

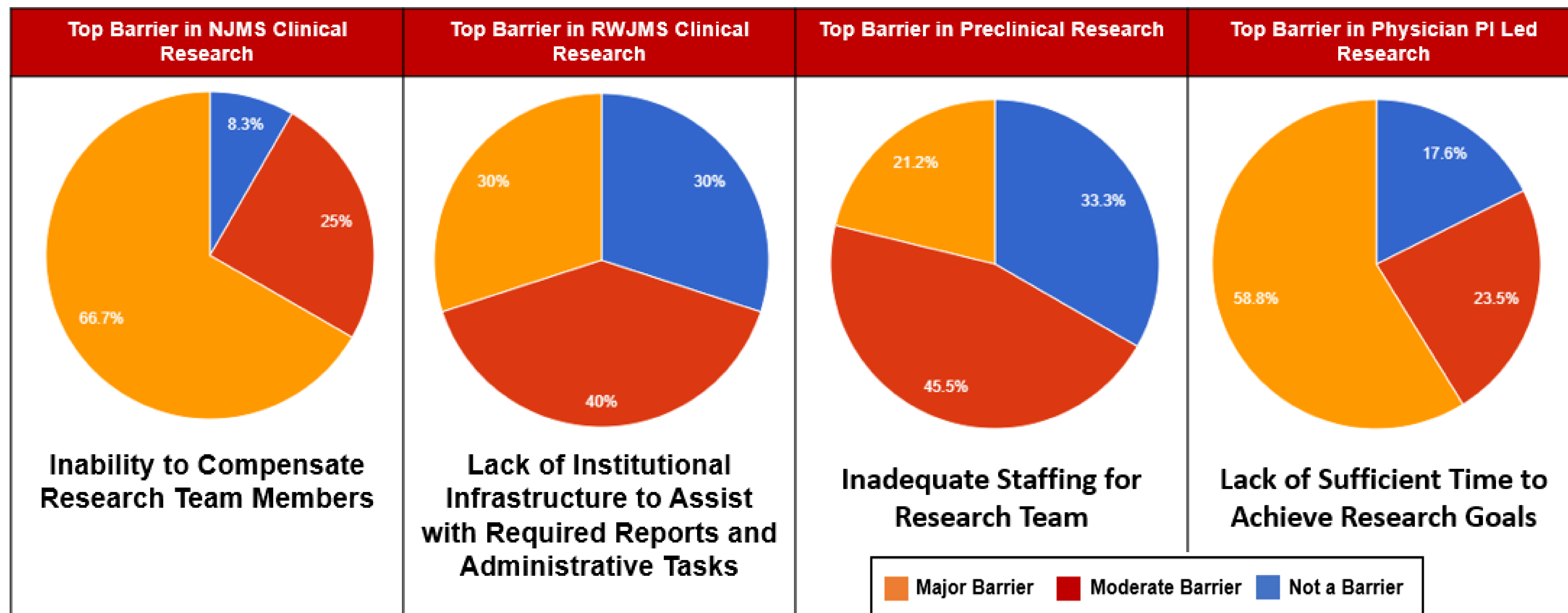
Sunaina Mukherjee ¹, Isabel Parzecki ¹, Farah Anwar BA ², Anthony Gonzalez MS ²

¹Ernest Mario School of Pharmacy, Rutgers University, ²New Jersey Alliance for Clinical and Translational Science (NJ ACTS)

Introduction

Translational research specifically involves designated stages through which a study advances, beginning with T0, preclinical studies. Between the different stages, there are barriers and bottlenecks that critically affect each transition and progression along the translational research spectrum. The goal at hand was to identify and categorize the wide range of commonly encountered barriers in translational research within the NJ ACTS CTSA hub using a **comprehensive needs assessment survey**.

Results



Methods/Approach

Section 1: Demographics and Background

Section 2: Self-Reporting of Barriers

Section 3: Feedback and Comments

Barrier Categories with Example Barriers

- 1 Funding (Ex. Lack of funding for research equipment and processes, inability to compensate research team members)
- 2 Time (Ex. Lack of sufficient time to achieve research goals, use of protected time to conduct research)
- 3 Infrastructure (Ex. Inadequate staffing for research team, lack of holistic institutional support)
- 4 Collaborations (Ex. Lack of relationships with clinicians, finding collaborators with the necessary skills)
- 5 Training (Ex. Access to training material and resources for staff, recruiting adequately trained research staff)
- 6 Recruitment (Ex. Access to a detailed feasibility assessment tool, achieving diversity in study population)
- 7 **Regulatory** (Ex. Communication with the IRB, obtaining timely IRB approval of the protocol and study materials)

Following dissemination of the survey to all researchers engaged in translational research in the NJ ACTS CTSA hub, preliminary data collection was conducted. Initial analysis (N=108) yielded these top barriers in the hub: obtaining timely IRB approval, inadequate staffing for the research team, and lack of holistic institutional support. Further analysis of the survey results through the lens of comparing preclinical and clinical research, clinical research at different clinical institutions (New Jersey Medical School and Robert Wood Johnson Medical School), and physician PI led research established top barriers within these broad domains, one top barrier from each domain depicted above. Researchers also provided comments within Section 2 and especially Section 3 of the survey supplementing their responses and providing more context as to the nature of the barriers, current measures their affiliated institutions were utilizing to minimize such barriers, along with the shortcomings of existing resources and tools. Various other sub analyses will be compiled to determine any other key barriers and continue to stratify the data for optimal interpretation.

Conclusions and Future Implications

The aggregate survey data and comments can be utilized to develop feasible institutional solutions to overcome prevalent barriers and improve efficiency in all parts of the research process. The data from multiple sub analyses pinpointed the larger needs in the NJ ACTS CTSA hub as a whole and at the respective institutions, most notably both issues with HR leading to difficulties with staffing and onboarding research team members as well as recurring, varying issues with the IRB. Possible solutions encompass accessible resources for researchers, longitudinal training programs, consultative services, workshops for investigators, and communication strategies to bridge the gap between the research departments causing delays in the research process, namely HR and the IRB. Moving forward, additional sub analyses will be performed to tease out other nuances of the data, such as barriers within the different translational research stages and research types. Partnering with the qualitative research team at NJ ACTS will allow for a concrete plan for implementation of the aforementioned institutional solutions and meaningful interpretation of the survey findings.