

# Standing Device Benefits Letters 2011

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www.chkd.org

Physical, Occupational & Speech Therapy 601 Children's Lane Norfolk, VA 23507 757.668.7083

August 31, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a senior inpatient occupational therapist, and assistive technology professional, at Children's Hospital Of the King's Daughters. Our department treats patients both in the acute care setting as well as in the acute rehabilitation unit, with diagnoses ranging from orthopedic lower extremity surgeries to traumatic brain injury, stroke, and other neuromuscular diseases.

CHKD is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with neuromuscular impairment resulting from such diagnoses as spinal cord injuries, cerebral palsy, CVA, and traumatic brain injury, just to name a few.

For persons with these neuromuscular diseases there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with these neuromuscular impairments, including: bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with neuromuscular impairment are able to access such devices as part of their care, treatment and rehabilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of persons with neuromuscular impairment to be more independent, productive and self-reliant.

Children's Hospital of The King's Daughters
Health System

www.chkd.org

Physical, Occupational & Speech Therapy 601 Children's Lane Norfolk, VA 23507 757 668 7083

I have personally been recommending/prescribing standing equipment for more than five years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, CHKD maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with cerebral palsy, spinal cord injury, CVA, and traumatic brain injury while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Naomi Adams, OTR/L, ATP

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September 2, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am the Coordinator of Physical and Occupational Therapy at HMS School for Children with Cerebral Palsy where we provide education to students who could not be educated in their school districts. HMS is designated an Approved Private School by PA Department of Education and receives funding for PA students with multiple disabilities, in day or residential programs, whose families, sending school districts and the state agree to accept an HMS placement. Our residential program is certified by PA Department of Public Welfare, Division of Children, Youth and Families. We also work with out-of-state school districts and their state Department of Education to explore agreements for placement and funding.

We love our students and are passionate for their health and comfort. As experts in the issues resulting from cerebral palsy or other brain injuries, we continually challenge ourselves to stay on top of best practices in the field. We specialize in state-of-the-art assistive technology that expands youngsters' access to the world, harnessing every form of assistive device to maximize students' independence

Many of our students stand daily for upward of thirty minutes. HMS School is well aware of the medical benefits associated with the integration of standing programs in an educational plan, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with cerebral palsy as well as head injuries.

For persons with cerebral palsy or a head injury, there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with cerebral palsy including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density, joint and

muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with cerebral palsy are able to access such devices as part of their care, treatment and habilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of our students to be more independent, productive and self-reliant.

I have personally been recommending standing equipment for more than nineteen years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, HMS School maintains an on-going effort to ensure that our students are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with cerebral palsy while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Barri Alexander, MBA, PT

Coordinator of Physical and Occupational Therapy

HMS School for Children with Cerebral Palsy

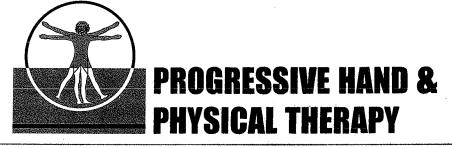
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6 September 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

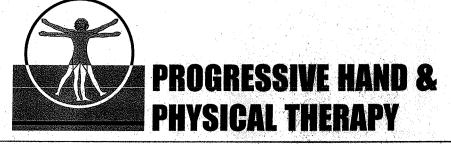
Dear Mr. Golinker,

I am the director of physical therapy at Progressive Hand & Physical Therapy in the greater Houston area. In 2009, I became a board certified Neurologic Certified Specialist. Our clinical team is able to expertly treat a wide range of diagnoses including: spinal cord, brain injury, multiple sclerosis, stroke, and cerebral palsy. We have experience serving patients of all ages and helping them achieve their specific goals to maximize their functional potential.

Progressive Hand & Physical Therapy has utilized standing frames to assist our patients who lack the neurological innervation and muscular strength to stand without assistance. Progressive Hand & Physical Therapy is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with spinal cord, brain injury, multiple sclerosis, stroke, and cerebral palsy.

For persons with spinal cord, brain injury, stroke, and cerebral palsy there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with spinal cord, brain injury, multiple sclerosis, stroke, and cerebral palsy including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with spinal cord, brain injury, multiple sclerosis, stroke, and cerebral palsy are able to access such devices as part of their care, treatment and



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habilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of persons with spinal cord, brain injury, multiple sclerosis, stroke, and cerebral palsy to be more independent, productive and self-reliant.

I have personally been recommending/prescribing standing equipment for more than 4 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, Progressive Hand & Physical Therapy maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with spinal cord, brain injury, multiple sclerosis, stroke, and cerebral palsy while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Amonette, PT, NCS

Sincerely,

Jenry L. Amonette, PT, NCS Director of Physical Therapy

Progressive Hand & Physical Therapy

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Webster, Texas 77598 Phone: 281-332-3000 Fax: 281-332-9171

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## State of Hawaii, Dept. of Education P.T./O.T. Program

West Hawaii SPED Regional Office - Special Services Ph: 808-327-6202 Fax: 808-327-6296; Cell: 808-937-7903

#### Nancy Bloomfield, P.T.

#### Letter of Medical Necessity

To: To Whom it May Concern Date: 9/28/2011

From: Nancy Bloomfield, RPT, ATP

Re: Standing equipment

I have been a pediatric physical therapist for over 40 years and have been working in the school system in Hawaii for the last 17 years.

Approximately 60 to 70% of the students on my caseload have a standing protocol in their Individual Educational Plans. Standing is imperative for non-ambulatory individuals and provides the following benefits:

- 1. Improves circulation.
- 2. Improves respiration
- 3. Improves urinary tract function
- 4. Improves digestive function; helping with chronic constipation
- 5. Promotes development of weight bearing joints particularly the hip joints
- 6. Prevents development of osteoporosis and promotes development of bone density
- 7. Changes of position to different weight bearing surfaces prevents skin breakdown
- 8. Allows visual perception to develop in vertical position
- 9. Improves social interactions among peers
- 10. Dynamic standers allow student/client to experience moving through his/her environment in the upright position
- 11. Dynamic standers can be used in P.E. classes to allow for hands-free standing for activities where hands are required to manipulate equipment (i.e.T-ball, tennis, basketball, golf, etc.)
- 12. Dynamic standers with large, self propelling wheels or with chain-drive wheels develop upper extremity strength.
- 13. Propelling a dynamic stander is a motor pattern that easily transfers to propelling a manual wheelchair în some students.

Nancy Bloomfield, RPT, ATP

## UNIVERSITY of IOUISVILLE.





Mary Ellen Buning, PhD, OTR/L, ATP Dept. of Neurological Surgery

Director, Assistive Technology Resource Center 220 Abraham Flexner Way #1112

School of Medicine Louisville, KY 40202

Mr. Lewis Golinker, Esq. Director, Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

August 18, 2011

Dear Mr. Golinker,

I am the Director of the Assistive Technology Resource Center at Frazier Rehab & Neuroscience Institute in Louisville KY. We are a regional inpatient and outpatient rehab and part of the Jewish Hospital St. Mary's Healthcare organization. Our hospital is in the process of merging with the University of Louisville Hospital, Kentucky's only Level I trauma center. I came here more than 3 years ago to start a Wheelchair Seating and Mobility (WSM) program to serve those in this region who rely on wheeled mobility for their mobility related activities of daily living. We primarily serve adults and children with neurological diagnoses. In the past 3 years our WSM program has greatly improved the level of practice and expectations for those who use wheelchairs. We believe in evidence-based practice use interventions that have a basis in research. As a result, those we evaluate and treat in our clinic can expect to avoid secondary complications of wheelchair use such as pressure ulcers and skeletal collapse, have increased comfort, and greater functional independence and opportunities for return to employment or purposeful daily lives. In the past 3 years we have seen nearly 1000 individuals with all types of diagnoses.

Frazier Rehab's Wheelchair Seating and Mobility clinic is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with spinal cord injury, cerebral palsy, multiple sclerosis and head injuries with motor impairments.

For persons with these diagnoses there are a number of health benefits that are derived from using standing devices—both static and as a component of a powered wheelchair. Specifically, reports and research have established that standing devices can maintain hip integrity and hip/knee/ankle range of motion; reduce the risk of skin/pressure ulcers, osteoporosis, bladder infections and spasticity; and improve pulmonary and cardiac function, bladder function, bowel/digestive function, spasticity/tone. When standing, upper extremities are better positioned for functional tasks like preparing food, folding laundry using a microwave safely and dressing and grooming activities. For many the ability to stand has not only medical or health maintenance benefits but it also increases a sense of well being and restored capability and equivalence with others who are not using wheelchairs, especially in social interactions with others in the community or in employment. As an occupational therapist, this particular issue has

high value for me. I know that returning to "valued occupations" where one's identity and roles are restored is a key part of the whole rehabilitation process.

I have personally been recommending and prescribing standing equipment for more than fifteen years as an occupational therapist specialized in wheelchair seating and mobility. At Frazier Rehab Institute, standing devices as well as the active stepping used in locomotor training are considered the standard of care and part of recovery from spinal cord injury. As such they are part of our regular intervention for SCI treatment.

Our WSM program works hard to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments while at the same time facilitating greater activity, participation, quality of life and independence. The increase in self-sufficiency and ability to manage independently within the home leading a reduction in the "burden of care" are also significant benefits to our clients.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Mary Ellen Buning, PhD, OTR/L, ATP

Fraug Eleen Buring

# SCOTTISH RITE HOSPITAL FOR CHILDREN

September 30, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am the Director of Child Life and Therapy Services at Texas Scottish Rite Hospital for Children. TSRHC is a renown facility that specializes in pediatric orthopedic care. As department director and a clinician, my role is to support the needs of our patients and families through direct therapy interventions as well as consultative services.

The staff at Texas Scottish Rite Hospital for Children are well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be valuable and important tools in the treatment and on-going health management of people with neurological and / or neuromuscular disorders.

For persons with static encephalopathy and spina bifida there are a number of health benefits that can be derived from using standing devices. Research reports have indicated that standing devices can impact a number of secondary medical complications including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/activities of daily living, musculoskeletal deformities, and psychological conditions.

The use of standing devices can enhance and facilitate the ability of persons with static encephalopathy and spina bifida to expand their positioning options, experience greater social opportunities with peers and family members, and participate in activities not available to them from a seated position. I have personally been recommending standing equipment for more than 30

As a general matter, TSRHC maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and offective. It has been our organizational experience that standing devices can be therapeutically effective for certain physical and psychological impairments associated with static encephalopathy and spina bifida while at the same time facilitating greater activity, participation, quality of life and independence.

Sincerely,

Eust Chrom Carol Chambers, PT, MS, PCS

Director, Child Life and Therapy Services

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A MASONIC CHARITY



August 25, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am the President of the International Organisation of Physical Therapists in Paediatrics which is a subgroup of the World Confederation of Physical Therapy. Our organisation represents 16 countries and over 12,000 pediatric physical therapists. The objective of the organisation is to foster co-operation between physical therapists practicing in paediatrics throughout the world, encourage improved standards and consistency of practice in paediatrics care by physical therapists, advance practice by communication and exchange of information, and encourage scientific research and promote opportunities for the spread of knowledge of new developments in the field of Paediatrics.

I previously was President of the Section on Pediatrics of the American Physical Therapy Association from 2003 – 2007. I am also a Professor Emeritus in the Department of Physical Therapy at the University of Tennessee Health Sciences Center. I was a faculty member of the Department of Physical Therapy from 1973 until my retirement last year and served as Chairman of that Department from 1986 until that time. The courses which I taught at the University were in the area of growth and development and in the courses related to evaluation and treatment of children.

In the courses which I taught, the use of standing devices was emphasized as a major intervention used on a daily basis with children with a variety of disorders. Additionally, I have authored more than 7 textbooks used by students in entry level physical therapy programs and specific chapters have been included in these textbooks focused on the use of adaptive equipment with children. In these textbooks, the use of standing devices has been emphasized in these chapters. Case studies presented in the textbooks have included the use of standing devices as well. The first textbook that I wrote with this inclusion was in 1985... over 25 years ago.

The University of Tennessee Health Sciences Center Department of Physical Therapy, the Section on Pediatrics of the American Physical Therapy Association and the International Organisation of Physical Therapists in Paediatrics are all well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. Clinical and empirical evidence has shown that standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with cerebral palsy, muscular dystrophy, developmental delay, and spinal cord disorders.

At the recent meeting of the World Confederation of Physical Therapy, a 2 day program sponsored by the International Organisation of Physical Therapists in Paediatrics was presented on the management of children with a variety of disorders. The presenters were from Canada, South Africa, New Zealand, the Netherlands and Jordan as well as from the United States. Interesting, all of the presenters included the use of standing devices in the treatment of children in their countries. Each of the presenters noted the number of health benefits that are derived from using standing devices. Specifically, reports and research were cited about the use of standing devices to reduce the risk of, control, and/or treat a number of secondary medical complications associated with cerebral palsy, myelodysplasia, Prater-Willie, developmental delays and spinal cord injuries including: bladder function/urinary tract infections, bowel/digestive function, range of motion, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction,, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions. In our organizational experience, the use of standing devices enhance and facilitate the ability of persons with a variety of developmental and lifelong disorders to be more independent, productive and self-reliant.

