

MULTI-REGIONAL CLINICAL TRIALS

BRIGHAM AND WOMEN'S HOSPITAL and HARVARD

The Roles and Responsibilities of the IRB in Addressing Diversity in Clinical Research

Sarah A. White, MPH David H. Strauss, MD Barbara E. Bierer, MD

MRCT Center of BWH & Harvard

November 10, 2020 PRIM&R presentation

Disclaimer

The views and findings expressed in this presentation and the documents are those of the authors and do not imply endorsement or reflect the views or policies of the U.S. Food and Drug Administration or the affiliated organization or entity of any member who contributed to this work. Individuals have served in their individual capacity.

The seminar focuses on the role of the IRB in considering diversity, inclusion, and equity in clinical trial participation. It is not intended as a general diversity training.

The MRCT Center is supported by voluntary contributions and by grants. <u>www.MRCTCenter.org</u>



• Sarah A. White, MPH

- Welcome
- MRCT Center introduction
- Introduction to Achieving Diversity, Inclusion, Equity In Clinical Research Project
- David H. Strauss, MD
 - Role of the IRB as presented in the Guidance and Toolkit Ethical responsibilities
- Barbara E. Bierer, MD
 - Practical Approaches to Considerations of Inclusiveness Tools and Resources





Sarah A. White, MPH Executive Director, MRCT Center



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The Multi-Regional Clinical Trials Center (MRCT Center)

Our Vision

Improve the integrity, safety, and rigor of global clinical trials.

Our Mission

Engage diverse stakeholders to define emerging issues in global clinical trials and to create and implement ethical, actionable, and practical solutions.

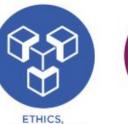




The MRCT Center's work

Addressing emerging issues of MRCTs





CONDUCT, AND

OVERSIGHT

GLOBAL REGULATORY ENGAGEMENT

TRANSPARENCY



CAPACITY BUILDING



https://mrctcenter.org

Recognizing the need to focus on and with the participant

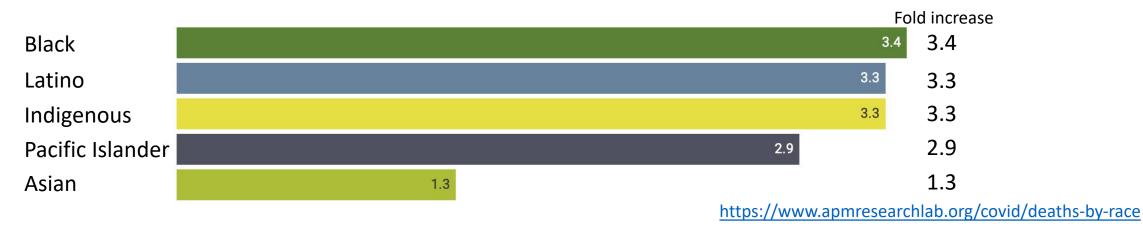
- Post trial access to medicines
- Return of Results, Aggregate and Individual
- Health Literacy
- Diversity, Inclusion, Equity



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Health disparities by race and ethnicity in the COVID-19 pandemic

Adjusted for age, race and ethnicity widens the gap in mortality compared to Whites





Health disparities by race and ethnicity in the COVID-19 pandemic

Adjusted for age, race and ethnicity widens the gap in mortality compared to Whites



But are underrepresented in research



The NEW ENGLAND JOURNAL of MEDICINE



Racial Disproportionality in Covid Clinical Trials

Daniel B. Chastain, Pharm.D., Sharmon P. Osae, Pharm.D., Andrés F. Henao-Martínez, M.D., Carlos Franco-Paredes, M.D., M.P.H., Joeanna S. Chastain, Pharm.D., and Henry N. Young, Ph.D. News & Analysis

