**BPBP Data Set Description**

The BPBP data set represents results from a study on children who have brachial plexus birth palsy and have undergone a tendon transfer procedure and a realignment of the glenohumeral joint in order to improve functionality of their affected arm. Most of the data was collected several years after surgery, and the purpose of the study was to 1) determine whether the glenohumeral joint remains in place over time, and 2) determine whether displacement of the glenohumeral joints over time has a negative affect on arm function.

The data is organized in the following manner.

**Demographic variables:**

* Collection Date
* Age
* DOS (Date of surgery)
* AOS (Age of surgery)
* Height
* Weight
* Gender
* Diagnosis (Erbs or Extended Erbs)
* Diagnosis Code (1-Erbs, 2=Extended Erbs)
* Affected (Affected side)
* Dominant (Dominant side)
* Affected Dominant (Was the affected side the dominant side? 1=Yes, 2=No)
* Nerve Repair (Was a nerve repair performed?)
* TT (Which tendon(s) were transferred?)
* TT Details (Tendon transfer code)
* Congruency (Status of current joint congruency: Mild, Moderate, or Severe)
* Congruency Score (1=mild, 2=moderate, 3=severe)

**Survey Variables**

* PreOp XXX, PostOp XXXX: Pre and Post surgical Mallet scores
* Post-Pre XXXX: Post-surgical scores minus pre-surgical scores
* Activity scores: Scores from the short-form CAT survey.

**Kinematic Variables**

*Status*: affected (aff) or unaffected (unaff) limb.

*Position*: One of 11 possible positions that include:

* Neutral: arm in a neutral position
* Abduction: Arm in a fully abducted position
* Elev: Arm in a fully elevated position
* ER: Arm at side, elbow at 90°, full external rotation.
* Nape: Hand placed on nape (back) of neck.
* Spine: Hand placed as high as possible on lower portion of spine.
* Exten: Full shoulder extension
* Mouth: Hand placed on mouth
* IR: Arm at side, elbow at 90°, full internal rotation
* Flex: Shoulder flexed to 90°
* Front: Reach as far in front of body as possible with hand.
* IR90ABD: Shoulder abducted at 90°, full internal rotation
* ER90ABD: Shoulder abducted at 90°, full external rotation
* Scaption: Abduction in the scapular plane
* 45ABDScaplane: Abduction halfway between pure abduction and pure flexion.

*Joint*:

* ST = scapulothoracic
* GH = glenohumeral
* HT = humerothoracic

*Axis*:

* GH: Elevation(Z), Horizontal Abduction(Y), External Rotation(Y’)
* HT: Elevation(Z), Horizontal Abduction(Y), External Rotation(Y’)
* ST: Posterior Tilt(Z), Downward Rotation(X), Internal Rotation(Y)

Key: Status\_Position\_Joint\_Axis(\_disp). For example: “Aff\_neutral\_ST\_Dwn Rot” would refer to the affected arm in the neutral position. The data would describe the orientation of the scapulothoracic (ST) joint about the frontal (X) axis. If the variable name ends with “\_disp”, the value represents the displacement from the neutral position.