

CLINICAL EDITORIAL

Standing Matters

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When an infant first stands up in their crib, their parents celebrate. But what about a child with a medical condition who is unable to achieve this milestone? Regardless of diagnosis, a child or adult who spends most of their day sitting is subject to health risks.

Fortunately, manufacturers worldwide are committed to designing standing devices that provide medical and functional solutions to meet evidence-based recommendations for postural management.

Postural management provides intentional, comfortable positioning opportunities in standing, sitting and lying, plus movement where possible, throughout the 24-hour day. When implemented throughout a client's lifespan, postural management prevents secondary complications and improves function and participation.

A recently published international clinical practice guideline cites adaptive standing before age 2 as an intervention to prevent musculoskeletal impairment for children with cerebral palsy.¹ Children with neuromotor conditions such as cerebral palsy or other complex syndromes are born with perfect body symmetry; their joints and muscles are intact and flexible.

The effect of gravity on the body, as the child is immobile and

spends prolonged periods in asymmetrical positions during growth, results in deformity.² Today, adaptive positioning devices such as standers can make all the difference.

Before adaptive standers became more widely available, allowing caregivers to initiate standing before age 1, the consequences of immobility induced bodily distortion resulted in inevitable and costly hospitalizations.

Surgical muscle-tendon releases, orthopedic osteotomies to restructure the hip joint, and complex spinal fusion surgeries are examples of the corrective medical procedures now effectively avoided through proactive early-intervention adaptive standing.

Using adaptive standers, therapists can coach family caregivers to start age-appropriate developmental standing opportunities in manageable intervals during the child's daily routines. Therapists can also educate family caregivers on the value of 24-hour postural management, providing specific instructions for standing position and dosage. Often, parents will discover their child's positive response to the upright position and their child's standing time will increase. This approach has outcomes beyond musculoskeletal health: children experience an age-appropriate position that positively impacts their visual field, social interaction and potentially their cognitive growth.

Standing opportunities continue throughout early childhood and the school years: a critical time for standing protocols. Growth spurts will predispose a child with a neuromotor condition to an increased risk of contracture and other deformities. Consistent, regular standing will maintain and improve joint range of motion and bone mineral density, thereby improving the child's posture and movement function and reducing their risk of fracture.

Far from being the only intervention, adaptive standing offers activity in a natural position and is a valuable adjunct that can alternate with and support the child's adjacent therapies for mobility and learning. Under the guidance of a therapist, a planned approach for standing can occur at home and in school, embedded naturally into daily activities and routines as a child-centered, participatory opportunity.

Adolescents and adults also benefit from supported standing. It is never too late to stand. To begin, a client of any age will need medical clearance or referral from a knowledgeable health care provider. Then an accommodation trial period assures that the individual will build tolerance over time and that standing is feasible and medically safe.

At the same time, special care and instruction will be provided should there be a risk of fainting or a case of bone fragility. The individual's cognitive function

and the support required for safe transfer to the standing position will inform decision-making on which standing device to choose.

Recent overviews of the literature co-published by the Clinician's Task Force offer a comprehensive review of available peer-reviewed research on standing for children and adults.^{3 4}

Whether the client has had a condition since infancy or has acquired a condition through circumstances or a medical event, supported standing not only offers positive outcomes for neuromuscular, cardiovascular, respiratory, digestive and mental/cognitive domains, as well as reducing skin pressure issues and pain levels, but also improves psychosocial well-being and activities of daily living.

With the wide variety of standing device options now available, therapists can select and trial a device whose characteristics align with the evaluated needs of the client.

Whether a multiposition, mobile, sit-to-stand or powered wheelchair stander, a standing device is designed to meet specific goals that address the client's hip integrity, bone density, muscle length, joint range of motion, spasticity, bowel/bladder function, respiration and circulation.

But beyond the remarkable reductions in health care complications and costs that accompany properly prescribed standing, there is something

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just as important to clients and families: immeasurable gains in social and cognitive engagement.

Health care funding sources around the globe are re-examining and revising policy and coverage for adaptive standers

considering these up-to-date research-based outcomes.

Continued advocacy, education and experience will secure the place of adaptive standing in best practice today and for the future as a standard of care.

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