

Cognitive Impairment in Patients
Admitted to the Inpatient Unit:
do we screen patients for it?

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Background: incidence

- Common clinical problem in palliative care
- Incidence 26-44% in reported studies
- Prospective study at BHOC 54%
- Incidence rises as patients deteriorate
- 83% in final days
- Potentially reversible in 50%
- Not detected in 22-50%
- Comparison with baseline crucial

Background: risk factors

- Increasing age
- Cognitive status: dementia, depression
- Functional status: immobility, falls
- Sensory impairment
- Decreased oral intake
- Drugs
- Co morbidities
- Precipitating factors: infection, anaemia, pain, sleep deprivation, neurological events etc..

Screening Tools

- Mini-mental state examination
 - Abbreviated mental test score
 - Confusion Assessment Method
 - Memorial Delirium Assessment Scale
 - Confusion Rating Scale
 - Clock Drawing Test
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- Vary in ease of use, operator training, time to complete

Prevention of Delirium- HELP Programme

- Familiar objects
- Clock/newspapers/calendars
- Orienting conversation
- Day/night clarity
- Sleep enhancement
- Limit room and staff changes
- Early mobilisation
- Hearing aids and glasses
- Maintain usual routine for meals/medication
- Prevent dehydration
- Address reversible causes early

Audit Proposal

- A retrospective review of notes of all admissions to Brentry Inpatient Unit in October 2007
- Was there any evidence of screening for cognitive impairment using any recognised method?
- Of those identified with cognitive impairment was there any evidence of implementation of a nursing care plan for confusion?

Standards

1. All patients admitted to the inpatient unit should have documented evidence of having been screened for cognitive impairment using a recognized screening tool, unless they are unable to complete this
2. All patients found to have cognitive impairment should have a confusion care plan followed

