Reviewer’s report

Title: The Integrated Care Pathway for Managing Post Stroke Patients (iCaPPS©) in Public Primary care Healthcentres in Malaysia: Impact on Quality Adjusted Life Years (QALYs) and Cost Effectiveness Analysis

Version: 1 Date: 17 Sep 2019

Reviewer: E. (Erik) Buskens

Reviewer's report:

The authors have performed an interesting and exemplary study trying to assess the cost-effectiveness of a post-stroke service in the primary care setting as compared to essentially non-organised CAU. Clearly the results of this study will have merit for other LMIC to design their services for stroke survivors.

There are several issues that would require revision before the paper would be suitable for publication. Mostly technical issues regarding the economic evaluation and study design.

In the abstract and elsewhere in the manuscript the authors mention costs per QALY gained which should be reserved for the actual incremental analyses. There are averages of costs and effects but these are not very informative.

Please rephrase and revise throughout the manuscript.

'Abstract: Results Total costs for 6 months treatment with iCaPPSTM was MYR790.34, while conventional care cost MYR527.22. Median QALY gained [incorrect - not gained] for iCaPPSTM 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 [incorrect] or iCaPPSTM was MYR1436.98, conventional care was MYR1647.56.'

In the methods section the power calculation is presented. 'Sample size calculation: Considering the constraints in resources for this study, power of study was set at 80%, with the desired group difference in mean EQ-5D-5L index scores estimated at a rate of 15% (9); 65 patients were required on each arm.' Why 15% and what would be the SE used in the estimation? Too little prior information of relevance is presented.

The economic evaluation supposedly is performed from a societal perspective, yet, 'Economic evaluation: The cost analysis was conducted from a societal perspective, i.e. the economic viewpoint of the provider (Ministry of Health, Malaysia) and from the patients' perspective.' the economic perspective of the ministry of health would typically be more narrow. So what is the actual perspective used?
Finally, the productivity losses of pensioners were based on the pension benefits. Their actual productivity is not accounted for if after pension there would be any. 'For stroke survivors who were retirees or pensioners, the reported total annual pension received or the gross domestic per capita income, whichever available, was used to calculate productivity loss.' this might need to be revised.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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