I have personally been recommending/prescribing standing equipment for more than 38 years. In addition to serving as a faculty member who has taught entry level physical therapy students for more than 35 years, I have maintained an ongoing clinical practice. In my practice, standing devices are considered the standard of care and is a part of my regular practice patterns. Certainly, the standing equipment has become more sophisticated over time but I was using standing "boxes" beginning in 1973 as a part of my practice.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Barbara H. Connolly PT, DPT, EdD, FAPTA

Sarbora D. Compelly

President, International Organisation of Physical Therapists in Paediatrics Past President, Section on Pediatrics, American Physical Therapy Association Professor Emeritus, University of Tennessee Health Science Center

#### EASTER SEALS SUPERIOR CALIFORNIA

August 22, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a Staff Physical Therapist at Easter Seals, Superior California in Sacramento, California. Easter Seals is a non-profit non-public agency whose Pediatric Services provide physical, occupational and speech therapy to disabled children with a variety of disabilities including conditions such as cerebral palsy, muscular dystrophy, spinal muscle atrophy, traumatic brain injury, pervasive developmental disorder, genetic anomalies such as Down Syndrome, and autism. I have personally been recommending and prescribing standing equipment for more than 13 years here. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

Currently Easter Seals "seconds" me over to the Sacramento County Office of Education (SCOE) for the physical therapy consultation needed to support the M.O.V.E. curriculum in their Severely Handicapped (SH) classrooms. The disabilities described above are typical of the students in the SH classrooms in which I consult. In each consultation, I provide physical therapy expertise for teachers to use with the M.O.V.E. curriculum to teach severely orthopedically and cognitively challenged students from ages 3 through 22 to sit, stand, and walk, and to accomplish the transitions between.

The M.O.V.E. curriculum was published in 1990 and is used worldwide in special education classrooms to teach functional gross motor skills. Since its onset, it has used standing devices to provide the external support severely orthopedically challenged students need to learn to stand and to prepare them for walking. In addition, the M.O.V.E. curriculum was founded on the observation that students who can be placed and eventually master the ability to be in upright positions (in both sitting and standing) not only are more healthy, but also develop their cognitive and language acquisition skills, resulting in improved social skills and an improved quality of life.

For severely orthopedically and cognitively challenged children, there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications which would interfere with their regular attendance at school including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and calciuria, joint and muscle contractures, decreased range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, , respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions.

In the M.O.V.E. Curriculum and SCOE's experiences, the use of standing devices enhances and facilitates the ability of students with severe orthopedic and cognitive disabilities to be more independent, productive and self-reliant in both school and family settings. These two cases illustrate typical experiences in using standing devices:

- 1. D-'s case illustrates how the use of a stander benefitted a student's general health and social development. D- had cerebral palsy with extensive hypertonus, extreme muscle tightness that required the abdominal implantation of a baclofen drug pump to allow his muscles to relax so his joints could move. The combination of hypertonus and baclofen left him with extremely weak muscles, so he needed a device to support him in standing. D- had used a stander when he was younger to age 15, but in his high school transfer it was not immediately transferred with him, so he did not stand for several years. In these non-standing high school years, his average school attendance was 33%, due to illness: colds, pneumonia, bladder infections and pressure sores. He was considered very medically fragile. At age 18 we slowly re-implemented a standing program for D- using the Rifton Supine Stander. In the following year his school attendance went up to 85% because of improved health and remained so until he graduated. He rarely caught respiratory illnesses and developed no pressure sores. His bowel (constipation) and bladder function (output) improved. Additionally, throughout the following years as he was standing, he had increased social interaction with his peers at eye level- he became a "person" to them instead of the kid on the reclined wheelchair. Standing in a stander improved his quality of life in both health and in social interaction.
- 2. G-'s case illustrates how the use of a stander can help a severely disabled child learn to stand and prepare that child to learn to walk. In his early preschool years, G- had a traumatic brain injury as a result of a near-drowning incident. His brain injuries had left him with sensory defensiveness and moderate spasticity (muscle tightness) in his legs and feet. When he entered school at 5 years old he would not bear any weight on his legs, so the adults in his life had to lift him for transfers between chairs or from the floor to chairs. G- was placed on a standing program in school, and during a year G-progressed from tolerating only 1 minute of time standing in a Rifton Dynamic Stander, to tolerating 45 minutes twice a day. His feet and legs were "desensitized" by standing upright on them for increasing time periods in the stander. He not only developed a tolerance to standing, but also this past year at age 8, G- has learned to come to stand with minimal balance assistance of his parents or school staff. Now weighing 68 Lbs, He no longer requires lifting to transfer, and this has prevented potential back injuries of all the adults who were lifting him. He is now learning how to walk in a Rifton Pacer gait trainer. Had he not used the stander to learn to stand, teaching him to walk would not have been attempted.

In the extensive professional experience of Easter Seals, SCOE, and the M.O.V.E. curriculum, we find standing devices provide significant medical and psychological benefits for the students who use them, and significant improvements in the quality of life for both the students and their families.

Upon request, I would be happy to provide additional information as needed.

Sincerely,

Janet C Cookson PT, DPT
Easter Seals, Superior California
3205 Hurley Way
Sacramento, CA 95864
916.300.2092 (direct line)



### WESTMORELAND INTERMEDIATE UNIT

102 EQUITY DRIVE, GREENSBURG, PENNSYLVANIA 15601-7190 PHONE: 724-836-2460

September 29, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a physical therapist for The Westmoreland Intermediate Unit and provide physical therapy for three to six year old students who are in the preschool setting. In the past, I've also worked for a facility that provided outpatient, inpatient and schooling

for special needs children.

Over the past thirteen years of being a physical therapist, I have used standers for students who present with cerebral palsy, spina bifida and developmental delay. Some of the benefits of standing that I've observed have been improved range of motion in hamstring and heelecord muscles thus less need for botox injections and hamstring and heelecord lengthening surgical procedures. Families have reported improved bowel functions once a child has been involved in a standing program and therefore needed to take less medication for constipation. Improved breathing and oxygen saturation levels have been observed when a child who is limited to being positioned only on the floor is now able to be upright in a stander. Without the standing frames, the child is unable to experience upright positions and achieve weight bearing through their bones. By being upright, the child is able to explore more of their environment with their hands and eyes. Think about how your experiences would change if you were limited to only being positioned on the floor or sitting in a chair. Often in a classroom, the child is able to engage with the teacher and peers more because he is upright. An increase in the level of alertness, facial expressions and vocalizations can be observed when a child is upright.

I consider standing devices an important part of a child's physical, social and cognitive development and strongly recommend them for someone who is unable to

achieve an upright position on their own.

Sincerely,

Heidi Darby, PT, PCS

Physical Therapist

Pediatric Certified Specialist



136 W. Purnell St. Lewisville, TX 75057 469-948-8573

September 29, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am the lead therapist for occupational therapy and physical therapy for the special education department of the Lewisville Independent School District. My duties include providing consult and direct physical therapy services to our students, as well as a wide variety of administrative duties, including ordering equipment and supplies for students, classrooms, and therapists.

Lewisville ISD is a large school district with over 50,000 students and over 60 campuses. We currently have 24 OT's and PT's on our staff.

Our therapists are very well aware of the medical benefits associated with the integration of standing programs into a student's school day. In our experience, standing devices have proven to be extremely valuable and important tools in the motor development and on-going health management of people with number of diagnosis, including cerebral palsy, spina bifida, spinal cord injury, traumatic brain injury, Angelman syndrome, muscular dystrophy, spinal muscular atrophy, etc.

In our school district we begin putting students in prone or supine standers as early as age 3, and this often continues until they complete high school. For our more severe and profound students, standing is many times a part of their educational curriculum. Prequently goals and objectives for standing are written into their IEP. For our students there are a number of health benefits that are derived from using standing devices. Reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with the physical limitations of our students. Some of these are: bladder function/urinary tract infections; bowel/digestive function; cardiopulmonary/circulatory function; spasticity/tone; orthostatic hypotension; osteoporosis; bone density; joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction,, respiratory function, self-care/activities of daily living, scoliosis and other musculoskeletal deformities, and psychological conditions. We often see increased verbalizations, improved moods, and increased interaction with teachers and peers when students are given the opportunity to stand. I believe our parents will tell you that the need for scoliosis or other musculoskeletal surgeries has been delayed or avoided because their child stood regularly at school.

I have personally been recommending/prescribing standing equipment for more than 20 years. In this facility, standing devices are part of our regular practice patterns. We have been very fortunate that our department's budget has allowed us to purchase for our students standing equipment that will maximize their educational experience and promote overall physical and mental health.

Sincerely,

Patty Disen, NT Lead Therapist OT/PT

Lewisville ISD

Barbara Doucet, MSPT, M.Ed Carter Development Center 396 Northhampton St. Boston, MA 02118

#### October 4, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

#### Dear Mr. Golinker,

I have been employed as a physical therapist for the Boston Public Schools for the past fifteen years. As a physical therapist for a large urban school system, my caseload includes students with a variety of diagnoses receiving physical therapy services as part of their individualized education program (IEP). The Carter Center is a specialized school for students with severe developmental delays and complex medical needs, within the Boston Public School system. It is where the majority of the students that I service attend school. Many of the students are primarily wheelchair users and require extensive supports and assistance to access their school environment and curriculum. My responsibilities as an educational team member includes, student evaluations and physical therapy treatments; consultation to classroom staff and parents/guardians; providing trainings for school staff on proper techniques for, transfers, positioning, applying splints and braces, and using equipment such as wheelchairs, walkers, gait trainers, and standers; and recommending positioning devices for students.

At the Carter Center, supported standing is an important daily routine for many of our severely impaired students as part of the school's commitment to promoting health and wellness for all of the students. Standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of students with a variety of diagnoses. Based on my experience, some of the diagnoses for which I have witnessed the medical benefits of supported standing programs include microcephaly, cerebral palsy, adrenoleukodystrophy, schizencephaly, pachygyria, traumatic brain injury, C.H.A.R.G.E. Syndrome, and Rett Syndrome, to name a few.

For persons with **the above stated conditions** there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with cerebral palsy and other conditions affecting the nervous system including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, joint and muscle contractures, range of motion, skin/pressure

ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/activities of daily living, and musculoskeletal deformities.

Based on my experience, I am convinced that many secondary medical complications, such as contractures, constipation and bowel obstructions, spasticity, poor hip joint integrity, and pressure sores can be greatly reduced. Many of these complications, as well as others, result in surgeries, hospitalizations, and chronic illnesses that far outweigh the cost of a standing device. I frequently see increased spasticity and loss of lower extremity range of motion that occurs over the summer, with students who do not have standing devices at home. I have also seen improvement in digestive (absorption) functioning for students who rely on G or J tubes for nutrition, directly measured by volume and time. Another benefit frequently observed is the improved bowel function and decreased frequency of constipation for students on certain medications. There is no substitution for the important positive health effects that gravity has on the human body.

I have personally been recommending standing equipment for approximately 15 years and will continue to do so. At the Carter Center and many other Boston Public Schools that provide services for students with special needs, standing devices are considered the standard of care and are part of our regular practice patterns and included in students' IEP plans.

An on-going effort is made to ensure that our students and their families are made aware of assistive technologies that are both safe and effective. It has been my experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with a variety of neurological, genetic, and metabolic disorders while at the same time facilitating greater activity, participation, quality of life, and independent functioning. Standing devices provide significant medical benefits to the individuals on my caseload and to others with similar medical needs.

Sincerely,

Barbara Doucet, MSPT, MED Barbara Doucet, MSPT, M.Ed

**Boston Public Schools** 



#### 10/01/2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I have been practicing physical therapy at Denver Health Medical Center for 23 years. Denver Health is a level one trauma/safety net hospital. Many of my patients have Medicare and/or Medicaid. As a physical therapist and assistive technology practitioner (ATP), I treat patients with traumatic, disabling conditions or injuries that impair the ability to stand or to walk. In my experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with static or progressive neurological conditions, such as cerebral palsy, multiple sclerosis, head injury, or spinal cord injury.

For persons with these neurological conditions, there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with neurological disabilities including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and calciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with disabilities are able to access such devices as part of their care, treatment and habilitation. In my experience, the use of standing devices enhances and facilitates the ability of persons with difficulty standing to be more independent, productive and self-reliant.

I have personally been recommending/prescribing standing equipment for more than 23 years. In my facility, standing devices are considered the standard of care and are part of our regular practice patterns.

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As a general matter, Denver Health maintains an on-going effort to ensure that our patients are made aware of assistive technologies that are both safe and effective. It has been our experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with cerebral palsy, multiple sclerosis, head injury or spinal cord injury while at the same time facilitating greater activity, participation, quality of life and independence.

We recently purchased a second standing frame for our inpatient therapy department because we had to "time-share" our one existing unit. I have had several families build standing frames out of plywood because, while the patient, family, and clinicians recognized the benefits of standing, the patient's insurance company did not. While I commend the families for their resourcefulness, I am always concerned about safety when a patient has to resort to using a "homemade" medical device.

