## Reliability, Validity and Responsiveness of the Timed Functional Arm and Shoulder Test (TFAST) in Patients with Shoulder Problems.

## Lay Abstract

Shoulder problems frequently occur in a variety of forms including arthritis, overuse injuries, and rotator cuff involvement which may negatively impact an individual's ability to participate in the home, community, and work. Consistent performance measurement of upper extremity function is important for appropriate treatment and return to work and sport decisions. Currently, clinicians rely on patient's judgment of their own function rather than actually measuring performance. We have developed an objective measure of upper extremity performance called the Timed Functional Arm and Shoulder Test (TFAST). The TFAST was successfully tested in healthy individuals across the lifespan, safely demonstrating promising measurement properties. The purpose of this study is to investigate the use of the TFAST in patients with shoulder problems to determine if it can be feasibly and safely performed in the clinic, and if it will provide valuable and reliable information to healthcare providers and patients.

The TFAST, in three simple tasks, provides a global representation of functional ability in five minutes using minimal equipment available in most clinics. For this study it will be measured twice, early in the course of care, to examine its consistency and again at the end of care. The end of care measurement will be compared to patient ratings of improvement to see how well it captures functional change.

Developing and documenting the measurement properties of the TFAST will provide a standard and widely applicable test of upper extremity performance that will be useful in guiding treatment and return to work and sport decisions. It will also provide a standard measure of upper extremity performance for research applications.