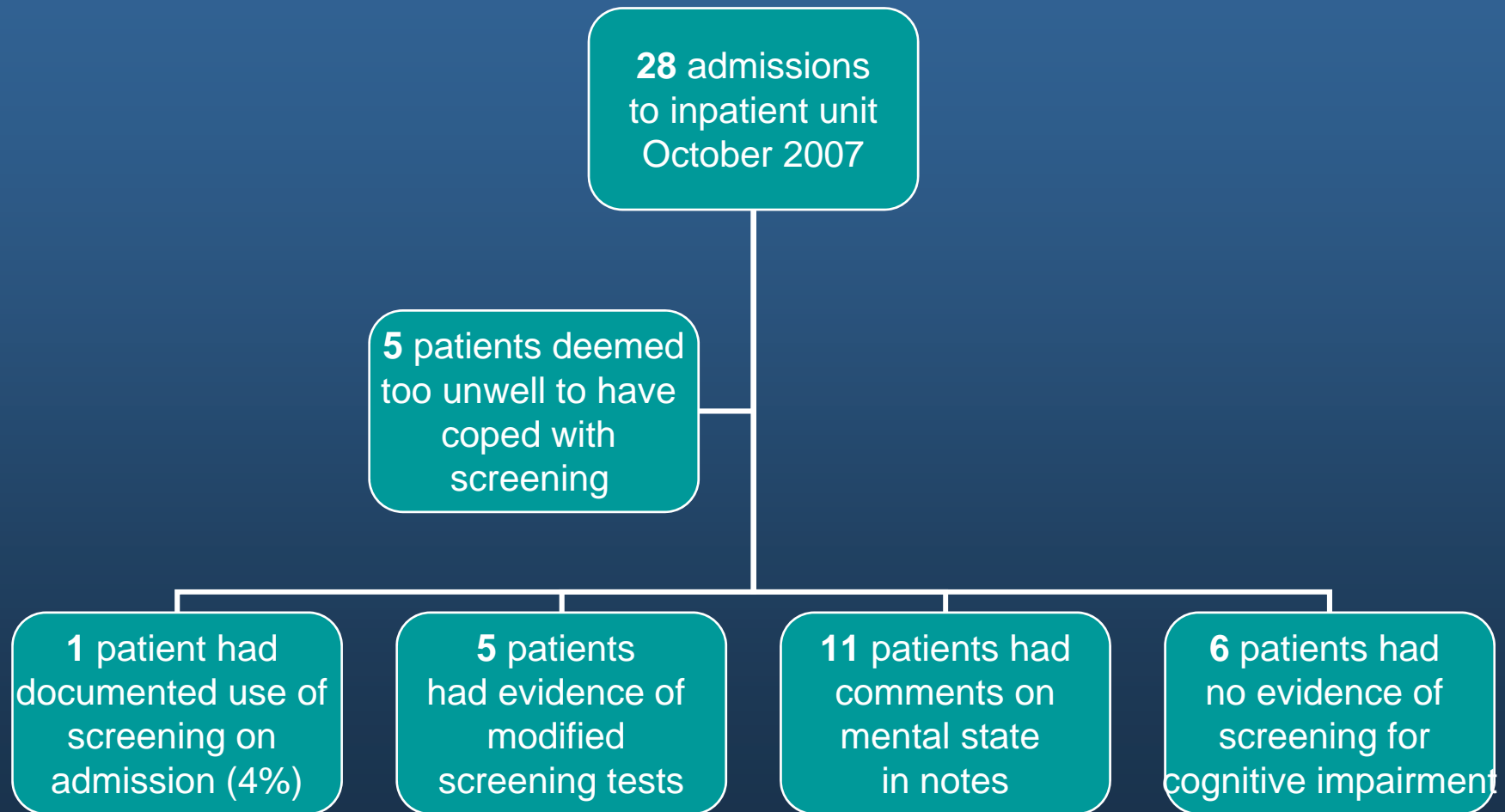
Justification for Standards

- No published guidelines but:
- Known high prevalence
- Known poor detection rate
- Known associated high risk to patients
- Known associated high cost to providers
- Several papers recommending screening to compliment good practice

