

## **How to Determine if a Pelvis is Flexible or Fixed**

An important facet of wheelchair evaluations is to determine if the pelvis is flexible or fixed. This should be done during the patient's mat evaluation. If a pelvis is flexible it will allow the therapist to identify cushions and orthotic devices such as the Engage APOD® which will correct positioning and abnormal posture with the goal of placing the patient into pelvic neutral. If the pelvis is fixed, then therapist must work within the limitations of the patient's pelvis and accommodate it with an appropriate seating surface.

### **Lateral Pelvic Flexibility:**

Position yourself over the patient who should be supine on a firm surface.

Place your hands on the patient's distal trunk with your thumbs pointing inward.

Slide your hand down the patient's trunk until your index fingers rest on the patient's iliac crest and your thumbs are resting on the apex of the ASIS bilaterally.

Support the patient's legs with your thigh (the patient will have hips and knees flexed to 90 degrees and their lower legs resting on your thigh).

Use a rocking motion with your leg to move the patient's thighs side to side.

This motion should create movement in the pelvis which will determine that the pelvis is laterally flexible. If you do not feel any movement then the pelvis is fixed.

### **Anterior/Posterior Flexibility:**

Place the patient into a hooklying position, then move the patient into a position where the hips and knees flexed to 90 degrees and their lower legs will be supported on your thigh (therapist leg will be under the patient's lower legs), then assess anterior and posterior flexibility:

For anterior flexibility place your hands on the posterior pelvis and slowly pull anteriorly to assess if a lumbar lordosis can be reached. If the pelvis is flexible, a lordosis will be reached. If the pelvis is fixed then the lumbar spine will remain flattened.

For posterior flexibility, bring the patient's knees towards their chest which should decrease their lumbar lordosis and flatten their lower back. If the pelvis is fixed, a lordosis will remain. If the pelvis is flexible then the patient's lumbar spine will move into a flattened position.