A quality improvement approach to cognitive assessment on hospice admission: could we use the 4AT or Short CAM?

Lucy Baird[1] and Juliet Spiller[2]

[1]Specialty Doctor, Palliative Medicine; [2]Palliative Medicine Consultant, Marie Curie Hospice Edinburgh.

Marie Curie

Care and support through terminal illness

Introduction

Prevalence studies show that 15-42% of patients admitted to specialist palliative care inpatient units have delirium. Symptoms of delirium are often subtle and easily missed, or misdiagnosed as fatigue or even depression, and so the use of a screening tool could improve early identification and management of delirium and lead to improved outcomes. Patients admitted to the hospice are often frail and tired, therefore a quick and easy-to-use method of cognitive assessment is essential.

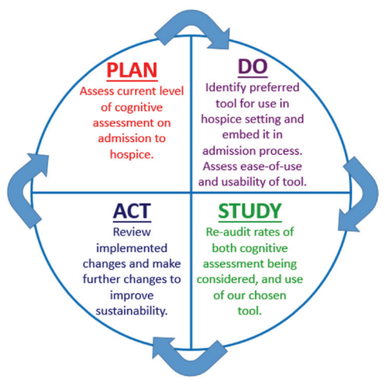
Aims

Using a quality improvement (QI) approach (PDSA: Plan, Do, Study, Act) this project aimed to improve cognitive assessment on admission to a hospice inpatient unit by:

- Determining staff preference between the Short Confusion Assessment Method (Short CAM)[1] and the 4 'A's Test (4AT)[2]
- Using PDSA cycles to embed the preferred tool into the admission process, whilst continuing to assess usability and completion rate

Methods

- Baseline measure taken of the rate of performing cognitive assessment on admission
- Four PDSA cycles were then undertaken which involved implementing change and then evaluating results through auditing case-notes and interviewing staff



Results

Initial results

- **Of 8 consecutive patients admitted to the hospice in March 2016, none had any form of cognitive assessment performed on admission despite several being noted to be "confused"**
- The Short CAM was the suggested tool, yet this was not printed in admission paperwork, nor easily accessible on the wards

PDSA Cycle 1

- Two nurses and 2 doctors performed the Short CAM and 4AT
- Feedback was received on ease-of-use and usability of both tools within the hospice setting
- **Three of the 4 staff preferred the 4AT**, stating it was "easier to fill in at the time" and "less open to interpretation", 1 nurse preferred the Short CAM as they felt it gave you "a better feel" for the patient
- **All 4 staff agreed the 4AT was quicker**

PDSA Cycle 2

- The 4AT was supplied on both wards in the hospice and staff were asked to complete a 4AT on the next 5 admissions if appropriate, i.e. not if a patient was very unwell or dying
- A 4AT was completed in 3 of the 5 admissions
- In the 2 cases where a 4AT was not completed it would not have been appropriate; the first patient was documented to be unconscious and the second patient was very breathless and died overnight
- **Staff agreed the 4AT was a usable tool and that it could easily be performed as part of a routine admission**

