Clinical Practice Guideline: MEDEK Therapy

Date of Implementation: September 15, 2016

Product: Specialty

GUIDELINES

American Specialty Health – Specialty (ASH) considers MEDEK Therapy unproven given the lack of evidence to support this form of physical therapy.

At this time, no evidence exists of its effectiveness in the peer reviewed literature. Studies are needed to determine whether a clinically significant improvement is achieved through the use of MEDEK Therapy.

For more information, see the *Techniques and Procedures Not Widely Supported as Evidence Based (CPG 133 - S)* clinical practice guideline.

Patients must be informed verbally and in writing of the nature of any procedure or treatment technique that is considered experimental/investigational or unproven, poses a significant health and safety risk, and/or is scientifically implausible. If the patient decides to receive such services, they must sign a *Member Billing Acknowledgment Form* (for Medicare use *Advance Beneficiary Notice of Non-Coverage form*) indicating they understand they are assuming financial responsibility for any service-related fees. Further, the patient must sign an attestation indicating that they understand what is known and unknown about, and the possible risks associated with such techniques prior to receiving these services. All procedures, including those considered here, must be documented in the medical record. Finally, prior to using experimental/investigational or unproven procedures, those that pose a significant health and safety risk, and/or those considered scientifically implausible, it is incumbent on the practitioner to confirm that their professional liability insurance covers the use of these techniques or procedures in the event of an adverse outcome.

DESCRIPTION/BACKGROUND

MEDEK, a form of physiotherapy, refers to Metodo Dinamico de Estimulacion Kinesica or Dynamic Method for Kinetic Stimulation (a.k.a. Cuevas MEDEK Exercise [CME]). It was developed by a Chilean physical therapist, Ramon Cuevas in the 1970s and introduced to North America by physical therapist Ester Fink. MEDEK is used for developing gross motor skills in young children with physical disabilities and movement disorders (e.g., cerebral palsy, Down's syndrome, hypotonia, muscular dystrophy, and developmental motor delay). It assumes that movement affects the development of the brain. It does not focus on modifying muscle tone, primitive reflexes or abnormal patterns of movement. It

focuses on training movements leading to sitting, standing, and walking. Muscles are trained in postural and functional tasks rather than being exercised in isolation. Tight muscles are stretched in dynamic situations. The motor developmental sequence is not used. MEDEK assumes that different skills require different movement strategies. Unlike other interventions, tasks are performed without the child's attention, conscious thought or co-operation. It is assumed that motivation will increase temporary performance only but will not create a permanent change. The therapist's task is to provoke automatic postural reactions that contribute to the postural control needed for functional tasks. A child receiving a MEDEK treatment is physically manipulated by the therapist to stretch out tight muscles and train the muscles in groups, which leads to increased trunk control for the child. Trunk control is necessary for sitting, standing and walking. Each exercise the patient does is named and has a specific, functional purpose. Exercises are repeated until the movement becomes automatic and the body reacts normally to situations where it is required to keep its balance. MEDEK therapy begins on a table; then, if the child is able to stand with ankle support, moves to the floor. Floor exercises involve seven pieces of MEDEK equipment which can be arranged in ways to challenge the child's sense of balance. Practitioners claim that the effectiveness of MEDEK therapy depends on the level of dysfunction, the amount of time spent in MEDEK therapy, and the age the patient begins intervention. MEDEK practitioners recommend beginning MEDEK treatments very early in the child's life because lack of motor development as a young child snowballs as the child gets older. Practitioners of MEDEK and clients and their parents who have participated in this therapy claim better than expected improvement in motor skills. However, well-designed clinical studies are needed to determine the effectiveness of MEDEK.

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EVIDENCE REVIEW

ASH is unaware of any peer reviewed literature published on MEDEK therapy as noted with a thorough literature search.

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PRACTITIONER SCOPE AND TRAINING

Practitioners should practice only in the areas in which they are competent based on their education, training, and experience. Levels of education, experience, and proficiency may vary among individual practitioners. It is ethically and legally incumbent on a practitioner to determine where they have the knowledge and skills necessary to perform such services and whether the services are within their scope of practice.

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It is best practice for the practitioner to appropriately render services to a member only if they are trained, equally skilled, and adequately competent to deliver a service compared to others trained to perform the same procedure. If the service would be most competently delivered by another health care practitioner who has more skill and training, it would be best practice to refer the member to the more expert practitioner.

Best practice can be defined as a clinical, scientific, or professional technique, method, or process that is typically evidence-based and consensus driven and is recognized by a majority of professionals in a particular field as more effective at delivering a particular outcome than any other practice (Joint Commission International Accreditation Standards for Hospitals, 2020).

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Depending on the practitioner's scope of practice, training, and experience, a member's condition and/or symptoms during examination or the course of treatment may indicate the need for referral to another practitioner or even emergency care. In such cases it is prudent for the practitioner to refer the member for appropriate co-management (e.g., to their primary care physician) or if immediate emergency care is warranted, to contact 911 as appropriate. See the *Managing Medical Emergencies* ($CPG\ 159-S$) policy for information.

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References

Cuevas Medek Exercise. Retrieved on June 29, 2023 from https://napacenter.org/the-benefits-of-cme/

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Joint Commission International. (2020). Joint Commission International Accreditation Standards for Hospitals (7th ed.): Joint Commission Resources