Background & Purpose

Studies examining pediatric physical therapy (PT) outcomes lack description of treatment plans & intervention methods. This hinders exploration of relationships between client characteristics, treatment provided & therapy outcomes & limits applicability of research evidence to practice.

In addition, pediatric PTs do not have a standard system to document therapy activities & intervention methods that therapists, clinical facilities & researchers can share.

A part of the Move and Play study, the Physical therapy Interventions in Pediatrics (PTIP) system has been designed to describe PT activities and interventions used with children with Cerebral Palsy & explore their associations with functional outcomes. A similar documentation system has been used in patients with stroke.

The aim of this study was to explore the utility of a modified PTIP system at an outpatient pediatric clinic to understand association between client goals, PT activities & interventions and client outcomes.

Design & participants

Design: Case study to examine utility of PTIP during 3 phases of intervention delivered over 26 weeks

Child: 5 year old girl with Cerebral Palsy. GMFCS level III ambulating with posterior rolling walker.

Intervention:

Table 1: GAS goals for Phase 1-3. In Phase 1, 5’s treatment continued to focus on goals from Phase 1. GAS was designed to reflect small, incremental changes in S’s ability and skills which would progressively cumulate in changes in functional performance. Greater focus was placed on transitions in Phase 1 and on standing activities in Phase 3. See Figs. 2-4. Shifting of emphasis to achieve goals

Discussion

The modified PTIP system illustrated differences between emphases, intervention content, time utilization by 1 therapist for 3 phases of PT of different intensity for a child with CP & was successful in explaining their associations with timing, client goals & functional outcomes.

The treating therapist reported that the system:

1) Objectively & accurately reflects the treatment she provided

2) Highlights differences in treatment provided over the 3 phases.

3) Highlights importance of therapy intensity & congruence of treatment activities with goal areas and outcomes

4) Is useful for planning time allocation & intervention selection to achieve goals

5) Can potentially educate therapists & parents on importance of intensity, goal-focused treatment & outcome measurement.

Future Directions

1) Develop systematic method to capture & convey therapists’ clinical problem-solving process to elucidate stronger associations between clinical decisions, therapy content & outcomes.

2) For development of larger studies examining cause & effect relationships between PT intervention & outcomes.

3) Aid in teaching students & novice therapists clinical decision-making skills for specific ages & diagnoses.

4) Merge modified PTIP system with PT documentation & billing system to increase efficiency. Create electronic data entry to reduce paperwork, make data extraction, analysis & reporting easier.

Use of the modified PTIP system may facilitate development of research studies where research questions and findings have greater relevance to the complex environments in which physical therapists practice.

Materials & Outcome measures

Data collection form (Fig 1). Data collection form adapted from original PTIP materials for use at Pathways Center.

Modified PTIP activities and intervention codes (Fig 2). Activities & codes to document PT intervention adapted from original PTIP form. Codes modified & expanded to make applicable to wider variety of clients. The child’s treating therapist collected data.

Goal Attainment Scale (GAS): The treating therapist designed individualized goals for phases of intervention (Table 1).

Gross Motor Function Measure (GMFM): 5 dimensions were used to document change in functional motor performance over 3 phases of intervention (Fig 7).

References


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