

Leckey Squiggles Stander Supine/Prone Standing Device

Sample Letter of Medical Necessity



Introduction

(Describe your relationship with the client, their disability, and the product requested)

As _____'s therapist, I am requesting insurance funding for a Leckey Squiggles Stander. This DME device has been prescribed by _____'s physician and is a medical necessity that would not be used in the absence of disability, illness or injury. It is essential to enable _____ to stand, a normal activity of daily living (ADL), which stretches and strengthens _____'s muscles and enables him/her to be upright and interact with his/her peers at eye level, thereby promoting neurological and musculoskeletal development.

What follows is a breakdown of _____'s clinical needs and the safety requirements for the child and his/her caregivers.

Diagnosis & Disability

(Describe the ability to sit, stand, walk, and transfer including the amount of assistance needed for each activity. Where appropriate, describe other related equipment, such as mobility devices, and patient lifts. May include a clinical evaluation in place of this narrative)

_____ is an X-year-old boy/girl who has been diagnosed with XX. Due to his/her impairment, he/she has limited control of his/her head, trunk, upper and lower limbs, and is unable to stand or walk independently. As a result, _____ has difficulty with many of the usual activities of daily living (ADL) and does not experience the typical range of movements and magnitude of forces that stimulate muscle and bone growth. Unfortunately, this is detrimental to his/her long-term development and physiological function.

_____ is incontinent and is prone to urinary tract infections and constipation. His/her family finds that being upright helps with bladder emptying and bowel function. _____ shows some skin reddening if left sitting for long periods and needs frequent re-positioning as part of his/her 24-hour postural management program.

_____ uses a special needs stroller for mobility and is currently lifted for transfers. He/she requires postural support at home and at school to sit and bathe.

What are the implications on the lives of the child and caregivers without a Squiggles Standing Frame?

(Include how the child is currently supported)

Standing typically occurs at 9-12 months. Through a combination of feedback from the visual, vestibular, and somatosensory systems (sensors in our muscles and soles of feet), standing upright helps to tell our brain the position and orientation of our body in space. Without this feedback, it will be more difficult for _____ to learn upright head and trunk control and thus use of his/her upper limbs and hands.

Children are born with anatomically normal joints, without evidence of hip displacement or dislocation. During infancy, long bone growth, e.g. the femurs, takes place at cartilaginous plates near the ends of the shaft. This growth is principally influenced by mechanical loading (forces and moments) and causes bony remodeling. As well as correctly aligning the hip, knee, and ankle for efficient walking, this re-shaping ensures a structurally sound and strong hip joint. Children who are immobile are at risk of hip migration with up to 90% of the least active children experiencing hip displacement (Soo et al, 2006). Unfortunately, hip displacement is associated with pain, spinal deformity, and surgery. Standing frames have been shown to improve bone mineral density and are the first step in the journey toward upright movement (Glickman, 2010)

Standing also puts the child at eye level with peers during group activities and encourages peer interaction and socialization. Without a standing frame, _____ will be restricted to a seated position. Arva et al (2009) showed that 'time spent in a standing position can give wheelchair users a sense of confidence and equality through face-to-face contact with the non-disabled community' thus improving their sense of well-being and quality of life. Studies (Ainsworth et al, 2011) have reported that energy metabolism is doubled merely by standing instead of sitting, which is highly relevant to people who spend many hours a day sitting in a wheelchair

What are the specific clinical benefits of the Squiggles Stander?

(Explain how this product's features provide a benefit to the client, in terms of mental and physical wellbeing, and how this would be applied in a real-world environment. Adjust the suggestions below to suit the individual benefits to the child)

Per a review of pertinent research, the benefits of standing therapy with a Squiggles Stander are wide-ranging and include:

Increase bone density: Bone density is a measure of bone strength. Stronger bones are less likely to fracture. Normal bone growth and development need a combination of good nutrition and active weight bearing which involves muscle contractions to load bones (Pope, 2007).

Preventing contractures: Contractures (shortening of a muscle to a non-reducible position) occur due to restricted movements and excessive time sitting as opposed to upright activity. The muscles most at risk are muscles that bend the hip (iliopsoas); those that straighten the hip and bend the knee (hamstrings); the calf muscle that bends the knee and points the toes (gastrocnemius); and/or the calf muscle which points the toes (soleus).

Improves respiration and voice control: When we stand, the diaphragm has more room to expand and contract, meaning we can breathe in and out more easily, deeply, and efficiently (Labandz, 2010; Watanabe, 2010; Wechsler, 2009; Meyer, 2008). This aids in voice control as there is greater breath support- therefore better opportunity for communication.

Enhances circulation and blood pressure: Effective circulation is closely related to breathing, as it is the efficient supply of oxygen to the blood, followed by the efficient pumping of this oxygenated blood to the rest of the body which helps to keep us healthy. Active standing has been found to improve blood pressure, and heart rate and decrease edema (swelling) in the legs and feet.

Aids digestion, bowel function, and bladder drainage: Standing is believed to help with digestion and toileting through a combination of gravity (Wechsler, 2011; Watanabe, 2010; Meyer, 2008; and the activation of the stomach muscles (Labandz, 2010).

