

Door to Needle Time for Thrombolysis pre- and post- STAT simulation training

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Introduction

- Minimising the “door-to-needle-time” (DTNT) for stroke thrombolysis is associated with improved patient outcomes (1)
- In Borders General Hospital, stroke and TIA assessment and management is led by the stroke consultant in hours, and the medical registrar out of hours
- The STAT (Stroke and TIA Assessment Training) simulation course aims to improve the recognition and management of acute stroke
- Since August 2018, all medical registrars involved in thrombolysis have received either the STAT course or personalised walk-throughs of the thrombolysis pathway
- This project assesses DTNT following the introduction of the STAT course.

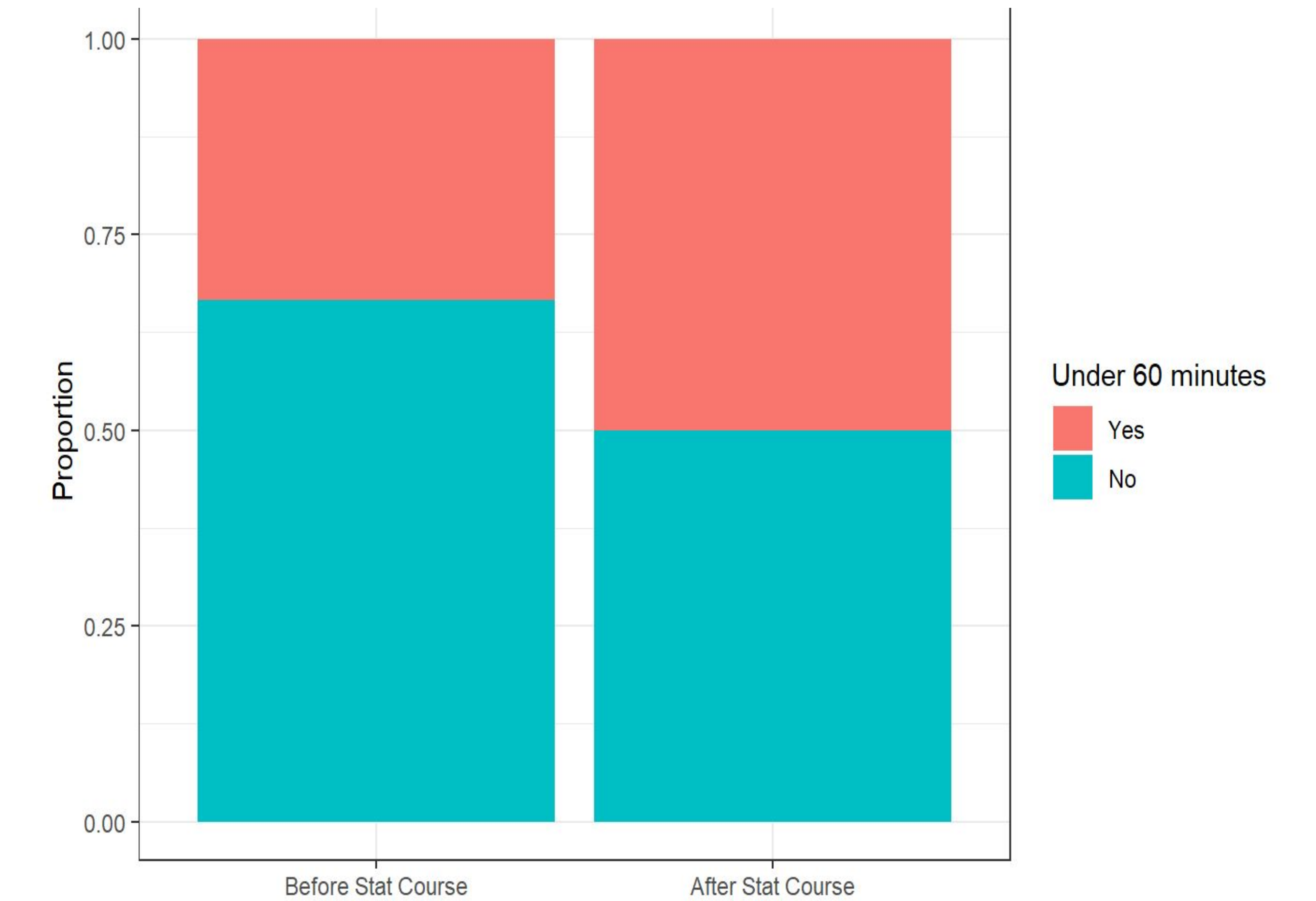
Method

- Data on DTNT is routinely collected for the Scottish Stroke Care Audit (SSCA).
- Median DTNT and change in NIHSS for three years before and eighteen months after the introduction of the STAT course (Mann Whitney- U)
- Proportion of patients thrombolysed within one hour (one of the SSCA standards (1)) was compared using a Chi-Square test.