Medical News & Perspectives

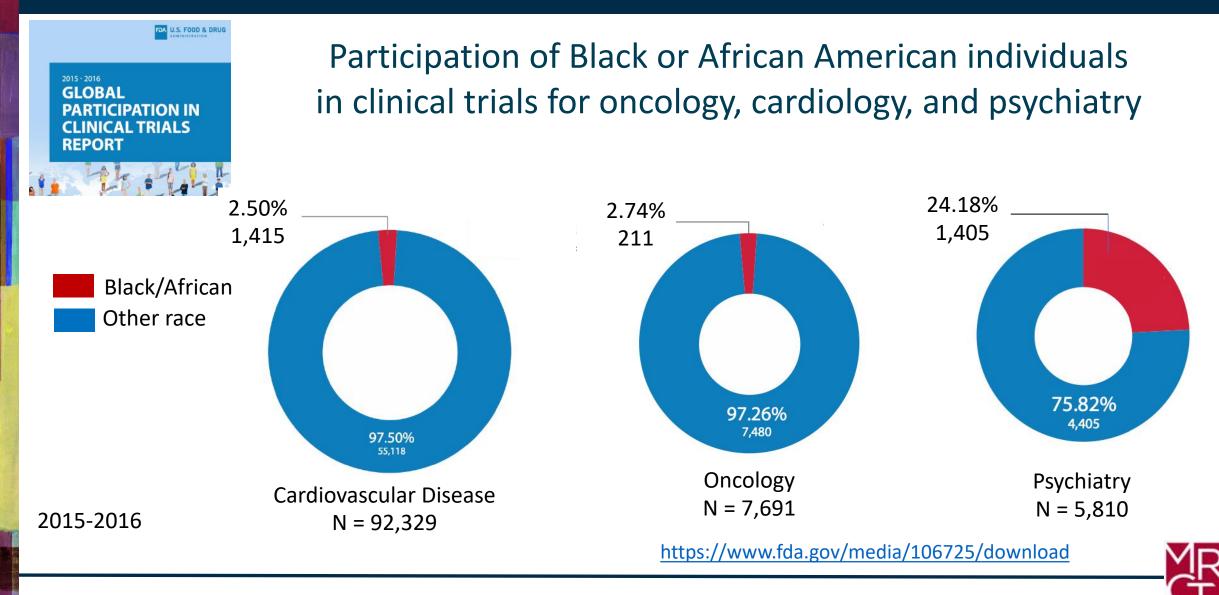
Researchers Strive to Recruit Hard-Hit Minorities Into COVID-19 Vaccine Trials

Mary Chris Jaklevic, MSJ

https://jamanetwork.com/journals/jama/fullarticle/2769611



Drug Trial Snapshots: Summaries



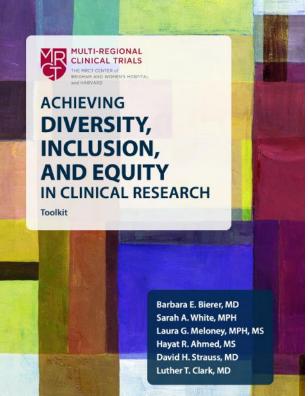
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ACHIEVING DIVERSITY, INCLUSION, AND EQUITY IN CLINICAL RESEARCH

Guidance Document





Achieving Diversity, Inclusion, Equity In Clinical Research

Guidance and Toolkit

mrctcenter.org/diversity-in-clinical-trials

Released 6 August 2020



Leadership

- RADM Richardae Araojo, PharmD, MS, U.S. FDA
- Barbara E. Bierer, MD, MRCT Center
- Luther T. Clark, MD, Merck & Co., Inc.
- Milena Lolic, MD, U.S. FDA
- David H. Strauss, MD, Columbia University
- Sarah White, MPH, MRCT Center

MRCT Center staff:

- Carmen Aldinger, PhD, MPH
- Hayat Ahmed, MS
- Laura Meloney, MS, MPH
- Joshua Smith-Sreen, MPH

And the invaluable contributions of >50 workgroup members, representing:

- Patients, Patient Advocates
- Academia
- Pharmaceutical companies
- CROs
- Non-profit organizations
- Trade associations
- Government agencies
- Research institutes

Each serving in their individual capacity.



