Delirium Awareness:
Bridging the Gap Between Screening and Clinical Practice

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Rationale

Delirium is an acute confusional state characterised by an acute onset and fluctuation in disturbed consciousness, cognitive function or perception. It is a common diagnosis encountered in elderly patients.

When recognised early, prompt identification and treatment of reversible causes can be initiated. These include pain, infection, nutrition, constipation, hydration, medication and environment.

The 4AT score is a screening tool used for rapid assessment delirium and cognitive impairment. It has a sensitivity of 76% and specificity of 94% (1).

This project aimed to assess the use of 4AT and clinical assessment of delirium including consideration of its causes

Aims

1) To determine whether patients were being screened for delirium using the 4AT assessment tool
2) To determine whether this score was reflected in their clinical assessment and diagnosis
3) To determine whether causes for delirium were being considered in clinical plans

Methods

Data Collection

Data was collected on all Acute Orthogeriatric inpatients for one day each week for five consecutive weeks.
Each patient's 4AT admission score was recorded from digital noting. Clinical notes were reviewed to assess whether a diagnosis of delirium, acute confusion or cognitive decline was made during their stay and whether causes were addressed.

Data Analysis

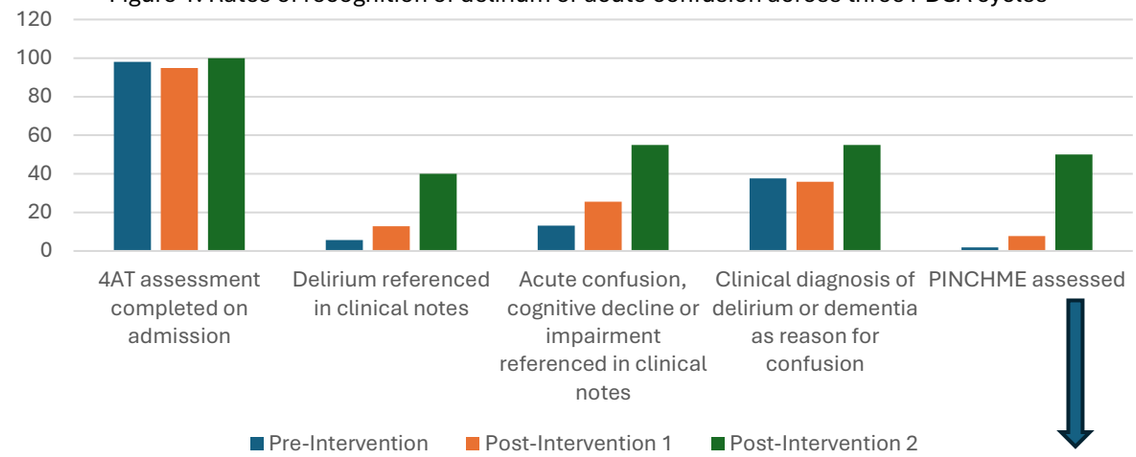
Data was analysed using numerical methods and Excel.
Results informed the intervention used

Intervention

(1) Daily board-round announcements to the clinical team highlighted delirium, prompt review of 4AT and screening for causes using the 'PINCHME' model.
(2) Email sent to clinical team and ongoing board round announcements

Results

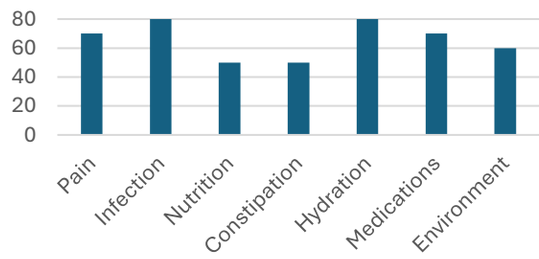
Figure 1: Rates of recognition of delirium or acute confusion across three PDSA cycles



Improvements were seen in the initial assessment and diagnosis of acute confusion. There was a significant increase in the assessment of reversible causes for delirium.

These were then broken down and assessed (Figure 2). Infection and hydration were the most commonly addressed.

Figure 2: Breakdown of assessment of reversible causes of delirium



Discussion

This project demonstrated an improved awareness of delirium and its causes amongst clinicians through written and verbal interventions.
Although not analysed here, this should lead to improved recognition and treatment of reversible causes and therefore the management of delirium itself.
There is now a need for sustainable change to maintain awareness amongst clinicians beyond rotational teams.
This could include the design and introduction of an automatic online delirium alert in patients scoring >4 on 4AT and the design of a digital confusion screen to ensure thorough assessment on all patients.
Further evaluation of communication with next of kin could be considered for future quality improvement projects.

Conclusions

This project has successfully improved awareness of delirium in the acute orthogeriatric setting. Further PDSA cycles are required to ensure this is maintained.

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References

Shenkin, S.D., Fox, C., Godfrey, M. *et al.* Delirium detection in older acute medical inpatients: a multicentre prospective comparative diagnostic test accuracy study of the 4AT and the confusion assessment method. *BMC Med* **17**, 138 (2019). https://doi.org/10.1186/s12916-019-1367-9