In summary, in my experience, I find standing devices provide significant medical benefits to the individuals I treat and to others with similar medical needs. Upon request, I would be happy to provide additional information as needed.

Sincerely,
Undy AFT, ATP

Cindy Duff, PT, ATP

Supervisor, Inpatient Therapy

Denver Health

Cynthia.duff@dhha.org

303-602-7320



## Indiana University Health

9/30/2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a physical therapist at Riley Hospital for Children with Indiana University Health. We are the only comprehensive children's hospital in the state. Our outpatient department serves the greater Indianapolis area for occupational and physical therapy needs. We see children from ages 0-18 with all diagnoses such as developmental delay, cerebral palsy, muscular dystrophy, spina bifida, traumatic brain injury and mitochondrial disorder to name a few.

We often recommend and evaluate patients for standers. Riley Hospital for Children is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with cerebral palsy, spina bifida and traumatic brain injuries.

For persons with cerebral palsy there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with cerebral palsy including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with cerebral palsy are able to access such devices as part of their care, treatment and habilitation. In our organizational experience, the use of

standing devices enhance and facilitate the ability of persons with cerebral palsy to be more independent, productive and self-reliant.

I have personally been recommending/prescribing standing equipment for more than four years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, Riley Hospital for Children maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with cerebral palsy while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Kristin Forrest, DPT Physical Therapist

Kistu Lout Pr

September 22, 2011

Mr. Lewis Golinker, Esq.
Director/Assistive Technology Law Center
401 East State Street, Suite 300
Ithaca, New York 14850

Dr. Mr. Golinker,

I am a pediatric physical therapist presently employed by the Santa Rosa County District Schools in northwest Florida. I have been a physical therapist for 34 years and specialized in pediatrics for the past 26 years. Additionally, I have been a trainer for M.O.V.E. International since 2001. M.O.V.E. is a program that emphasizes the importance of upright weight bearing and functional mobility skills for children with severe and multiple disabilities.

Although I am employed by a public school system, my district administrators are well aware of the medical benefits associated with the integration of standing programs implemented during the school day. In our experience, standing devices have proven to be extremely valuable and important tools in the on going health management of our students with cerebral palsy, spina bifida, and other neuromuscular conditions.

For students who are not able to assume a standing position without assistance, there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with lack of or decreased time in upright weight-bearing positions including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, respiratory function, self-care/activities of daily living, musculoskeletal deformities, and psychological conditions.

I have personally been recommending standing equipment for more than 25 years in my treatment of children with severe physical disabilities. In Santa Rosa County District Schools, standing devices are considered the standard of care and are part of our regular practice patterns. It has been our experience that standing devices are therapeutically effective in management neuromuscular conditions facilitating greater activity, participation, quality of life and independence.

Sincerely,

Terri Goebel, PT



8/22/2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a level 2 physical therapist at Gillette Children's Specialty Healthcare in St.Paul, MN. Gillette serves children with disabilities as well as adults with pediatric onset disabilities. A large percentage of our patient population relies on wheelchairs as their primary means of mobility. In my role, I work primarily with inpatients who are recovering from life-changing injuries (traumatic brain injury, stroke, spinal cord injury) are children with chronic disabilities who have undergone major orthopedic surgery or neurosurgery (children with cerebral palsy status post selective dorsal rhizotomy, femoral and tibial derotation osteotomies, spinal fusions etc).

Gillette Children's Specialty Healthcare invests in many types of standers (supine, prone, mobile, sit to stand, tilt tables), so that our inpatients can benefit from their use and so that our outpatients can trial them when trying to obtain one for permanent home use. Gillette Childrens Specialty Healthcare is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of non-ambulatory people with traumatic brain injuries, spinal cord injuries, cerebral palsy, muscular dystrophy, and spina bifida.

For non-ambulatory persons with traumatic brain injuries, spinal cord injuries, cerebral palsy and spina bifida (to name a few!), there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with these neurological conditions, including: bladder function, bowel function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function. In my experience, non-ambulatory children who have not regularly participated in a standing routine have a much higher incidence of lower extremity joint contractures, hip subluxation/dislocation, chronic constipation, and frequent respiratory illness.

I have personally been recommending/prescribing standing equipment for 8 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, Gillette Childrens Specialty Healthcare maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical impairments associated with individuals with traumatic brain injury, spinal cord injury, cerebral palsy and spina bifida; while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Wath Harmon PT

Gillette Children's Specialty Healthcare

651-726-2687 phone

651-229-3911 fax

September 14, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I have been a physical therapist for over 24 years, most recently employed at the MS Achievement Center, a facility that provides PT, OT, and Speech therapies to its day program members and the first of its kind in the country to do so specifically for the multiple sclerosis population. Prior to this I have also worked in log term care facilities and outpatient neurologic rehabilitation at Sister Kenny Institute, a world-renowned center for rehabilitation of persons with spinal cord injuries, brain injuries, and other complex medical conditions.

In all the facilities in which I worked, we used standing frame technology, as the ability for non-ambulatory persons to bear weight on their limbs is frequently an essential part of their overall rehabilitation plan, and at times can make the difference between them being able to progress to some type of functional weight-bearing in any form. For instance, when we used a tilt table at one skilled nursing facility where I worked, we were able to safely acclimate an elderly diabetic amputee patient with whom I was working, in a way that allowed us to closely monitor her blood pressure and increase the time she spent in an upright position with her prosthesis on. This was able to be done in such a way that was tolerable from both a cardiovascular as well as a pain standpoint due to the tilt table as she could not stand in the parallel bars initially at first, even with assistance. She was able to progress to taking enough steps to get into and out of her house, a goal we would not have reached without the tilt table as a treatment tool.

At Sister Kenny, I had many clients with spinal cord injuries who also had a tendency towards severe spasticity, urinary tract infections, and trunk muscle weakness after acute injury, and post-acute SCI patients who were developing contractures in their legs and trunk that were impairing their wheelchair positioning, putting them at risk of pressure sores, and osteoporosis. In many cases too numerous to site individually, we were able in acutely injured patients to help them acclimate to upright posture gradually as in the case of my amputee client noted above, as well as reduce the amount of spasticity medication they had to take with routine (at least 2x/week use) of a standing device, thus reducing the all too common side effects of this medication such as fatigue. Due to muchimproved bladder emptying with upright posture, we were able to help them avoid the all-too-common complication of urinary tract infections. They also often had difficulty

with trunk weakness post-injury, and standing frame therapy allowed them to build up their trunk strength without having to use their arms to balance themselves, thus helping them to avoid another common complication of overuse injuries in their shoulders. In post-acute spinal cord injured persons, the standing frame was a very safe way to improve flexibility in the legs and trunk, with an optimally gradual and prolonged stretch that could be progressed over their therapy course in such a way as to maintain these gains in flexibility. Contractures and prolonged immobility are risk factors for developing pressure sores, a problem with which I also had to become all too familiar in my role as the lead therapist in the Wheelchair and Seating Clinic for over 10 years. There is ample evidence in the wound care literature that once a wound forms, the skin is never as strong when it repairs as it originally was so redevelopment of wounds is common, the quality of life one loses through having to be bedridden for sometimes very prolonged periods of time is significant, not to mention the very great financial cost of treating pressure sores. Standing frame therapy provides a very much more cost-effective way of improving patient's flexibility and circulation than allowing their immobility and loss of flexibility to have to be treated after the fact. In addition to the benefits to flexibility, circulation and spasticity management noted above, both acute and post-acute patients noted often a very significant reduction in pain related to spasticity, nerve damage, and immobility, and with standing were able to reduce the amount of pain medication they had to take, some of which has life-threatening side effects.

In my most recent capacity as physical therapist at the MS Achievement Center, we found standing frame therapy so invaluable for persons with late effects of multiple sclerosis that we have available to use a number of standing frames that are used with day program members after formal PT is completed and their standing tolerance determined, and therapy aides are trained in how to help the day program members into and out of the frames for routine long term use. For many of the members at that facility, the fact that they are able to stand for up to 45 minutes on at least a once per week basis is the difference between their being able to tolerate being up in a wheelchair at all due to the severe issues late stage MS clients have with blood pressure regulation issues, bowel and bladder function, pain, osteoporotic fractures from chronic non-weight-bearing status, spasticity, and severe and otherwise very difficult to maintain trunk strength. We found that due to the fluctuating nature of their condition, we were often called upon to help people re-establish their standing tolerance after an exacerbation of their MS and that this ability to regain a supported upright posture often made the difference between them being to regain the trunk strength to resume basic activities of daily living such as independent powered mobility or feeding themselves for instance.

In summary, I cannot imagine being effective as a PT treating patients with neurologic and other complex medical problems over the years without the frequent and successful use of standing frame technology as an integral part of my treatment approach. To say that prolonged passive standing is a helpful therapy option is an understatement, and as such I also helped as many people as had the space in their homes, funding, and the ability to use a standing frame either unassisted or with caregiver help to get home units so they could stand routinely for preventative health maintenance, as the human body is not meant to sit all day and as such standing has long term health benefits.

Thank you for your time and consideration of my comments in the usefulness of and promotion of this critical therapy and health maintenance modality.

Jailail Harry P.T., M.S.

Signed,

Jackie Harry, PT, MS CMSC Certified Therapist Dawn James, PT, DPT School Physical Therapist Los Angeles Unified School District 936 Yale Street Los Angeles, CA 90012

September 23, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a school based physical therapist with Los Angeles Unified School District, Los Angeles, CA. LAUSD is the second largest school district in the United States with one of the largest special education populations. As a school based therapist, I serve children with disabilities who require special education services from the age of 0-22 years old.

The school based therapists of LAUSD are well aware of the medical, educational, and social benefits associated with the integration of standing programs within a special education program. In my experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health/educational management of students including those with Cerebral Palsy, Spina Bifida, and Muscular Dystrophy.

For students with disabilities, there are a number of benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with Cerebral Palsy, Spina Bifida, Muscular Dystrophy, and other disabilities including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that students with disabilities are able to access such devices as part of their care, treatment and habilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability students with disabilities to be more independent, productive and self-reliant. Standers allow students the ability to be at eye level with their peers improving and often facilitating social interactions and social emotional development. For older students with disabilities standers have been used in conjunction with other assistive technology devices to stand in front of their classmates and give presentations just like any other student. Standing programs are often embedded

into our curriculum and are integral in implementing the MOVE (Mobility Opportunities Via Education) Curriculum which has been shown to result in improved acquisition of motor skills for students with multiple disabilities.

As a pediatric physical therapist, I have personally been recommending/prescribing standing equipment for more than 18 years. Within my school district practice, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, school based therapists maintain an on-going effort to ensure that our students, families, and teachers are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments common to students with disabilities while at the same time facilitating greater activity, participation, quality of life and independence within their educational programs.

In my extensive professional experience, I find standing devices provide significant medical and educational benefits to the individuals I treat and to others with similar needs. Upon request, I would be happy to provide additional information as needed.

Sincerely,

Dawn James, PT, DPT
Doctor of Physical Therapy

#### September 30, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a physical therapist employed by Fairfax County Public Schools and an adjunct professor at University of Maryland School of Medicine. In my capacity as a school based therapist I work directly with children and their families to provide programs to meet their educational needs. As a professor, I work with doctoral students facilitating their research projects as well as conduct and publish research for peer reviewed publications.

In the school setting, we advocate for the use of standing programs so that students can reap the health benefits of standing which include maintaining bone density, improving circulation/bowel/bladder function, and sometimes muscle strength. In addition, use of standing devices promotes participation in movement activities such as those that occur in physical education or recess. We have some students that are better able to participate in academic classes when positioned upright because their level of alertness is improved. In the school and research settings, we are well aware of the medical benefits associated with the integration of standing programs in educational environments.

For persons with developmental disabilities there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with developmental disabilities including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with developmental disabilities are able to access such devices as part of their care, treatment and habilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of persons with developmental disabilities to be more independent, productive and self-reliant.

I have personally been recommending/prescribing standing equipment for more than 20 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, school systems maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective and have access to the equipment they need at home and at school. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with developmental disabilities while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs.

Sincerely,

Connie Johnson, PT, DScPT 14516 South Hills Court

Centreville, VA 20120

Email: conniecjohnson@gmail.com



## The University of Oklahoma

#### Health Sciences Center

#### **DEPARTMENT OF REHABILITATION SCIENCES**

Program in Occupational Therapy • Program in Physical Therapy • Tolbert Center for Developmental Disabilities • Oklahoma Assistive Technology Center

August 25, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a clinical assistant professor in the Department of Rehabilitation Sciences, University of Oklahoma Health Sciences Center. Our department includes two centers of excellence: 1) The Lee Mitchener Tolbert Center for Developmental Disabilities, and 2) the Oklahoma Assistive Technology Center. Both centers promote best practices for people with developmental disabilities and their families through teaching, service, and research. As part of my work in both of these centers of excellence, I work with children and adults and their families to obtain and use the most appropriate assistive technology that will help them to achieve identified outcomes. This includes the use of standing devices and power wheelchairs that have standing capabilities.

