Population Representativeness of SPRINT

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What is Population Representativeness?

- The population representativeness metric is an estimate of the fraction of the real-world patients that is represented in the study population

- Can be calculated based on:
    1. Restrictiveness of eligibility criteria
    2. Characteristics of enrolled participants

Our Claim

Participant-based Representativeness is less than
Eligibility-based Representativeness

- **Why?**

Because not all eligible patients are enrolled!

Calculating Representativeness

- Eligibility-based: GIST 2.0 (Sen et al. JBI 2016)
- Participant-based: STASI (extension of GIST)

- **What's novel about these?**
  - Explicit modeling of the relationship between study traits.
  - Non-uniform importance for the study traits

Representativeness of SPRINT

- Eligibility based – 0.18

- Participant based (using only the eligibility traits) – 0.10

- Participant based (using all available traits) – 0.0062

What more information can we get?

- Which traits caused participant based Representativeness to drop?
  - SBP, Age

- What are the differences across different demographic groups?
  - Males 0.0074 vs. Females 0.0052 (due to HDL)
  - Black 0.0071 vs. Hispanic 0.0050 vs. White 0.0039 (due to DBP, triglycerides)

So what next?

- More extensive subgroup analysis
  - Identifying over-represented and under-represented subgroups

- Further development and validation of STASI