

# Scoot – 4-in-1 Mobility Rider

(Sample Letter of Medical Necessity)



Every child is unique, and every child is assessed individually to see which products are required to meet their specific individual needs. Health care providers will make the ultimate decision on which products are appropriate for an individual, based on their clinical judgement, and the funding applications will take these individual requirements into account. Firefly cannot guarantee the success in obtaining insurance funding.

# Firefly Scoot

## Template Letter of medical necessity

**Please note – for sections highlighted in blue, please replace with details specific to the child’s presentation and clinical need. The text provided is for example purposes only.**

### **Introduction** *(your name and relationship with client, with product requested)*

As Jane Doe’s therapist, I am requesting insurance funding for a Firefly Scoot. This DME device has been prescribed by Jane’s physician and is a medical necessity which would not be used in the absence of illness or injury. It is an essential device to enable Jane to develop the motor skills and spatial awareness necessary for independent mobility and Mobility Related Activities of Daily Living (MRDAL). Through regular use Jane will increase her physical and cognitive abilities and improve her neurological and musculoskeletal development. The following explains this medical justification.

### **Explain the Child’s diagnosis and disability.**

Jane is a X year old boy/girl who has been diagnosed with XX.

Sensory and Comms: She has sensory integration disorder and presents with reduced cognition. She is non-verbal with greatly delayed communication and social skills.

Strength and tone: Jane has fluctuating tone with decreased strength in her trunk. She has some degree of passive postural control in her head and upper trunk but has very limited active and reactive control. She has limited motor control of her upper and lower limbs and is unable to use cutlery, hold a pencil, sit, stand or walk independently. Jane requires regular therapy to increase strength and manage tone.

Range of Movement: Jane has bilateral hip flexion contractures of 10 degrees and knee flexion contractures of 5 degrees.

Surgery and medications: Jane had bilateral tenotomies last year and receives Botulinum-A injections 6 monthly.

Equipment and transfers: Jane has a standing frame, a toileting aid and a pushchair. She wears AFOs for 4-5 hours/day and is currently lifted for transfers.

Jane’s dependence on a carer means that she cannot experience activities which are typical of her peers including exploring her environment and learning about distance and the 3D nature of objects through floor play.

### **What are the implications for the child without a Scoot?**

## Physical benefits

Jane lacks neck, shoulder and trunk strength. The prone crawling position gives opportunities to develop strength in the extensor muscles of her neck and spine, holding her head up against gravity. While positioning on a mat on the floor can be used to develop strength in the back and neck extensor muscles, it is the dynamic nature of crawling in Scoot which will strengthen the muscles in a co-ordinated functional manner which will be needed for later upright movement (walking).

Jane lacks full independent trunk control. Trunk control can be split into passive, active or reactive. While passive and active trunk control can be worked on in stationary seats, the Scoot, Ride and Pooosh positions will give opportunities to develop re-active trunk control. Unlike a wheelchair, the multi-directional movement of the Scoot base has the advantage of developing multi-directional spinal control.

Presently, Jane is held by her therapist during physiotherapy sessions. Specific movement exercises are practised to develop gross and fine motor control in her trunk, shoulders, arm and hands. Such sessions are of short duration due to fatigue by both child and therapist. Through use of the Scoot in the self-propelling Ride configuration (larger wheels), Jane will have multiple opportunities to strengthen these upper limb muscles, a pre-cursor for wheelchair propulsion, all while being motivated by her family in her natural home environment.

## Cognitive benefit

Independent mobility is a momentous event in childhood, marking the moment when children move from dependence on carers, to a burst of new choices and importantly new risks. With this comes a step increase in vocabulary, both spoken by the adult and understood by the child as the new experiences change the relationship between the adult and child from entirely nurturing to assisting ("watch out, it's hot/cold/dangerous!" etc). This independent mobility heralds a massive change in psychological function. While previously it was thought that this happened through maturation of neurological systems, recent evidence has demonstrated the reciprocal relationship between independent locomotion and cognitive development. Moreover, it is exposure to these new self-generated experiences which are gained through self-generated mobility that guarantees the developing brain receives the required stimuli to cause psychological change: in perception, emotional regulation and judgement.

Jane currently has no means to mobilise independently and must be carried or pushed, requiring an adult for all mobility. The Scoot will enable Jane to move independently. Either by crawling on her tummy in prone, sitting pushing her legs when on the castors or using her hands to propel the wheels. This self-generated movement will improve her visual proprioception (spatial awareness, depth perception), help develop new attention strategies, improve understanding of others' intentions, improve working memory, and improve her spatial search strategies. Kermoian and Campos (1988), showed that self-generated locomotion, regardless of how it is accomplished, makes an important contribution to spatial search.

For children with impaired motor ability, the easy multi-directional movement of the Scoot ensures the child gets the benefits of independent mobility without the excessive strain that their impairment may confer if left to belly crawl.