MRCT Diversity Workgroup

Maria Apostolaros, PhRMA Abhijit Bapat *, Novartis Stacey Bledsoe*, Eli Lilly and Company Shari Bodnoff*, Novartis Racquel Bruton . Biogen Elizabeth Cahn, Cancer Connection Li Chen, Amgen Patrick Cullinan, Takeda, currently BlueBird Bio Liza Dawson*, National Institutes of Health (NIH) Maria De Leon*, Parkinson's Foundation Theresa Devins, Boehringer Ingelheim, currently Regeneron Pharmaceuticals Anthony Edmonds, Takeda Rhona Facile, Clinical Data Interchange Standards Consortium (CDISC) Rachael Fones, IQVIA Laura Gordon*, Institute for Advanced Clinical Trials for Children (iACT) Anya Harry, GlaxoSmithKline (GSK) Melissa Heidelberg, Genentech/ A Member of the Roche Group Quita Highsmith, Genentech/ A Member of the Roche Group Sharareh Hosseinzadeh, Novartis Lloryn Hubbard*, Genentech/ A Member of the Roche Group Anne Marie Inglis*, GlaxoSmithKline (GSK), currently Mallinckrodt Pharmaceuticals Steven Snapinn, Seattle- Quilcene Biostatistics Aarthi B. Iyer*, Kinetiq, now Advarra Becky Johnson*, IQVIA Tesheia Johnson, Yale School of Medicine Jonathan Jackson*, Massachusetts General Hospital Marcia Levenstein, Vivli Roberto Lewis, Columbia University Eldrin Lewis, Brigham and Women's Hospital, currently Stanford University

*involvement limited in time

Jianchang Lin*, Takeda Erin Muhlbradt, National Cancer Institute (NCI) Isabela Niculae*, Biogen Latha Palaniappan, Stanford University Claude Petit, Boehringer Ingelheim Claire Pigula*, Biogen Melissa Poindexter*, Advances in Health Nicole Richie, Genentech/ A Member of the Roche Group Bryant (Abel) Riera*, Population Council Suzanne M. Rivera, Case Western Reserve University Frank W. Rockhold, Duke University Ricardo Rojo*, Pfizer Rosanne Rotondo*. Novartis Fabian Sandoval, Emerson Clinical Research Institute Richard Sax*, IQVIA Hollie Schmidt, Accelerated Cure Project for Multiple Sclerosis Karlin Schroeder. Parkinson's Foundation Mary Scroggins*, Pinkie Hugs Jessica Scott*. Takeda Lana Skirboll, Sanofi Stacey Springs*, Harvard Medical School Sara Tadesse-Bell, Genentech/ A Member of the Roche Group Ann Taylor*, Columbia University Paul Underwood, Boston Scientific Junyang Wang, Food and Drug Administration (FDA) Robert Winn*, University of Illinois Gerren Wilson*, Genentech/ A Member of the Roche Group Crispin Woolston, Sanofi Honghui Zhou*, Johnson&Johnson



Guidance Document

- Multi-stakeholder contributions and consensus
- Practical and actionable recommendations
- Accountability section considers how each stakeholder can change the paradigm
- Toolkit provides adaptable resources not easily found elsewhere



mrctcenter.org/diversity-in-clinical-trials





David H. Strauss, MD

Senior Advisor, MRCT Center Special Lecturer, Columbia University



Diversity and Inclusion in Clinical Research: a role for the IRB

- Beyond COVID-19, is there a problem to solve?
- Is a role for the IRB justified?
- What practical steps can be taken?



