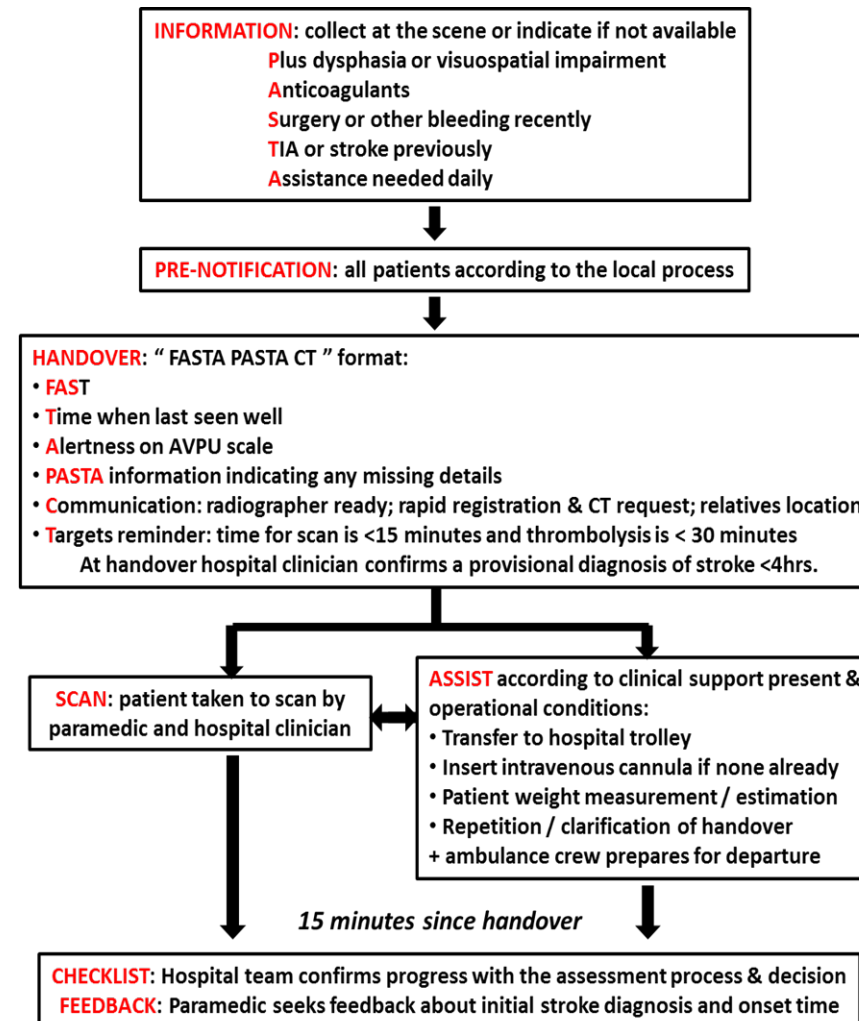


PARAMEDIC ACUTE STROKE TREATMENT ASSESSMENT (PASTA) TRIAL: MAIN RESULTS

Background

- Rapid thrombolysis reduces disability for selected stroke patients but it is challenging to optimise delivery
- We evaluated the clinical and cost effectiveness of a Paramedic Acute Stroke Treatment Assessment (PASTA) aimed to facilitate thrombolysis
- PASTA comprised additional pre-hospital information collection, structured hospital handover, practical assistance post-handover, a pre-departure care checklist and clinician feedback
- The primary outcome was the proportion of all stroke patients receiving thrombolysis