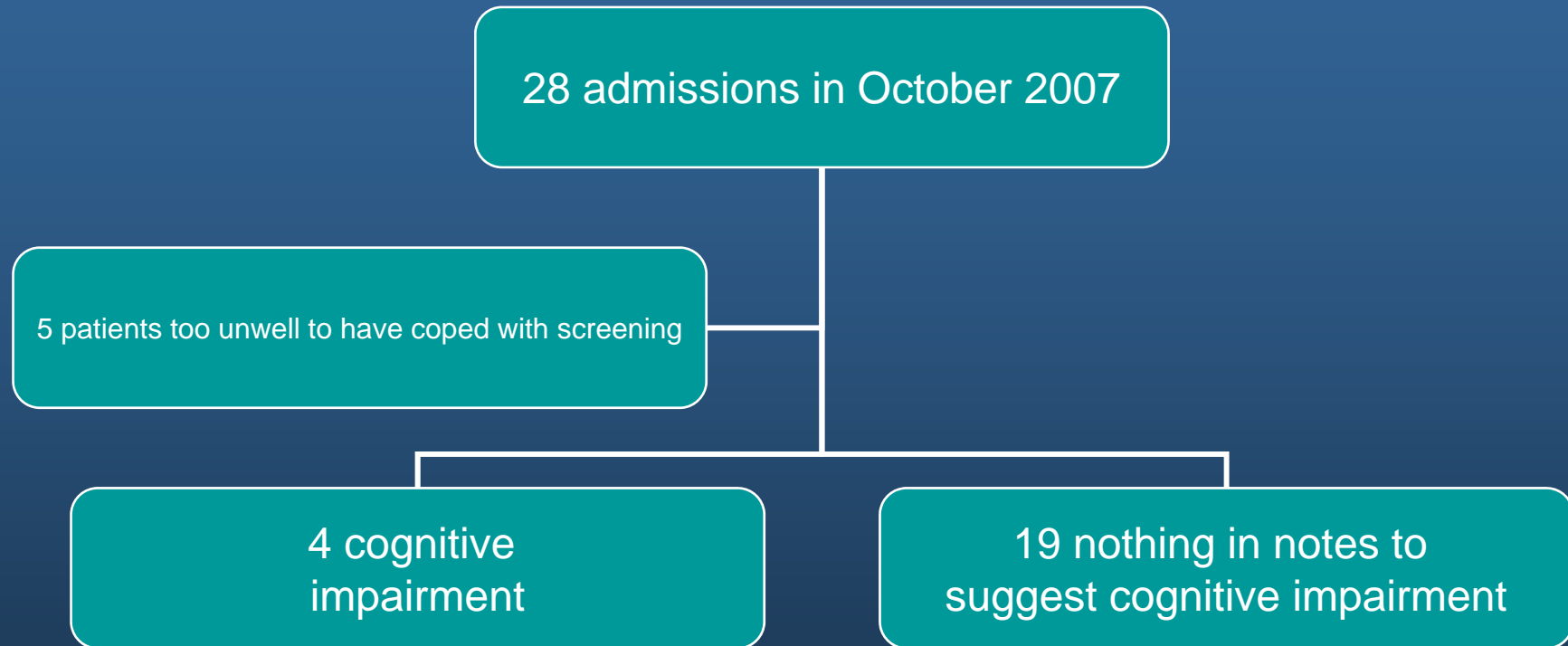
Methods

- Patients identified from admissions book
- Notes reviewed for evidence of:
 - 1.Documented use of screening tool to identify cognitive impairment
 - 2.Any entries to suggest cognitive impairment
 - 3.Inclusion of completed confusion care plan in notes

Results: Screening Tools



Results: Cognitive Impairment



Of the 4 with cognitive impairment, only 1 patient (25%) had evidence of a confusion care plan in notes

Implement Change

- Discussion at Clinical forum:

Screen all patients on admission

Include screening tool in admission notes

- Which screening tool?

- Clock drawing test chosen

Clock Drawing Test: Pros

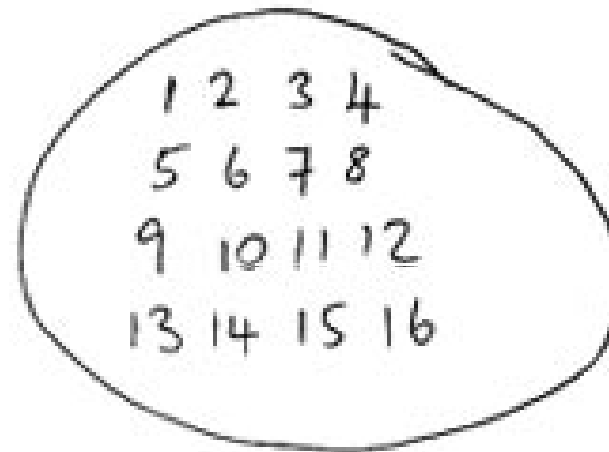
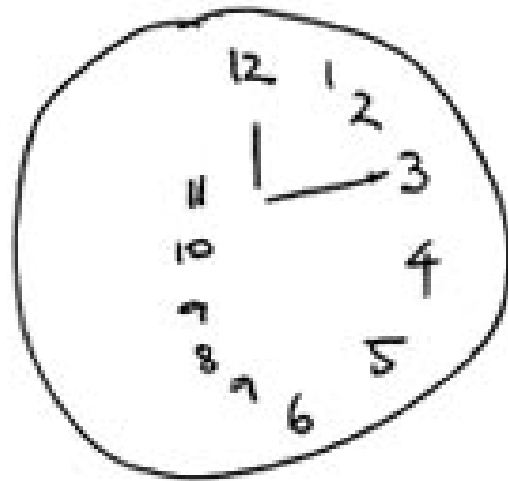
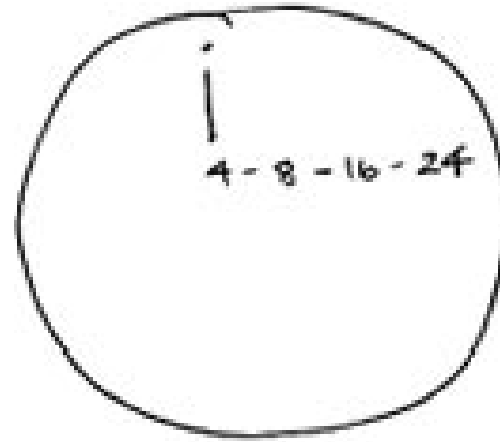
- Quick
- Simple
- Validated in many settings
- Correlates well with MMSE scores
- High specificity 0.96
- High sensitivity 0.86
- High negative predictive value 0.93
- Not affected by IQ, language, mood, culture

Clock Drawing Test: Cons

- Many scoring systems available so need to be clear which system is in use
- Unsuitable for those with upper limb dysfunction
- Unsuitable for those with marked visual impairment

