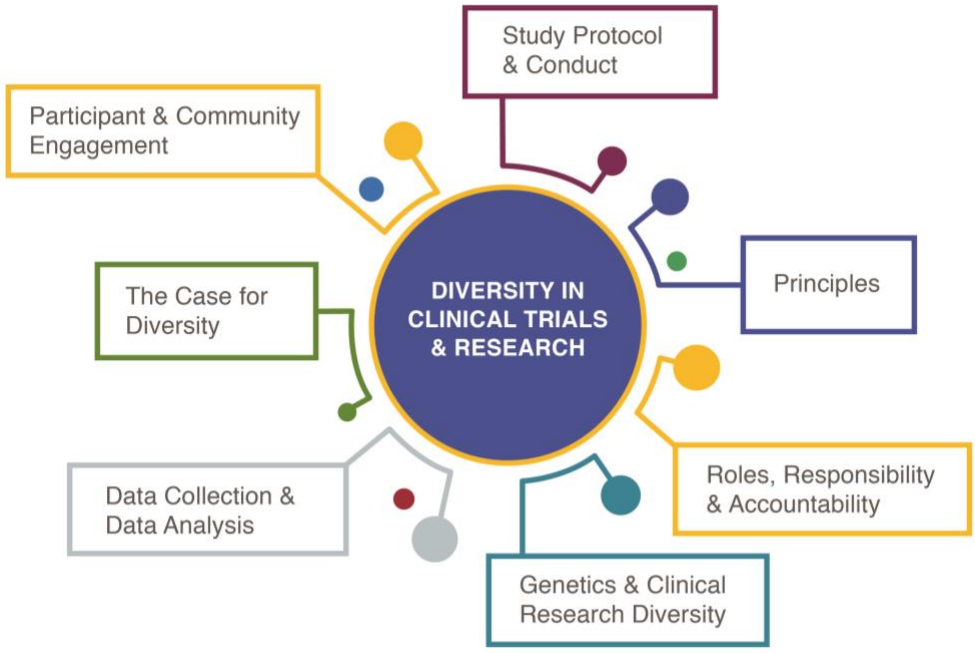
Diverse Representation and Inclusion in Clinical Research Principles

The Multi-Regional Clinical Trials Center of Brigham and Women's Hospital and Harvard (MRCT Center) convened a multi-stakeholder working group (the "Diversity Workgroup") to examine current efforts to increase diverse representation and promote inclusion in clinical research, to identify existing impediments to achieve increased diversity, and to develop and disseminate work products to enable progress.

The Diversity Workgroup has developed a set of fundamental principles that help to frame considerations of diverse representation in clinical trials. While we recognize that a case-based analysis will be required for each clinical research question, we also believe that these principles will help guide those analyses. We have also developed a set of action steps to help advance implementation. The MRCT Center Diversity Framework, including the Guidance Document and Toolkit, can be found at <*insert future URL*>.



MULTI-REGIONAL CLINICAL TRIALS
THE MRCT CENTER of BRIGHAM AND WOMEN'S HOSPITAL and HARVARD

For more information about the MRCT Center's work on the Diversity in Clinical Research, visit: https://mrctcenter.org/blog/projects/representation-diverse-populations-multi-regional-clinical-trials/

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1. **Race, ethnicity, sex, gender, age, and geographic ancestry do not intrinsically define distinct genetic or biological groups; along with social, cultural, and economic factors, these factors are associated with important differences in disease susceptibility and manifestation, treatment response, and rates of inclusion in clinical research.**

   Efforts to understand biologic variability and the complex contributions of social determinants of health, disease burden and progression, access to clinical trials, and treatment outcome require careful study.

2. **Enhancing the diversity and inclusion in the clinical research enterprise serves to advance biomedical science and healthcare and may help reduce health disparities.**

   Diversity and inclusion in clinical research aims to identify subpopulation variability in diagnosis, treatment, and prevention. Diversity and inclusion also serve to broaden the knowledge base and may identify important group-specific efficacy and safety signals prior to approval of investigational products. Clinical research in which participants reflect the diversity of the population is better positioned to develop effective treatments for those most likely to use them. A greater understanding of the barriers that negatively impact diversity and inclusion in research is needed so that data supporting future medical innovation better reflect target populations.

3. **Diversity in clinical research endeavors to be responsive to the ethical principle of justice by promoting greater fairness in the distribution of the benefits and risks of research.**

   The clinical research enterprise—and healthcare—can only appropriately identify and respond to the health needs of populations that are represented and studied.

4. **Appropriate inclusion of diverse populations requires action by all relevant stakeholders across the continuum of drug development and clinical research involving human participants.**

   Efforts to meet the goals of diversity require consideration of complex scientific, organizational, social, and cultural factors and biases. Progress requires engagement, commitment, and accountability by all stakeholders, including sponsors, research institutions, investigators, patients and their advocates, regulatory agencies, oversight bodies, and others.

5. **Refinement in methodology and data analytic tools is necessary to achieve the scientific aims of increased diversity and inclusion.**

   Development and adoption of common standards, methodologies, and successful strategies will require collaboration across stakeholders and scientific disciplines and are necessary to advance medicine and public health.

6. **Advanced and innovative approaches, including use of real-world data, may more readily detect differences across groups than can be achieved by individual clinical trials alone.**

   The size, time, and resource requirements of clinical trials typically preclude their use to detect small but potentially significant differences across populations of interest. New research paradigms using real world data, curated data sources, machine learning, bioinformatics, and robust analytics are necessary.

Action Steps for Implementation

1. **Prospectively plan and design clinical trials to include diverse populations that reflect the population for which the treatment is intended.**

2. **Adopt common data standards for the collection and reporting of information in order to improve data quality and data granularity relevant to diverse populations.**

3. **Modify study design, eligibility requirements, and study conduct expectations to optimize inclusion of diverse groups. Provide oversight and ongoing review.**

4. **Engage patients, their advocates, and their communities as respected partners in research early in and throughout the process of study design, implementation, and analysis.**

5. **Systematically introduce, evaluate, and adopt approaches to recruitment and retention of underrepresented populations to overcome barriers to clinical trial participation.**

6. **Prioritize the development and application of health literate and culturally sensitive communications, tailored to each target population. Introduce mechanisms to eliminate or mitigate language barriers.**

7. **Ensure that information about clinical research, the availability of specific clinical trials, and the reporting of results is widely available, easy to access and understand, and complete.**

8. **Develop novel analytic methods to address heterogeneity of treatment effect.**

9. **Explore novel approaches of using real world data and other data sources to understand safety and efficacy of diverse populations, both pre-approval and post-registration.**

10. **Diversify genomic data sources; analysis of diverse genomic data is a necessary and complementary approach to identifiable biological variability in treatment response.**

11. **Include training on cultural considerations and approaches to support inclusion in workforce for all individuals. Importantly, train, support, and mentor a diverse workforce.**

12. **Define mission, messaging, roles and responsibilities, and allocation of resources to establish diversity and inclusion as a priority within each stakeholder group—sponsors, funders, academic centers, sites, contract research organizations, investigators, and participants. Establish leadership positions and authority, coordinate programs and component functions, and recognize success within sponsor and academic organizations to drive and fulfill expectations for diversity and inclusion.**

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