Improving cognition screening on admission to the short stay Clinical Decision Unit (CDU)

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Background and objective:

Delirium significantly impacts patient mortality and admission length[1]. Delirium identified in the emergency department is an independent predictor of increased 6 month mortality[2].

0.02% of all patients over 65 admitted to Eastbourne CDU had an accepted cognition screen completed on admission. Of these patients who were over 65, 0% of those presenting with a fall, 9.09% of those with new confusion, and 0% of those with a fall *and* new confusion had a completed cognition screen.

We aimed to bring the department closer to the NICE guideline[3] that **all patients admitted over 65 should have a delirium screen**, especially those with symptoms of delirium such as falls or new confusion.

Interventions:

4AT proforma box for cycle 1:

A **4AT box** (fig. 1.) when was added to the electronic clerking proforma to prompt completion of the 4AT. When selected, this brought up the four 4AT questions which, when filled in, generated an overall score.

Educational focus for cycle 2:

Teaching sessions were held on the importance of early delirium identification. **'Delirium champions'** were appointed within the department to encourage a culture of delirium awareness.
Posters (fig.2.) **and smaller prompt cards** (fig. 3) were put up around the department and on computers to prompt people to complete the 4AT box. These allowed the key learning to be delivered to all in the department despite varied rotas/ high staff turnover in A&E, which posed a challenge with more traditional in person teaching.

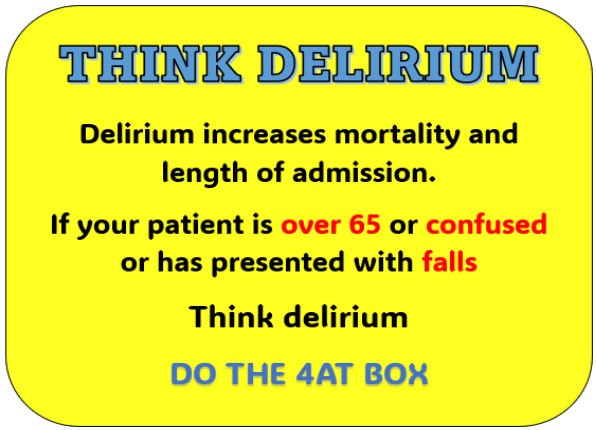
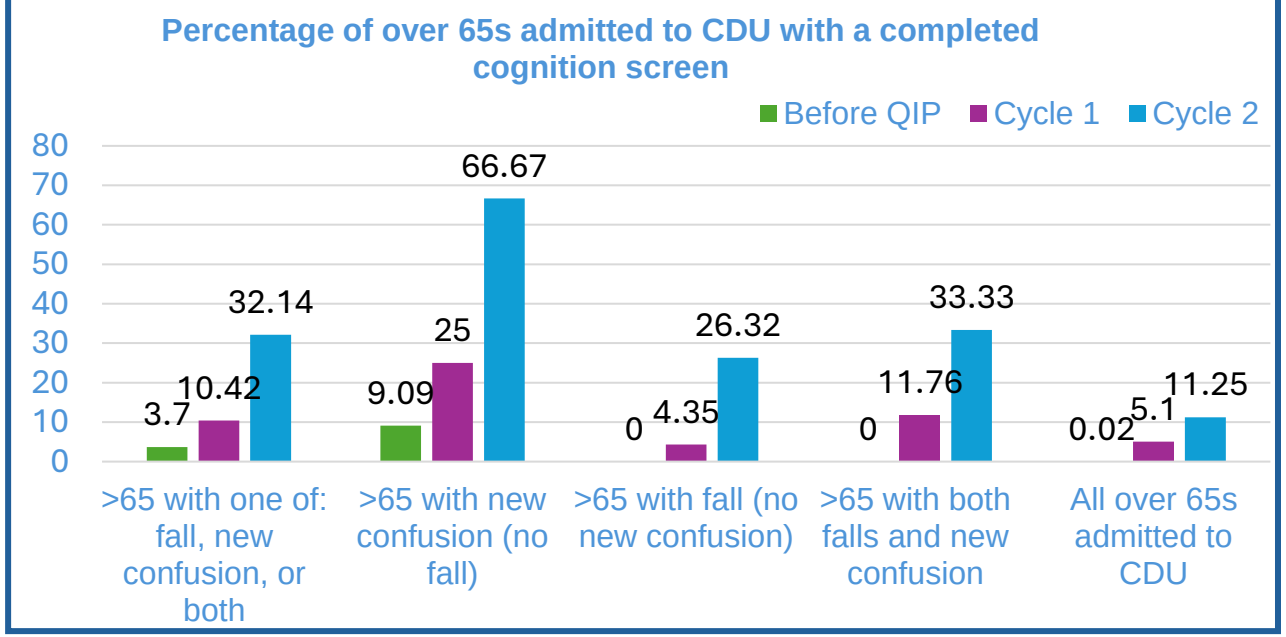


Figure 3. prompt cards stuck to computers to encourage delirium assessment



Methodology:

2 weeks worth of admissions to CDU were assessed pre and post intervention for a documented cognition screen. The QIP ran from 2023-24. Accepted cognition screens for this QIP were: 4AT, AMTS, MOCA, MMSE, SQuID, or a documented diagnosis of delirium.