Drug Trial Snapshots (2019): US Food and Drug Administration

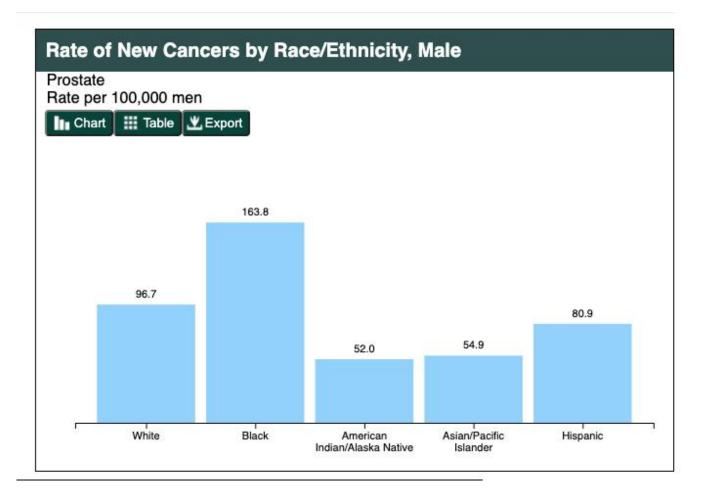
In 2015, of 45 novel drugs approved, and with over 105,000 enrolled participants, only 40% of patients were women, and strikingly only 5% were African American.

INDICATION	WOMEN	WHITE	BLACK or AFRICAN AMERICAN	ASIAN	HISPANIC	AGE 65 and OLDER	UNITED STATES
Treatment of prostate cancer	0	79	3	13	3	87	9

https://www.fda.gov/media/135337/download



Prostate Cancer (CDC, 2017)



- Prostate cancer rates are highest among African-Americans
- African-Americans are twice as likely to die from prostate cancer
- Increase risk is associated with low SES, unequal access to diagnosis and treatment, and (?) other factors

https://gis.cdc.gov/Cancer/USCS/DataViz.html



Drug Trial Snapshots (2019): US Food and Drug Administration

INDICATION	WOMEN	WHITE	BLACK or AFRICAN AMERICAN	ASIAN	HISPANIC	AGE 65 and OLDER	UNITED STATES
Treatment of prostate cancer	0	79	3	13	3	87	9
Treatment of advanced breast cancer	100	66	1	22	14	44	9
Treatment of schizophrenia	24	21	75	1	9	0	100

https://www.fda.gov/media/135337/download



The importance of *inclusion*

- Analyses of group differences in safety and efficacy among diverse populations can promote identification of both underlying biological factors and socially relevant factors that affect health, the "social determinants of health" (Beneficence)
- Seeks fairness in the distribution of the benefits of research (Justice)
- Builds public trust

Belmont Report

Justice:

- "Who ought to receive the benefits of research and bear its burdens?"
- "...moral requirements that there be fair procedures and outcomes in the selection of research subjects."
- "An injustice occurs when some benefit to which a person is entitled is denied without good reason..."

§46.111 Criteria for IRB approval of research.

(3) Selection of subjects is equitable.



Belmont Report

Beneficence

- In the case of particular projects, investigators and members of their institutions are obliged to give forethought to the **maximization of benefits**...
- In the case of scientific research in general, members of the larger society are obliged to recognize the longer term benefits and risks that may result...



Belmont Report

• Respect for Persons

- Obligations to treat individuals as autonomous agents
- Obligations to protect those with diminished autonomy



Application of the Belmont principles

- Ethics and protection from research risk
- Ethics and access to the direct benefits of novel/investigational therapies
- Ethics, Inclusion, and access to the benefits of scientific knowledge



Oversight and ethical responsibility

• Attention to diversity and inclusion may be an under-recognized and under-appreciated role for many IRBs, but

• It is embedded in the language of Belmont and the Common Rule

• It is essential to the ethical conduct of clinical research





Barbara E. Bierer, MD

Faculty Director, MRCT Center Professor of Medicine (Pediatrics), Harvard Medical School <u>bbierer@bwh.harvard.edu</u>



The role of the IRB

- Ensuring ethical research
- Creating expectations, promoting dialogue
- Establishing accountability
- Fostering competence, education, and the development of infrastructure
- o Institutional support for the role and responsibility of the IRB
- Responsibilities of HRPP in addition to IRB

