

Journal of

Supplement 54
June 2015

REHABILITATION MEDICINE

The International Non-profit Journal

International official journal of the

– *International Society of Physical and Rehabilitation Medicine (ISPRM)*

Official journal of the

– *UEMS European Board and Section of Physical and Rehabilitation Medicine (EBPRM)*

– *European Academy of Rehabilitation Medicine (EARM)*

Published in association with the

– *European Society of Physical and Rehabilitation Medicine (ESPRM)*

– *Canadian Association of Physical Medicine and Rehabilitation (CAPM&R)*

– *Asia Oceania Society of Physical and Rehabilitation Medicine (AOSPRM)*

– *Baltic and North Sea Forum for Physical and Rehabilitation Medicine (BNFPRM)*

ABSTRACTS

**The 9th World Congress of
International Society of Physical
and Rehabilitation Medicine**

June 19–23, 2015, Berlin, Germany

TC241

Outcome Orientated Quality Management in Neurological and Geriatric Rehabilitation – The SINGER (Scores of Independence for Neurological and Geriatric Rehabilitation) as a Validated Outcome Measurement to Reliably Quantify and Compare the Improvement in Stroke Rehabilitation

**P. Themann¹, U.- N. Funke²*

¹Klinik am Tharandter Wald, Halsbrücke/Hetzdorf, ²MDK Sachsen e.V., Dresden, DE

Background: Total quality management is a major challenge to all indoor and outdoor medical facilities. Concerning structural and procedural quality management many items exist but outcome related quality management hampers reliable and sophisticated measurement systems. The often used assessment algorithm „Barthel Index“, „Expanded Barthel Index“ and „FIM“ (Functional Independence Measure) are either not differentiated enough and incomplete because neuropsychological and communicative items are missing (BI, EBI) or not selective enough to separate each ranking level (FIM). *Method:* So we developed an ICF based assessment instrument with operationalised descriptions of each grade of independence in 20 items including self-care, mobility, communication, cognition and house-keeping for stroke patients. After a pilot study in 2 rehabilitation centers with 100 patients we did a multicenter evaluation in 12 German Centers including 1,758 patients. Test criteria were excellent with a very good internal consistency (Cronbach's alpha of 0.97 for the sum score and between 0.67 and 0.90 for each selective item) and inter-rater reliability (Cohen's Kappa for 5 selective items 0.7-0.89, for the other 15 items 0.90-1.00). With this assessment we could reliably establish the mean improvement of stroke patients in the participating German rehabilitation centers. In addition we undertook a multivariate factorial analysis to look for factors – like age etc. – influencing the individual result. These factors explained variance of more than 84% of the outcome score, so that we choose to select the SINGER together with these factors as an ongoing predictor controlled indicator of outcome orientated quality. *Conclusion:* With a computerised version of this new method we have a valid tool for a permanent semiautomated registration and outcome orientated quality management of stroke patients. We will discuss the influence of this new approach on the cooperation of the rehabilitation team and possible comparabilities of different clinical settings.