

PROPOSAL DEVELOPMENT INFORMATION

GCMAS Research Committee

Objective 1: Gait analysis is an effective tool in the clinical decision making process for improving treatment outcome in individuals.

The primary reason for the inconsistent utilization of clinical gait analysis is the lack of efficacy data demonstrating that functional outcomes are improved as a direct result of gait analysis. The consequence of this uncertainty is that individuals with disabilities are either deprived of a useful assessment tool or are subjected to a time consuming and unnecessary evaluation. The purpose of this recommendation is to demonstrate that clinical gait analysis alters treatment decisions so as to improve functional outcomes.

Long Term Goal

Demonstrate that gait analysis is an effective tool in the clinical decision making process for improving treatment outcome.

Purpose of Proposed Investigation

Compare outcomes between centers that use gait analysis and centers that do not use gait analysis.

Strategy

Gait analysis has two roles – 1) education; 2) contribution of patient-specific data. This study design captures effect of both components.

Challenges

- Recruiting group w/o gait analysis
Suggestions:
 - ❖ Recruit patients directly, thereby bypassing providers who may be reluctant to be evaluated
 - ❖ Present participation as assessment only, do not provide data or indicate that it could be used as preop diagnostic
 - ❖ Provide a secondary benefit to subjects such as free postop PT – this would also allow for assessment of the PT component, which is also important in determining outcomes

- Possible inequality of skill level between groups
Suggestions:
 - ❖ Account for training / experience level of surgeons – may be difficult to get this info

Issues to Consider

- ❖ What outcome measures, including gait, should be included
- ❖ Definition of effectiveness of treatment
- ❖ Which conditions / procedures to study
- ❖ Funding, especially if PT provided
- ❖ May be premature to study effect of gait analysis when effect of treatment itself (surgery) has not been established
- ❖ Should focus on specific problems (e.g., stiff knee in swing, equinus, crouch)
- ❖ Need for long term follow-up and outcomes