Diversity in our profession: parallels to clinical trials

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NISS-Merck Meetup
About Me

20 years in pharma
Sr. Director for Real World and Access Analytics team at Lilly
Prev. Sr. Director for Neuroscience and Biomedicines Core (clinical) at Lilly
Multiple non-admin/ research track pharma stats roles over approx. 17 years.

Past Chair of ASA Comm on Minorities in Statistics
Founder of JSM Diversity Workshop and Mentoring Program
2022 Chair-elect of the ASA Biopharmaceutical Section
Many other Stats Profession and community service leadership roles

PhD in Statistics from THE Ohio State Univ.
BA in Math from the Univ of Georgia
This phone call from a friend of mine illustrates the problem we’ll discuss today quite well.

Phone call from a friend: “in all my career I’ve only worked with 2 black statisticians and never interviewed any either” “I want to do better. You’ve had a lot of success in this area. How have you done it?”
Common Statements I hear

“I want to hire diverse talent. They don’t apply.”

- Constructive shift in perspective/ mindset: I’ve failed to ‘reach’ the target talent pool and attract them to apply
population

“pre-screen” at inv. sites

Screening period (run-in)

Randomization

Evaluate primary objective

on trial
Interview & Eval process

Hiring

In workforce

- Recruiting from network
- Application review
- Etc.

population
Solutions: not reaching target pop

Clinical trial
• Site selection
• Recruitment Advertising
• I/E criteria

Talent attraction
• Intentional recruiting presence
• Recruitment Advertising and Communications
• JD language
Intentional recruiting presence

JSM DWMP/DMP

ENAR FDB

StatFest

SACNAS

HBCU’s

PWI’s with strong track records on diversity

Cross-industry initiatives (e.g., PhRMA conference)

Scientific orgs (e.g., AAAS, NSF, NIH)

SIBS, SAMSI, etc.
Communicate with target applicant pool

Power of Direct Connection

Reach out; listen; respond

Be aware of ‘opt out’ based on JD language
Common Statements I hear

“I want to hire diverse talent. They don’t apply.”
   • Constructive shift in perspective/mindset: I’ve failed to ‘reach’ the target talent pool and attract them to apply

“I want to hire diverse talent. Those who apply don’t qualify.”
   • Constructive shift in perspective/mindset: My evaluation/qualification process is biased, and I need to repair it.
The hard truth

Failure to hire is a type 2 error, reflecting bias in your evaluation/qualification system.

That’s an assumption, Brian. How can you know?

- Observational. Not a randomized experiment. Can’t know definitively.
- Can’t observe the counterfactual.
The hard truth

Failure to hire is a type 2 error, reflecting bias in your evaluation/qualification system.

That’s an assumption, Brian. How can you know?

• Observational. Not a randomized experiment. Can’t know definitively.
  • Numerous controlled experiments are available and have addressed this.
• Can’t observe the counterfactual.
  • Proxies of the counterfactual are available. Those you fail to hire go to comparable companies and do well!
Common Statements I hear

“I want to hire diverse talent. They don’t apply.”
  • Constructive shift in perspective/ mindset: I’ve failed to ‘reach’ the target talent pool and attract them to apply

“I want to hire diverse talent. Those who apply don’t qualify.”
  • Constructive shift in perspective/mindset: My evaluation/qualification process is biased, and I need to repair it.

“We try to hire diverse talent, but… they don’t choose us.”
  • Constructive mindset: This is something we MUST understand and change.
Not-so-easy answer

Broad examination of the org and how it acquires talent:

• Org systems
• Org structure
• Culture
Employee Retention
Screening period (run-in)

population

“pre-screen” at inv. sites

Randomization

Evaluate primary objective

on trial
Less common statements I hear

“My organization has a thoughtful plan to ensure retention of target populations.”

- This is critical to reach DEI goals
- Failure here will result in failure to recruit talent
- Success here will buoy success in recruiting talent
Closing Thoughts
To be successful…

Reject common excuses
  • They don’t apply
  • They don’t exist or are too rare
  • They don’t choose us

Act to drive change
  • Think holistically – from recruiting through engagement and retention
  • Evaluate and act on all segments of the hiring and employment process

Remain Committed to outcomes
  • Missing out on talent means missing out on leadership, innovation, etc. which are imperatives for the industry and the patients we serve.