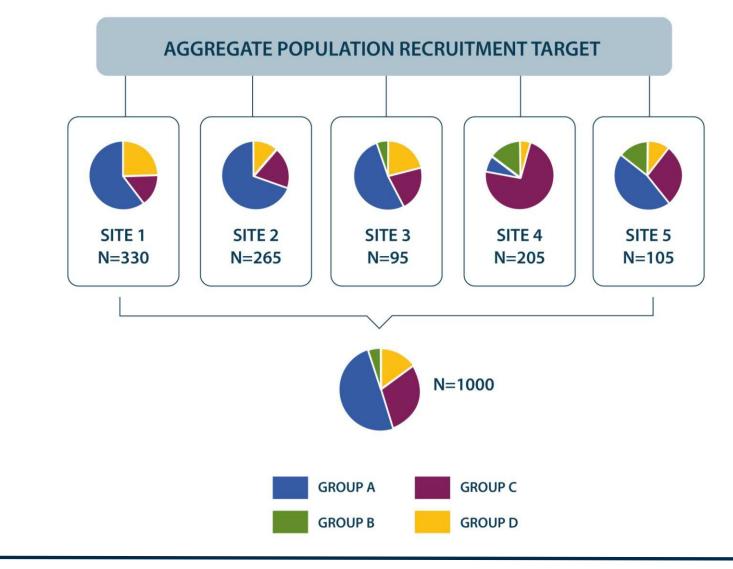
Ask the question.



IRB: Demographics and Overall plan

- Optimal recruitment target: Epidemiology of the disease and/or those for whom the product is intended
- Reasonable reasons for deviation, e.g.,
 - Phase 1 healthy volunteers
 - Exploratory study
 - A given population is the object of specific study
 - Geophysical mapping
- Exceptions should be justified and documented
- If one starts from the assumption of the recruitment target, the study protocol should contain:
 - Information about the demographics of the disease and/or those for whom the product is intended
 - Prior research relevant to the current study

IRB: Overall plan





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Focusing on the role of the IRB in advancing diversity

• Initial Review:

- Study Aims and Subject Selection
 - Do the demographics of the proposed sample reflect that of the population affected by the condition or for whom the intervention is intended?
 - > When it does not, is the deviation adequately justified?
 - Is planned under- or over- representation by age, race, ethnicity, or gender in the sample scientifically justified?
 - Is there a statistical plan for examining heterogeneity in outcome or across subgroups?



Focusing on Role of the IRB in advancing diversity

• Criteria for Inclusion and Exclusion

- Will inclusion and exclusion criteria inadvertently or unnecessarily result in underor over-representation of understudied subgroups?
- Have alternative approaches to minimizing risk that do not rely on exclusion been considered?

Recruitment

- Have recruitment procedures considered specific approaches to engage underserved populations?
- Are materials available in languages understandable/primary to the participants?
- Are participant materials translated? If not, why not?
- Do all participant-facing materials conform to health literacy principles?



Focusing on Role of the IRB in advancing diversity

- Study Conduct
 - Are study procedures flexibly organized to accommodate the needs of underrepresented groups?
 - Are all in-person visits essential? Can any be done locally or virtually if appropriate?
 - Is reimbursement for expenses of participation provided?
- Payment
 - Is payment sufficient to cover costs of participation?
- Return of results
 - Are study results intended to be returned in a manner that meets the needs of populations studied?