Facilitates the formation of the hip joint in early development: Children who stand at the normal developmental age of 12-16 months are considered more likely to form the femoral head and acetabulum (ball and socket) of the hip joint (Labandz, 2011 & 2010; Dobrich, 2010; Rosen, 2010).

Enables children to interact with eye contact which is reported to improve confidence, self-esteem, and self-image (Hohman, 2011; Rosen, 2010; Thompson, 2009; Wechsler, 2009; Meyer, 2008).

Improves skin integrity by relieving pressure encountered during sitting: When individuals sit for lengthy periods, the sitting bones (ischial tuberosities) and other bony areas like the bottom of the spine (sacrum) can become vulnerable to pressure and potential skin breakdown. It has already been established that standing improves breathing and circulation, so it seems logical that in the standing posture, oxygenated blood can more easily reach the tissues that are usually subject to pressure.

In a systematic review (Glickman, 2010) of the benefits reported by therapists and users, there was also a manifest improvement in psychological function which is associated with increased well-being, alertness, and sleep patterns.

Describe needs and safety issues for both child and caregivers

(Explain what the child's needs are, including any information about how they walk, move, and transfer. Explain the types of obstacles that a caregiver needs to overcome, discussing the possible injuries that may occur if the product is not in place. This may also be things such as fatigue and straining movements)

Without access to a standing frame, _____'s caregivers must provide total assistance for him/her to stand. Due to weakness and uncontrolled movements, this is awkward and tiring

for the caregivers, putting strain on their shoulders and lower back. This strain will become more so as _____ grows and could result in future personal injury costs.

Despite best attempts, the caregiver *will not have enough hands* to provide appropriate support at the feet, knees, hips, and chest, to elongate the spine and stretch the lower limbs. It will also be difficult to achieve an active as opposed to a passive standing position as this requires _____ to feel stable and relaxed in his/her core in order to reach out with his/her arms and extend through his/her lower limbs. _____ has a walker/gait trainer but can only manage short periods due to weakness and it does not provide the muscle stretch of a standing frame.

_____ has (low/mixed/fluctuating/high) muscle tone which makes him/her prone to leaning to the side when supported incorrectly. Long term this can lead to scoliosis (a curvature of the spine) and contributes to pelvic instability. The Squiggles Stander provides a safe, comfortable, and comprehensive support that will ensure he/she is positioned symmetrical and midline as he/she grows.

Currently _____ is light and could be lifted into the Squiggles Stander, however as he/she grows, he/she will need to be transferred using a mechanical lift. The Squiggles Stander goes near horizontal with all the supports opening outwards to assist with safe transfers. For prone standing, the Squiggles Stander is close to the ground so _____ can step in from behind with minimal assistance from caregivers. He/she can then stand independently without additional support from caregivers.

What are the equipment and accessory requirements?

(What is it you are requesting funding for? Which componentry do you need to fulfill the requirements set out above?)

The Leckey Squiggles Stander is a 3-in-1 standing frame developed to meet the individual needs of each child while encouraging an active upright position. It is designed and manufactured as durable medical equipment and is a registered medical device.

- The Squiggles Stander will support _____ up to age 5 or 22kg/48lbs.
- The Squiggles chassis is easily positioned to near horizontal for easy transfer by lifting or using a mechanical lift. It can then be adjusted to the optimum angle in prone or supine to suit individual therapeutic goals.
- The Squiggles is low to the ground so that _____ is at eye level for interacting with his/her peers. This also makes it easier to step in forwards.
- The light, compact frame makes it easy to move around for indoor or outdoor activities. Alternatively, the frame is easily separated into 2 lightweight parts for transport or easy storage.
- The multi-adjustable tray can be positioned at exactly the right place for a variety of tabletop activities like drawing, eating, reading, and playing. This ensures standing time is active and confers many benefits to the physiology of standing.
- The height-adjustable user handles make it easy for the caregiver to move the product about without bending or straining.
- The footplates are angle adjustable to accommodate rotation at the hip or ankle. They can be individually depth-adjusted to accommodate asymmetrically tight hamstrings. A footrest raiser can accommodate leg length discrepancy and ensure equal loading at the ankle, knee, and hip and a symmetrical trunk.
- The padded knee supports distribute pressure and increase comfort.




Components of the Leckey Squiggles Stander

(Delete components and accessories that you are not requesting).

In order to meet _____'s standing needs, I am requesting funding for the Leckey Squiggles Stander with the features and accessories set out below.

This product will have approximately X years left of growth.

