Frimley Health NHS Foundation Trust

# Improving Delirium assessment in elderly; a systematic approach
# 4AT as a screening tool for delirium

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## Introduction

- **Delirium (sometimes called 'acute confusional state') is an acute, fluctuating syndrome of encephalopathy causing disturbed consciousness, attention, cognition, and perception.**
- **NICE Guidance: in the 2023 update, the 4AT (figure 1) is the main recommended tool for general settings, replacing the Confusion Assessment Method (CAM). The CAM-ICU and ICDSC are recommended for ICU settings. If indicators of delirium are identified, a health or social care practitioner who is competent to do so should carry out an assessment using the 4AT (1).**

## Objectives

- **To audit compliance with NICE guidance on the use of assessment tools for early detection of delirium.**
- **To increase awareness of delirium and improve objective assessment upon identification of indicators.**
- **To measure improvement in delirium recognition using the 4AT after appropriate interventions.**

## Methodology

- **We have collected data of 59 patients through a retrospective study from FPH (49) and WPH (10) to evaluate the number of 4AT assessments done in relation to delirium diagnosis**
- **Criteria of patient selection: patients admitted to FPH and WPH of age 65 and older regardless of dementia diagnosis.**
- **Patients who have had their 4AT and AMTS were identified and the data was analysed.**

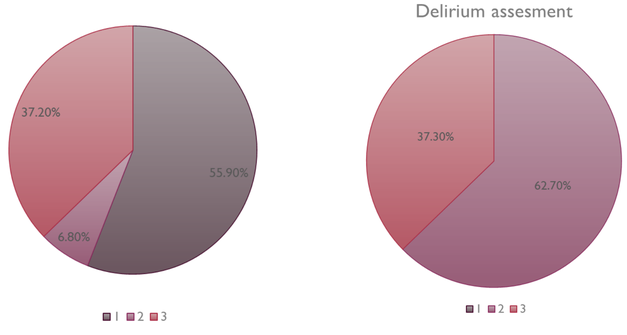
## What is 4 AT?

| | | Circle score for each section |
|---|---|---|
| 1 | **Alertness** | |
| | Normal (fully alert, but not agitated) | 0 |
| | Mild sleepiness for <10 seconds after waking, then normal | 0 |
| | Clearly abnormal | 4 |
| 2 | **AMT4** *Ask your patient the following: age, date of birth, name of hospital/building, current year* | |
| | No mistakes | 0 |
| | 1 mistake | 1 |
| | 2 or more mistakes or untestable | 2 |
| 3 | **Attention** *Ask your patient to list the months of the year backwards* | |
| | 7 months or more correctly | 0 |
| | Starts, but scores <7 months/refuses to start | 1 |
| | Untestable (cannot start because unwell, drowsy) | 2 |
| 4 | **Acute change or fluctuating course** *Evidence of significant change or fluctuation in alertness, cognition, other mental function arising over the last 2 weeks and still evident in last 24 hours* | |
| | No | 0 |
| | Yes | 4 |
| | 4 or above – possible delirium – use the Delirium pathway | Total score |
| | 1–3 – possible cognitive impairment | |
| | 0 – delirium or severe cognitive impairment unlikely (but delirium still possible if 4 information incomplete | |

Adapted from MacLullich A (2014). See full delirium guideline on intranet.

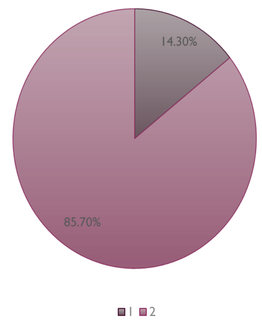
Figure 1

## Delerium assessment with either 4AT or AMT




- 4AT assessment was only used in 6.8%
- AMT assessment used in 55.9%
- Didn't have any assessment done 37.2%
- 37.30% didn't have any assessment done
- 62.70% had assessment done

## 4AT in delirium diagnosis:

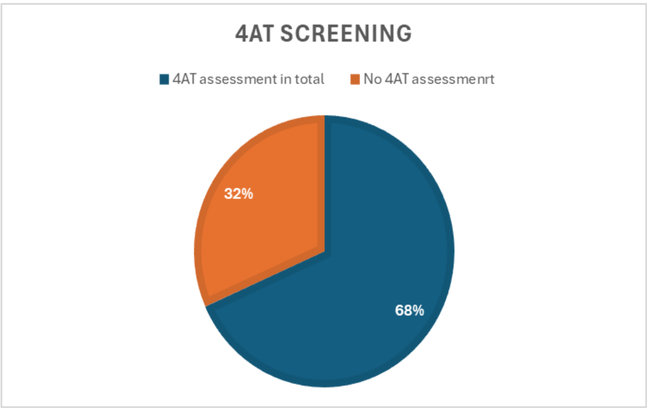


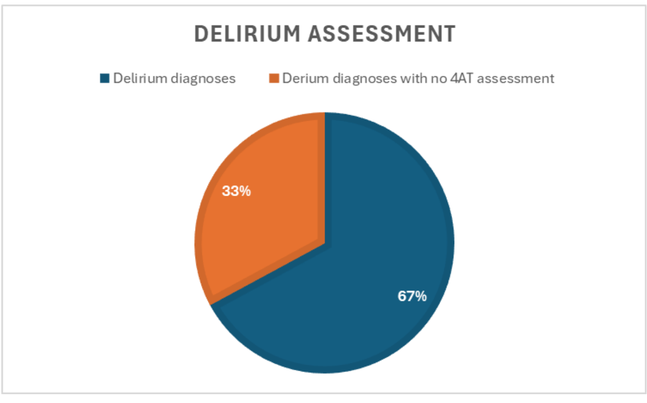

## Action plan and interventions:

- **Our team initiated proactive engagement with the Emergency Department (ED). We requested the collaboration of ED and clerking doctors for delirium assessments on admission, employing the 4AT method.**
- **Reinforcement measures included the creation and posting of reminders and informative posters on boards within the ED and other wards.**
- **We encouraged the Nurse in-charge to facilitate the distribution of reminders to all ward staff and physicians; also signposted the team to the reminders posted on the wards information boards.**

## 2nd cycle:

**Data of 60 patients were collected and examined focusing mainly on 4AT tool 2 months after implementation of changes.**




## Outcomes:

- **Increased awareness and screening usage.**
- **Education and training on the impact of delirium and the importance of 4AT for screening.**
- **Follow-up assessment allowing for evaluation of the effectiveness of the interventions, emphasizing delirium assessments, the audit contributes to patient safety and the overall quality of care.**

**References**

1. https://www.nice.org.uk/guidance/cg103/chapter/Recommendations#assessment-and-diagnosis

**Acknowledgement**

**Dr. Savithri Gunasekera, Consultant Geriatrician, Frimley Park Hospital.**