Equitable Healthcare for All

How can healthcare be made more equitable worldwide? In addition to improvements regarding affordability and accessibility, the approach to clinical trials also plays an important role. Women, people of color, and children are often not adequately represented. This is where Merck has a focused strategy to better reflect patient populations in its clinical trials. Through its efforts, the company aims to reduce the key barriers that still stand in the way of diversity, equity, and inclusion.

By Melaina Boyce, Head of In-Country Clinical Study Operations (USA, Canada, and Latin America), and Junyang Wang, Director, Global Regulatory and Scientific Policy (USA)

In general, healthcare has improved around the world in recent decades. Nevertheless, this progress is not sufficient if basic healthcare is to be provided to all people by 2030, as envisaged by the UN Sustainable Development Goals (SDGs).

The problem:

> **Variability is the law of life, and as no two faces are the same, so no two bodies are alike, and no two individuals react alike and behave alike under the abnormal conditions which we know as disease.**
>
> *Sir William Osler, 1904*

The father of modern medicine, Sir William Osler, presciently stated this fact more than a century ago. It continues to plague the healthcare ecosystem and the communities served by it to this day. The Covid-19 pandemic uncovered prevailing health inequities in America, highlighting striking life and death differences in healthcare based on demographic factors such as race and ethnicity. For example, during the course of vaccine development, it was reported that Black Americans made up only 7 percent of study participants. That number should be closer to 12 percent to reflect the US Black or African American population. According to the 2020 US Census, the population is 58.9 percent White (not Hispanic), 13.6 percent Black or African American, 6.3 percent Asian, and 19.1 percent Hispanic. This is in addition to the fact that Black Americans were — and are — disproportionately affected by Covid-19, as pointed out in a report by the National Urban League. According to the report, Black Americans were not only more likely to be infected with Covid-19 than White Americans, but they also died more frequently from it and were exceptionally affected by the negative psychological and economic consequences.

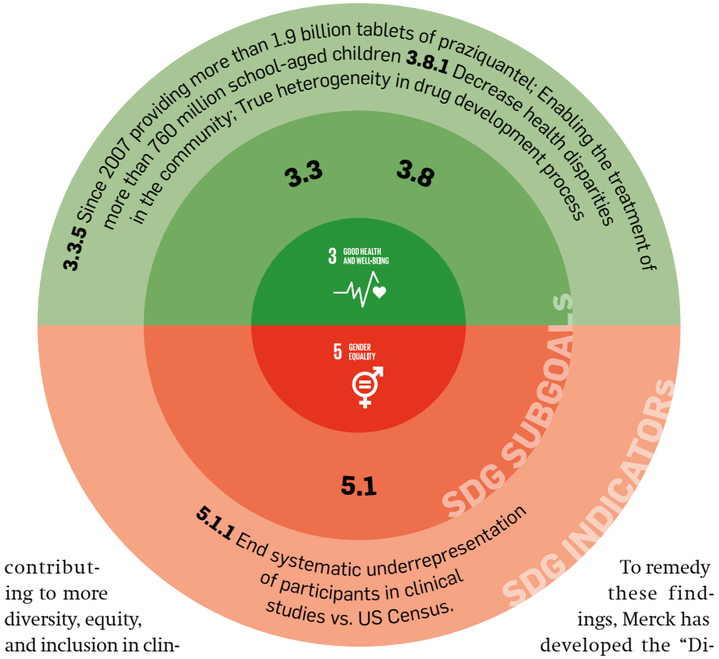
Although the pandemic brought such health disparities to light, these healthcare inequities existed long before and apply not only to healthcare, but also to clinical research. Most clinical trials are not representative of the general population. Ethnic minorities, women, children, and the elderly are often not given sufficient consideration. According to a 2020 US Food and Drug Administration (FDA) analysis of approved molecular entities and therapeutic biologics, 75 percent of US clinical trial participants were White, whereas only 8 percent were Black or African American, 6 percent were Asian, and 11 percent were Hispanic.

As part of a longstanding effort to increase the diversity of clinical trials, the FDA unveiled new Diversity Plans guidance (April 2022). It was created to shift the industry focus from a retrospective, post-hoc approach to one that is inclusive and systematically incorporates diversity in the early design stages of development and throughout the lifecycle of the program. This new FDA objective is backed by legislative changes made by the US Congress that makes Diversity Plans a requirement for all clinical studies submitted to the FDA. Similar requirements have been implemented in Japan and China, where a fixed percentage of Japanese and Chinese patients are required for clinical trials. The World Health Organization (WHO) is also seeking to develop best practice guidance that highlights and addresses underserved populations in clinical trials.