Clock Drawing Test: Instructions

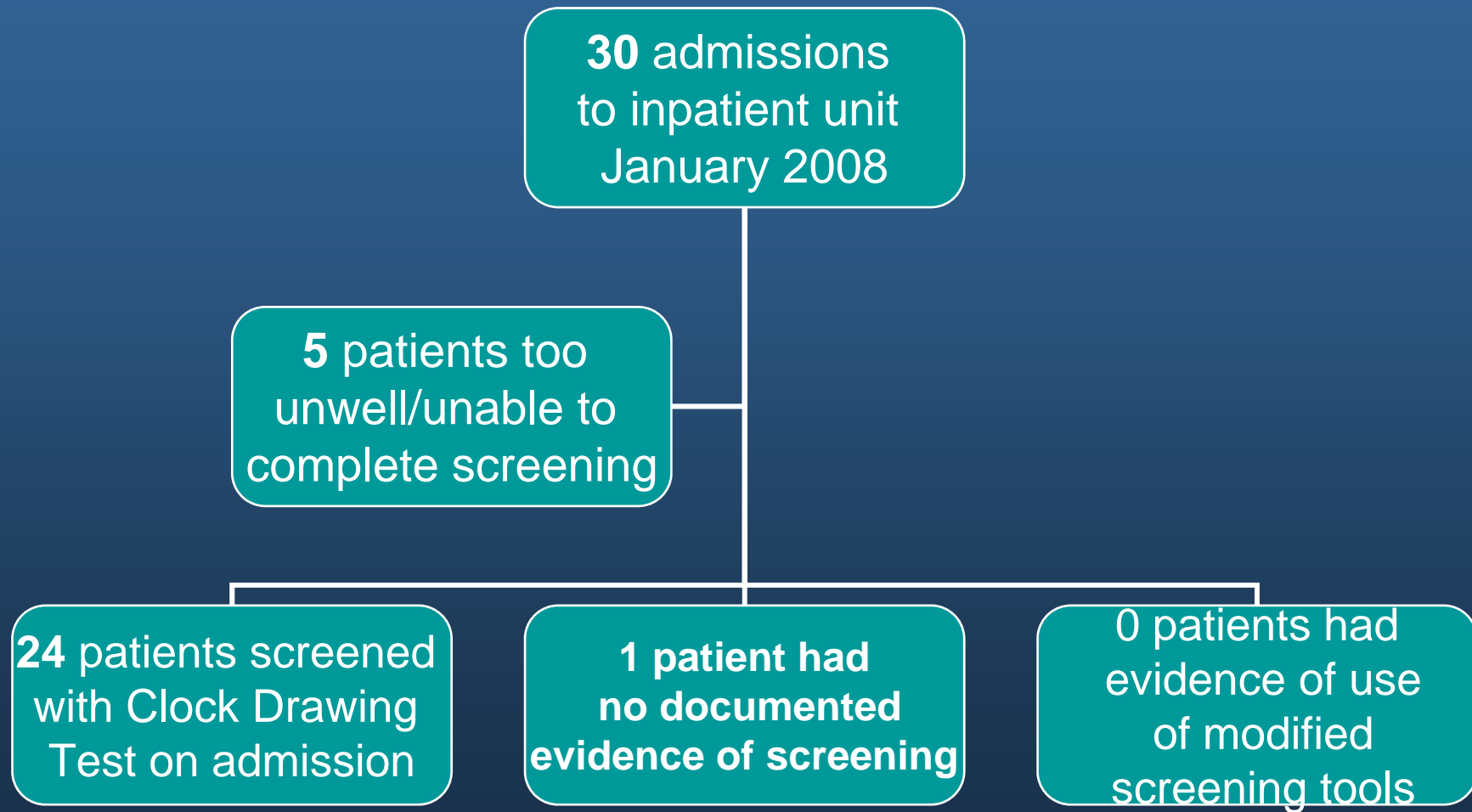
- Ask patient to draw face of clock
- Ask patient to draw in hands of clock showing a specified time eg 10 to 2
- Repeat instructions as needed UNTIL patient has started drawing
- Do not cover watches/clocks
- Abnormal result is score of 3 or more as per Shulman scoring system