PASTA pathway



Newcastle University

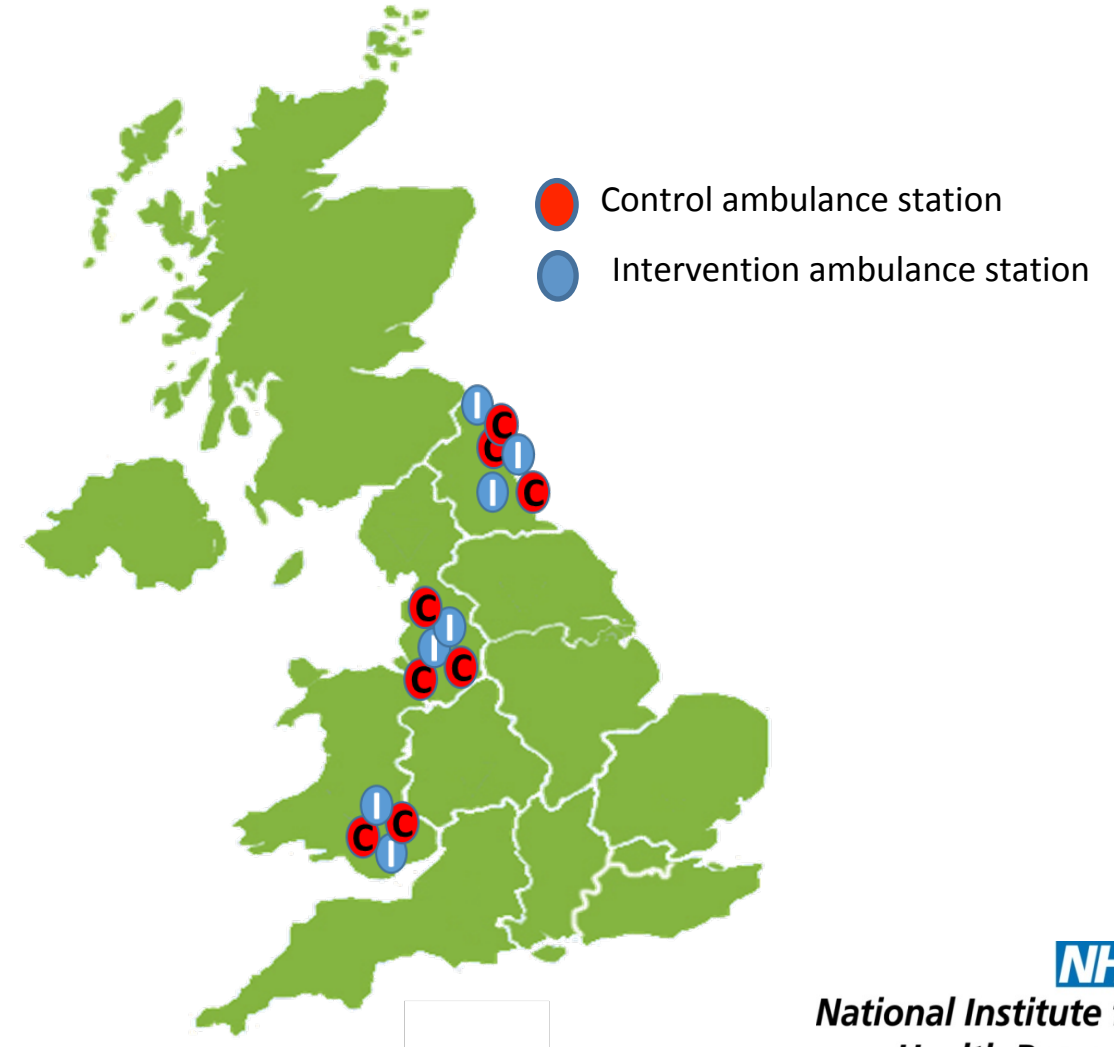


National Institute for Health Research

PARAMEDIC ACUTE STROKE TREATMENT ASSESSMENT (PASTA) TRIAL: MAIN RESULTS

Methods

- A pragmatic multicentre cluster randomised controlled trial was hosted by 3 ambulance services and 15 hospitals in the UK (Dec 2015 to Jul 2018)
- Hospitals were already providing thrombolysis with pre-notification for paramedic suspected stroke
- Ambulance stations were randomised to PASTA (intervention) or standard care (control)
- PASTA paramedics each completed 1 hour of intervention training
- Initial paramedic stroke identification was unchanged
- Stroke patients were enrolled if it was confirmed in hospital that they had been seen by a study paramedic within 4 hours of symptoms starting



PARAMEDIC ACUTE STROKE TREATMENT ASSESSMENT (PASTA) TRIAL: MAIN RESULTS

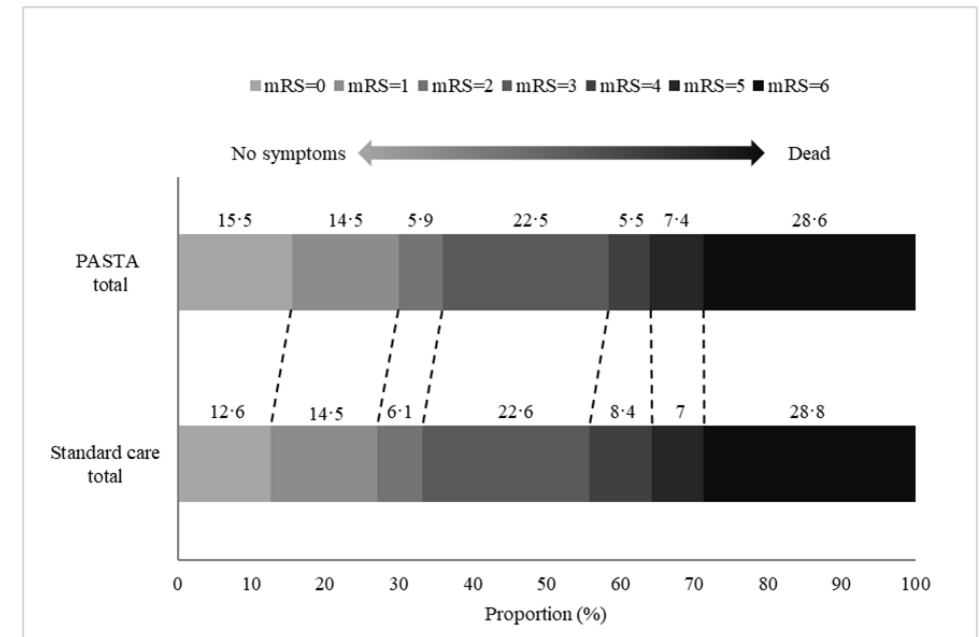
Results

- 1214 patients were enrolled: 500 assessed by 242 PASTA paramedics and 714 assessed by 355 standard care paramedics
- PASTA *did not increase* the proportion of patients receiving thrombolysis, instead there was a non-significant trend for *less* thrombolysis amongst the intervention group: 197/500 (39.4%) PASTA and 319/714 (44.7%) standard care patients [adjusted Odds Ratio 0.81 (95% CI 0.61 to 1.08); p=0.15]
- The average time from paramedic assessment to thrombolysis was 8.5 minutes *longer* for PASTA patients [p=0.01]
- However after 90 days, there was a non-significant trend for *fewer* PASTA patients to be dead or dependent on others for personal care [adjusted Odds Ratio 0.86 (95% CI 0.60 to 1.2); p=0.39]
- There was a small non-significant *gain* in Quality Adjusted Life Years for PASTA patients [0.006 (95% CI -0.003 to 0.015)] and costs *less* than standard health and social care by an average of £1,105 (95%CI -£2256 to -£60)

Conclusion

- The enhanced paramedic assessment did not increase the rate or speed of thrombolysis, but cost-effective outcome changes may represent better informed treatment decisions which subsequently reduce care costs.

Health outcomes at 90 days (modified Rankin scale)



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