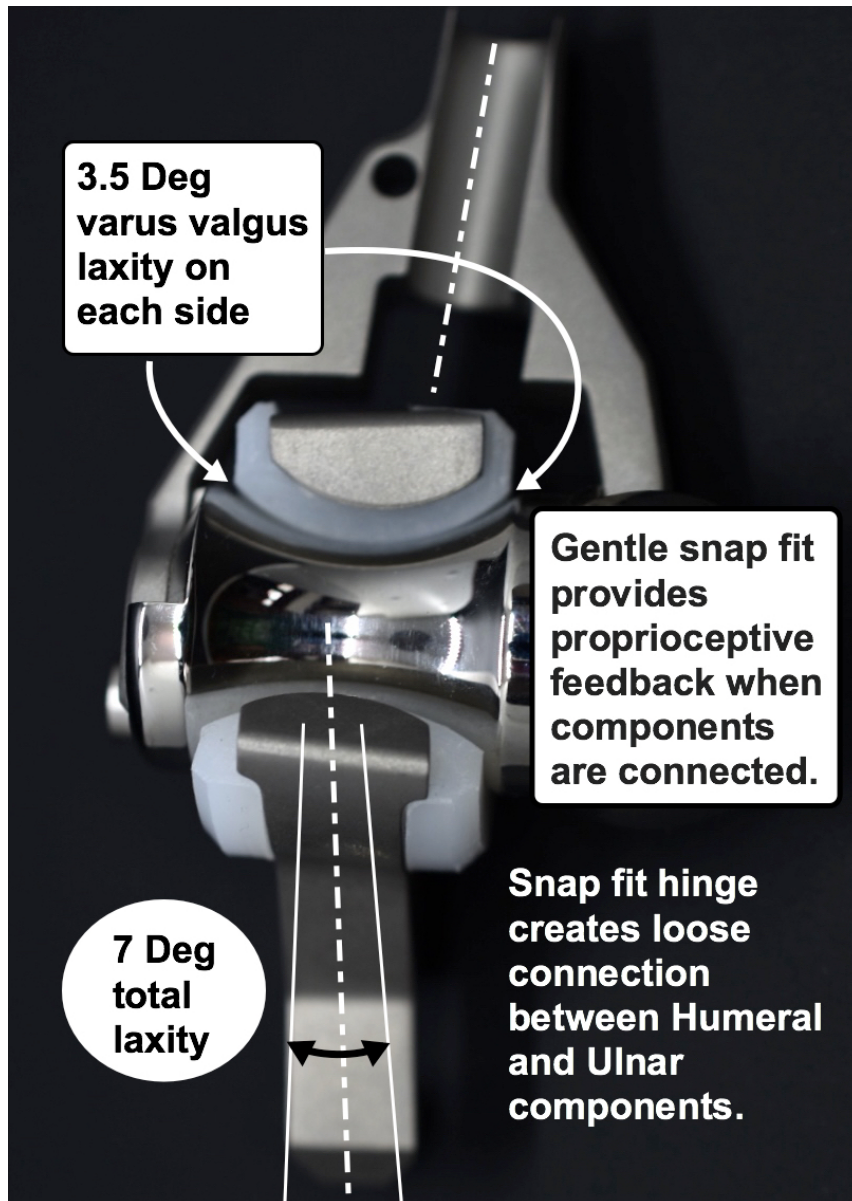


Hinge laxity of non mechanically linked elbow



The hinge is not mechanically linked and employs laxity that allows for varus and valgus deviation of 7 degrees with 3.5 degrees in both varus and valgus directions. This is the same laxity as is employed in semi-constrained elbow arthroplasty.

The hinge employs a snap fit that allows the humeral component to snap into the polyethylene component. This loose connection provides proprioceptive feedback to the surgeon when implanting the components. The gentle snap fit is designed to mimic the capsule that surrounds the elbow by supplying some stability and maintaining ulnohumeral alignment, particularly during implantation.

Substantial elbow stability, however, is not derived from this snap fit elbow articulation but, rather, is derived from the elbow ligament reconstruction, which is designed to transmit forces between the humerus and ulna and aims to mimic the primary static stabilizers of the elbow.

Kaufmann RA, Wilps T, Musahl V, Debski RE. Elbow Biomechanics: Soft Tissue Stabilizers. *J Hand Surg Am.* 2020;45(2):140-147.