Standing is a natural position that all of us use on a daily basis. For children and adults with developmental disabilities, such as cerebral palsy, spina bifida, etc. and even those with acquired injuries, such as traumatic brain injury and spinal cord injury, standing with appropriate support from standing devices is an integral part of intervention programs designed by rehabilitation professionals, including occupational therapists and physical therapists. Standing devices can reduce the risk of a number of secondary medical complications that are commonly seen in children and adults with developmental disabilities including: bladder function/urinary tract infections, bowel/digestive function, spasticity/tone, osteoporosis, bone density, skin/pressure ulcers, pain, and musculoskeletal deformities. I have personally been recommending standing equipment for more than 20 years because I consider standing devices part of a routine plan of care and standard practice for children and adults with developmental disabilities.

As part of an academic health sciences center, I make every effort to ensure that clients understand and appropriately use assistive technologies that are safe, effective, and assist them in achieving identified outcomes. I understand and respect the need for accountability and cost-benefit when recommending any single assistive technology device. I also understand the need



for continued research to build the growing body of evidence to support the use of assistive technologies. Given the current body of evidence supporting the use of standing devices and the benefits I've seen in clinical practice, I believe that standing devices should be an available option for children and adults with developmental disabilities to use as part of their overall intervention plan that is designed to promote participation and independence in daily activities and routines. Upon request, I would be happy to provide additional information about the benefits of using standing devices.

Sincerely,

Maria Jones, PT, PhD

Clinical Assistant Professor

Department of Rehabilitation Sciences

College of Allied Health

University of Oklahoma Health Sciences Center

1200 N. Stonewall Ave., Room 1138

Oklahoma City, OK 73117

Phone: 405-271-2131 ext. 46811



Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 lthaca, New York 14850

Dear Mr. Golinker,

I am Hilary Kent, PT at Courage Center St. Croix and Courage Center Forest Lake, writing you in support of the benefits for standing devices in the home setting. Courage Center is a recourse and rehabilitation organization that provides therapy for clients of all ages with a variety of diagnosis. <a href="https://www.couragecenter.org">www.couragecenter.org</a>

Standers are used during therapy, by our recreational therapy staff as a component of personal training sessions and in clients home as part of their home programming. The Courage Center is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with spinal cord injuries, Cerebral Palsy, Traumatic Brain Injury and Muscular Dystrophies including Spinal Muscular Atrophy.

For persons with Cerebral Palsy there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with Cerebral Palsy including: cardiopulmonary/circulatory function, spasticity/tone, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, respiratory function, self-care/activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with cerebral palsy are able to access such devices as part of their care, treatment and habilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of persons with cerebral palsy to be more independent, productive and self-reliant.

Courage Center St. Croix 1460 Curve Crest Baulevard Stillwater, Minnesota 55082

p: 651,439,8283

www.CourageCenter.org



I have personally been recommending/prescribing standing equipment for more than 3 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, Courage Center maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with Cerebral Palsy while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Glazy Kent, PT

Courage Center St. Croix 1460 Curve Crest Boulevard Stillwater, Minnesota 55082



9-15-11

Mr. Lewis Lolinker, Esq. Director Assistive Technology Law Center 410 East State St., Suite 300 Ithaca, NY 14850

Dear Mr. Lolinker,

I am the primary Physical Therapist for the Ohio State Medical Center's Seating and Mobility Clinic. Our center focuses primarily on the Assistive Technology needs for adolescents to geriatrics with a broad range of diagnosis. We serve central Ohio but receive many referrals from all over the state and into both West Virginia and Kentucky due to our expertise and resources. I have focused on the treatment and assistance in prescription of mobility devices for neurologic patients for 8.5 of my 10 years as a Physical Therapist- including stroke, SCI, brain injury, Cerebral Palsy, Muscular Dystrophy, ALS, MS, etc. I have completed my Assistive Technology Practitioner certification, present for education purposes, and attend national conferences to expand my knowledge base.

The OSUMC is well aware of the medical benefits of including standing programs into the rehabilitation and ongoing home programs upon discharge from therapy. In my experience, standing frames have proven to be very beneficial in the ongoing management as well as preventative intervention for multiple neurologic diagnosis. I frequently trial and recommend standing programs for clients with paraplegia, quadriplegia, MS, MD and CP. For persons with these diagnosis, the benefits from standing including: tone management, contractor reduction and prevention, improved circulation for wound management and prevention, improved digestion - with reduction in use of medications for bowel programs and decrease in UTI's, increase endurance to upright and therefore function out of bed, respiratory function and pain reduction. Many of my clients utilize a standing frame for rehab and return to function after a medical complication where a prolonged hospital stay has left them deconditioned and in a more dependent state for transfers and ADL's. The standing frame has assisted these clients in returning to optimal functional independence to resume work and life roles with decreased caregiver assist and significant improvement in quality of life.

I have personally been recommending and assisting in prescribing standing equipment for 8.5 years. In this facility, standing frames are commonly used and incorporated into the client's plan of care / discharge program.

The OSUMC Assistive Technology Center maintains an on-going effort to educate client's on device options to assist in their independence and improvement in their quality of life. It has been my experience that standing frames are both a safe and, in the long term, cost effective measure for improvement, maintenance and prevention of co-morbidities plus functional decline.

In my professional experience, standing devices provide significant medical, psychological and physical benefits to the neurological patients that our center focuses on. Please contact me if you have any further questions or concerns.

Sincerely, Whole Koestus PT, ATP 9907 9/18/4

Wendy Koesters, PT, ATP

OSUMC Assistive Technology Center

Rehab Team

Restoring hope with hard work



9-30-11

Mr. Lewis Golinker, Esq.
Director
Assistive Technology Law Center
401 East State Street, Suite 300
Ithaca, New York 14850

Dear Mr. Golinker,

I am the owner of a small pediatric physical therapy clinic in NE Iowa. I have been a physical therapist serving the pediatric population for 20 years. I see patients from as young as 3 months to as old as 24 with varying diagnoses involving neurologic disorders. I train parents to carry over the physical therapy exercises given to their children, provide a range of physical therapy treatments to the children, and also do some teaching at a local PTA program for the pediatric portion of their learning. I have worked at a large facility in Duluth, MN for 3 years as a new grad, again providing PT services to the pediatric and adult neuro population. I have worked in a general hospital and have worked in a private sector of outpatient PT, all in which I have treated the children and adults with neurologic issues.

Euro-Team Physical Therapy Clinic and our staff are well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with kids with cerebral palsy.

For persons with cerebral palsy there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with cerebral palsy including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with cerebral palsy are able to access such devices as part of their care, treatment and habilitation. In our organizational experience, the use of

**Lisa Krieg**, MPT

Martina Tannahill, MSPT

standing devices enhance and facilitate the ability of persons with cerebral palsy to be more independent, productive and self-reliant.

I have personally been recommending/prescribing standing equipment for more than 20 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, Euro-Team maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are the apeutically effective as treatment for certain physical and psychological impairments associated with CP while at the same time facilitating greater activity, participation, quality of life and independence. I can not stress enough the importance of this letter regarding the need for standing equipment to be provided with insurance companies' help, to families with children having neurologic issues. Families, physicians, and PT's all want to avoid AT ALL COSTS the need for surgery for these kids. If surgery becomes inevitable, the child faces over a year of excruciating rehabilitation, casting, pain, and loss of strength and ROM that sometimes is never fully recovered. By using weight bearing devices through their developmental growth years, our profession has found extreme benefit to avoiding the hip surgeries, muscle lengthening, and increased need for tone reducing medications that change a child's life dramatically. Standing frames are without a doubt a necessary part to helping form the acetabulum of the hip region, the head of the femur, the angle of the femur to avoid subluxations, the lengthening of muscles to avoid surgical need of lengthening...most kids with cerebral palsy just can not provide their bodies with sufficient weight bearing on their own to help the natural growth and alignment of the weight bearing bones and muscles. Parents and teachers do not have enough time or strength in the day to hold their child in a weight bearing position. They need help for their child, they want help, and they deserve the help we can give to help thwart unnecessary pain and rehabilitation which would stem from surgical intervention because their child could not get sufficient weight bearing time to help develop their body appropriately as they were growing.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Lisa Krieg, MPT



The Mount Sinai Rehabilitation Center Outpatient Rehabilitation

Center for Advanced Medicine 5-17 East 102<sup>rd</sup> Street, 1<sup>e</sup> and 2<sup>rd</sup> Floors Box 1241

New York, NY 10029-6574 Tel: (212) 241-4477 Pax: (212) 860-1093

September 7, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I have been a practicing occupational therapist for more than 16 years, currently employed by The Mount Sinai Hospital in New York City. As an Advanced Clinical Specialist at Mount Sinai I oversee the wheelchair clinic, evaluating clients for medically appropriate devices throughout the week. Mount Sinai is one of the Model System Centers for spinal cord injury and traumatic brain injury, and is also CARF accredited for stroke and amputation. As such, I see a wide range of clientele.

Within both the inpatient and outpatient units at Mount Sinai standing devices are integrated into therapeutic intervention. Staff is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with spinal cord injury, brain injury, amputation and other neurological conditions.

For persons with spinal cord injuries there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with spinal cord injury, including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction,, respiratory function, self-care/activities of daily living, musculoskeletal deformities, and psychological conditions.

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Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with spinal cord injury are able to access such devices as part of their care, treatment and rehabilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of persons with spinal cord injury to be more independent, productive and self-reliant.

I have personally been recommending/prescribing standing equipment for more than 8 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, Mount Sinai maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with spinal cord injury while at the same time facilitating greater activity, participation, quality of life and independence.

In my extensive professional experience, I find standing devices provide significant medical benefits to the individuals I treat and to others with similar medical needs. Upon request, I would be happy to provide additional information as needed.

Sincerely,

Jenny Lieberman, MSOTR/L, ATP

Advanced Clinical Specialist

Department of Rehabilitation

Mount Sinai Hospital

17 East 102<sup>nd</sup> Street

New York, NY 10029

212-824-7627

GEORGETOWN UNIVERSITY

# Center for Child and Human Development

September 12, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am an Associate Professor in The Department of Pediatrics, Georgetown University and the Training Director within the Center for Child and Human Development. The Georgetown University Center for Child and Human Development (GUCCHD) was established fifty years ago to improve the quality of life for all children and youth, especially those with, or at risk for, special needs and their families.

Located in the nation's capital, the center serves vulnerable children and their families, as well as influences local, state, national and international programs and policy.

As a physical therapist I am well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy intervention plan. Standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with cerebral palsy.

Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with cerebral palsy including spasticity/tone, osteoporosis, bone density and claciuria, range of motion, hip integrity and other musculoskeletal problems.

I have personally been recommending standing equipment for more than 30 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, the Georgetown University Center for Child and Human Development maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as an intervention for children with cerebral palsy.

In my professional experience, I find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs.

Sincerely,

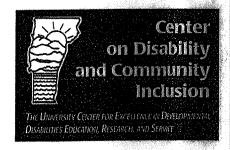
City

Toby Long, PhD, PT, FAPTA Associate Professor Director of Training



Box 571485, Washington, DC 20057-1485 • http://gucchd.georgetown.edu Phone: 202-687-5000 • Fax: 202-687-1954 • TTY: 202-687-5503

University Center for Excellence in Developmental Disabilities



#### September 30, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

My name is Marie MacLeod and I am a physical therapist and the Assistive Technology director at the Center on Disability and Community Inclusion (CDCI) at the University of Vermont. The CDCI is part of a national network of University Centers for Excellence in Developmental Disabilities (UCEDDs). Each state UCEDD is affiliated with major research universities and hospitals to serve as a resource, for people of all ages in the areas of education, research, and direct service related to the needs of people with disabilities. UVM is affiliated with Fletcher Allen Hospital in Burlington Vermont. In my role, I work with the Vermont State Interdisciplinary Team and serve the children in the state with the most severe disabilities. In my position I am responsible for equipment and assistive technology assessment for individuals with varied diagnoses such as cerebral palsy, spinal cord injury, muscular dystrophy, spina bifida and traumatic brain injuries. Additionally, I am the Pediatric Representative for the State of Vermont to the National Physical Therapy Association, and hold a specialty certificate in Assistive Technology from the Rehabilitation and Engineering and Assistive Technology Society of North America.

In my role, I am the director of an assistive technology tryout center and I frequently prescribe standers for clients who are not mobile, both adults and children. I do so because of the many medical benefits of standing supported by research and my experience. In children with cerebral palsy, it has been shown to decrease spasticity, prevent or lesson lower extremity joint contractures, and improve the depth of the acetabulum in young children. In individuals with spinal cord injuries, it has been shown to lesson spasticity, decrease contractures, lesson pressure sore risk, facilitates bladder empting, and improves digestion. Other research based established benefits are the control of osteoporosis with reversal in loss of bone density. Some patients report improvement in pain, sleep dysfunction, improved circulation, and lesser degree of orthostatic hypotension. Furthermore use of dynamic standers can promote improved cardio pulmonary function and reduce the incidence of respiratory problems, which decreases the overall cost of patient care.