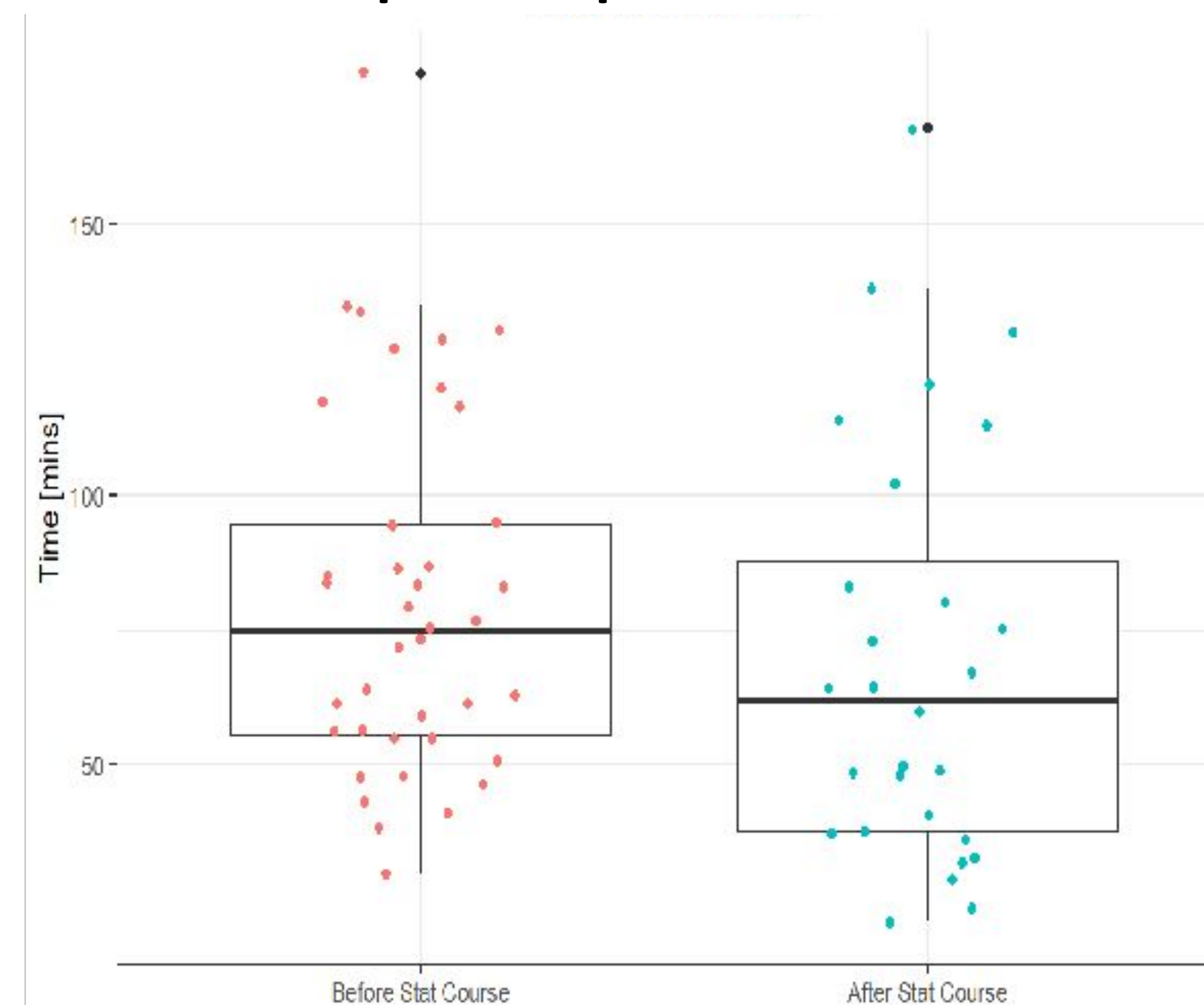
Results

- DTNT was compared for 39 patients pre-course with 28 post-course.
- There was a non significant increase in patients thrombolysed within 1 hour (33% to 50%, $p=0.17$).
- There was a non-significant fall in median DTNT (75 mins to 62 mins, $p=0.10$).
- This coincided with an increase in the number of patients being thrombolysed per month.
- There was no change in the medial NIHSS of thrombolysed patients (-6 to -5, $p=0.096$).

Proportion of Patients Thrombolysed <60 Minutes pre and post STAT course



DTNT pre and post STAT Course



Conclusions

- Small numbers limited measurement of the effect of the STAT course on DTNT or patient outcomes
- The introduction of STAT has coincided with a trend towards improvement in DTNT
- It would be valuable to assess other measures of impact of the course, such as confidence of medical registrars in the assessment of stroke patients for thrombolysis.
- We would like to thank the Northumbria Stroke Team, who developed the STAT course and Chest Heart and Stroke Scotland for funding its roll-out in NHS Borders.