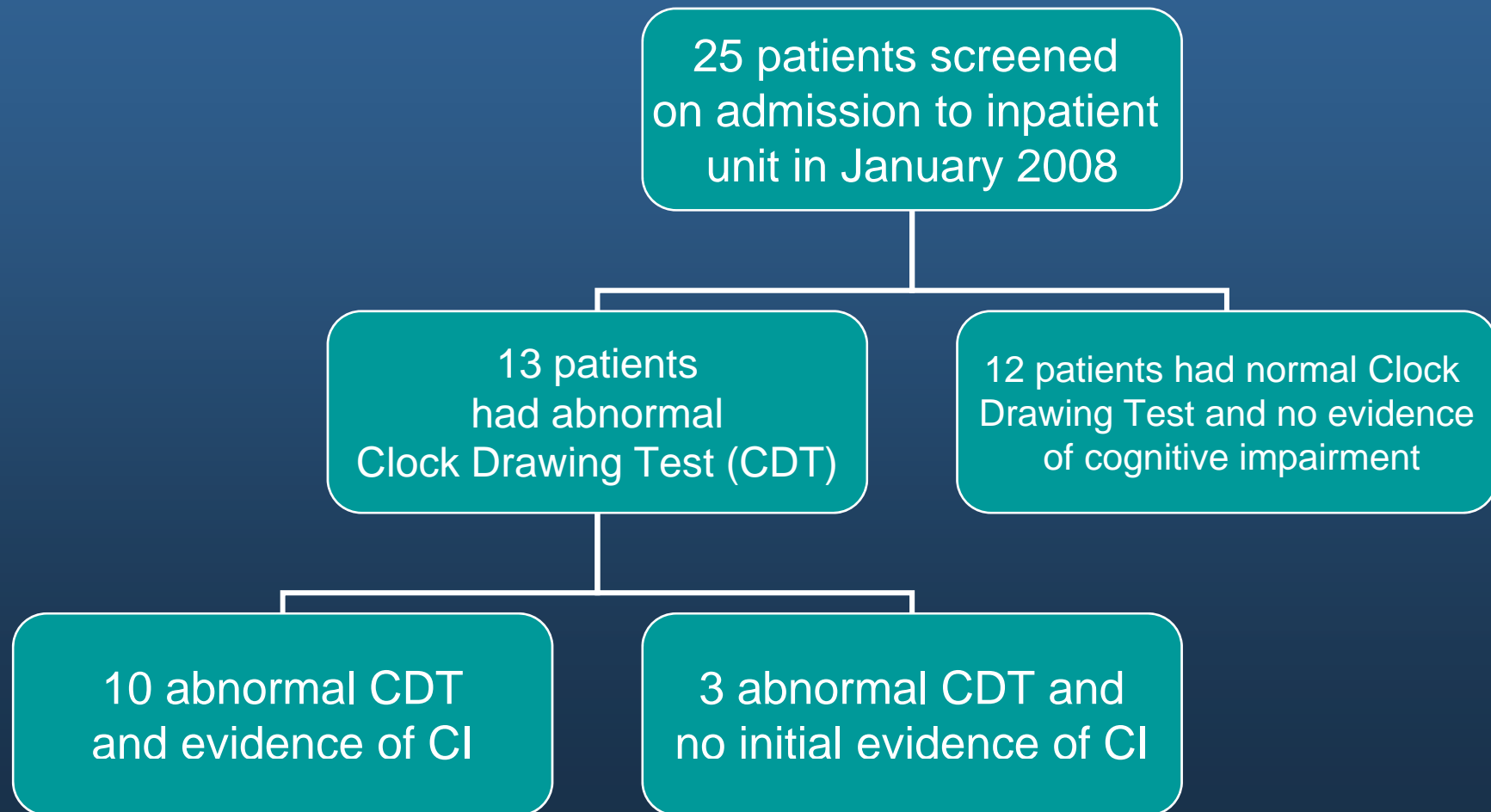
Re-Audit Proposal

- A retrospective review of notes of all admissions to Brentry Inpatient Unit in January 2008
- Was there any evidence of screening for cognitive impairment using Clock Drawing Test?
- Of those identified with cognitive impairment was there any evidence of implementation of a nursing care plan for confusion?

Re-audit results: screening



Re-audit results: cognitive impairment



Re-audit results: cognitive impairment

10 patients with evidence of cognitive impairment

3 patients had confusion care plan in notes (30%)

7 patients had no evidence of confusion care plan

Results versus standards

Criteria	Standard	Results – October 07	Results – January 08
100% of admissions not meeting exclusion criteria to be screened for cognitive impairment	100%	4%	96%
100% of those patients identified as being cognitively impaired to have a confusion care plan completed	100%	25%	30%

Further changes from re-audit

- Amended wording on CDT sheet
- SCORE:
 - If >3 , initiate management plan to identify reversible causes
 - If >3 , inform nurses to implement confusion care plan
 - Confusion care plan implemented