Cushion lingo and why it matters: Immersion, Suspension, Offloading, Asymmetry, Postural Support and Stability

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This presentation will use a blend of powerpoint slides and live demonstrations to discuss important differences between pressure redistribution cushions available on the market today. We will look some of the major types of ready-made cushions: foam, foam-air, gel-air, foam-fluid, and air cell cushions. We will look at the profile of various shaped cushions, considering their properties to adapt to different shaped users. We will follow with making adjustments to an air cell cushion to provide sufficient immersion to spread the load over the widest possible sitting area.

Following the initial consideration of shape-fitting properties, we move on to look at the capacity of these cushions to reduce the load on soft tissue over bony areas which are most vulnerable to pressure. Through the addition of components to the cushion, or through making adjustments to the air cells, we aim to answer these questions:

- Can complete offloading be provided in a standard, off-the-shelf cushion?
- If the person sits in a very slouched posture, or is tilted so the buttock on one side is higher than the other side, how can these cushions be set up, or adjusted to fit the person, and is there a way to improve sitting posture?

Finally, we will look at the needs of people without sensation who use mobile shower commodes with cushioned seats, considering how to manage pressure with the reduced surface area available when sitting on shower commodes.