There is a renewed focus on Osler's challenge — all stakeholders in the healthcare ecosystem need to reflect upon past lessons and address the fundamental fact that some individuals can experience the same disease differently than others. This makes it more critical than ever for drug developers to understand how their potential therapies affect different groups. It is imperative that diverse groups of people participate in drug studies. When these studies acquire comprehensive data on the representative populations, it enables programs that can identify potential biologic variabilities across heterogeneous subgroups according to age, gender, race, and ethnicity, among other factors. Researchers are thus able to identify the different effects of drugs on different population groups, leading to data that supports treatment guidance and decision-making for the diversified population. Furthermore, allowing individuals to see that the clinical trials include people like them engenders trust in a historically challenging medical environment of distrust among underserved populations.

ABOUT MERCK

In the healthcare business sector, Merck develops, among other products, drugs and technologies to prevent and control non-communicable diseases such as cancer, multiple sclerosis (MS), diabetes, and hypertension. It is also the world market leader in fertility treatments. Merck has been engaged in the fight against the neglected tropical disease schistosomiasis and is working toward its elimination as a public health problem. In conducting clinical trials, the company adheres to the highest ethical and scientific standards worldwide – always in compliance with the applicable laws and regulations. This is ensured not only via routine checks by the relevant regulatory authorities, but also through internal and external quality assurance audits.



Merck takes the lead

The science and technology company Merck also sees itself as responsible for contributing to more diversity, equity, and inclusion in clinical trials. The company is committed to making efforts to ensure that the clinical trial population reflects the population it intends to treat with the company's products.

In order to translate this approach into clinical research practice, the company conducted analyses to examine the status quo of recruitment diversity, equity, and integration in clinical trials. The data is from global studies sponsored by Merck that were conducted between 2013 and 2022.

The results revealed that Black people and Hispanics were systematically underrepresented in the studies conducted by Merck. On average, only 7.8 percent of the study participants were Black, and the proportion of people of Hispanic origin averaged only 8.0 percent. While overall Asians seem to be well represented, Asian-Americans were underrepresented. Looking at the proportion of women, it can be stated that there is a good overall representation of women, but large variation across trials and a tendency for underrepresentation in late-stage trials.

To remedy these findings, Merck has developed the "Diversity, Equity & Inclusion (DE&I) in Clinical Trials" (DEICT) approach, which was rolled out in 2022. It contributes to Merck's new company-wide DE&I strategy, which was completed in 2022. It is aligned with, and supported by, the numerous efforts and initiatives generated in recent years on this topic throughout the pharmaceutical industry. The company's DE&I approach aims to create an inclusive working environment and tackle DE&I in all dimensions, including in clinical trials.

The approach starts with increasing understanding within the organization via training on DEICT. This is designed to provide R&D with the awareness, knowledge, and skills to implement the company's commitments to DEICT, specifically through the use of a template (tool) in the development of a diversity plan. Outlining the approach helps Merck to break down barriers that still stand in the way of integration and to foster inclusion. Despite the complexity, the company has identified four areas of focus: increasing awareness, broad- >>

MERCK'S PROGRAM FOR THE ELIMINATION OF SCHISTOSOMIASIS AS A PUBLIC HEALTH PROBLEM

Merck is engaged in the fight against the neglected tropical disease (NTD) schistosomiasis. Its approach is in line with WHO's NTD Roadmap, which seeks its elimination as a public health problem by 2030.

Schistosomiasis is a chronic condition and one of the most common and most devastating parasitic diseases in tropical countries. It is estimated that approximately 240 million people are infected worldwide and that around 200,000 die from it each year, mainly in sub-Saharan Africa. If untreated, the disease can lead to potentially fatal chronic inflammation of vital organs as well as anemia, stunted growth, and impaired learning ability. It has devastating consequences for the lives of children, for whom the infection rate is particularly high.

Merck has adopted an integrated schistosomiasis strategy that is being implemented in close collaboration with partners worldwide and focuses on: treatment, research and development, health education, advocacy and partnerships.

In 2007, Merck partnered with WHO to fight this disease. Since then, the company has provided more than 1.9 billion tablets of praziquantel, enabling the treatment of more than 760 million people, mainly school-aged children, in 47 endemic countries. Each year, Merck provides up to 250 million tablets to WHO for mass drug administration programs in endemic countries. In 2022, the company provided more than 200 million tablets for distribution in 27 countries – 24 of which were in sub-Saharan Africa. Joint global efforts – including the large-scale provision of treatments – have proven to be successful. Data shows that in 2019, almost 60 percent fewer school-aged children were in need of treatment than in 2000.

