The Integrated Care Pathway for Managing Post Stroke (Icapps) Patients in The Community: A Cost –Effectiveness Analysis

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Introduction
The iCaPPS was designed to deliver comprehensive post stroke care for stroke survivors in communities with limited access to specialized stroke care services. Rehabilitation intervention and regular screening for post stroke complications were additional features of iCaPPS compared with conventional care practices.

Objectives
A cost effectiveness analysis study was done to ascertain impact of iCaPPS on quality of life compared with current conventional monitoring based in public health centres.

Methods
A cluster randomised controlled trial on 151 post stroke patients from 10 selected public healthcentres in Peninsular Malaysia was done to evaluate quality of life (QoL) of patients managed with iCaPPS (n=86) vs conventional care (n=65) for 6 months. Costs from provider and patient perspective were calculated. QoL was evaluated using EQ-5D health state utility scores. Cost per quality adjusted life year (QALY) gained and incremental cost effectiveness ratio (ICER) were determined. Differences within groups were determined using Mann-Whitney tests.

Results
Total costs for 6 months treatment with iCaPPS was RM**792.77**, while conventional care cost RM**527.08**. QALY for iCaPPS patients was 0.55 (0,1.65) compared to conventional care 0.32 (0, 0.73) (z=-0.21, p=0.84). Cost per QALY gained for iCaPPS was RM**1441.40**, conventional care was RM **1647.12**. The ICER was RM**1155.17**, equivalent to **3.74**% of per capita GDP.

Discussion
Managing post stroke patients using the iCaPPS protocol cost **1.5** times more than conventional care although QALY scores improved.

Conclusions
The management of post stroke patients in the community using iCaPPS protocol is cost effective compared to current conventional care in public health centres.

Keywords: post stroke, integrated care pathway, Cost effectiveness, ICER, Quality Adjusted Life Years