Title: A **Comparison of three approaches to weekend rehabilitation on the functional outcome of patients in the acute stage post-stroke**

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Purpose: The aim of the study is to determine if task-orientated group classes over weekends are more effective than limited individual one to one sessions and sham treatments to optimise functional ability of patients in the acute phase after a stroke. The study will take place at the Netcare Rehabilitation Hospital's stroke unit and rehabilitation centre in Aukland Park, Johannesburg.

Relevance: In most rehabilitation centres patients receive treatment during at least one day of the weekend while being discharged for one day of the weekend or resting while still in hospital, usually the Sunday. The workload assigned to the physiotherapist on weekend duty is therefore amplified due to a decrease in the medical staff on duty in a rehabilitation setting over weekends. Becker (2006) identifies a correlation between the quality of treatment and the number of medical personnel on duty, leading to quantity treatment being valued higher than quality treatment. In light of the findings that greater intensity of rehabilitation in terms of time and frequency is associated with better outcomes (Kwakkel et al 1999, Langhorne et al. 1996, Teasell et al. 2004) and maintenance and reduced hospital length of stay (Kalra 1994). it stands to reason that we should aim to provide more intensive rehabilitation within this first three month period post stroke.

Participants: A sample size of six per intervention group will be sufficient to achieve 80% power in an analysis of variance (ANOVA). Thus 18 sub- acute stroke survivors, who comply with the inclusion and exclusion criteria, admitted to Netcare rehabilitation hospital were admitted to the study.

Methods: Baseline measurements and weekly measurements of Timed Up and Go test, Rivermead Mobility Index, Modified Motor Assessment Scale and the 10-Meter Walking Test, will be performed by a blinded evaluator. Subjects will be randomised to one of 3 weekend therapy groups which will be conducted on Saturday mornings prior to going home for weekends. The individual therapy group received a 20 minute one to one therapy session. Task oriented group therapy subjects worked in a circuit of 4 exercises for 5 minutes each, thus 20 minutes. The third group received a sham therapy session.

Data Analysis: From the weekly evaluations, each patient's percentage of change over the treatment period was determined. The ANOVA was used to test the null hypothesis that the % improvement is the same across all the intervention groups. If the null hypothesis is rejected, a pair-wise t-test with a bonferroni adjustment will be used to identify the groups which are different.

Results: To Follow

Conclusions: To Follow.