University of Vermont

CENTER ON DISABILITY AND COMMUNITY INCLUSION
The University Center for Excellence in Developmental
Disabilities Education, Research, and Service
Mann Hall - 3rd Floor, 208 Colchester Avenue
Burlington, VT 05405-1757

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Additionally, through the use of dynamic standers and wheelchair standers, many individuals can obtain independence performing activities of daily living such as cooking, retrieving objects from closets, and urinating in a standing position. This improves their overall independence and improves their sense of self-esteem as well.

While it may be true that some of these benefits cannot be proven by double blind study protocols, neither has the value of crutches, canes or wheelchairs been proven. I can understand in this day of limited resources that an insurance company many not have to cover any particular treatment if it does not wish to do so, but to deny such treatment on the premise that it is "experimental" seems rather absurd given the long history of use as standard of care, the needs of the patients and the special circumstances in which they find themselves. These individuals include those with cerebral palsy, mylodysplasia, spinal cord injury, developmental delay, and various genetic syndromes. Most of the families involved are not in a position to contest these policies as they are among the most vulnerable of our citizens. They come by these conditions through no fault of their own. Denying them this equipment, which is considered standard of care, also denies them the opportunity to maximize potential function and health going forward.

I encourage you to review the attached list of references that show all the benefits of standing. I have personally been prescribing standing equipment for over twelve years. In my practice and in pediatric settings across Vermont, standing devices are considered the standard of care and are part of our regular practice patterns.

I work hard to educate my patients and their families about all of the technologies that may improve both their function and their quality of life. It has been my experience that standing devices are therapeutically effective as treatment for many individuals unable to functionally stand, weight bear or walk to enhance physical and psychological outcomes while at the same time facilitating greater activity, participation, health and well-being. Upon request I would be happy to provide additional information on standing devices. We strongly believe theses deices provide significant medical benefits to the individuals we treat and to others with similar medical needs.

Sincerely,

Marie MacLeod PT, M.Ed, CLT, ATP

By Med. Old, ATP CDCI, 208 Colchester Ave, 3rd Floor Man Hall

Burlington, VT 05405.

802-598-5271

#### References

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### **Altimate**Medical

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July 18, 2011

Lewis Golinker, Esq. 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Lew:

I am Certified Occupational Therapy Assistant and an Assistive Technology Professional. I have over 5 years of clinical experience at University of Minnesota Hospitals in pediatric occupational therapy including assessment of mobility, seating and standing positioning equipment for children. In addition, I have worked in the Complex Rehab Industry for more than 25 years, initially as a pediatric rehab supplier in Texas and Minnesota, and since 1999 as the Funding and Product Development specialist at Altimate Medical, Inc.; manufacturer of Easystand products. Some of my responsibilities at Altimate include acquiring and maintaining HCPCS codes for our products, monitoring public and private payer trends, educating payers and clinicians on research, documentation and products, maintaining our funding phone line and funding questions from the Altimate website. I am a member of AOTA, a Friend of the National Registry of Rehabilitation Suppliers (NRRTS), and a past Coding Work Group leader with the National Coalition for Assistive and Rehab Technology (NCART).

Of the four Standing Frame HCPCS codes; E0637, E0638, E0641 and E0642 Altimate Medical manufactures Sit to Stand (HCPCS-E0637) Static and Active Standers. Our products include the Bantam, Magician Comfy, Evolv, Glider and StapStand (product link- <a href="http://www.easystand.com/products.cfm">http://www.easystand.com/products.cfm</a>).

I write to answer your question whether standing frames are generally accepted as safe and effective by the medical community. In short, the answer is "yes." The statement by Gudjonsdottir and colleagues (2002) that "Standers are used extensively for children who are unable to stand or walk by themselves" is both accurate and confirmed by the widespread acceptance and use of standing frames by the medical community. This comment is repeated frequently in the medical literature related to therapeutic use of standing.

The medical community has long accepted our products and standing frames as a class of equipment because they are therapeutically effective. Clinical experience teaches that wheelchair users often experience painful, problematic and costly secondary complications due to long term sitting. Standing is an effective way to counterbalance many of the negative effects of constant sitting.

Our Easystand products have been billed as Durable Medical Equipment (DME) to insurance companies and other third party payers. Since Altimate Medical introduced the EasyStand in 1989, our standing equipment has been routinely purchased as DME. Altimate products are designed to maintain function and design characteristics for repeated daily use by the patient for whom it is originally prescribed. They are not useful products in the absence of illness or injury and are prescribed by a physician with input from other clinical professionals usually in a clinic setting. These devices are used by the client



#### **Altimate** Medical

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who requires anterior and posterior body support and alignment during weight bearing, from sitting to standing, whose diagnoses, prognosis or symptoms necessitates one or more of the following:

- Facilitating a symmetrical posture.
- Developing and improving head, neck and upper body muscle control.
- Inhibiting abnormal muscle tone and reflexes.
- Preventing loss of range of motion.
- Alleviating pain caused by inappropriate or prolonged positioning.
- Improving systemic functions; i.e. bladder, respiratory, digestive and circulatory.
- Maintain BMD or preventing loss of bone density.
- Developing standing tolerance, balance and endurance.

Confirmation of the medical community's general acceptance of and confidence in the therapeutic value of our products comes from many sources. For example, each year of Altimate's existence, thousands of our standing frames have been and continue to be purchased for use by people with disabling conditions. Altimate Medical's EasyStand product line has helped over sixty thousand people of all ages all over the world.

Our products are also the subject of published articles in peer reviewed research journals, such as this one performed by Edward Hines Jr. Veterans Affairs Hospital Research Service (<a href="http://www.easystand.com/health-benefits/research-study.cfm?studyID=25">http://www.easystand.com/health-benefits/research-study.cfm?studyID=25</a>). Another research study that involved our products was developed at Children's Hospital, Harvard Medical School, and published in the American Academy of Cerebral Palsy and Developmental Medicine (AACPDM) 2006 Conference Proceedings (<a href="http://www.easystand.com/health-benefits/research-study.cfm?studyID=31">http://www.easystand.com/health-benefits/research-study.cfm?studyID=31</a>). Further clinical support of standing is published in other professional literature as well, such as this article in Advanced for Physical Therapy & Rehab Medicine (<a href="http://www.easystand.com/PDFs/advanced'OnHisOwn'.pdf">http://www.easystand.com/PDFs/advanced'OnHisOwn'.pdf</a>)

The general acceptance of our products also is confirmed by their status as covered items by many health-based systems of benefits:

More than 37 state Medicaid programs cover standing frames for individuals with documented medical need. Several Medicaid programs have coverage criteria for standers, making their coverage a matter of routine.

Health insurers also cover and provide standers. BCBS of Minnesota, Tennessee, and Texas, Kaiser Permanente, HealthPartners, Medica, Cigna, and Aetna all have coverage policies for standing frames. By contrast, the Anthem guideline is the exception to the generally held view that standing frames are a therapeutically valuable tool.



#### **Altimate**Medical

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TRICARE is the health care program serving active duty service members, National Guard and Reserve members, retirees, their families, survivors and certain former spouses worldwide. TRICARE covers durable medical equipment (DME) when prescribed by a physician and if DME. Like Medicaid and insurers, Tricare covers standing frames.

So too does the Veterans Administration. Altimate Medical, Inc. has been a provider of standing frames to the Federal Supply schedule/ Veterans Administration via contract since 1991. Our current contract is effective through May of 2013.

In summary, peer reviewed research on standing and weight bearing dates to before 1950. Physicians and Clinicians have been prescribing standing frames since the early 1970's for home use. In my 30 years as a clinician, supplier and manufacturer I have personally assessed and provided standing frames for pediatric and adult disabled persons. Altimate Medical, Inc., one of many standing frame manufacturers' has provided products for 22 years. To question whether standing frames are generally accepted as safe and effective by the medical community seems an absurd question and a burden to the appeals system, but more importantly a health risk to the consumers who need them.

Please contact me if I can provide any further information.

Thank you.

Respectfully,

Nancy Perlich COTA, ATP

noncy Perlich

Altimate Medical, Inc. 262 West First Street

Morton, MN 56270



#### STRIDE Learning Center

August 29, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street. Suite 300 Ithaca, New York 14850

Dear Mr. Golinker.

I am an Occupational Therapist who is passionate about providing services within the educational setting. I work with a multi-disciplinary team that provides occupational, physical and speech therapy, as well as special education services to disabled children with a variety of disabilities. These conditions include, cerebral palsy, muscular dystrophy, spinal muscle atrophy, traumatic brain injury, pervasive developmental disorder, and genetic conditions. We also work hard to provide families and educational teams with knowledge and skills to support learners at school, at home, and in other community settings. I have also helped implement a hygiene and toileting program in other school districts to ensure that students are able to participate fully in their daily routines. I have seen the huge benefits of implementing the M.O.V.E. curriculum to teach severely orthopedically and cognitively challenged students from ages 3 through 22 to sit, stand, and walk, and to accomplish the transitions between. Standing devices are critical to implementation of such a program in order to provide safe opportunities for upright positioning. These standing devices provide students with a sense of dignity and access to new experiences.

As an occupational therapist, it is my job to support learners to develop student skills in order to access the curriculum and their environment. When a student is limited by mobility, it also impacts participation in daily routines that we often take for granted, such as using the restroom or even standing to take a stretch break. In our district, we have experienced that students who work in upright positions also demonstrate increased cognitive and language abilities, as well as improved social interaction, independence, and overall quality of life. We also know that student's with physical impairments often leave their educational career with fewer motor skills than what they arrived with. Although some of this cannot be prevented, it is critical that we consider the impact of limiting positioning options and how it will impact these students progress and future. If we can help students develop stronger bodies to decrease the burden of care on providers, both physically and financially- it will change their future options for living as well as community access and cost of care.

For severely orthopedically and cognitively challenged children, there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications which would interfere with their regular attendance at school including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and calciuria, joint and muscle contractures, decreased range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions.

As a professional who has worked with many children and families, the use of standing devices enhances and facilitates the ability of students with severe orthopedic and cognitive disabilities to be more independent, productive and self-reliant in school, community, and family settings.

Upon request, I would be happy to provide additional information as needed.

Respectfully Submitted, Pisacka OTR/L

lanet

Janet Pisacka MS OTR/L Occupational Therapist

STRIDE Learning Center 970-672-6839



Rehabilitation Services

September 8, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am an Occupational Therapist and Assistive Technology Practitioner at Monroe Carell Jr. Children's Hospital at Vanderbilt. Additionally, I am an Assistant Professor of Occupational Therapy at Belmont University's Doctorate School of Occupational Therapy. Monroe Carell Jr. Children's Hospital at Vanderbilt is included among the nation's leaders in pediatric health care. Again this year, the Monroe Carell Jr. Children's Hospital at Vanderbilt is included among the nation's leaders in pediatric health care in U.S. News & World Report magazine's Best Children's Hospitals rankings. The hospital achieved rankings in a maximum of 10 out of 10 pediatric specialty programs In fiscal year 2010 (July 2009-June 2010), there were 257,743 pediatric visits at Children's Hospital. More than 182,000 children were seen in physician clinics. The wheelchair and seating clinic at Vanderbilt employees two occupational therapist and two physical therapists all have advanced credentials and experience in the provision of assistive technology.

I have over 30 years of clinical practice experience in the area of rehabilitation and assistive technology. In my clinical role I am responsible for the assessment of and recommendation for seating, mobility and alternative positioning for a geographically

diverse and large catchment area in middle Tennessee and parts of Georgia, Alabama, and Kentucky. My area of research is in the wheelchair assessment and procurement process. I am a member of the American Occupational Therapy Association and the Rehabilitation Engineering and Assistive Technology Society of North America. I am also an active member of Community Research Partners (a consortium of researchers in academics and community health practitioners). My doctoral dissertation and research is in the area of wheelchair assessment and provision of assistive technology services, thus I am well apprised of the literature and research that supports standing as a therapeutic modality in the treatment of various pediatric deficits. I have included some of the current research in this document to provide you with an overview of evidence based research regarding standing.

We utilize standing programs and devices on a regular basis with most of our clients as the medical benefits are astounding and well supported in the literature. For clients who are non ambulatory and utilize a power wheelchair a power standing feature is of utmost importance for a variety of reasons. The power standing feature on wheelchairs has medical uses and it is not simply used to enhance the environmental setting of patients or for mere convenience. For clients who are capable of intermittent ambulation who utilize a manual wheelchair for long distances the use of a stander for prolonged weight bearing is appropriate. Any client who is not independently capable of ambulation should be exposed to a standing program and provided a standing device for reasons identified in this literature review.

