Physical Therapy in a School Setting

Physical therapists assist students in accessing school environments and benefiting from their educational program; including such environments as:

- Classrooms, hallways, stairs, ramps, elevators, school bus
- Bathrooms, cafeteria, gym, auditorium
- Playground, school trip destinations, extracurricular venues

Physical Therapy (PT) and IDEA
The Individuals with Disabilities Education Act (IDEA) is a federal law, with state education agency oversight, that supports the provision of public education for all children—regardless of the nature or severity of their disability. Part B of IDEA mandates the education of children, 3-21 years old, who have a disability that interferes with their educational performance and their ability to benefit from their educational program. The law guarantees the provision of special education and “related services” as necessary, to meet the students goals.

Physical therapists should work collaboratively with a student’s IEP team, and family throughout the screening, evaluation, program planning, and intervention process.

Areas of Concern for Students with WS
Developmental delay: delays in acquiring milestones and higher level skills
Musculoskeletal problems: ranging from hypotonia to stiffness, gait deviations, poor postural control/alignment
Learning disabilities: difficulty with visual-spatial input, require increased repetition and multi-sensory strategies
Attention deficit disorder: decreased sustained postural stability, under or over responsive to sensory information

Obtaining Services
The Individualized Education Program (IEP) process involves planning and decision making by the IEP team including parents/caregivers, students, and therapists (if indicated). The components of the process are:

Problem Identification → Referral → Evaluation → Eligibility → Individual Plan (goals) → Services (when/where).

1. Problem identification - identify the areas in which the student is not able to meet the environmental demands or the demands of the curriculum.
2. Referral - the team identifies the resources needed to meet the need including related service frequency and duration, location, and specific criteria.
   - Physical therapy is indicated as a related service in school, only when necessary to help the student access and participate in education and the educational environment. Quality of movement and medically relevant impairment is not a consideration unless it impedes on the educational process.*
3. Evaluation/Eligibility/Individual Plan - the PT will complete an evaluation and, if appropriate, will write goals for areas in need of specific skill development.
4. Services - will be provided to support the development or achievement of a skill area as needed. Services can vary by type (direct or consultative), frequency (# of minutes per time period), and environment (private or group; pull-out or in the classroom).

*Hospital-based and private therapeutic sessions (outside of school) can address areas of concern not covered in the school-based sessions.
Physical Therapy (PT)

PT for Very Young Children

PT can be used for:

Assessment of muscle tone imbalances and supporting the child’s progress through developmental milestones, such as crawling and walking.

Sample goal and objective areas

The child will increase body awareness:
- identify body parts by touch

The child will improve locomotion, body movements:
- creep, crawl, walk w/ support
- ball rolling
- visual tracking

PT for Pre-school children

PT can be used to:

Support development of milestones, refining walking/running/jumping skills, and beginning to assist with the child’s ability to participate in typical games and activities, e.g. catching/throwing, riding on various toys, etc.

Sample goal and objective areas

The child will improve locomotion & balance:
- walk w/without supports
- stand on one foot
- hop in place, forward

The child will improve body movements:
- creep, crawl, walk w/wo support
- ball throwing/catching

PT for School Age Children

PT can be used to:

Support the child as they begin to participate in playground and gym activities.

support the child to access the school environment

support balanced muscle tone and endurance

Sample goal and objective areas

The child will increase classroom /school independece:
- improve ability/endurance on steps
- increase walking speed
- improve ability to carry items while walking (Cafeteria, classroom etc)
- improve posture while sitting

The child will gain ability to participate safely in gym/on playground/after school events:
- improve ability to hop/skip/jump rope etc.
- increase walking speed
- improve ability to throw/catch/kick balls
- improve understanding of group play and rules
**Physical Therapy (PT)**

### PT for Teenagers

PT can be used for:

Support as the child ages and may need protection against injury during activities or training to strengthen various muscle groups to improve balance and strength so that they can participate in the more sophisticated sports. Providing training and support in healthy practices, physical fitness, and wellness.

Physical therapists may also need to work with physicians and orthotists to provide braces/splints to help correct or prevent deformity in limbs or the back.

**Sample goal and objective areas**

The student will improve ability to participate in school sports/gym class
- increase understanding of “rules of the game” for specific interests
- improve skills needed for sport interests
- increase active participation in activities
- improve general coordination and strength

### PT for Adults

PT can be used to:

Complete an assessment of physical status and provide targeted instruction and support regarding fitness and wellness activities.

Physical therapists can also provide guidance regarding activities to maintain endurance, mobility, and range of motion.

**Sample goal and objective areas**

The client will improve strength, flexibility & activity level
- instruction in fitness machine use
- independent participation in activities
- Active Participation in activities
- increase quality, type & number of stretches

The client will improve cardiovascular endurance
- increase walk/run/bike activities
- increase understanding of heart rate/heart monitor use
- encourage/support active participation in activities

### Resources

- American Physical Therapy Association
  [http://www.apta.org](http://www.apta.org)

- APTA organizations by state

- Foundation for Physical Therapy

- Guidelines for Medical Supervision of a patient with Williams syndrome
  [http://pediatrics.aappublications.org/content/107/5/1192.full](http://pediatrics.aappublications.org/content/107/5/1192.full)

- Common Evaluation Tools
  - Assessments of Functional Skills
  - School Function Assessment (SFA)
  - Bruininks-Oseretsky Test of Motor Proficiency
  - Range of Motion/Strength Assessments
  - Batelle Inventory
  - Gait/Balance Analysis

- APTA List of Assessment Tools Used in Pediatric Physical Therapy
Hippotherapy is a great private therapy option for improving physical well-being, balance and self-confidence.

Hippotherapy is a physical, occupational, and speech-language therapy treatment strategy that utilizes equine movement as part of an integrated intervention program to achieve functional outcomes. Equine movement provides multidimensional movement, which is variable, rhythmic and repetitive. The horse provides a dynamic base of support, making it an excellent tool for increasing trunk strength and control, balance, building overall postural strength and endurance, addressing weight bearing, and motor planning.

Hippo-therapy is not a riding lesson. In contrast, therapeutic riding provides recreational riding lessons adapted for individuals with disabilities.

A word about “objectives”

Most children with Williams syndrome will benefit from therapeutic interventions as young children, and some will continue to benefit from some therapies throughout most of their education.

Just as it is important for therapists to learn about Williams syndrome in order to establish the most valuable goals and realistic objectives, it is important for parents to understand the elements of a good objective so that they can be sure their children will get the most benefit from therapeutic intervention.

Regardless of which therapy a child is receiving, a good objective will follow the same format. Each objective must address 4 key elements:

- **Audience:** who the objective is for
- **Behavior:** what behavior is the objective addressing
- **Condition:** Under what circumstances will the result come about? What will contribute to the change? By when should the results be evident?
- **Degree:** what determines successful completion of the goal - 8/10 times, 4/5 days etc.

Objectives such as “the child will listen to the speaker 80% of the time”, or “the child will attend to a specified task for “X” minutes” are not good goals.

• It is impossible to know for sure when/if a child is listening, or attending. Many children with WS can appear to be unfocused or looking at something other than what they are supposed to be attending to, but when asked about the topic will know the answer. Therefore a much better goal to gauge a child's ability to attend is a goal directed at answering questions following the exercise.

Goals and objectives are not the child’s curriculum. They are areas that the team has decided will support the child’s progress in the curriculum if they are given focused attention.

For more information on IEPs and Goals and objectives go to: [www.wrightslaw.com/advoc/articles/plan_iep_goals pf.html](http://www.wrightslaw.com/advoc/articles/plan_iep_goals pf.html)