Item	Description of Medical Necessity
<p>Support Shell</p> 	<p>The standing support is based around a long central spine, from which the headrest, chest, hip, knee, and foot supports move freely. These can be adjusted vertically along the spine to accommodate any size and shape.</p>
<p>Pivot Chassis</p> 	<p>The pivot chassis provides pneumatic angle adjustment for 3-in-1 Positioning: prone, supine, or upright. It can adjust from vertical to horizontal to make transferring in and out easier.</p>
<p>Flat Headrest</p> 	<p>There are several headrest options, the flat headrest acts as a prompt to keep the head upright and positioned centrally. The minimally curved design enables the child to have a good field of view when they turn their head to the left and right.</p>
<p>Spine Cap Cover</p> 	<p>The spine cap cover fits over the headrest opening when used in the prone position.</p>

<p>Headrest & Padded Laterals</p> 	<p>The headrest with padded laterals provides additional support for children who lack head control. The additional pads keep the head in a central position and can be used to attach switches for communication.</p>
<p>Grab Rail</p> 	<p>The grab rail gives increased stability for some children and can be fitted to the tray in prone or supine.</p>
<p>Sandals with Straps</p> 	<p>Where additional foot stability is needed, the footplate can be fitted with sandals. The individually adjustable footplates can move around the footplate to accommodate tight hamstrings and internal or external hip or foot rotation and can be bolstered with a footplate raiser to accommodate leg length discrepancy.</p>

What alternatives are available but not suitable, and what are the benefits of the Squiggles Stander?

(Give at least one example of another product that is similar but does not have as many features or benefits. This could also be a type of method in place of a product)

There are simple, less costly alternative pediatric standing frames that provide upright support, but do not enable prone or supine positioning or have individually adjustable components to accommodate specific body shapes. Other standers offer prone and supine positioning, but the level of trunk support is inferior compared to the Squiggles Stander with its individually adjustable chest and pelvic supports. The sternum support on the Squiggles stander is unique in encouraging trunk and spine extension while allowing the shoulder girdle to protract for tabletop play.

Summary/conclusion

Standing therapy is an essential part of 24-hour postural management and confers a range of benefits to children including an increase in bone mineral density, improvement in range of movement, and aiding bladder and bowel function. The associated psychological and cognitive benefits of being upright with peers will improve sleep, communication, and general well-being.

The Leckey Squiggles Stander is a versatile 3-in-1 standing frame that can be positioned in prone, supine, and upright. It has adjustable supports that adapt to suit individual needs ensuring a comfortable, safe position and a simple, easy-to-use product for caregivers. The Squiggles stander is the best frame to meet all the medical needs of _____. As such I do not hesitate to recommend that the Squiggles Stander should be funded.

Activities that can be achieved with the Squiggles Stander



References

1. Ainsworth BE, Haskell WL, Herrmann SD, et al. (2011). Compendium of Physical Activities: a second update of codes and MET values. *Med Sci Sports Exerc*, 43(8):1575–81.
2. Arva J, Paleg G, Lange M, et al. (2009). RESNA position on the application of wheelchair standing devices. *Assist Technol*, 21 (3),161–8. quiz 169–71.
3. Dobrich, L. (2010). Making a Stand. *ADVANCE for Physical Therapy & Rehab Medicine* 21(24),14. <http://physical-therapy.advanceweb.com/Archives/Article-Archives/Making-a-Stand>
4. Glickman LB, Geigle PR, & Paleg GS. (2010). A systematic review of supported standing programs. *J Pediatr Rehabil Med*,3(3),197–213.
5. Hohman, K. (2011, March). Upstanding Benefits. *Rehab Management [serial online]*. http://www.rehabpub.com/issues/articles/2011-03_01Kreuger, 2010
6. Labandz, S. (2011). Using standers to position children for success. *ADVANCE for Physical Therapy & Rehab Medicine [serial online]* 18(20), 29. <http://physical-therapy.advanceweb.com/Archives/Article-Archives/Heightened-Awareness-2>
7. Meyer, A. (2008, Sept). Stand for health. *Rehab Management [serial online]*. http://www.rehabpub.com/issues/articles/2008-08_02.
8. Meyling CG, Ketelaar M, Kuijper M, Voorman J, & Buizer AI. (2018). Effects of Postural Management on Hip Migration in Children with Cerebral Palsy: A Systematic Review *Pediatric Physical Therapy*, 30:82-91.
9. Paleg et al. (2013). Systematic review and evidence-based clinical recommendations for dosing of pediatric supported standing programs. *Pediatr Phys Ther*, 25(3):232-247
10. Pope PM. (2007). Severe and complex neurological disability: management of the physical condition. London: Elsevier. Labandz,2010
11. Rosen, L. (2010, January). The need to stand: finding the appropriate standing system to find a client's needs. *Rehab Management [serial online]*. http://www.rehabpub.com/issues/articles/2010-01_03Silberstein, 2008
12. Soo B, Howard J, Reig S, Lanigan A, Wolfe R, Reddibough D & Graham K. (2006). Hip displacement in cerebral palsy. *J Bone Joint Surg Am*, 88(1),121-9.
13. Thompson, G. (2009, June). The Rising. *Rehab Management [serial online]*. http://www.rehabpub.com/issues/articles/2009-06_05.
14. Watanabe I. (2010, March). The “other” benefits of proper positioning. *Mobility Management*. <http://mobilitymgmt.com/articles/2010/03/01/proper-positioning>.
15. Wechsler K. (2009). Stand up! *QUEST: MDA’s Research and Health Magazine* 18(1). <http://quest.mda.org/article/stand>

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