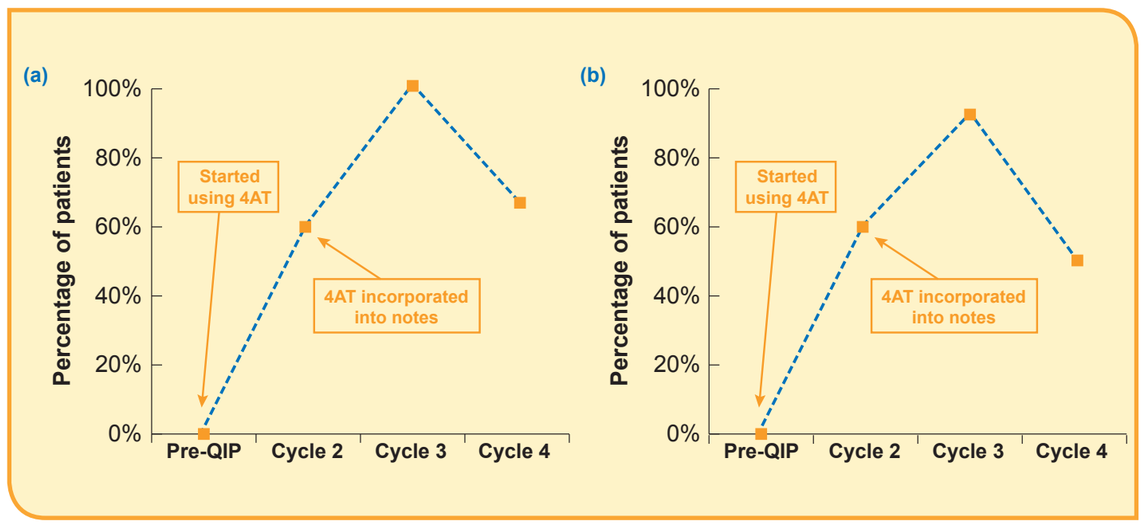
PDSA Cycle 3

- The 4AT was incorporated into the admission paperwork
- It was agreed cognitive assessment should be considered in 100% of patients admitted and a 4AT should only not be completed if the patient is too unwell and the reasoning documented
- **Of 12 consecutive admissions, cognitive assessment was considered in 100% (12) and a 4AT performed in 92% (11)** *(Figure 1)*
- **Staff valued having the 4AT in the admission notes**

PDSA Cycle 4

- Two weeks later, 12 consecutive admissions were reviewed to see if the improvements had been sustained; **cognitive assessment was considered in 67% (8), and a 4AT performed in 50% (6)**
- Some staff documented a 4AT was not performed as the patient was not confused

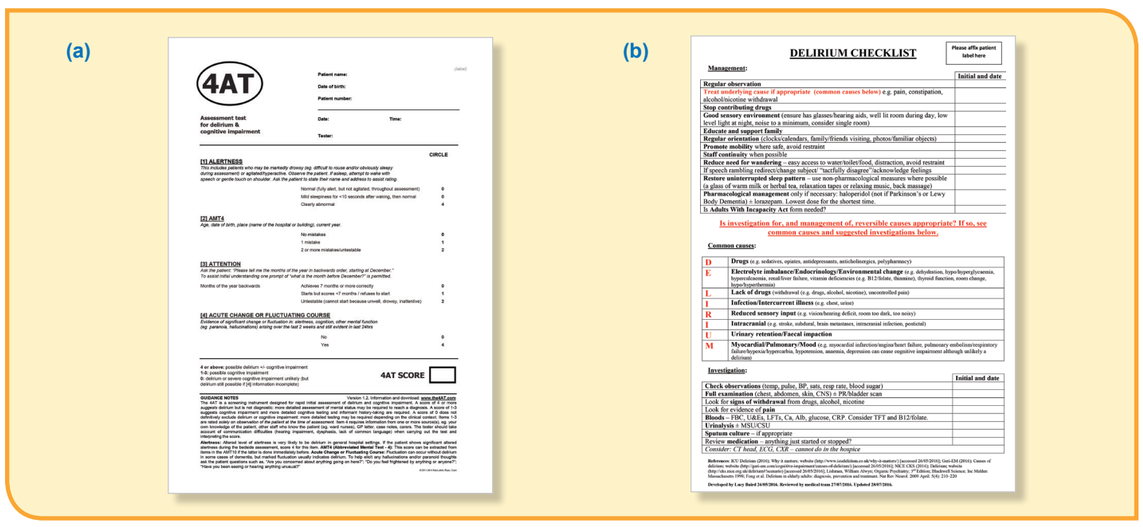
Figure 1: Percentage of patients where cognitive assessment was considered (a) and performed (b).



Subsequent Interventions

- **Staff were re-educated about the importance of screening all patients and documenting reasons where a 4AT was not used** *(Figure 2a)*
- **The admission notes will be further adapted** to ask: "Is a 4AT appropriate? Yes/No" and "If not, why?"
- **A delirium checklist was developed** and printed on the back of the 4AT as it is not only important to identify patients with a possible delirium, but also to manage this, and investigate and treat reversible causes, if appropriate *(Figure 2b)*

Figure 2: 4AT and Delirium Checklist.



Conclusions

- **The 4AT is a usable tool in the hospice inpatient setting** to assess patients' cognitive state on admission
- **The 4AT can easily be incorporated into the admission process**
- **The QI approach highlighted the need to link staff awareness of their use of the screening tool with perceived improvements in the treatment of delirium**, which prompted the creation and implementation of a delirium checklist in the unit
- Following staff education and changes to admission paperwork, rates of considering cognitive assessment, in addition to 4AT completion, should improve

Recommendations

- **Re-audit** to ensure standards improve
- **Development of a patient/relative information leaflet about delirium in the palliative care setting**

References: [1]Hospital Elder Life Program (2016) Confusion assessment method (Short CAM). Webpage: http://www.hospitalelderlifeprogram.org/delirium-instruments/short-cam/ [accessed 10/03/2016]. [2]MacLullich, A. (n.d.) 4AT rapid assessment test for delirium. Webpage: http://www.the4at.com/ [accessed 10/03/2016].