Within a consortium of partners established in 2012, Merck has developed a potential new pediatric treatment option to address the unmet medical needs of preschool-aged children (PSAC). In line with Merck's approach to involve the patient population in need, clinical studies have been implemented in Africa, for example pivotal Phase III trial performed in children aged 3 months to 6 years in Côte d'Ivoire and Kenya. The results showed efficacy and demonstrated favorable safety, tolerability, and improved palatability among PSAC. This program is currently in the regulatory phase, with the scientific opinion of the European Medicines Agency expected by the end of 2023.

ening access, enabling patient participation, and lowering screening barriers. To address this, Merck has defined concrete goals as well as internally and externally oriented measures.

The approach is based on four pillars:

1) Partner with diverse healthcare professionals or those who provide treatment to diverse communities.

2) Invest in community education and outreach – spread awareness and amplify the trusted voices in the community.

3) Facilitate patient participation in clinical research by ensuring access to resources.

4) Leverage protocol design and the use of real-world data.

These activities help to reduce health inequities and achieve true heterogeneity in the drug development process. One example of how Merck is putting this into practice is the "I'M IN" initiative. Launched in 2019, it addresses both Merck's own employees as well as external stakeholders with whom the company collaborates. As part of the initiative, it hosts lectures and panel discussions that offer a forum on overlooked health disparities regarding MS. Since its launch, "I'M IN" has engaged with more than 1,000 healthcare professionals.

In addition, Merck supports and funds "I'M IN Neurodisparity Fellowship" projects, which develop strategies for more equitable MS care, lower barriers, inspire replication, and create "ripple effects" in the MS community. In the area of reproductive medicine and infertility, Merck also funded the Diversity Fellowship Research Award in 2022, in addition to initiating its Reproductive Endocrinology and Infertility (REI) Diversity Fellowship, dedicated to diversifying the pipeline of REI physicians.

"In medicine, DE&I isn't just the latest business acronym – it's a critical component of providing equitable healthcare. By prioritizing underrepresented physicians and underserved patients, we can create innovative solutions that address systemic inequalities and ultimately build a more inclusive healthcare system. At the core of this mission are a deep sense of purpose and a commitment to creating lasting impact for generations to come.

Gretchen Terry-Leonard, Professional Relations, Strategic Alliances, Healthcare, United States

To meet legal requirements and adequately address diverse patient populations, Merck performs epidemiological landscape analyses to determine the size of patient populations and their geographic locations. Another measure to promote diversity is to enhance the site selection process to reach minority populations and collaborate with specialized vendors focused on DE&I training at the site level. Furthermore, Merck is committed to creating protocols with diversity in mind (e.g., gender-neutral language, inclusion, and exclusion criteria considerations) so that their design is more inclusive and patient friendly.

The company also utilizes digital recruitment campaigns and employs traditional and modern tactics to reach diverse communities. This includes appropriate patient-facing materials and digital social campaigns.

Understanding that multiple stakeholders are on this journey, Merck has assembled a committee of experts in the community to advise the company on efforts to increase diversity in clinical research. The committee is comprised of healthcare professionals and patient advocates to ensure that Merck's clinical development ecosystem fosters inclusive research.

It is equally important to measure progress, thus Merck created a DEICT Scorecard, which evaluates whether diversity is being integrated into its culture and leadership. The Scorecard was inspired by the Diversity Maturity Model for Organizational-Level Strategies from the Clinical Trials Transformation Initiative (CTTI). It was endorsed by senior leaders to enable Merck to apply DE&I in clinical trials.

Besides the DEICT Scorecard, the Good Pharma Scorecard was developed to assess how women, older adults, and ethnic minorities are being included in clinical trials. Merck's gold rating in the Good Pharma Scorecard ranking this year provided confirmation of its good performance with regard to fair inclusion in its oncology trials, especially women and older patients.

In addition to providing medicines, Merck is committed to building capacity and expertise throughout the value chain. Complementary measures such as awareness-raising and educational work help to improve the lives of local populations overall.

Positive effects include, for example, improving future employment opportunities for local health workers and promoting equal rights for women. An important lesson learned is that in order to leave no one behind, you have to reach people where they are, even if they live far from the clinical research site.

These are examples of Merck's commitment to improving health for all – regardless of age, gender, or race – and advocating for the implementation of DE&I in clinical trials. Cooperation and partnership – whether with authorities, local communities, healthcare experts, or through industry initiatives – is the common thread running through all of its activities. This also includes support for the UN's 2030 SDGs. ■