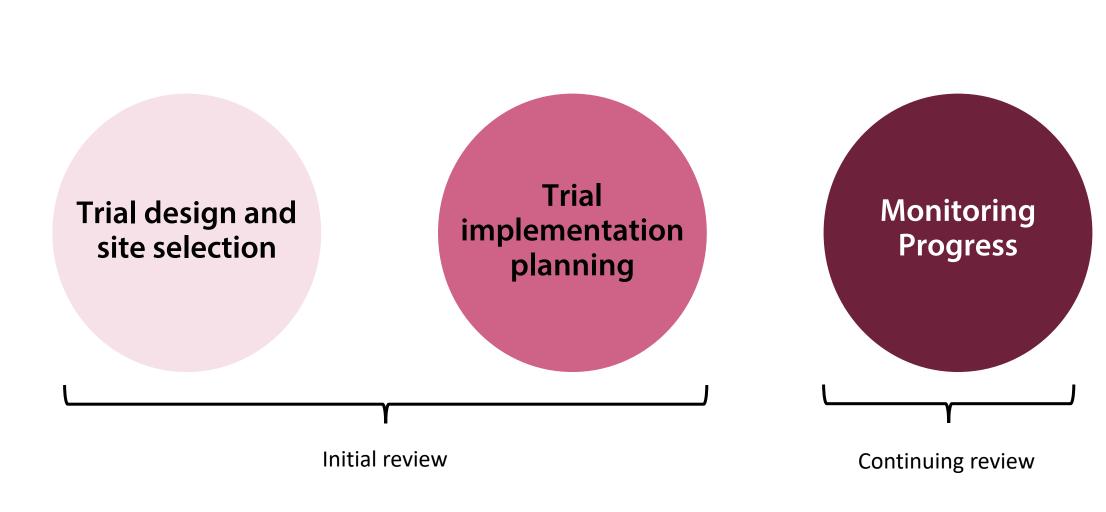
Focusing on Role of the IRB in advancing diversity

• Continuing review:

- Has the study fulfilled its recruitment/accrual goals?
- Is demographic distribution on track to approximate the study goals?
- If not, are adequate corrective actions described, sufficient, and likely to be successful?



What tools can an IRB leverage to support investigators in advancing diversity for multi-center trials?

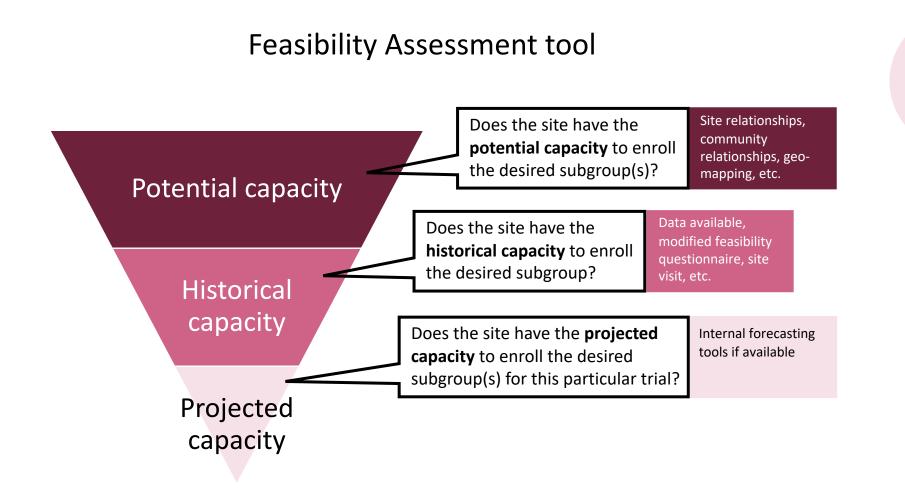




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Site Selection – ensuring study sites have capacity to enroll a diverse population



Trial design and site selection

Site Selection – ensuring study sites have capacity to enroll a diverse population

Site selection decision tree tool

	Does the site have the potential capacity to enroll the desired subgroup(s)? Determined by site relationships, community assessment, demographic-epidemologic geo- mapping, etc.
Yes	No
Does the site hav historical capacit enroll the desir subgroup(s)?	ty to Yes Could error be present in this initial assessment of a
Determined by data ava (ideal) or site-report on enrollment, feasibilit questionnaite and site Yes	ty t
Does the site have the projected capacity to enroll the desired subgroup(s) for this particular trial?	Yes What factors contribute to the site's limitations? What changes might enable the site to enroll a diverse
Determined by sponsor internal forecasting techniques and tools Yes	population? Are these changes feasible? No
	CHECKPOINT 3
Establish host sites, exact budget per site and begin participant enrollment	What factors contribute to the site's limitations? What changes are necessary to enroll the desired subgroup(s) in this trial? Are these changes feasible?

