

Project Abstract
Relationship of Student Outcomes to School-Based Physical Therapy Services
84.324. NCSER-PD.

Professional Development for Teachers and Related Services Providers: Exploration Goal

Purpose: The proposed prospective multi-site observational study will describe accurately the outcomes that students achieve when receiving physical therapy within schools and the relationship of the physical therapy intervention to those outcomes. Knowing relationships between student outcomes and physical therapy intervention, as currently provided in schools, will influence physical therapy practice, future research, and professional development. Our research objectives are to describe the changes in students' *participation in school activity, self-care, posture and mobility, and recreation and fitness* outcomes and the relationships of these changes to identified characteristics of school-based physical therapy intervention, including service delivery models, activities, procedures, and dosage.

Setting: Representative schools will be sampled from at least four diverse regions to ensure a national representation of student outcomes and physical therapy school-based interventions.

Participants: 120 physical therapists will be recruited regionally to participate. From each therapist's caseload 6 students will be randomly selected to participate (n=720). At a minimum, projecting that at least 2 students per therapist will agree to participate, 240 students with disabilities in kindergarten through grade 6 (age 5 to 12 years) receiving special education and the related service of physical therapy will be randomly selected.

Assessment: The student outcome measures used will include standardized testing on subsections of the School Function Assessment and students' Individualized Education Program goals related to areas physical therapists address converted to Goal Attainment Scaling. Therapist's intervention services will be recorded using the researcher-developed School-Based Physical Therapy Interventions for Pediatrics data collection system.

Research Method: This is an Exploration proposal where we will conduct primary data collection to identify student adaptive and functional outcomes and determine associations of these student outcomes to current school-based physical therapy intervention across one year. During the first year IRB approvals will be obtained, participants recruited, and therapists trained in the assessments and data collection. At the beginning and end of the second year the therapists will administer the School Function Assessment and Goal Attainment Scaling. Weekly throughout the year therapists will report the service delivery models, activities, procedures, and dosage of physical therapy intervention provided for the students using our detailed data collection system. There will be no manipulation of variables or change in intervention programs provided to the student participants.

Analytic Strategy: Given the observational nature of this data, the analyses will use descriptive and correlation statistical procedures. Continuous variables will be summarized with descriptive statistics and categorical variables described with counts and percentages. Linear and generalized linear mixed models will be performed to investigate associations between malleable factors, physical therapy intervention, and changes in student outcomes while accounting for the hierarchical structure of students nested within therapists.