NOLARO 24™ LLC
CONTINUING EDUCATION

Basic Biomechanics: The Four Steps to Foot Typing

1 Hour Webinar – 1.5 Contact Hours

Course Description:

This webinar will provide an introduction to functional foot typing and gait analysis utilizing a simple 4-Step method of visual gait assessment. The presentation will give an overview of 24 variations of the "normal" adult foot, and protocols for classifying feet into 6 major subgroups or "Quads". This 4-Step Foot Typing method is quick and easy to learn and will offer the practitioner a biomechanically based approach to gait assessment and foot classification. The participant will learn that each "Quad" presents with specific foot traits, such as arch height, toe sign, callouses, and gait pattern; which can predispose a patient to a particular array of clinical conditions.

Participants will be required to complete and submit a post webinar quiz and course evaluation for CEU eligibility.

1 Hour Program

Learning Objectives/Outcomes:

1. The attendee will be able to differentiate between a compensated and uncompensated rearfoot varus and their effect on gait.
2. The attendee will learn to functionally identify the presence of a neutral forefoot, or a forefoot varus or valgus, by observing a subject standing and in gait.
3. The attendee will learn to recognize that there are 24 variations of the "normal" adult foot that can be classified into 6 major subgroups or "Quads".
4. The attendee will learn how to implement a 4-Step method to identify each "Quad".
5. The attendee will gain a better understanding of functional gait (by Quad) and how this affects posture and predisposition to musculoskeletal pathology.
6. The attendee will gain a better understanding of how foot morphology dictates gait and therefore leads to a particular set of symptoms or pathology.

References:

1. DeCaro L, Nole R. Attaining Successful Orthotic Outcomes through Functional Foot Typing. *Current Pedorthics 2015; 47:1.*
2. Nole, R. Management of the Adolescent Athlete by Foot Type. *Current Pedorthics 2015; 47:2.*
3. Banwell H, Mackintosh S, Thewlis D. Foot orthoses for adults with flexible pes planus: a systematic review. Journal of Foot and Ankle Research *2014, 7:23*
4. Chuter V. Relationships between foot type and dynamic rearfoot frontal plane motion. *J Foot and Ankle Research.* 2010; 3:9.
5. Hagedorn TJ, Dufour AB, et al. Foot Disorders, Foot Posture, and Foot Function: The Framingham Foot Study. *PLOS One*. Sept 2013; 8:9.
6. Golightly YM, Hannan MT, Dufour AB, Jordan JM. Racial differences in foot disorders and foot type: *The Johnston County Osteoarthritis Project. Arthritis Care Res*: 2012; (11):1756
7. Hillstrom HJ, Song J, Kraszewski AP, Hafer JF, Mootanah R et al. (2012) Foot type biomechanics part 1: Structure and function of the asymptomatic foot. *Gait Posture* 37(3): 445-451.
8. Hsi WL. Analysis of medial deviation of center of pressure after initial heel contact in forefoot varus. J Formos Med Assoc. 2016 Mar; 115(3):203-9
9. Nole R., Garbalosa J. "Feet First" in Lusardi & Nielson: Orthotics and Prosthetics in Rehabilitation. Butterworth and Heinmann, Boston, 2000.
10. Ribeiro AP, Trombini-Souza F, Tessutti V, Rodrigues Lima F, Sacco ICN et al. Rearfoot alignment and medial longitudinal arch configurations of runners with symptoms and histories of plantar fasciitis. *Clinics*. 2011; 66(6): 1027-1033.
11. Banwell H, Mackintosh S, Thewlis D. Foot orthoses for adults with flexible pes planus: a systematic review. *Journal of Foot and Ankle Research 2014,* **7***:23*