Trial design and site selection

Checkpoint	Capacity Tier	Purpose
Checkpoint 1	Potential Capacity	Assessment of methods used to determine a site's lack of "potential capacity" for enrollment of desired subgroup(s). If bias/inaccuracy is detected in these methods, the site remains eligible for consideration in site selection for enrollment of that subgroup(s).
Checkpoint 2	Historical Capacity	Identification and assessment of factors that contribute to a site's lack of "historical capacity" for diverse enrollment, the changes needed in order to build that capacity in the future, and whether supportive measures might be feasible for the sponsor/CRO to provide. If changes are deemed feasible to make, the site remains eligible for consideration in site selection for diverse enrollment.
Checkpoint 3	Projected Capacity	Similar to that of "historical capacity," identification and assessment of those factors limiting a site's "projected capacity" for diverse enrollment <i>in the trial at hand</i> , according to whatever diversity goal and target population established by the sponsor. If identified changes are feasible to make, the site should be included in the study at hand.

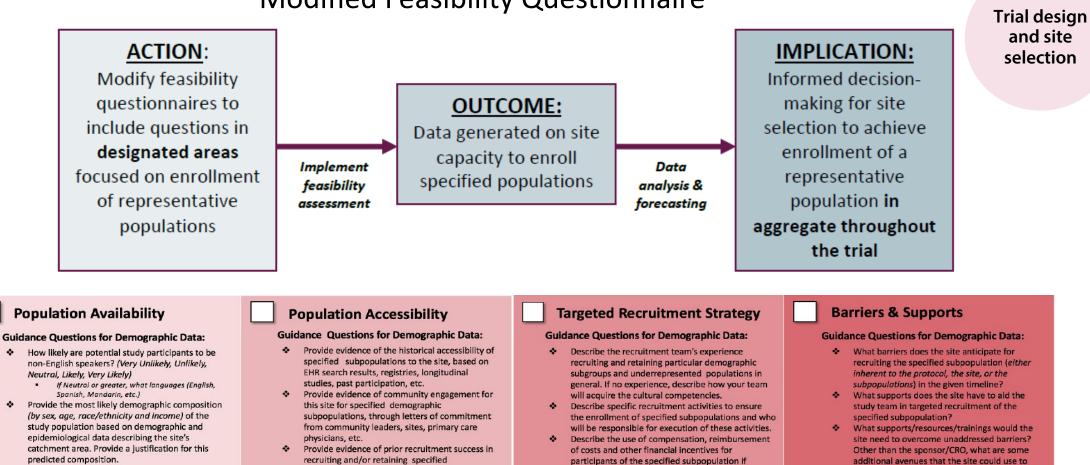


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OMPCT Contor

Site Selection – ensuring study sites have capacity to enroll a diverse population

demographic subpopulations.



applicable.

Modified Feasibility Questionnaire

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acquire anticipated supports?

Recruitment Strategies – planning for recruitment of a diverse population

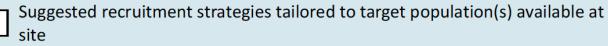
Recruitment Strategy Documents – Potential Key Performance Indicators (KPIs)

Output indicators

Trial-level recruitment plan for diversity available at site, including all the proposed elements to consider (See Achieving Diversity, Inclusion and Equity in Clinical Trials Guidance Document, Table 12, Part E, Section 13.5)

Site-specific recruitment plan for diversity available at site

Monitoring mechanisms for recruitment targets by demographic established



Outcome indicators

Site investigator-reported understanding of diversity enrollment objectives

- Data on demographic profile of enrolled participants available to sponsor in a suitable amount of time
- In the case that demographic profile data indicate site will not meet target enrollment of target subpopulation, contingency plan implemented



