## The relationship of cervical range of motion and movement control with temporomandibular dysfunction: A pilot study

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Evidence exists that cervical posture is associated with temporomandibular joint dysfunction (TMD). Few studies have examined cervical spine active range of motion and cervical movement control in subjects with TMD. The purpose of this study is to pilot a protocol comparing cervical spine range of motion and cervical movement control between subjects with and without TMD.

Subjects include individuals 18-60 years of age with or without the presence of TMD signs/symptoms of jaw pain, limited jaw motion, or joint noise. Subjects exclude those with history of jaw or cervical spine surgery within 5 years, history of joint disease of the temporomandibular joint (TMJ) or cervical spine, cervical or TMD symptoms under active treatment by a healthcare provider, moderate or severe neck disability as identified by the Neck Disability Index (NDI), systemic disease impacting the cervical spine or TMJ, and subjects who are pregnant.

Data collection has been initiated and includes: TMJ Disability Index and NDI scores, active cervical range of motion for six physiologic motions, cervical movement control tests described by Patrocini et al. (2014), active maximal mouth opening and lateral deviation and TMD subgroup classification. Cervical movement control will be scored by a physical therapist with > 10years of experience blinded to subject classification into the control or TMD groups. Tests specific to the TMJ will be completed by a physical therapist with > 10 years of experience blinded to the cervical movement control scores.