Conclusions and learning:

Cycle 1's addition of the 4AT box led to an increase in the proportion of patients over 65 with a completed cognition screen. It led to an increase within all subgroups analysed of those over 65, with falls, new confusion or both. There was still significant room to improve to bring in line with NICE guidelines[3] after cycle one, showing the prompt box alone was insufficient.
This improved significantly with the second cycle and educational interventions.
Teaching and encouragement of a culture shift within the department were required in addition to the 4AT prompt box to improve delirium identification.

References: Anand, A. *et al.* (2022). Positive scores on the 4AT delirium assessment tool at hospital admission are linked to mortality, length of stay and Home Time: Two-centre study of 82,770 emergency admissions. *Age and Ageing*, 51(3). 2. Han, J.H. *et al.* (2010). Delirium in the emergency department: An independent predictor of death within 6 months. *Annals of Emergency Medicine*, 56(3). 3. NICE (2010). Recommendations: Delirium: Prevention, diagnosis and management in hospital and long-term care: Guidance (2010) *NICE*.

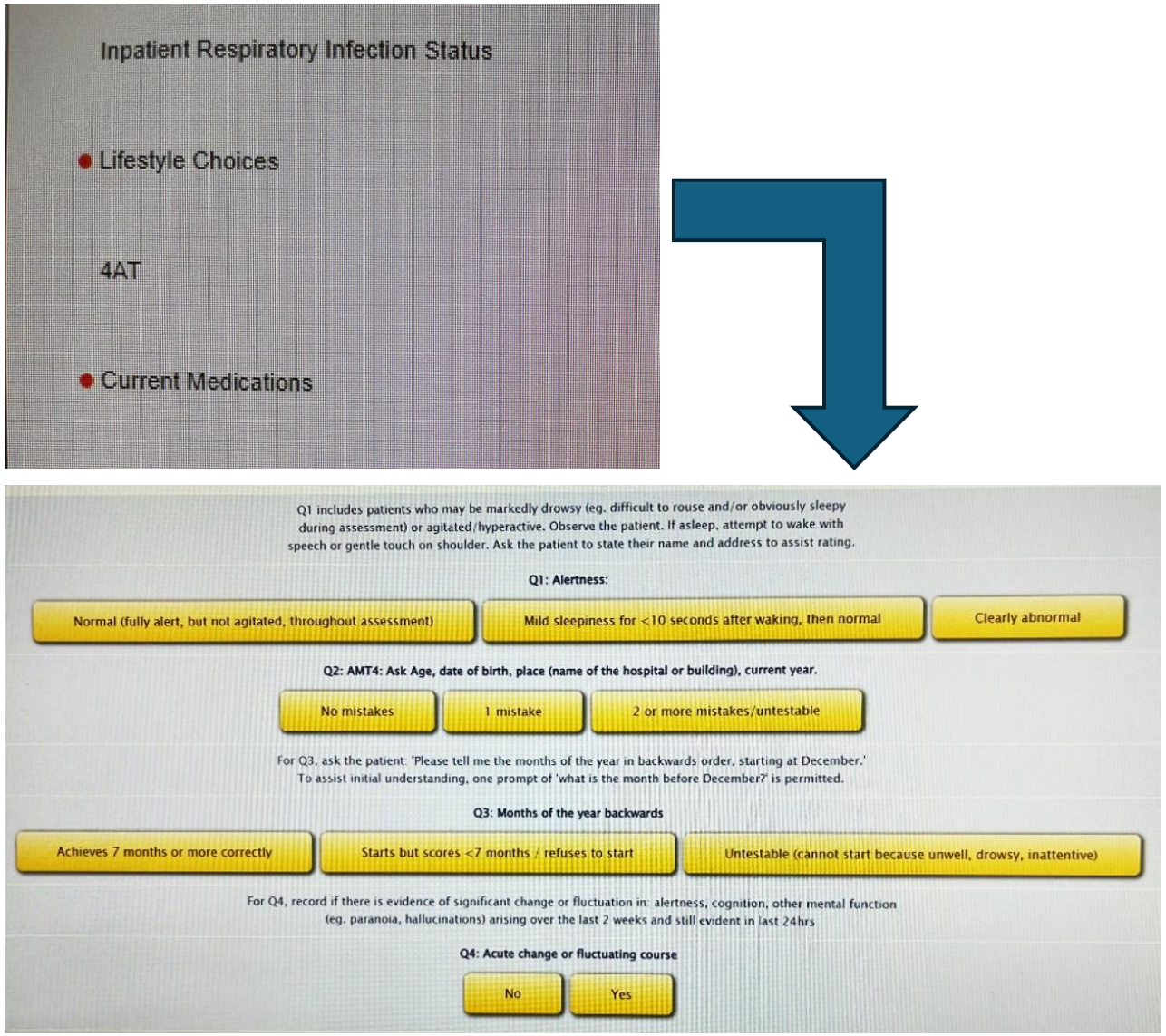


Figure 1. 4AT box as it appears in the nervecentre online clerking software (top), when selected it brings up the four questions (bottom image). The score can be generated from the answers selected.

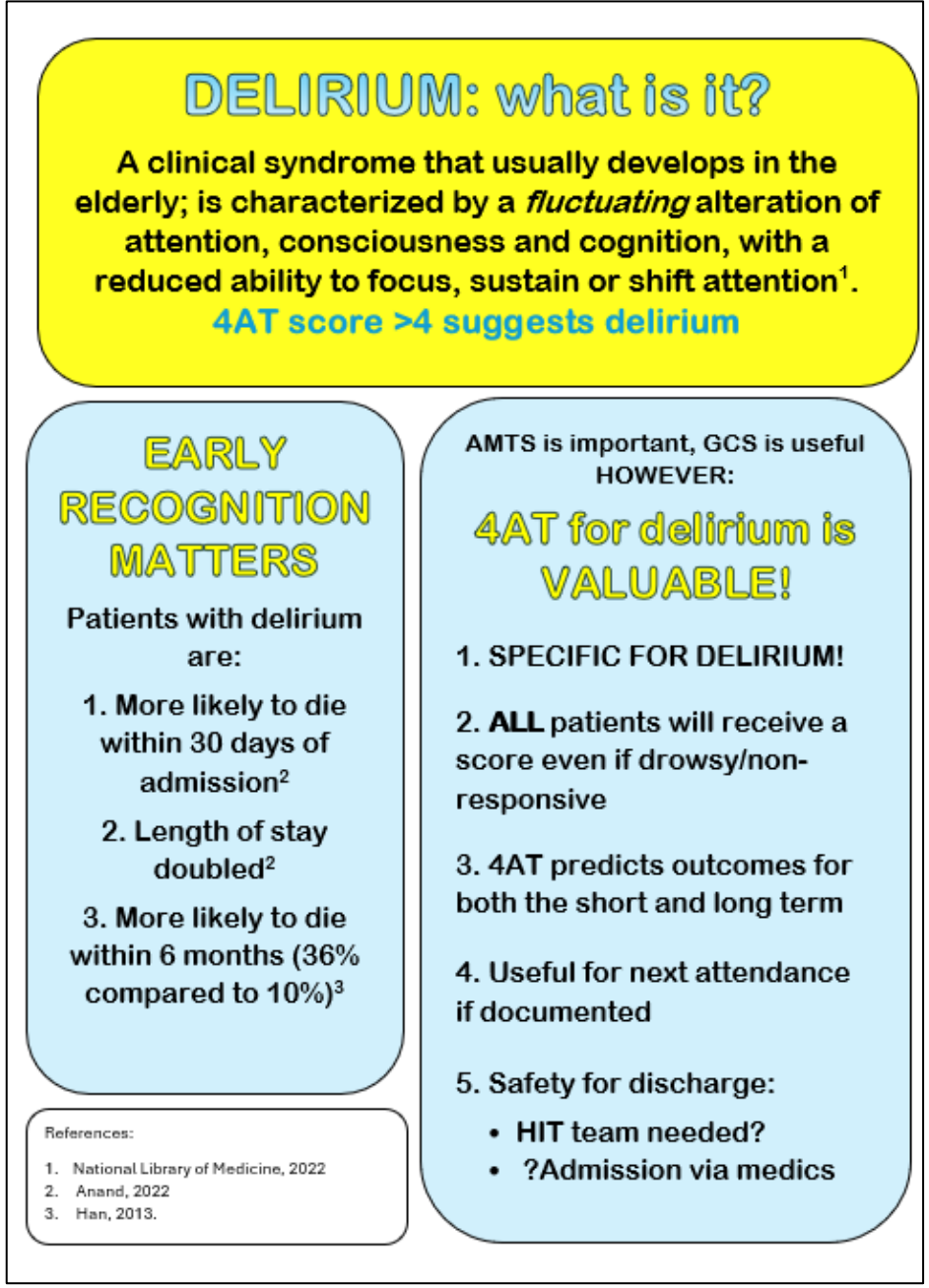


Figure 2. A4 poster distributed in the A&E department as part of cycle 2 educational interventions