Recruitment Strategies

Elements to consider within a trial-level recruitment strategy document

RECRUITMENT DOCUMENT ELEMENT

Trial sample size (N) calculation to achieve treatment effect as provided in protocol

Overall epidemiology of disease

Epidemiology of disease by demographic

Heterogeneity assessment across subgroups and effect on sample size

Potential limiters and enablers for strategic recruitment

JUSTIFICATION

Typical power calculation included in recruitment planning to provide the goal for overall study population across all sites

Available measures of disease frequency (prevalence, incidence, etc.) to characterize the burden of disease by geographic region

Measures of disease frequency (prevalence, incidence, etc.) by available demographics and by region, to highlight the subpopulations for whom the intervention is intended

Assessment based on literature, ongoing trials, or prior evidence for differences in disease manifestation or treatment response in particular subpopulations, to justify modified methods for recruitment, sample size and analyses of the intended subpopulations.

Logistical, economic, capacity-related, and sociocultural elements that might enable or limit recruitment in particular subpopulations or regions

Diversity guidelines and subpopulations for trial

Development of objectives to achieve a diverse trial population, with overall trial-level enrollments for specified subpopulations, to highlight recruitment expectations

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Recruitment Strategies – making the plans to recruit a diverse population

Recruitment Strategy Document

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Sponsor Logo			CRO Logo
Recr	uitment Strategy D	ocument	
		ocument	
	Study Title	ocument	
		ocument	
	Study Title	ocument	





Recruitment Strategy Document

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Eligibility and Enrollment Log – monitoring tools for investigators

A. Study Information

Protocol Number:	
Protocol Title:	
Principal Investigator:	

B. Participant Information:

Participant Name/Pre-Screening ID:				
Age: >=18 - <65 years >=65 - <74 years >=75 - <84 years >=85 years				
Sex: Male Female Unknown or undifferentiated				
Gender: Male Female Trans-Male Trans-Female				
Gender nonconforming or unknown				
Ethnicity ¹ : Hispanic or Latino Not Hispanic or Latino				
Race ¹ : American Indian or Alaska Native Asian Black or African American				
Native Hawaiian or other Pacific Islander White Other				

C. Inclusion/Exclusion Criteria

Inclusion Criteria (From IRB approved protocol)	Yes	No	Supporting Documentation ²
1.			
2.			
3.			
4.			
5.			

		Monitoring Progress
Exclusion Criteria (From IRB approved protocol)		
1.		
2.		
3.		
4.		
5.		

D. Enrollment Tracking

Enrolled?		If no, why? Provide supporting Documentation ³	
Yes	No	If no, why? Provide supporting Documentation ³	

E. Statement of Eligibility⁴

This individual is [eligible / ineligible] for participation in the study.

Signature:	Date:
Printed Name:	



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- Institutional endorsement and support of the IRB
- Policies that support the positions of the IRB
- IRB membership:
 - Diverse membership
 - Community voice represented
 - Cultural competence and implicit bias training

• Challenging in a world of single site review of multi-site trials

Argument for collective approach and harmonization



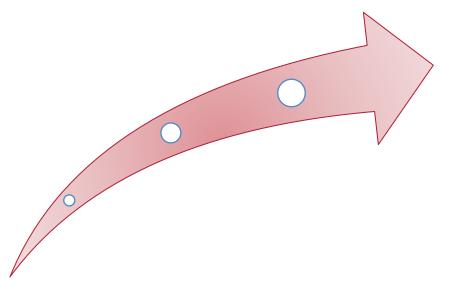
Key Performance Indicators

Monitoring Progress

Progress takes time

The importance of:

- Metrics
- Transparency
- Accountability







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Discussion and Questions

Sarah A. White, MPH David H. Strauss, MD Barbara E. Bierer, MD sawhite@bwh.Harvard.edu dhs2@cumc.columbia.edu bbierer@bwh.Harvard.edu Join us:



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