communities must balance this history with the need for diverse representation in clinical trials. This balance will require age-relevant and culturally competent educational materials to reverse the lack of health literacy that exists, an effort to engage with community leaders to foster greater awareness and to build trust, and an openness to study design. Over one-third of the adult population in the US is unable to understand and navigate the healthcare system adequately to make educated healthcare decisions or act upon a physician's instructions[5]. Half the population cannot read above 8th grade level, yet most health resources are written at an 11th grade level, often with little regard for readability scoring metrics or the importance of visual design[6]. These statistics, and others, have led to delays in recruitment, trial leakage, and underrepresentation among key segments of the population.

PPD has partnered with Jumo Health, a private company that focuses on health literacy, to create customised patient recruitment and retention materials that foster greater understanding of clinical trials and study specifics using videos and other visual aids to reinforce the written word. Jumo Health uses experts in the development of educational resources that reflect the target population to ensure potential participants can see their likeness in the materials presented, and provides age-appropriate, culturally sensitive materials in multiple languages that explain the "core four": 1) clinical trials; 2) the specific medical condition; 3) informed consent; and 4) the study protocol. Resources are prepared by age cohort, written by doctors, and have the added benefit of peer review. The range of media includes comic books, animations, and videos to name a few.

In providing insight for this article, Kevin Aniskovich, CEO of Jumo Health states, "We can successfully engage, build the required trust, and enrol a diverse population by focusing on the 'core four.' We educate through storytelling – words matter, but stories of hope and inspiration can motivate. This can be anything from ensuring Henrietta Lacks is widely known, to activating participants to share their experiences." Jumo Health has collaborated with a variety of stakeholders that leverage existing community action networks focused around specific indications and communities of subjects, most recently in connection with the Operation Warp Speed efforts that seek to find therapeutic treatments and vaccines to treat COVID-19. Examples of Jumo Health's work in action are available at RiseAboveCOVID.org.



Improving access and removing barriers

Lack of awareness of clinical trial options, as well as insufficient access to clinical trial sites, are major barriers contributing to the under representation of communities of colour in clinical trials. It has been shown that individuals are more willing to participate in clinical trials if suggested by their physician. However, a large percentage of Americans have insufficient access to healthcare which means their clinical trial options are limited to what they see or hear in the public domain. Recruitment efforts often rely on social media and paid search engines which work well in some indications and with certain patient groups; however, a large segment of the population does not engage with social media or utilise search engines to gather health information. Recognising the differences in the way individuals access information and who they view as trusted sources is critical; who is sharing the message is often more important than the message itself.

Collaborating with organisations like ClinArk can help create greater awareness of clinical trial options among underserved groups through community engagement. ClinArk is a minority-owned organisation, dedicated to helping all communities gain access to clinical trials through a grass-roots approach to building trust within underserved communities. “We know the importance of building trust in the community before running your clinical trial. We work with advocacy groups and interact with community leaders and trusted organisations to help drive greater awareness of clinical trials,” said Adam Brown, founder and CEO of ClinArk, in a discussion about this article. “When ClinArk takes on a project, we involve the community in everything we do. We hire staff from the communities we serve which is important because we are creating opportunities for individuals that may never otherwise hear about clinical research.” In doing so, ClinArk contributes both to the diversity of clinical trial participants, as well as diversity in the clinical trial workforce.

There are many socioeconomic factors that are more prevalent among communities of colour and create barriers to clinical trial participation. Removing as many of these barriers as possible is important to improve diverse patient participation in clinical trials. Incorporating home healthcare options and providing transportation and reimbursement are all solutions that minimise the burden of trial participation. Additional considerations should include asking sites to offer after-hours appointments to minimise time away from work, patient stipends to compensate for time and childcare, and offering concierge services to personally assist participants in navigating the complexities of clinical trials, foster ongoing engagement, and improve retention.

Partnering with best-in-class providers can make the difference in deploying integrated, patient-centric solutions that make it easier for all individuals to participate in clinical trials, but critically important to certain subsets of the population. We have a deeper appreciation of barriers to achieving greater diversity in clinical trials through our own experiences as well as from our collaborations with stakeholders, community leaders, motivated advocates, and expert organisations. Recent success will only help us to continue to evolve best practices, as well as grow our network of experts to support education and awareness, build trust, and enable greater access to clinical trials. We are committed to making clinical trials as care options more accessible to all individuals which will drive more diversity in enrolment, as well as ensure safety and efficacy data are clinically relevant.

I would like to acknowledge Kevin Aniskovich, CEO of Jumo Health, for his professional insights and review of this article.

About the author

As vice president of patient-centered trials at Evidera, a PPD business, Rhonda Henry leads the group responsible for providing customised patient-centric strategies to engage, recruit, and retain diverse trial populations throughout the life of a clinical trial, as well as enhancing the patient experience. As part of the Patient-Centered Research team, Rhonda works with key stakeholders internally and externally to bring the voice of the patient into drug development, as well as make it easier for both sites and patients to participate in clinical research. As a breast cancer survivor, creating greater access to clinical trials and removing potential barriers to participation for all individuals remains a key area of focus for Rhonda and her team. Currently, Rhonda leads a cross-company advisory board aimed at engaging with patients and caregivers as partners in the clinical research process. She is a board member for two non-profit organisations, the Carousel Center and Flunk Cancer and was named by PharmaVoice as one of 2020's 100 most inspiring individuals in the industry.

About Evidera

Evidera, a PPD business, is a leading provider of evidence-based solutions to demonstrate the real-world effectiveness, safety, and value of biopharmaceutical and biotechnology products. We help companies generate the evidence needed to optimise the market access and commercial potential of their products.

We provide integrated and tailored scientific expertise and global operational capabilities. Our offerings include interventional studies, real-world evidence, data analytics, patient-centered research, epidemiological studies, modelling and simulation, literature reviews and evidence synthesis, market access consulting and communications, and medical writing. Our staff has contributed to hundreds of payer/regulatory submissions and has published more than 2,400 peer-reviewed articles.

To learn more, visit evidera.com.

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