

PT COUNTS: Practice-Based Evidence (PBE) Research Design (Horn et al., 2012) Student Characteristics: •Age •Medical diagnosis •Severity of disability •Educational placement •Geographical location Student Outcomes •School participation •Engagement in therapy

Physical Therapy Intervention: •Service delivery approaches Activities Procedural interventions •Dosage •Consultation/collaboration Documentation

Study

Start

During

Study

Study

End

•Recreation & Fitness •Posture & Mobility •Self-care at school •Academics

Background



- Since 1975 students with disabilities to receive a free & appropriate education in US
- Students to be educated in least restrictive environment with students without disabilities
- Each student has Individualized Education Program (IEP) which includes developmental, functional, & educational goals
- Physical therapists (PTs) to provide services to assist in meeting these goals
- Minimal evidence supporting school-based physical therapy (Majnemer et al. 2014)

Methods & Procedures PTs completed required training PTs completed student assessments PTs completed weekly student intervention data collection for 6 months

- PT rescored student assessments
- · Conducted data analyses

Purpose

Prospective, multi-site observational study, PT related Child Outcomes in the Schools (PT COUNTS), undertaken to describe the characteristics of school-based PT services and student outcomes.

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Assessments

Individualized measure: **Goal Attainment Scaling (GAS)** (King et al., 1999) Student goals converted into GAS format

Standardized measure:

School Function Assessment (SFA) (Coster et al., 1998)

School-Physical Therapy Interventions for Pediatrics (S-PTIP) Data Collection (Hashimoto & McCoy 2009; McCoy & Linn 2011)

S-PTIP Form & Manual

- PT COUNTS website, University of Kentucky
- http://www.mc.uky.edu/healthsciences /grants/ptcounts
- S-PTIP Intra-rater Reliability (Effgen et al., 2014)

Participants: 109 PTs

Attributes	Participating PTs (N=109)
Female Gender, n (%)	105 (95.5%)
Age in years, Mean/SD	46 years (SD 4.2)
Average years working in school, Mean/SD	13 years (SD 9.1)

School-Physical Therapy Interventions for Pediatrics (S-PTIP) Data Collection

Includes record of:

- Services to the Student
 - Activities, including time in activity in 5 minute increments Types of Interventions used How & where services provided
 - Student's engagement in therapy sessions
- Services on behalf of the Student Consultation/collaboration Documentation

Participants: 296 Students

	Students (N=296)
Male Gender, N (%)	166 (56%)
Age, Mean (SD)	7.3 (SD 2.02) Range 5-12 years
Diagnoses	CP (35%) Genetic (30%) Other (35%)

School	Physical Inerapy interventions for Per Cox Jeffries Efford Chiarello Greancy	Smarr. Stoner 2/15/2012
Student ID Monday date for We	ek Reported _/ / Therapist ID _	No Services Due to: (check one below)
INTERVENTION CODES Neuromuscular Interventions: 01. Balance	Type of Activity: Enter the duration of each activity in	No services this week per IEP plan; Absence of Student; Absence of PT/PTA;
02. Postural awareness 03. Motor learning 04. Hands-on facilitation techniques	Pre-Functionalminutes	School closed; Sichedule conflict; Other (note).
05. Constraint-induced MT 06. Oral motor facilitation 07. Aquatic therapy	Sittingminutes	Enter one 2-digit INTERVENTION CODE
Musculoskeletal Interventionsi 08. Strengthen (PRE) 09. Strengthen (Functional)	Standingminutes	
10. PROMpref Stretch 11. Protonged Stretch 12. Manual Therapy	Transfers Classroom Activity minutes	
13. Massage 14. Use of modality: Cardiopulmonary Interventions:	Classroom Mobilityminutes	
15. Aerobiotonditioning ex. 17. Postural Drainage	School Mobilityminutes	
18. Pressure release 19. Position changes	School Mobilityminutes	
Orthoses: 21. Shoe insert	Community Mobilityminutes	
22. LE plastic orthoses: 23. Knee truncbilizer 24. Trunk orthosis (elestic)	PE Activityminutes	
25. Elbowersand spint 26. Taping 27. Elastic wraps/suits	Self-Care Activityminutes	
25. BWS harness system	recreationminutes	Services Delivered by: (check one)
31. Pushtoy 32. Walker, type:	Other Activityminutes	Notes:
34. Canes, type: 35. Dowels/sticks	Total Time with Student:	
36. Wheelchair, type:	minutes	Feeder Delivery Duration: (5 minute increme
Mobility Interventions: 37. Hall training	Sensory Interventions: 59. Visual training	Services to the Student:
38. Stairs training 39. Doors training	60. Sensory integration ex. 61. Sensory processing	A. Individual:
40. Curbs training 41. Bus/car training	62. Student	B. With students who are non-SpEd:
42. Ramp training 43. Elevator training	63. Family/caregiver 64. Teacher	With students who are SpEd:
44. Bathroom access	65. PT Assistant	With no other students:
45. Cafeteria access 46. Library access	65. Aide 67. IEP Team	C. Within a school activity:
47. Playground access	68. Other	D Contractment
45. Seation	Assessment: 69 Major	With whom: OT: SLP: Teacher: Aide:
49. Sidelyers	70. Ongoing	Others (note):
51. Prone over wedge	71. Fion motor	Bervices on behalf of the Student:
52. Other	72. Cognitive training	E. Consultation/Collaboration
Equipment Interventions: 53. Equipment Application/training	73. Benavioral training 74. Speech/Language	With whom: Family: Staff: Othera:
54. Equipment Maintenance	75. BoclarEmotional	F. In-service:
55. Equipment Fabrication 56. Adapted switches/foots	75. Adaptive PE 77. Orientation and Mobility	G. Curriculum development:
57. Communication Devices	78. Other	H. Documentation Time:
58. Other	79. Other	I. Total Services on behalf of Student:
		Betting: School: Home: Other (note)
		Student Participation Rating:

Students' Gross Motor Function Classification			
	Total (N=296) N (%)		
Gross Motor Function Classification System (GMFCS) Level			
I	113 (38.2%)		
11/111	117 (39.4%)		
IV/V	66 (22.3%)		



Results: Most Common of 13 Intervention Categories

Intervention N=296	Times intervention indicated	Times indicated/ student
Neuromuscular	10,729	36.2
Mobility	5,114	17.3
Musculoskeletal	4,749	16.0
Mobility assistive	1,711	5.8
Educational	1,640	5.5
Integumentary	361	1.2

Results: Most Common of 14 Activities

Type of Activity N=296	Times indicated	Times/ student
School Mobility Indoors	2234	7.5
Recreation	1932	6.5
Pre-Functional	1929	6.5
Standing	1600	5.4
Transitions/Transfers	1529	5.2
Physical Education Activity	1446	4.9
Sitting	797	2.7

Results: Most Common of 79				
Intervention N=296 Times indicated Times/student				
Motor learning	3,503	11.8		
Balance	3,406	11.5		
Functional strength	3,175	10.7		
Postural awareness	2,429	8.2		
Hall training	1,688	5.7		
Hands-on facilitation	1,294	4.4		
Stairs training	1,251	4.2		
Ongoing assessment	1,033	3.5		
LE plastic orthosis	1,018	3.4		
Walker	810	2.7		
Doors training	698	2.4		
PROM/brief stretch	662	2.2		

Results: Activities with Most Time

- Physical education: 5.7 min/week, SD 6.2
- Recreation: 5.6 min/week, SD 6.1
- School mobility: 5.6 min/week, SD 6.2
- Standing: 3.9 min/week, SD 4.0
- Transitions/transfers: 3.4 min/week, SD 3.9

Results: Services to the Student

Туре	N	Min/week Mean (SD)	Min/Max
Individual	289	23.3 (16.3)	.5/105.9
Group	167	7.6 (9.0)	.2/ 39.5
With no other students	283	17.1 (12.0)	.5/ 63.2
Within school activity	220	9.5 (12.9)	.2/ 87
Separate from school activity	288	19.6 (11.4)	.2/ 62.7
Co-treatment	122	6.8 (7.6)	.2/ 44.1

Results: Service on Behalf of Student

Туре	N	Min/week Mean (SD)	Min/Max
Consultation/ Collaboration	289	6.0 (4.9)	.2/32.3
In service	9	1.8 (2.0)	.2/ 6.5
Curriculum development	53	2.0 (2.3)	.2/11.4
Documentation	296	7.1 (3.8)	.2/21.1
TOTAL Time:	296	13.2 (7.5)	1.7/51.1

Contact Information Questions?

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PT COUNTS Web site: http://www.mc.uky.edu/healthsciences/gr ants/ptcounts/index.html

Summary of Results

Services directly with the student - 23 minutes/week

Services on behalf of the student

- 13 minutes/week

Services were limited in intensity usually provided individually to students separate from school activities

Activities primarily involved mobility, transitions, & recreational movement using motor learning, balance, & functional strengthening interventions

References

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See poster abstracts for:

Outcomes of school-based physical therapy for children with disabilities in the United States PO-38-Sat **Relationship of school-based** physical therapy to outcomes for children with disabilities in the USA PO-17-10-Sat