

Physiology students can help the NHS identify reasons for poor staff compliance with physiology screening tools

Easy as 4-AT: Improving Delirium Screening in Acute Elderly Admissions with a Targeted Educational Intervention – A Pilot Study

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INTRODUCTION

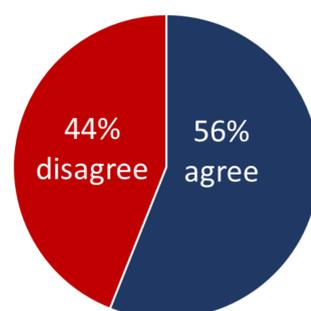
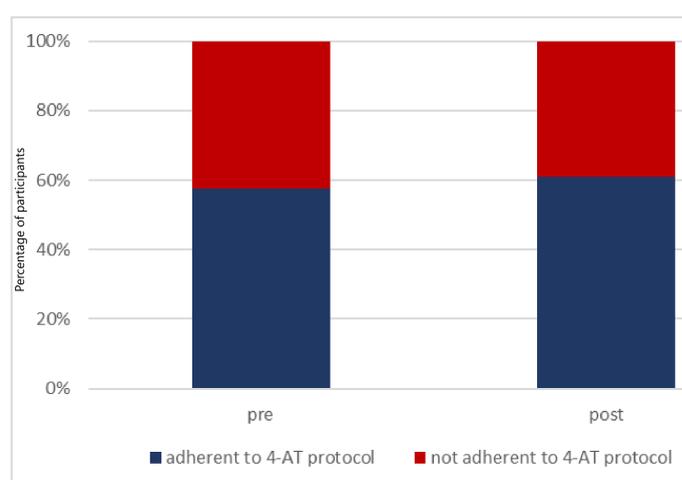
- Delirium is a common and serious complication of acute illness ('brain failure') and remains poorly diagnosed in older patients.
- The 4-AT is a simple way to screen for delirium and should be used on all acute admissions aged 65 and over.
- HIS (Healthcare Improvement Scotland) inspection (2017) revealed issues with adherence with this protocol at Dr Gray's Hospital, Elgin.
- Several other institutions have reported poor adherence to delirium screening tools.
- New ACE (Acute Care of Elderly) Unit wanted to improve 4-AT screening but lacked resources/time.

METHODS

- Case note review: 1st cycle (15/01/18) Medical and nursing notes of inpatients on the ACE unit >65 years were reviewed for 4-AT staff adherence.
- A 10 question online survey was conducted to assess junior doctors' perspectives on the 4-AT - sent to all junior doctors in Dr Gray's.
- Video designed with a specific focus on how to assess acute change in cognition (component 4 of 4-AT). Clarified the external sources that can be used to fully complete the 4-AT. Video was shown during an FY1 teaching session (14/03/18).
- Feedback surveys were immediately disseminated to the attending junior doctors following the teaching session.
- Case note review: 2nd cycle (16/03/18) - medical and nursing notes of inpatients on the ACE unit >65 years were reviewed for acute changes in 4-AT adherence.

RESULTS

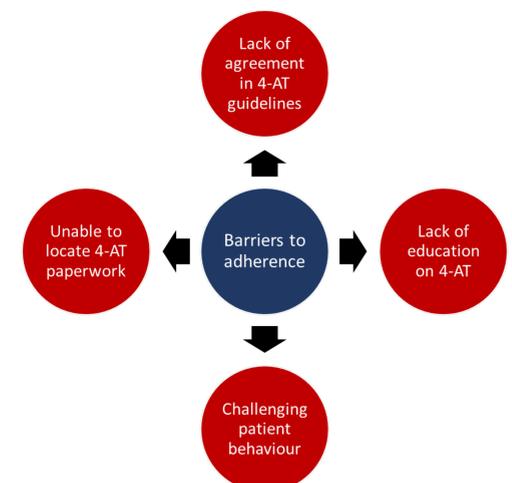
- >80% staff said that they completed the required 4-AT screening as required.
- Pre-intervention: of the eligible notes reviewed (n=26), staff adherence to 4-AT guidelines was 57.7%
- Post-intervention: of the eligible notes reviewed (n=23), adherence to 4-AT guidelines was 60.9%.
- There was no significant increase ($p=0.821$) following the intervention, as expected during such a short timescale.



- The majority of staff agreed that the short video intervention made them feel more confident in assessing for 'acute change' in a patient.
- Video being improved in light of initial feedback.

DISCUSSION

- There were clear deficits in staff adherence to 4-AT protocol, supporting the findings of the HIS inspection report.
- The intervention proved to be of limited effect in improving overall adherence in the short term, however it showed effect in addressing the issue of acute change assessment.
- Barriers to adherence included lack of education, **with a specific weakness in the ability to assess for acute change in physiology**.



WHAT HAS CHANGED?

- Enhanced teaching to stress the value of the 4-AT and serious implications of undetected delirium.
- Incorporation of 4-AT reminder stickers on all eligible case notes.
- Uniformity in storage of 4-AT forms across wards.
- Re-audit this summer to assess whether significant long-term improvements have been made.
- Physiology students are now seen as valuable partners in improving quality and standards by the healthcare team at Dr Gray's Hospital.