I have worked with numerous pediatric patients in the past 12 years standers and standing programs to address medical complications from prolonged sitting such as urinary tract infections, loss of bone mineral density, circulation problems and edema, abnormal

muscle tone and spasticity, pressure ulcers and skeletal deformities. The use of standing devices can help many patients as it has been associated with improved digestive function, reduces the occurrence of urinary tract infections, improves circulation and reduces swelling of the lower limbs, improves bone mineral density, improves passive range of motion, maintains vital organ capacity, reduces abnormal muscle tone and spasticity, and reduces the occurrence of pressure ulcers, contractures and skeletal deformities. In fact, significant research exists that supports the use of standing to improve bone mineral density (Alekna, Tamulaitiene, Sinevisius, & Juocevicius, 2008). Disuse bone loss is a consequence of various medical conditions such as cerebral palsy and spinal cord injury. For the pediatric clients I have worked with, the lack of opportunities for independent standing contributes to diminished opportunities to engage in physical activities and contributes to an overall decrease in well being. Opportunities to engage in standing contribute to improvements in physiological functioning such as improved range of motion, increased strength and improved performance in activities of daily living. Galgon, Shewokis & Tucker (2010) demonstrated that frequent and repeated opportunities to stand resulted in better hand control. Improving the postural system has subsequent improvement in functional hand movements.

Furthermore, it has been well documented that the capacity for exercise is reduced after prolonged bed rest, sedentary lifestyles or lack of opportunities to engage in physical activities such as standing (Sundblad, Spaak, & Linnarsson, D. ,2000). A lack of exercise has been associated with increased morbidity and mortality.

In addition, many patients use a standing feature on a wheelchair in order to participate in essential activities of daily living such as safely transferring to and from the wheelchair, toileting, bathing, grooming, eating and dressing. In a study by Kang, et al. (2007) a standing program allowed a client to improve his walking, his ability to shower

independently and his ability to travel by bus. Evidence exists that supports the use of standing to enhance functional performance. Depending on an individual's diagnosis, standing regimens are recommended to prevent contractures, increase lower extremity strength, improve cardiovascular output and enhance opportunities to engage in age-appropriate educational pursuits. Many of the children and adolescents that I see in the clinic use the standing feature to safely improve their functional reach, which gives them significant independence in activities of daily living such as grooming, dressing and toileting.

Additionally, standing improves cardiovascular output. In a recent study by Edwards & Layne, (2007) participants with spinal cord injuries demonstrated improvements in functional skills and improved physiological changes such as improved heart rate, blood pressure and EMG readings following a weight bearing/ standing protocol. Specifically, their results demonstrated an increase in neuromuscular activation which increases muscle activity. "Afferent feedback that increases muscle activity in the lower limbs suggests that loading the lower limbs may be an important physiologic need and may facilitate the access of the sensory and motor neural functioning fibers" (p. 505). Additionally, weight bearing may be associated with decreases in muscle spasticity which may result in improved performance of activities of daily living as it allows individuals to move freely and unhindered (Edwards & Layne, 2007, p. 505). Furthermore, a lack of opportunity for weight bearing/standing has been associated with impairments in mobility, sleep and is associated with limited joint range of motion, pain and contractures (Eng,et al., 2001).

I have recommended a power standing feature for clients who have respiratory difficulties, as research supports the use of standing. Chang et al., (2004) demonstrated that standing produced a transient increase in ventilation in critically ill patients. Many

children with spinal muscle atrophy, muscular dystrophy, cerebral palsy and spina bifida may likewise benefit from standing and may require the use of a power standing feature to accomplish the task of standing.

In my opinion, the standing feature on a wheelchair meets the definition of "durable medical equipment" contained in § 1861(n) of the Social Security Act and applicable regulations because (1) it can be used repeatedly and patients use it several times each day; (2) its primary purpose is medical in nature because it improves medical complications caused by prolonged sitting and it allows patients safely to participate in activities of daily living; (3) it is not useful to someone who is not confined to a wheelchair due to an illness or injury; and (4) it is appropriate for use in the home and, in fact, is most useful for patients in the home.

The medical standard of practice in the United States is that doctors and therapists will prescribe a standing feature on wheelchairs or a stander for those patients who need them for medical reasons such as reducing complications from prolonged sitting and to perform activities of daily living. Doctors and therapists generally do not prescribe a standing programs simply for convenience of the patient. Eng, et al. (2007) suggests that a physical and medical barriers exists for individuals with spinal cord injuries that prevent them from having opportunities for standing. Essentially, a lack of standing may contribute to increased risks of injuries and morbidity.

I am happy to provide additional support for the provision of standing as a medical need should you want further evidence.

Sincerely,

Dr Teresa Plummer, PhD, MSOT, ATP, CEAS

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# Kids in Motion Therapy Services, Inc.

September 19, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

My name is Karen Reeves and I am owner of Kids in Motion Therapy Services, Inc. and have been a pediatric physical therapist within various school systems and private pediatric clinics within the states of Florida and Georgia for the past 12 years. Most recently, I have been the lead physical therapist within a school system in Cherokee County, Georgia that provides physical therapy services to children ages 3-22. Throughout my years providing physical therapy to the pediatric special needs population, I have gained a solid and extensive knowledge of various types of adaptive equipment and have specifically recommended hundreds of standing devices.

In the school systems that I have worked for, we have used many types of standing devices for children with a variety of physical challenges, to enable these children to be integrated within a classroom with their peers. Standers in schools facilitate the enablement of children with special needs to participate in educational activities in an enhanced functional manner. As a physical therapist, I have educated special education teachers and parents on the medical benefits associated with the integration of standing programs in a physical therapy treatment plan during the student's school day. In my experience, standing devices have proven to be extremely valuable and an important part of the treatment and continued health management of children with special physical needs and medical diagnoses, including but not limited to: cerebral palsy, traumatic brain injury, mitochondrial disorders, muscular dystrophy, down syndrome and a variety of genetic and chromosomal disorders.

For persons with the above medical diagnoses, there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with above medical conditions including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, osteoporosis, scoliosis, bone density, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions.

# Kids in Motion Therapy Services, Inc.

Moreover, research and reports on standing devices have established additional reasons for ensuring that children with special needs that have the above listed medical conditions are able to access such devices as part of their care, treatment and education. In my physical therapy/educational experience, the use of standing devices enhance and facilitates the ability of children with special needs to be more alert, independent and productive.

I have personally been recommending/prescribing standing equipment for more than 12 years. In various school systems, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, the school systems that I have been a part of maintain an ongoing effort to ensure that our students with special needs have access to assistive and adaptive technologies that are both safe and effective. It has been my experience that standing devices are therapeutically effective as treatment for a variety of physical impairments associated with the above listed medical conditions while at the same time facilitating greater activity, participation, quality of life and independence for these children.

In my extensive professional experience, I find standing devices provide significant medical, educational, social and emotional benefits to the children with special needs that I treat. Standers are a integral part of my physical therapy treatment plan of care and enable these children to reach their highest level of functional independence.

Upon request, I would be happy to provide additional information as needed.

Sincerely,

#### Karen Reeves, PT

Karen Reeves, MPT Physical Therapist

karenreevespt@yahoo.com 770-595-9998 1040 River Wind Circle Vero Beach, FL 32967 From:

10/04/2011 08:23 #519 P.002/003

#### Richmond Hope Therapy Center

4900 Dominion Blvd, Ste B, Glen Allen, Virginia 23060



9/29/2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a pediatric physical therapist at Children's Hospital and Richmond Hope Therapy Center in Richmond, Virginia. I have worked at Children's Hospital for eight years. During this time I have served on an early intervention team, was the lead physical therapist on the spasticity team, and treated children both in the out-patient and the in-patient setting. Three and a half years ago I transitioned to Richmond Hope Therapy Center, while still maintaining regular weekly hours at Children's Hospital. Richmond Hope is a unique pediatric physical therapy center that works with children with special needs to achieve functional, measurable gains through the use of the intensive model of physical therapy. In addition to the intensive model, I also provide traditional outpatient therapy services at this location. The children I treat in both settings have a variety of diagnoses and levels of involvement. I am the therapist responsible for all equipment determination for patient's under my care. At both organizations, we actively seek out researched and evidence-based techniques and assistive technology to help children with special needs achieve their maximum potential.

At Children's Hospital and Richmond Hope Therapy Center, myself and other therapists regularly recommend the use of standers for many of our patients who are not functional ambulators or who are significantly limited in mobility. We do this because of the many documented medical benefits of standing. We work closely with equipment vendors to provide a continuity of care and determine the most appropriate piece of equipment to meet each child's medical needs. Additionally, we work with the families and caregivers in order to maximize the therapeutic benefit of these tools. As a treating physical therapist, I work with children and their families over time, building relationships and observing long term treatment outcomes. I have personally seen and heard testimonies from families as to the benefits of standing devices in the pediatric population. Children's Hospital and Richmond Hope Therapy Center are well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of children with complex medical

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needs including cerebral palsy, traumatic brain injuries, genetic and mitochondrial disorders, severe seizure disorders, SMA, MD, and multiple other neurological disorders.

For children with complex physical and/or neurological disorders such as cerebral palsy, there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with complex physical and/or neurological disorders including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions. In addition to those physical benefits, use of a standing device provides children the opportunity to be upright in class or social situations, interact with peers on eye level, and greater access to activities of daily living in multiple environments. Multiple children have reported increased alertness and quality of life through the use of their standing device.

Moreover, research and reports on standing devices have established additional reasons for ensuring that the pediatric population with complex physical and/or neurological disorders are able to access such devices as part of their care, treatment and habilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of young children up to adulthood with complex physical and/or neurological disorders to be more independent, productive and self-reliant.

As a general matter, Children's Hospital and Richmond Hope Therapy Center maintain an on-going effort to ensure that our patients are made aware of assistive technologies that are both safe and effective. It has been my experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with complex physical and/or neurological disorders while at the same time facilitating greater activity, participation, quality of life and independence.

I have personally been recommending standing equipment for more than eight years. In both facilities, standing devices are considered the standard of care and are part of our regular practice patterns. In our professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely, Shannen Richard, DPT

Shannon Richard, DPT

Children's Hospital

(804)273-6656

Richmond Hope Therapy Center

(804) 747-4673



August 17, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

My name is Lauren Rosen and I am a physical therapist and am the Program Coordinator of the Motion Analysis Center at St. Joseph's Hospital in Tampa, FL. In my position I coordinate a seating and positioning clinic for both adults and children. I see individuals with varied diagnoses such as cerebral palsy, spinal cord injury, muscular dystrophy, and traumatic brain injuries. I am the therapist responsible for all equipment determination for patients being evaluated at our hospital. Additionally, I am the Chairperson of the Wheeled Mobility and Seating Special Interest Group from the Rehabilitation Engineering and Assistive Technology Society of North America.

I frequently prescribe standers for clients who are not mobile, both adults and children. I do so because of the many medical benefits of standing. In children with cerebral palsy, it has been shown to decrease spasticity, prevent or lessen lower extremity joint contractures, and improve the depth of the acetabulum in young children. In individuals with spinal cord injuries, it has been shown to lessen spasticity, decrease contractures, lessen pressure sore risk, facilitates bladder emptying, and improves digestion. I encourage you to review the attached list of references that all show the benefits of standing.

Additionally, through the use of dynamic standers and wheelchair standers, many individuals can obtain independence performing activities of daily living such as cooking, retrieving objects from closets, and urinating in a standing position. This improves their overall independence and improves their sense of self-esteem as well

I have personally been prescribing standing equipment for more than fifteen years. In my clinic, standing devices are considered the standard of care and are part of our regular practice patterns.

I work hard to educate my patients and their families about all of the technologies that may improve both their function and their quality of life. It has been my experience that standing devices are therapeutically effective as treatment for many individuals unable to functionally stand, weight bear or walk to enhance physical and psychological outcomes while at the same time facilitating greater activity, participation, health and well-being.

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September 14, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I have been in practice as a pediatric physical therapist for 25 years, and currently I serve as the President of the Section on Pediatrics of the American Physical Therapy Association. The mission of the Section on Pediatrics is to promote the highest quality of life for all children, people with developmental disabilities, and their families. The Section represents pediatric physical therapy and promotes its members as practitioners of choice for children (birth to 21 years) with or at risk for movement dysfunction.

Throughout my years in clinical practice, I have observed many benefits associated with the integration of standing programs for children who are unable to stand on their own. Standing devices have been extremely valuable for children with a variety of diagnoses including cerebral palsy, muscular dystrophy, spinal cord injury, and traumatic brain injury. Specifically, it has been reported that 60 minutes of standing four to five times per week increased the bone mineral density of non-ambulatory children with cerebral palsy. In a review article, Pin<sup>2</sup> concluded that evidence supported the use of static standing programs for increasing bone density and temporarily reducing spasticity. In addition, although there is little scientific research to support this specifically, biomechanical analysis suggests a strong benefit for children who spend the majority of their daily routine in sitting to be positioned every day in supported standing with hip and knee extension. This daily positional stretch of the hip flexors and hamstrings should reduce the incidence of hip and knee flexion contractures in these children. Finally, it has been my experience that children and families benefit from an additional positioning option each day that creates an opportunity to interact with the environment and caregivers in an upright, standing position.

I have personally been recommending/prescribing standing equipment for more than 25 years. In all facilities where I have worked, standing devices were considered the standard of care and are part of our regular practice patterns. I have found that standing

devices provide significant benefits to the children and families I have worked with over the years.

Upon request, I would be happy to provide additional information as needed.

