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## MEMORANDUM

### Pressure Mapping and the Ride Custom Cushion

Position Statement from Aspen Seating:

Aspen Seating, LLC, is the parent company of Ride Designs, and the single largest provider of Ride Custom Cushions, both free standing and as inserts in Aspen Seating Orthoses. Aspen Seating serves the most severe and profound of postural and skin care issues related to wheelchair seating. Aspen Seating currently has over 2000 end users under their care.

The use of pressure mapping to determine efficacy of any wheelchair cushion is a questionable practice at best, but a Ride Custom Cushion's unique properties are even harder to evaluate by pressure mapping alone. The reasons are as follows:

1. There are essentially 2 primary properties of a Ride Custom Cushion:
  - a. Loading properties:
    - i. Isolated to areas of the body typically tolerant of pressure and shear.
  - b. Off-loading properties:
    - i. Where bony prominences are completely off-loaded to eliminate the forces of pressure and shear.
2. In regards to loading properties:
  - a. The Ride Custom Cushion intentionally applies pressure and shear to areas of soft tissue not associated with at-risk bony prominences, i.e. a user will experience elevated pressures in these areas. Typically these areas are the proximal thighs and posterior-lateral buttocks. This intentional loading results in extremely effective pelvic stabilization, and creates a platform for improved spinal alignment and functional independence.
  - b. Mapping of these areas of the cushion-sitter interface has little value in the absence of the more critical measure of soft tissue response, i.e. presence/absence of skin redness.

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3. In regards to off-loading properties.
  - a. Ride Custom Cushions are constructed and then fitted to ensure a minimum ½” clearance at the ischial tuberosities, coccyx and sacrum, and decreased loading of the greater trochanters. Though, when done properly, pressure mapping may reveal off-loading of these prominences, it cannot measure the degree of clearance. If the clearance is too little, then the client is at great risk of bottoming out when hitting bumps or changing position. Pressure mapping to measure the off-loading characteristics of the Ride Custom Cushion, therefore, can result in flawed confidence in the fitted cushion and place the user at risk.
  - b. When done improperly, a pressure mapping pad may hammock across the relief area, and reveal what would appear to be bottoming out of bony prominences. This would result in a false negative, and may prevent a sitter from being delivered a perfectly good cushion.

The Ride Custom Cushion is fitted by Ride certified suppliers and therapists. They are educated in the process of using the patented Ride Gauge, palpation, skin checks, and postural/functional outcomes assessment to determine the efficacy of a Ride Custom Cushion and other related seating and mobility components. They are also educated in how to use pressure mapping as a tool to troubleshoot and refine the fit of cushions that do not fit optimally. They are trained in techniques for modifying and adjusting the cushions to improve the fit.

The Ride Custom Cushion has a 90-day unconditional guaranteed fit. Ride Designs has approximately a 12% cushion re-do rate, likely the best in the custom cushion industry, and a near 100% success rate with redone cushions. If within 90 days Ride Designs is unable to provide a cushion through a certified provider that performs safely and effectively, the providing supplier can return the cushion for full credit.