## Poster abstract

## A cost-effectiveness study of cost of care and health consequences for two modes of treatment for patients with hip fractures

Lars-Eric Olsson, PhD, Sahlgrenska Academy at Göteborg University, Institute of Health and Care Sciences, Göteborg, Sweden

Elisabeth Hansson, PhD, Sahlgrenska Academy at Göteborg University, Department of Orthopaedics, Institute of Clinical Sciences, Göteborg, Sweden

**Inger Ekman,** Professor, Sahlgrenska Academy at Göteborg University, Institute of Health and Care Sciences, Göteborg, Sweden

Jón Karlsson, Professor, Sahlgrenska University Hospital/östra, Orthopaedic Department, Göteborg, Sweden

Correspondence to: Lars-Eric Olsson, E-mail: lars-eric.olsson@vgregion.se

## **Abstract**

Objective: To perform an economic evaluation of two treatment approaches in participants with an acute hip fracture.

**Design**: A cost-effectiveness analysis was performed to compare an intervention treatment (treatment A) with standard care (treatment B). The intervention treatment was an integrated care pathway (ICP). Participants were selected consecutively and the treatment study used a before-and-after design.

Setting: An orthopaedic ward at a hospital southwest of Sweden.

Participants: 112 independently living participants, aged 65 years or older and admitted to hospital with a hip fracture, were included. The exclusion criteria were pathological fracture and severe intellectual impairment (Pfeiffer's test <3 points).

The main outcome was hospital's total treatment costs for each participant undergoing surgery for a hip fracture, where effectiveness was measured using the Katz ADL index.

Results: The main result was a 40% reduction for each participant in the average total cost for treatment  $A \in 9,685$  vs.  $\in 16,002$  for treatment B (p=0.000). Moreover, effectiveness was significantly improved. The cost-effectiveness ratio for treatment A was  $\in 14,840$  vs.  $\in 31,908$  for treatment A. In addition, 75% of the participants in treatment A were successfully rehabilitated vs. 55% in treatment A.

Conclusion: The use of an ICP was cost-effective, with the greatest reduction in hotel costs. A longer hospital stay was related to more investigation costs, which appeared to be unrelated to the participants' medical condition. The cost of developing the ICP had already been covered after three participants. No 30-day re-admission was recorded in either group and the one-year mortality rate was 16% in both groups.

## Keywords

hospital care, health care cost, integrated care pathway, Sweden

Poster presentation available from:

http://www.integratedcarenetwork.org/Sweden2008/slides/olsson-poster.ppt