Sincerely,

Joe Schreiber, PT, PhD, PCS

President, Section on Pediatrics

Associate Professor Chatham University

#### References

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www.chkd.org

Physical, Occupational & Speech Therapy 601 Children's Lane Norfolk, VA 23507 757.658.7083

August 31, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a senior inpatient physical therapist at Children's Hospital Of the King's Daughters. Our department treats patients both in the acute care setting as well as in the acute rehabilitation unit, with diagnoses ranging from orthopedic lower extremity surgeries to traumatic brain injury, stroke, and other neuromuscular diseases.

CHKD is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with neuromuscular impairment resulting from such diagnoses as spinal cord injuries, cerebral palsy, CVA, and traumatic brain injury, just to name a few.

For persons with these neuromuscular diseases there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with these neuromuscular impairments, including: bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with neuromuscular impairment are able to access such devices as part of their care, treatment and rehabilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of persons with neuromuscular impairment to be more independent, productive and self-reliant.

I have personally been recommending/prescribing standing equipment for more than five years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.



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Physical, Occupational & Speech Therapy 601 Children's Lane Norfolk, VA 23507 757.668.7083

Jundsay Schulu, BPT Lindsay Schuler, DPT

As a general matter, CHKD maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with cerebral palsy, spinal cord injury, CVA, and traumatic brain injury while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

5ep. 30. 2011 | 1:02AM

### Yale Orthopaedics and Rehabilitation

A Practice of The Yale Medical Group

Brian G. Smith, MD Yale Physicians Building Director of Pediatric Orthopaedics 800 Howard Avenue Yale New Haven Children's Hospital P.O. Box 208071 Associate Professor New Haven, CT Department of Orthopaedics 06520-2071 Assistant: Denise Colagiovanni

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9/28/2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker.

Yale-New Haven Hospital is a 966-bed tertiary care facility that includes our Children's Hospital. The hospital has a longstanding affiliation with Yale University School of Medicine. We are, respectively, the senior pediatric physical therapist in Pediatric Outpatient Rehabilitation Services, leading a seating and mobility and positioning equipment clinic for individuals ages 0-21 as well as for a smaller number of adults ages 21-55 with developmental disabilities, and the Director of Pediatric Orthopaedics, treating both the spine and the lower extremity in children, youth, and young adults with developmental disabilities.

Our physicians and therapists promote use of standers of various types (sit-tostanders, mobile/wheeled standers, prone and supine standers) for a variety of populations, including cerebral palsy (GMFCS II-V), muscular dystrophy, myelomeningocele, spinal muscular atrophy, arthrogryposis multiplex congenita, and spinal cord injury. Our therapists and pediatric physicians recognize the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of individuals with developmental disabilities that preclude functional erect standing.

For individuals with such disorders of motor control, there are a number of health as well as developmental benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with cerebral palsy and muscle disorders. Objectives of supported standing include the following:

Promotion of ... Yale Medical Group

The Physicians of Yale University

- ...posture/alignment for functional swallowing and digestion and elimination patterns
- ...cardiopulmonary and circulatory function
- ...alternate ventilatory patterns compared to sitting and bed positions ...passive mid- and lower thoracic spinal extension toward prevention of kyphotic and scoliotic deformities, and toward improvement of active upper thoracic and neck extension/head control
- ... bone density and proper modeling of bone via balanced axial loading ...lumbar spine, hip, knee, ankle, and foot alignment to mediate persistent deformational patterns associated with tone, weakness, contracture, flexible joint deformities
- ...pressure relief, to allow off-loading of ischial-tuberosity and sacral coccygeal pressures associated with sitting and bed positioning
- ...proprioceptive inputs to lower extremities that result in isometric activity in innervated motors with stabilized trunk and LE position during UE and upper-trunk activity
- ...comfort/mediation of pain associated with immobility and static/limited variety of positions and activities.
- ...calming and enhanced attention toward visual and social engagement and use of language
- ...developmentally and functionally important "hands-free" upright activities including ADL's, therapeutic gross and fine motor, cognitive, visual/perceptual activities, and participation in "play" which applies these essential skills and so for a child is therapeutic.

Evidence in diverse bodies of literature including orthopedics, rehabilitation, assistive technology, and psychology (including psychological, emotional, social development, speech development, overall child development), and vision and perception support the broad physiologic, musculoskeletal, and developmental rationales for implementation of a stander in the daily routine of an individual.

Powerful in terms of society is the effect of the implementation of a stander on a child from the standpoint of the World Health Organization's International Classification of Functioning, Disability, and Health (2001). This document describes the interdependence of three levels of functioning - body structures and function, the individual's capacity to perform discrete functional activities, and one's ability to participate with others. The ICF also denotes participation as the level toward which society instinctively strives as it is this level of functioning that is universally most meaningful. As delineated above, stander use addresses an individual's needs on all three levels, and importantly, due to the combined dynamics of definitive postural support that compensates for weakness and deformity, and upright orientation that promotes face-to-face engagement with others, it is in a stander that many individuals with disabilities are best able to participate.

We have personally been recommending/prescribing standing equipment for 21 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

Our therapy staff strives to ensure that our patient and families are made aware of assistive technologies that are safe, effective, and enhance function and participation. It has been our experience that standing devices are therapeutically highly effective as a component of treatment for a range physical and psychological impairments associated with developmental disabilities that preclude functional upright, while at the same time facilitating greater activity, engagement, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs.

This letter reflects our clinical experience and professional expert opinion and not those of Yale-New Haven Hospital and Yale University.

We would be happy to provide additional information as needed.

TRLOPTRCS XTP

Sincerely,

Christina L. Rao PT, PCS, ATP

Yale-New Haven Children's Hospital

ran Klamith us

Pediatric Rehabilitation Services

Brian G. Smith, MD FAAP

Director of Pediatric Orthopedics

Yale-New Haven Children's Hospital

Associate Professor

Department of Orthopedics

Yale University School of Medicine

## **EVIDENCE**

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### http://www.canchild.ca/en/ourresearch/articles.asp

Christine Ott-Wright OTR/L on mobile standers <a href="http://www.rehabpub.com/features/672002/3.asp">http://www.rehabpub.com/features/672002/3.asp</a>

### On Ventilation and Thoracic Architecture

Mary Massery on cardiopulmonary function and treatment <a href="http://www.masserypt.com/html/pub.html">http://www.masserypt.com/html/pub.html</a>

### On Public Policy

ICF

http://www.canchild.ca/en/canchildresources/internationalclassificationoffunctioning.a

**₹**D

# Providence Public School District Office of Special Populations 797 Westminster Street Providence, RI 02903

September 19, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, NY 14850

Dear Mr. Golinker,

I am a school physical therapist in the Providence Schools (RI), Office of Special Populations, where we are very supportive of the use of standing devices for our students. I am also a Clinical Reviewer for the State of Rhode Island, Medicaid Program, where we are well aware of the medical necessity and indications for procurement of standing devices for children who are typically limited by disabling conditions such as cerebral palsy, myelodysplasia, muscular dystrophy, and spinal cord injury.

For students with spina bifida, for example, the benefits of regular supported stance position using standing devices includes, but is not limited to: bladder and bowel health, cardiovascular conditioning, and bone and muscle health to prevent and reduce spine and lower limb deformities, as well as the relief of pressure areas for skin health.

Additionally, just as wheelchairs enable mobility for the non-ambulatory, standing devices are necessary for upright positioning to enable children greater interaction with peers and their environment, toward more productivity, independence and self-reliance.

As a physical therapist, I have been recommending supportive stance positioning and prescribing standing devices for children through the 35 years that I have worked closely with their pediatric orthopedists, who also consistently insist on regular standing activities and the use of supportive standing equipment as necessary.

# P. Stack, MSPT-Page 2

The Providence School Department emphasizes the importance of carry-over between the school and home of programs utilizing mobility and supportive stance equipment for the fullest realization of each child's potential. Likewise, at RI Medicaid, we endorse the procurement of this medically necessary equipment that without which, such basic life function skills could not easily be obtained.

Sincerely,

Peter J. Stack, MSPT

Pediatric PPSD School Physical Therapist

Clinical Reviewer, RI - Dept. of Human Services, Medicaid



8/22/2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a physical therapist at Gillette Children's Specialty Healthcare in Minnesota. As our website states, "Since our founding by Dr. Arthur Gillette more than 100 years ago, we've been at the forefront of medical technology, treatment, education, and research for children with disabilities or complex medical needs." We are offer specialty healthcare to children with special needs and have centers of excellence, one of which is for children with Cerebral Palsy. Children with this disability are faced with the potential of numerous impairments for example seizures, hip dysplasia, lower extremity muscle contractures and poor bone density. These listed impairments, as well as many others, have been proven to benefit from prolonged standing. If a child can not independently stand and is not able to be assisted by a caregiver, a stander is medically necessary for these children and need to avoid additional medical costs in later years. Not only do standers assist to address these medical impairments, such as muscle contractures, it improves these children's quality of life and emotional well being!

Gillette Children's Specialty Healthcare is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with spinal cord, muscular dystrophy, cerebral palsy, choromosomal abnormalities, and many more.

For persons with cerebral palsy there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with cerebral palsy including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with cerebral palsy are able to access such devices as part of St. Paul Main Campus 200 University Avenue East • Saint Paul, Minnesota 55101 • (651) 291-2848 Fax (651) 229-

**Burnsville Clinic Duluth Clinic** Maple Grove Clinic

305 East Nicollet Boulevard, Suite 200 • Burnsville, Minnesota 55337 • (952) 223-3400 Fax (952) 223-3405 Lakewalk Center, Suite 210, 1420 London Road • Duluth, Minnesota 55805 • (218) 728-6160 Fax (218) 724-6982 9550 Upland Lane North, Suite 220 • Maple Grove, Minnesota 55369 • (763) 496-6000 Fax (763) 496-6660

6060 Clearwater Drive • Minnetonka, Minnesota 55343 • (952) 936-0977 Fax (952) 936-0944

Minnetonka Clinic Mobile Outreach Clinic 200 University Avenue East • St. Paul, Minnesota 55101 • (651) 634-1938 Fax (651) 628-4484 (800) 578-4266 their care, treatment and habilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of persons with cerebral palsy to be more independent, productive and self-reliant.

I have personally been recommending/prescribing standing equipment for more than 3 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, Gillette Childrens Specialty Healthcare maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with cerebral palsy while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Christina Storlie, DPT

Doctor of Physical Therapy

Gillette Childrens Specialty Healthcare



# Aaron W. Perlman Center

change the outcome

August 16, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am the senior physical therapist at The Perlman Center at Cincinnati Children's Hospital. At Cincinnati Children's Hospital Medical Center in Cincinnati Ohio, children, youth and adults with cerebral palsy and their families find a unique resource at the Aaron W. Perlman Center. The Perlman Center, part of Cincinnati Children's new Comprehensive Cerebral Palsy Program, offers a unique approach to therapy and support programs that focus on improving outcomes for kids with cerebral palsy across the age continuum. From early intervention through support for teens and adults, the Perlman Center provides a holistic approach to integrated therapy, developmental support and care coordination designed to address the complex needs of kids with CP and related disorders and their families. Our programs support active participation with peers and incorporate best and evidence-based practices and cutting-edge technology in each program. Our assistive technology program offers the latest advancements in technology and is an integral part of every patient's plan for success. I have been at the Perlman Center for 13 years. As senior therapist, I am actively involved in the development of evidenced based activities and parent/care giver education. I have been instrumental in the development of the early intervention program, standing protocols, and the continued research and development of adaptive equipment including standers. I work with families on a one-on-one basis to evaluate a patient's need for standing and trialing various products available to determine which stander will offer the most benefit for the patient. I complete all of the appropriate paperwork for funding and continue to stay involved with the families until the stander recommended is provided.

All individuals attending the Perlman Center therapeutic program or assistive technology program are evaluated for and participate in a daily standing program. We have a standard standing protocol that we educate families on, as well as demos of all of the latest available standers available for patients with complex disorders. This program starts at very early ages of development typical of gross motor standing skills. The protocol is recommended and adjusted through adulthood based on physical disability and need. The Perlman Center is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with complex medical disorders including cerebral palsy, SMA, MD and other related neurological diagnoses.

For persons with complex physical disorders such as cerebral palsy and other related neurological disorders, there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with complex physical disorders such as cerebral palsy and other related neurological disorders including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/ activities of daily living, musculoskeletal deformities and psychological conditions. In addition to the physical benefits stated above, daily standing programs have enhanced social and emotional development with family members and peers, improved visual skills and increased motivation for developmental exploration that is very important to motivate and encourage learning. The decrease in hospitalizations and need for additional medical treatment gained from the benefits of standing allow individuals and their families to live more functional lives despite their disabilities.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with complex physical disorders such as cerebral palsy and other related neurological disorders are able to access such devices as part of their care, treatment and habilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of persons with complex physical disorders such as cerebral palsy and other related neurological disorders to be more independent, productive and self-reliant.

