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DOI link to article:

https://doi.org/10.1177/2396987318770127

Date deposited:

23/05/2018
AS24-032

BETWEEN-CENTER AND BETWEEN-COUNTRY DIFFERENCES IN OUTCOME AFTER ANEURYSMAL SUBARACHNOID HEMORRHAGE IN THE SUBARACHNOID HEMORRHAGE INTERNATIONAL TRIALISTS (SAHIT) REPOSITORY

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Background and Aims: Differences in outcome among different settings are common in many diseases and may reflect differences in quality of care. We aimed to quantify between-center and between-country differences in outcome after aneurysmal subarachnoid hemorrhage (aSAH).

Method: We analyzed data from 5530 aSAH patients from three randomized clinical trials including 170 centers and 22 countries. We used random-effects logistic regression adjusted for patient characteristics, future research should focus on explanations regarding differential treatment policies and quality of care.

Trial registration number: N/A

AS12-071

SECONDARY TRANSFER OF STROKE PATIENTS FOR THROMBECTOMY BY AIR AMBULANCE IN ENGLAND: A COST-EFFECTIVENESS ANALYSIS

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Background and Aims: Helicopter Emergency Medical Services (HEMS) for secondary transfer of stroke patients eligible for thrombectomy could have a significant impact on outcomes for patients residing in areas remote from a thrombectomy centre (TC). Remote units cannot sustain a 24/7 thrombectomy service locally and transfer to a TC is necessary. There are few data on cost-effectiveness of secondary transfer via HEMS to inform commissioning decisions. We are evaluating the cost-effectiveness of HEMS versus ground-based ambulance (GBA) for stroke thrombectomy in England.

Method: Using Geographic Information System data, we identified unavoidably remote hospitals serving a population of ≥800,000 (where initiating a local sustainable 24/7 thrombectomy service is not feasible) and ≥1 hour by GBA from the nearest designated TC. We previously estimated the proportion of CT/CTA-confirmed stroke patients admitted with NIHSS ≥6 within 4.5 hours. Probability of receiving thrombectomy via HEMS or GBA was derived from average journey times. Quality Adjusted Life Years will be calculated for secondary transfer by HEMS and GBA to the most proximal TC to derive an incremental cost-effectiveness ratio.

Results: Annual stroke incidence of 3,860 at unavoidably remote hospitals (≥75km transfer distance), of which 508 patients would be transferred by HEMS. Ongoing survey of HEMS to establish operational parameters and costs to inform cost effectiveness model is ongoing and will be presented with the health economic data.

Conclusion: HEMS is an option for secondary transfer of patients eligible for thrombectomy from unavoidably “small” and remote hospitals. Estimates of HEMS cost-effectiveness will be presented to inform the optimal organisation of thrombectomy service delivery.

Trial registration number: N/A

AS12-072

VIDEO SUPPORT IN THE PREHOSPITAL STROKE CHAIN

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