# Wheelchair Cushions: The Science Behind the Clinical Choices

## Length: 2 Hours

### **Description:**

Participants will learn what forces need to be understood when considering the selection of wheelchair cushions. They will be taught measurable characteristics of wheelchair seats for tissue integrity, and a method of comparative testing. Participants will learn how to identify different materials used in the design of cushions and how those materials interact with the anatomy for pressure distribution. They will also learn how to understand durability and stability of these materials in cushion construction. They will also learn to identify and understand different design techniques used to improve cushion efficacy and their potential effects on functional outcomes.

## **Objectives:**

- 1. Describe the basic biomechanics of seated posture as it relates to wheelchair cushions.
- 2. Describe a method of comparative testing for wheelchair cushions and understand the results
- 3. List the material science of wheelchair cushion components
- 4. Name the different means by which cushions redistribute load

Instructional Level: Intermediate

Credits: 2.0 CCU / 0.2 CEU TPTA approval pending TOTA approval pending

#### **Presenter:**

#### Curt Prewitt MS, PT, ATP

Curt Prewitt is Director of Education for Ki Mobility. He graduated from the University of Northern Colorado with a Bachelor of Science degree in Exercise and Fitness Kinesiology in 1992, and then earned his Master of Science degree in Physical Therapy from the University of Colorado in 1995. He practiced as a physical therapist in a number of settings for a few years, most prominently in long term care, where he gained experience with seating and wheeled mobility.

He transitioned from a practicing therapist to a manufacturer's representative, selling PT, OT and general rehab products, eventually moving into sales management and focusing on complex rehab technology. He has previously also served as a product trainer and product specialist, teaching product features and clinical application, as well as coordinating continuing education presentations, both accredited and non-accredited.