I have personally been recommending/prescribing standing equipment for more than 13 years, including significant involvement in on going development of advanced state of the art technology. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

As a general matter, The Perlman Center at Cincinnati Children's Hospital maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with complex physical disorders such as cerebral palsy and other related neurological disorders while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Melissa Tally, PT, MPT

The Perlman Center

Cincinnati Children's Hospital

Meline Dally A, MAT

Melissa.tally@cchmc.org

(513) 636-7690



change the outcome

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

We work for Cincinnati Children's Hospital Medical Center. Mrs. Reder is the Senior Clinical Director of the Division of Occupational Therapy and Physical Therapy and Division of Therapeutic Recreation. Mrs. Thomas is a Physical Therapist II in the Division of Occupational Therapy and Physical Therapy.

The purpose of this letter is provide feedback on the positive functional outcomes that can come from using standing devices, as well as provide a reference list which includes evidence-based, peer reviewed scientific literature.

Due to the pediatric nature of our hospital, we use standing devices as an augmentation to our traditional handling approaches, strengthening activities, balance and coordination, and range of motion measures. Physical Therapists are well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with Cerebral Palsy, Muscular Dystrophy, and other neuromotor disorders.

For persons with these neuromotor disorders there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with these diagnoses including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity/tone, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions. Attached you will find a list articles supporting the benefits of standing.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with neuromotor diagnoses are able to access such devices as part of their care, treatment and habilitation. In our experience, the use of standing devices enhance and facilitate the ability of persons to be more independent, productive and self-reliant.

As a general matter, Cincinnati Children's Hospital Medical Center Division of Occupational Therapy and Physical Therapy maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our experiences that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with neuromotor disorders while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Molly Thomas, PT, DPT, ATP

Physical Therapist II

Division of Occupational Therapy and

Physical Therapy

Date Signed: 1/27/11

Rebecca Durham Reder, OTD, OTR/I.

Rebecca Durham Reder, OTD, OTR/L

Senior Clinical Director

Division of Occupational Therapy and

Physical Therapy

Division of Therapeutic Recreation

Date Signed: 10/27/11

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October 4, 2011

Mr. Lewis Golinker, Esq. Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am the medical director of the Department of Orthopedics at Connecticut Children's Medical Center. We are the only free standing children's hospital in Connecticut and our orthopedic department cares for children with a variety of disabilities including but not limited to cerebral palsy, spina bifida, muscular dystrophy and spinal cord injury. We are proud to be recognized as one of the top pediatric orthopedic departments by US News and Reports Hospital Survey.

At Connecticut Children's, we frequently refer to physical therapy for evaluation of an appropriate standing device. Connecticut Children's is well aware of the medical benefits associated with the integration of standing programs in a rehabilitation, occupational therapy, or physical therapy treatment plan. In our experience, standing devices have proven to be extremely valuable and important tools in the treatment and on-going health management of people with cerebral palsy, spina bifida, muscular dystrophy and spinal cord injury.

For persons with neuromuscular disorders there are a number of health benefits that are derived from using standing devices. Specifically, reports and research have established that standing devices can reduce the risk of, control, and/or treat a number of secondary medical complications associated with a variety of chronic pediatric conditions including: bladder function/urinary tract infections, bowel/digestive function, cardiopulmonary/circulatory function, spasticity and a variety of other muscletones, orthostatic hypotension, osteoporosis, bone density and claciuria, joint and muscle contractures, range of motion, skin/pressure ulcers, hip integrity, upper and lower extremity motor function, pain, sleep dysfunction, respiratory function, self-care/ activities of daily living, musculoskeletal deformities, and psychological conditions.

Moreover, research and reports on standing devices have established additional reasons for ensuring that persons with neuromuscular disorders are able to access such devices as part of their care, treatment and habilitation. In our organizational experience, the use of standing devices enhance and facilitate the ability of persons with neuromuscular disorders to be more independent, productive and self-reliant. Children with neuromuscular disorders need alternative positioning devices; they cannot be expected to sit in their wheelchair throughout the day. In the early 70's, standers were rarely used as a therapeutic device. Children developed severe contractures and they were then fitted with HKAFOS which they had to use throughout the day. These braces were extremely uncomfortable. The children were unable to move in them and their spasticity would consequently increase markedly. Walking with these braces was difficult at best due to their heavy weight and locked joints.

I have personally been recommending/prescribing standing equipment for more than 20 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.



As a general matter, Connecticut Children's maintains an on-going effort to ensure that our clients are made aware of assistive technologies that are both safe and effective. It has been our organizational experience that standing devices are therapeutically effective as treatment for certain physical and psychological impairments associated with neuromuscular disorders while at the same time facilitating greater activity, participation, quality of life and independence.

In our extensive professional experience, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs. Upon request, we would be happy to provide additional information as needed.

Sincerely,

Jeffrey Thomson MD,
Director of Orthopedics

Connecticut Children's Medical Center

Scott Van Epps PT, MS, PCS

Manager Physical Therapy, Center for Motion Analysis

Connecticut Children's Medical Center



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September 28, 2011

Mr. Lewis Golinker, Esq Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a Physical Therapist at Kids Can Do Pediatric Therapy Center in Danville, Kentucky. Kids Can Do provides comprehensive pediatric physical, occupational and speech-language therapy services in a child-friendly, family focused environment. Kids Can Do provides services to rural populations of infants and children ranging from birth to twenty-one years of age with a variety of diagnoses. Our therapists assess and treat children with diagnoses such as cerebral palsy, spinal cord injury, traumatic brain injury, developmental delay, cerebrovascular accident, muscular dystrophy, genetic syndromes, and schizencephaly. As a Physical Therapist, it is my job to ensure that our infants and children receive services to address each of their individual impairments tailored towards development of gross motor skills and achievement of developmental milestones.

At Kids Can Do, standing devices are an integral part of our treatment procedures. Benefits associated with the use of standing frames include increasing bone density secondary to weightbearing, decreasing risk of pressure ulcer development, improving or maintaining range of motion, improving bladder function, improving digestive /bowel function, improving cardiopulmonary/circulatory function, improving joint integrity, and improving self-esteem by being in an upright position or eye-level with peers. At Kids Can Do, standing frames are initiated in therapy by the physical therapist but are used by all three disciplines. When a child is in an optimal position, he or she is motivated to participate in a variety of motor, multisensory and language activities. These activities and therapeutic strategies can then be implemented across settings for example, at home and school.

I have recommended standing equipment for 29 years. At Kids Can Do, standing devices are considered the standard of care and are part of treatment protocols. The therapists at Kids Can Do make an effort to inform our patients of assistive technologies that are safe and effective. It is our facility's experience that standing devices are therapeutically effective as treatment for children with diagnosis including but not limited to

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developmental delay, traumatic brain injury, cerebral palsy, muscular dystrophy, spinal cord injury, and genetic syndromes.

In closing, standing frames provide significant medical benefits to children with a variety of diagnoses. At Kids Can Do, the plan is to continue to use standing frames and to recommend their use across settings. If you have any questions or need further information, please feel free to contact me at 859-239-6670.

Sincerely,

Vandevier, F.T. Beth Vandivier,PT

1522 Cedar Ave. Moncks Corner, S.C. 29461

September 30, 2011

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, New York 14850

Dear Mr. Golinker,

I am a physical therapist providing therapeutic services in Berkeley County School System where I serve a population of three-year-old to 21-year-old students. I evaluate and recommend equipment to all students, collaborate with staff and parents to assure the best therapeutic intervention for the child's maximal physiological and psychosocial development through their formative years, and research various standing devices, their effectiveness, safety, and performance.

I have spent the last 15 years of my career in this pediatric setting and have participated in development of Individual Education Programs (IEP) for students that included standers as part of their educational programming to afford them opportunities that they would not have from using a wheelchair alone. It is remarkably striking to observe the dramatic change in social interaction and initiation of engagement from peers without and with disabilities when a child is standing as compared to sitting in a wheelchair. This is born out in the research available. Part of the requirement of the IEP includes a description of the least restrictive environment provision to the student which the stander facilitates by directly stimulating interaction and stimulation from peers to further each student's cognitive and social-emotional growth. I have personally been recommending/prescribing standing equipment for more than 13 years. In this facility, standing devices are considered the standard of care and are part of our regular practice patterns.

It is difficult to imagine that a device that has been in use for at least 20 years in the home, clinical and educational setting could be labeled experimental with the extensive clinical evidence and research evidence to support it. The students (and their families) we serve have seen the complications of hip dysplasia, joint deformity, muscle imbalance and shortening, and scoliosis development prevented with the use of standers. Standers have proven extremely valuable in the management of children with spina bifida who have no other hope of standing and preserving urinary, circulatory, and spinal development integrity. We have seen children with muscular dystrophy preserve and prolong their ambulation skills by years. We have seen children with cerebral palsy avoid surgeries for orthopedic or muscular deformity simply by following a regimen of daily standing with the correct standing frame. We have seen children with neurological conditions or genetic syndromes use standing frames as a means of being able to integrate their sensorymotor and musculoskeletal system to be able to hold their head up for the

first time. We have seen children that have extensive muscle contractures from cerebral palsy, but also have cognitive deficits that impair their ability to communicate suddenly show behaviors to engage in the classroom and instruction around them while standing. Many of these children and those with other diagnoses can take a deep breath because they are finally in the appropriate positioning for the primary and secondary respiratory muscles to function efficiently and optimally. Respiratory illnesses might very well be the primary cause of absences and illnesses in the population that we serve. Skin breakdown is a constant concern with our student population who primarily use wheelchairs for the majority of their day. Standers for these young people are proven to remove the pressure over the ischii and the greater trochanters in ways that no seat cushion can do. Perhaps it is not well known that children with cerebral palsy that are ambulatory live with pain. This pain is from joint deformity that can be minimized when standers facilitate normal lower extremity, then ultimately postural integrity. Preparation for student's entrée into broader vocational arenas has been expanded with consistent use of standers in the school day during vocational tasks.

Caregivers have been able to keep students at home because of increased functional mobility and participation in transfers and self care activities in the home. Caregiver health and health maintenance is preserved. This translates into less financial burden on the family, third party payers, and community by requiring less surgery per individual and less healthcare services.

The Individuals with Disabilities Education Act (IDEA) requires schools to use Assistive Technology to meet each student's need where appropriate for his or her education. Any item or piece of equipment that is used to increase, maintain or improve functional capabilities is defined as an Assistive Technology device. Standers certainly increase, maintain and improve functional capabilities for the students we serve.

In my extensive professional experience, and the experience of my physical therapy colleagues, we find standing devices provide significant medical benefits to the individuals we treat and to others with similar medical needs.

Sincerely,

Typulfaden PT, MS, PCS, ADP

Lynn Yaden, PT, MS, PCS, ATP



# Children's of Alabama

Mr. Lewis Golinker, Esq. Director Assistive Technology Law Center 401 East State Street, Suite 300 Ithaca, NY 14850 (607) 277-5239 (fax)

September 30, 2011

#### Dear Mr. Golinker:

I am the Director of the Physical Therapy and Occupational Therapy Department at Children's of Alabama in Birmingham. We provide clinic, inpatient and outpatient services for 1000s of children each year. We are most alarmed that payers are denying coverage for standing devices that are so important for the health and treatment of some of our patients. Standing devices have been extremely valuable for children and adults with a variety of diagnoses including cerebral palsy, muscular dystrophy, spinal cord injury, and traumatic brain injury.

In my clinical practice over 30 years, standing devices have been used in treatment, schools, preschools, home settings and rehab facilities. In fact, standing using a standing device is a part of our dorsal rhizotomy post-surgical protocol. Benefits include improved head and trunk control, positioning so that individuals can participate with others socially and in educational environments, and in preparation for more independent standing and ambulation. Research and scientific reports have established that these devices can reduce or prevent medical complications such as spasticity, osteoporosis, contractures, hip joint integrity and other musculoskeletal problems. Just last summer, experts in orthopedics presented at our national APTA conference in National Harbor, all agreeing that standing devices are valuable in the management of our patients. Dr. Wayne Stuberg presented at this conference. His research, published in 1992, showed that 60 minutes of standing four to five times per week increased the bone mineral density of non-ambulatory children with cerebral palsy. In a 2007 review article, Pin concluded that evidence supported the use of static standing programs for increasing bone density and temporarily reducing spasticity. In addition, although there is little scientific research to support this specifically,

biomechanical analysis suggests a strong benefit for children who spend the majority of their daily routine in sitting to be positioned every day in supported standing with hip and knee extension. This daily positional stretch of the hip flexors and hamstrings should reduce the incidence of hip and knee flexion contractures in these children.

I personally support the use of and availability of standing devices for children and adults with disabilities impacting their ability to move independently. I respectfully request your consideration and encourage your support of policies that support reimbursement for these devices.

Sincerely,

Sheree York, PT, DPT, PCS

Director, PT&OT Dept, Early Intervention Services

Children's of Alabama

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1. Stuberg W. 1992. Considerations related to weight bearing programs in children with developmental disabilities. *Physical Therapy*. 68. 35-40.

2. Pin, TW. 2007. Effectiveness of static weight-bearing exercises in children with cerebral palsy. *Pediatric Physical Therapy.* 19. 62-73.

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