## What are the needs and safety factors with children with significant postural support and sensory disability? *(include benefits that the Firefly Scoot will provide)*

A mobility device for young children with complex needs must have trunk, hip and leg supports. The materials must be breathable and not cause skin irritation. The upper limbs and head should be able to move freely, to allow the child to interact with others in therapy and social activities.

The system must be portable so that it can be used on holidays or visiting family and should be suitable for other environments (e.g. In garden, at school, during sensory play, at park). This will ensure that the therapy movement program can continue in almost any location.

## What are the equipment and accessory requirements?

*(Include details of its adjustment for growth)*


The Firefly Scoot is a portable mobility device designed to enhance musculoskeletal development and age-appropriate psychological development. It is designed and manufactured as durable medical equipment and is a registered medical device.





- The Scoot is suitable for children of ages 2-6, or a max user weight of 48 lbs. It is a 4 in 1 product, and comes in 4 main component parts: the Scoot base, the wheels, the backrest and the footplate. There is an optional advanced backrest cushion.
- Scoot facilitates gradual weight bearing of the upper limbs, allowing Jane to build up strength to develop her muscles. As Jane progresses from “crawl” configuration to the other 3, her muscles will adapt and strengthen.
- The Scoot advanced backrest cushion, suitable for Pooosh, Scoot or Ride configurations has an adjustable, wraparound lateral and anterior support with integrated harness. This supports the trunk in upright midline symmetrical posture.
- The Scoot is lightweight and portable, which will enable Jane’s playtime and therapy to take place in almost any setting.
- As a latex free product, the Scoot will not harm or be detrimental to a sensitive child’s skin, keeping them safe and comfortable throughout the lifetime of the product.

The therapist or carer can set goals in many environments, allowing Jane the freedom to road around unaided. These movements that stimulate muscle growth will help postural and motor control, strength, balance and independent gait.

## Components of the Firefly Scoot **(Delete components as appropriate)**

The Scoot will enable Jane to mobilise in 4 different positions, stimulating neurological and musculoskeletal development. I am requesting funding for the Scoot seat with the following features.

Item	Description of Medical Necessity
<p><b>Scoot Backrest</b></p> 	<p>The high backrest gives a high level of support while sculpting around the shoulder so they freely move during self-propulsion. The lap strap stabilizes the pelvis and provides security.</p>
<p><b>Push Pole</b></p>	<p>The push pole can be attached to allow carers to take Jane for a walk around the house or</p>

	<p>over flat ground outside. It is useful when Jane becomes tired of propelling herself.</p>
<p><b>Footplate &amp; Wheels</b></p> 	<p>Scoot's durable and grippy rubber tyres make it suitable for outdoor use. The footplate can be easily adjusted to the child's exact leg length – it can also protect the feet when pushing it around.</p>
<p><b>Advanced Backrest Cushion</b></p> 	<p>The deep laterals of the advanced backrest cushion wrap around the trunk providing lateral and anterior support. The height can be adjusted to suit the size and ability of the child. It can be easily removed as the child develops trunk control to enable increasing function.</p>
 <p><b>Scoot</b> Scoot is a 4-in-1 mobility rider. It lets children with special needs play, explore and participate in ways that suit</p>	<p>The accompanying Scoot activity programme, developed by therapists, will guide the family through a series of ability-appropriate activities for each configuration, each focussing on a different skill and area for development.</p>

## Describe psychological benefits

Scoot will allow Jane to engage in a variety of activities in therapy or family settings. The increased opportunities for her muscle development will enhance her physical and cognitive development and emotional wellbeing, thus helping to avoid adverse medical problems as she grows. The Scoot will allow her to partake in family activities as she can be left to her own devices with supervision from a distance. The Poosh component will allow her to partake in family walks while the Scoot and Ride configurations enable floor play with siblings or walks outside.

## Discuss the cost of alternative caring methods

*(Describe other less costly ways to meet the recipient's needs that have been considered and why they are not adequate. Include details, for example, the make and model of less costly items considered and rejected.)*

Other products on the market only match one or two of the configurations of the Scoot. In contrast the Firefly Scoot provides 4-in-1 configurations and can be adapted to vary the position and needs of the child, providing more variety of movement. The Scoot also gives necessary trunk support

(lateral support) which is not included with alternative products. The Scoot is suitable for use outside unlike many contemporary designs.

## Summary/conclusion

This DME is essential to Jane's cognitive and physical development. The unique 4-in-1 design will support Jane through each stage of her development from prone, to scooting, to self-propelling, each with their own musculoskeletal benefit. The adult can take a step back from constant active caring to provide an assistive supervisory role more typical for her age giving both a sense of freedom. The chance for self-directed movement is linked to a wealth of cognitive and psychological benefits from risk taking to working memory, from spatial awareness to tolerance of delayed goals. Life skills that require a physical separation from the carer to achieve. The lightweight portable design will make this a well-used and well-loved therapeutic aid for Jane and her family and I recommend that it receives funding.

## Show the different variations of the product

