Using simulation to improve medical registrars’ confidence in out-of-hours stroke management

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Introduction
For general internal medicine (GIM) trainees in south-west England there are considerable inter-hospital variations in hyperacute stroke care delivery. This is down to different staffing levels, experience and services offered between primary and comprehensive stroke centres. What is common is that hyperacute stroke care needs to be delivered in a rapid and succinct manner. Our stroke simulation programme aims to address these issues and improve trainee confidence.

Materials and method
Following a successful pilot, the Southwest Deanery and the University Hospital Plymouth neurology team developed a multidisciplinary stroke simulation programme. This was opened up to all GIM trainees in the south west. Participant questionnaires collected pre-course and post-course ratings on stroke knowledge, confidence and overall usefulness of the scenarios. The scenarios included stroke thrombolysis, referral for thrombectomy and hyperacute stroke blood pressure management.

Results and discussion
Average confidence improved from 2.57/5 to 4.29/5. All (100%) of the 21 participants would recommend this training to a colleague.
Free-text feedback highlighted the benefit of the multidisciplinary team involvement and the debrief led by experienced clinicians.

Conclusion
This programme has shown improvement in the confidence of GIM registrars at managing hyperacute stroke scenarios. Moving forward, we plan to further develop the scenarios to include more acute complications of stroke and include members of the stroke team from our neighbouring centres to create a more rounded programme. We also hope to extend the sessions to run throughout the year and invite trainees returning from career breaks to participate.

Funding statement
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Fig 1. Self-reported confidence level of individual participants at managing hyperacute stroke scenarios pre- and post-stroke simulation programme. It was graded on a 1 (unconfident) to 5 (confident) scale.

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