

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

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Background

- Delirium is a common and serious complication of acute illness
- The condition 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 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

Aims

- To assess 4-AT protocol adherence in the ACE unit
- To identify attitudes and potential barriers influencing adherence
- To design and implement an educational intervention to improve 4-AT protocol adherence

Method

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

Survey

- A 10 question online survey was conducted to assess junior doctors' perspectives on the 4-AT
- Survey was sent to all junior doctors in Dr Gray's via an email link

Intervention

- Based on survey feedback, a video demonstration was 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

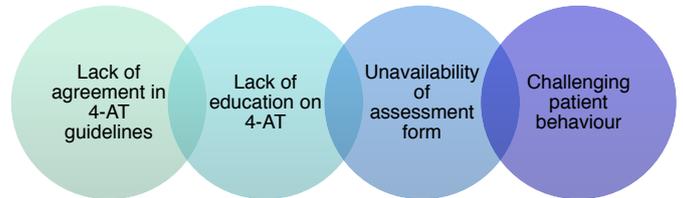


Case note review: 2nd cycle (16/03/18)

- Two days following the intervention, medical and nursing notes of inpatients on the ACE unit >65 years were reviewed for 4-AT adherence

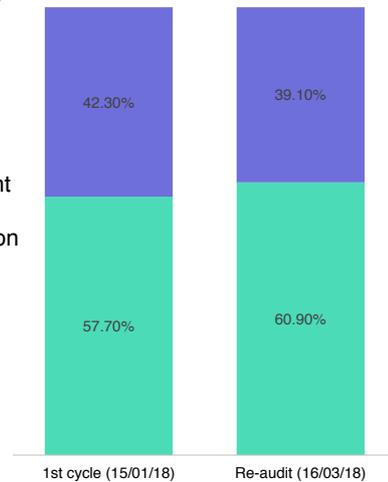
Results

- **Pre-intervention:** of the eligible notes reviewed (n=26), staff adherence to 4-AT guidelines was 57.7%
- The survey identified several emerging themes which pose as potential barriers to staff 4-AT adherence:

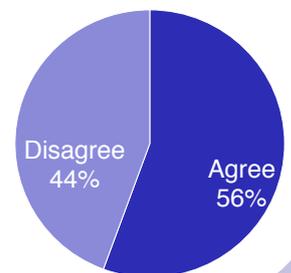


- Specifically, the feedback highlighted that there were deficits in staff ability to assess "acute change" (the 4th component of the 4-AT)

- **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



- The majority of staff agreed that the video intervention made them feel more confident in assessing for 'acute change' in a patient



Conclusion

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

Recommendations

- Enhance teaching to stress the value of the 4-AT and the 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
- Implementation of an ongoing audit and feedback cycle, targeting the issue of 4-AT staff adherence in Dr Gray's