

# THE NEED FOR ACUTE REHABILITATION IN STROKE AND SPINAL CORD INJURY

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## Acute rehabilitation and stroke

Stroke units contribute to a significant reduction in death, a significant decrease in dependency and a decrease in the need for institutional care. All types of patients, irrespective of gender, age, stroke subtype and stroke severity, appear to benefit from treatment in stroke units. Although stroke unit care is more costly than treatment in general neurological or medical wards, it reduces post-acute inpatient care costs and is cost-effective. In general, stroke units improve the acute stroke survival, the short-term functional status and the greater likelihood of discharge home.

## Stroke unit setting

The setting should be organized in a dedicated stroke ward. Acute stroke patients are more likely to survive, return home and regain independence if they receive organized inpatient (stroke unit) care. Stroke units should aim to replicate those core service characteristics identified in the randomized trials. The absolute benefits of organized inpatient (stroke unit) care appear to be sufficiently large to justify the reorganization of services. There is some controversy about the number and diversity of disciplines that need to be involved in stroke care.

## Acute rehabilitation and spinal cord lesions

The standard in the classification of SCI is the application of the International Standards for Classification of Spinal Cord Injury, written by the Neurological Standards Committee of the American Spinal Injury Association. Persons with SCI are among the most physically deconditioned of all humans. As levels of injury, types of injury and the extent of organ system dysfunction vary among persons with SCI, careful attention must be paid to accurate classification of individuals before entry into clinical treatment or study.

As the foundation of rehabilitation involves exercise, it is surprising that so little evidence is available to support its use. Substantial research is needed to document the benefits of exercise interventions post-SCI.

## New approach to study the contents and outcomes of spinal cord injury rehabilitation: the SCIRehab project

The literature provides clear evidence of the success of modern medical rehabilitation for SCI, but also highlights that much more research into the nature, quality, and effectiveness of inpatient rehabilitation is needed. Application of the criteria of the evidence-based medicine movement has exposed the fact that little high-quality evidence, produced using RCTs or other rigorous research designs, exists to show the effectiveness of rehabilitation or even specific rehabilitation treatments. Several studies concluded that longer stays in rehabilitation facilities were associated with increased functional gains, but variations in improvement rates were seen in different impairment groups. A number of studies have found that early SCI rehabilitation is beneficial.

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