Rehabilitation service development for sub-acute and non-acute patients in Thailand

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Introduction
Nowadays, the need of rehabilitation in sub-acute and non-acute patients has been continuously increased. Rehabilitation services in Thailand are considered only as part of acute care so that providers are not motivated to provide sufficient services to the patients because the services are not covered by the payment (DRG system).

Methods
This research and development study aimed to develop an appropriate payment model for sub acute and non acute patient (SNAP) in 5 health regions of the National Health Security Office (NHSO) in Thailand (Phitsanulok, Saraburi, Chanthaburi, Udonthani and Songkla). Twenty-four hospitals in five provinces were recruited voluntarily to develop the model. Three steps were set up as follows: 1) setting up the new service and payment system. 2) Implementation of the new system (according to context of each province) and 3) evaluation. Effectiveness was assessed as gain of functional and quality of life on a Barthel Index assessment. Efficiency studies consist of time and cost of rehabilitation care per patient. Data collection involved 3 sources including 1) provider characteristics, 2) patients' rehabilitation impairment category (stroke, traumatic and non-traumatic brain dysfunction, traumatic and non-traumatic spinal cord dysfunction, and major multiple trauma) and 3) administrative data from hospitals and the NHSO. The study was conducted from July 2013 - February 2015. Data analysis used frequency, percentage, chi-square test, paired t-test, and F-test.

Results
Results: Five regions produced five different rehabilitation services and payment models. The inpatient and extended outpatient with home visit model (of Saraburi) and the extended regional to community hospital model (of Songkhla) were remarkable. Three payment methods were observed: prospective payment with global budget, outcome payment, and performance with outcome payment. Comparing functional outcome with cost of rehabilitation among 3 different payment models revealed that outcome payment significantly increased functional status of the patients but accessibility to rehabilitation services (within the golden period in stroke patients) was still low (13.1% only).

Conclusions
Conclusions: Rehabilitation service led to better outcome, but only a few inpatients who needed rehabilitation services could get access to it. Recommendations: More attention should be paid to care manager for accessibility to continuing rehabilitation service. Moreover payment method should be structured to increase effectiveness of rehabilitation outcome.

Key words: Sub-acute and non-acute patients (SNAP), Rehabilitation, Outcome payment

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