EDUCATION IN MOTION

WHERE THEORY MEETS PRACTICE

LECKEY

Leckey Mygo 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 Mygo 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 device, patient lift)

_____ 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 wheelchair for his/her mobility and a mechanical lift 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 Mygo 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. For this reason, _____ has been in a standing program since he/she was X years old.

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 remodelling. 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 Mygo 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)

The benefits of standing therapy with a Mygo 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 needs 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 into 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 the 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 both 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 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. The walker/gait trainer does not provide stretch to the muscles like the 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 Mygo Stander provides safe, comfortable, and comprehensive support which will ensure he/she is positioned symmetrically and in midline as she grows.

Currently _____ is light and could be lifted into the Mygo stander, however as he/she grows, he/she will need to be transferred using a mechanical lift. The Mygo Stander goes near horizontal with all the supports opening outwards to assist with safe transfers. For prone standing, the Mygo 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 Mygo Stander is the next step up from a Squiggles Stander. It is a 3-in-1 (prone, supine, and upright) standing frame, for ages approximately 4-14 and is developed to meet the individual needs of each child. It is designed and manufactured as durable medical equipment and is a registered medical device.

- The unique design of the Mygo Stander's **knee and foot mechanism** allows users with up to 25-degree contractures to stand fully supported, with hips and knees flexed, in a more upright, less kyphotic posture. This often allows children to remain standing for longer.
- The Mygo chassis is effortlessly positioned horizontally 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 unique **de-rotation hip belt** with hardware makes it very easy for the therapist or caregiver to rotate the pelvis into a neutral central position without applying excessive force.
- The **split knee supports** self-align above and below the patella to ensure the pressure is not applied directly to the delicate patella but distributed to the femur and tibia.
- The Mygo is low to the ground so that _____ is at eye level for interacting with his/her peers. This also makes it easier to step forward for prone standing.

- The multi-adjustable tray can be positioned at exactly the right position 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.

Components of the Leckey Mygo Stander

To meet _____'s standing needs, I am requesting funding for a size 2 Leckey Mygo Stander with the features and accessories set out below.

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

This will have approximately X years left of growth.

Item	Description of Medical Necessity
Mygo Stander 	The Mygo Stander comes as standard with • Manual angle adjustment • Polyurethane (PU) chest, hip and knee supports • Two-piece footplate. The Mygo Stander is suitable for up to 60kg/132 lbs.
Mygo Stander Shoulder Pad 	The angle adjustable wings on the contoured shoulder support can be positioned to increase shoulder protraction to help bring the hands to midline for improved functioning.
Mygo Stander Shoulder Pad Cover 	Breathable, machine washable, colourful covers to fit over the shoulder pad will keep the product clean and hygienic.
Contoured Headrest 	The contoured headrest width depth and angle adjustment, provide increased support for children developing head control. It comes with easy-to-clean covers.
Flat Headrest 	The flat headrest has width, depth, and height adjustment ensuring the correct support for the head and neck. The covers are easily cleaned.

Flat Headrest Laterals with Covers 	Lateral supports for the flat headrest will ensure the head remains fully supported in the midline as the child moves about and learns head control. It is useful for low or high tone.

Fixed Chest Laterals 	Fixed chest laterals provide cushioned support to the trunk and are width and height adjustable.
Flip-Away Chest Laterals 	Flip-Away PU (polyurethane) lateral supports will help maintain a safe, upright position and can be moved out of the way for transfers.
Chest Wraparound Harness 	The wraparound flexible chest harness with laterals supports the trunk in an upright midline position during prone, upright, or supine standing and provides support during functional activities. The chest harness moves free for transfers.
Complex Chest Laterals – Vertical 	The complex flip-away lateral supports have independent angle, depth, and height adjustment providing the user with deep thoracic support to help maintain a stable upright position.
Hip Laterals 	Height and depth adjustable hip laterals provide proximal support to the pelvis to ensure the user remains in a central position with the head stacked above the trunk and pelvis.
Hip Wraparound Harness 	The wraparound flexible hip harness with laterals supports the lower body in either prone, upright, or supine standing and the harness moves out of the way for transfers.

De-rotation Hip Belt with Hardware  for prone  for supine	The unique pelvic de-rotation belt enables the therapist to rotate the child's pelvis to a central and neutral position with minimum effort. The pad is shaped around the buttocks to increase proprioceptive feedback to the child. Available for prone or supine.
Knee Cup Height Extension Brackets 	Knee cup extensions will provide additional height adjustment.
Basic Knee Strap 	The height-adjustable knee supports are available with a range of tibia straps. The unique V-shaped design ensures a wide range of knee shapes and sizes can be accommodated in comfort while distributing the pressure.
Split Knee Strap 	The split knee straps are attached with a buckle mechanism. They self-align to distribute pressure to the long bones and away from the patella.
Mygo Stander Tray 	The soft polyurethane tray with interchangeable inserts is height and angle adjustable and can be adjusted to a low position with close proximity to the user to encourage upper trunk and neck extension and upper limb movement.
Mygo Stander Tray with Bowl Insert 	The bowl insert for the tray can be used for eating or play activities, particularly messy play.
Grab Rail / Toy Bar for Tray 	A grab rail can be attached to the Activity Tray to provide increased stability, or objects can be mounted to promote motor skills and provide sensory play.

Sandals 	Optional sandals can be positioned on the footplates to individually accommodate a range of foot positions. The medial/lateral and anterior/posterior positioning of the sandals can be individually adjusted. Sandal raisers are available individually to adjust for leg discrepancy.

What alternatives are available but not suitable, and what are the benefits of the Mygo 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)

Other less costly alternative products have been trialed or considered but are not appropriate to meet _____'s specific needs. For example, the Supine & Prone standers from _____offer single use standing options for the user but due to the simple planar design, they do not give the same pelvic support proximal to the support surface. This can lead to excess pressure loaded on the knees.

Other standers used for Mygo Stander-aged clients are sit-to-stand options from a variety of manufacturers. However, this style of standing frame was originally not designed for a complex CP user and does not address pelvic stability in standing. In addition, the functional position afforded by a sit-to-stand is inferior to that achieved in a Mygo Stander.

Summary/conclusion

Standing therapy is an essential part of a 24-hour postural management program 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 Mygo Stander is a versatile 3-in-1 standing frame that can be positioned in prone, supine, and upright. It has many unique features including the hip de-rotation belt, split knee pads, and a combined knee/foot angle adjustment mechanism which can accommodate knee contractures of up to 25 degrees. The Mygo has a range of adjustable supports that adapt to suit individual needs ensuring a comfortable, safe position and a simple, easy-to-use product for caregivers. The Mygo is the best frame to meet all the medical needs of _____. As such I do not hesitate to recommend that the Mygo Stander should be funded.

Activities that can be achieved with the Mygo Stander.

(If you have pictures of the child in a demo, they can be attached with descriptions)

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