

# Is there a correlation between length of stay (LoS) in the Emergency Department (ED) and the occurrence of delirium in hospitalised patients?

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## Aims

Delirium is a serious and common complication in older hospital patients, linked to higher mortality, longer stays, and increased care needs. ED factors like noise, crowding, and delays may trigger it. This audit explored whether ED length of stay (LoS) is linked to delirium during hospitalisation in patients aged 65+. Findings aim to guide practice changes to reduce delirium risk and improve outcomes in acute care.

## Methods

A retrospective audit was carried out at a Scottish NHS hospital over two weeks in February 2023. Of 1247 ED attendances by patients aged 65+, 599 were admitted and included in the analysis. Data collected included triage time, admission decision time, ED length of stay (LoS), and delirium incidence in ED and during hospitalisation. Documentation of assessments (e.g. 4AT, Clinical Frailty Score) was also reviewed. Data was analysed to explore links between ED LoS and delirium.

## Results

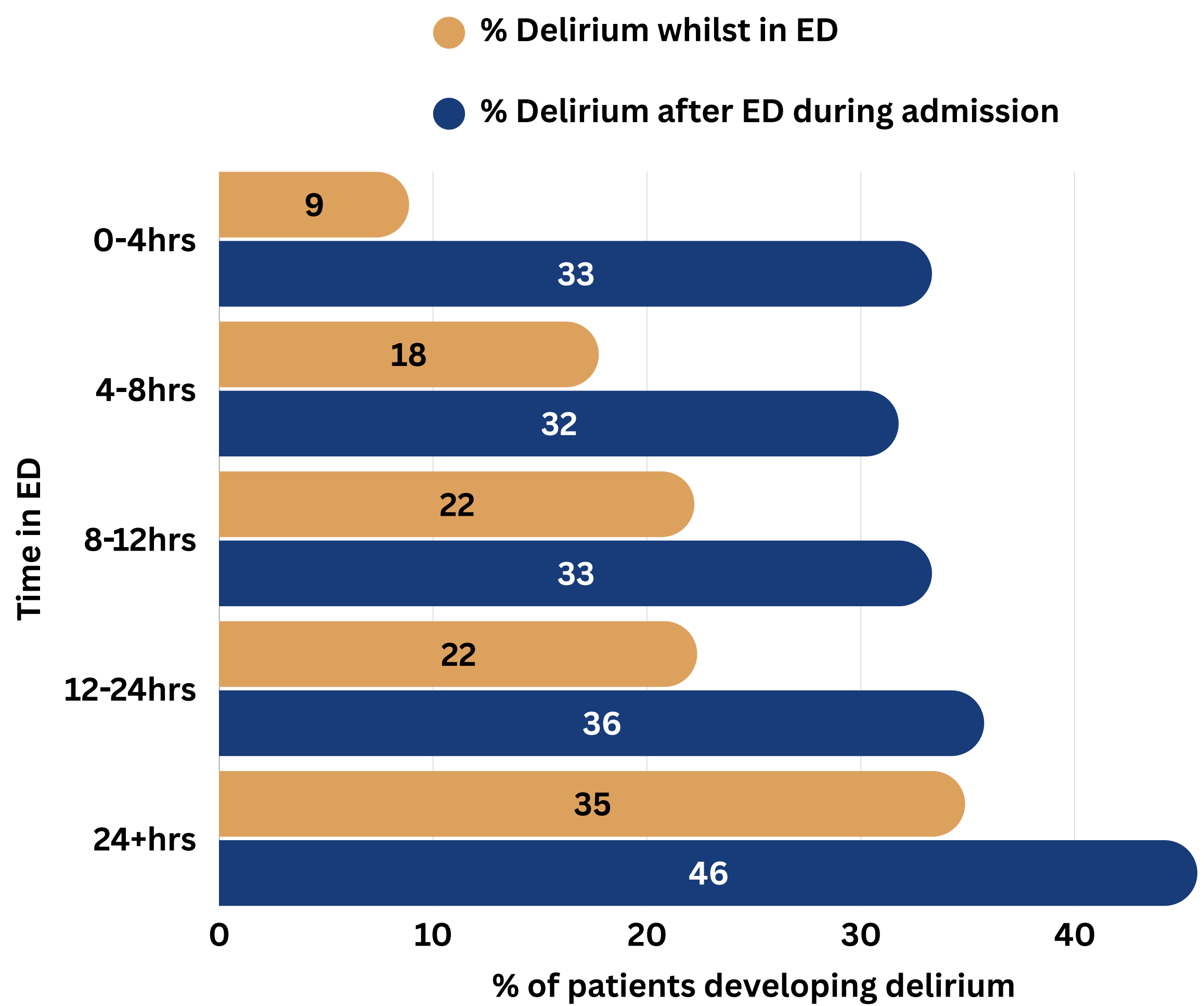
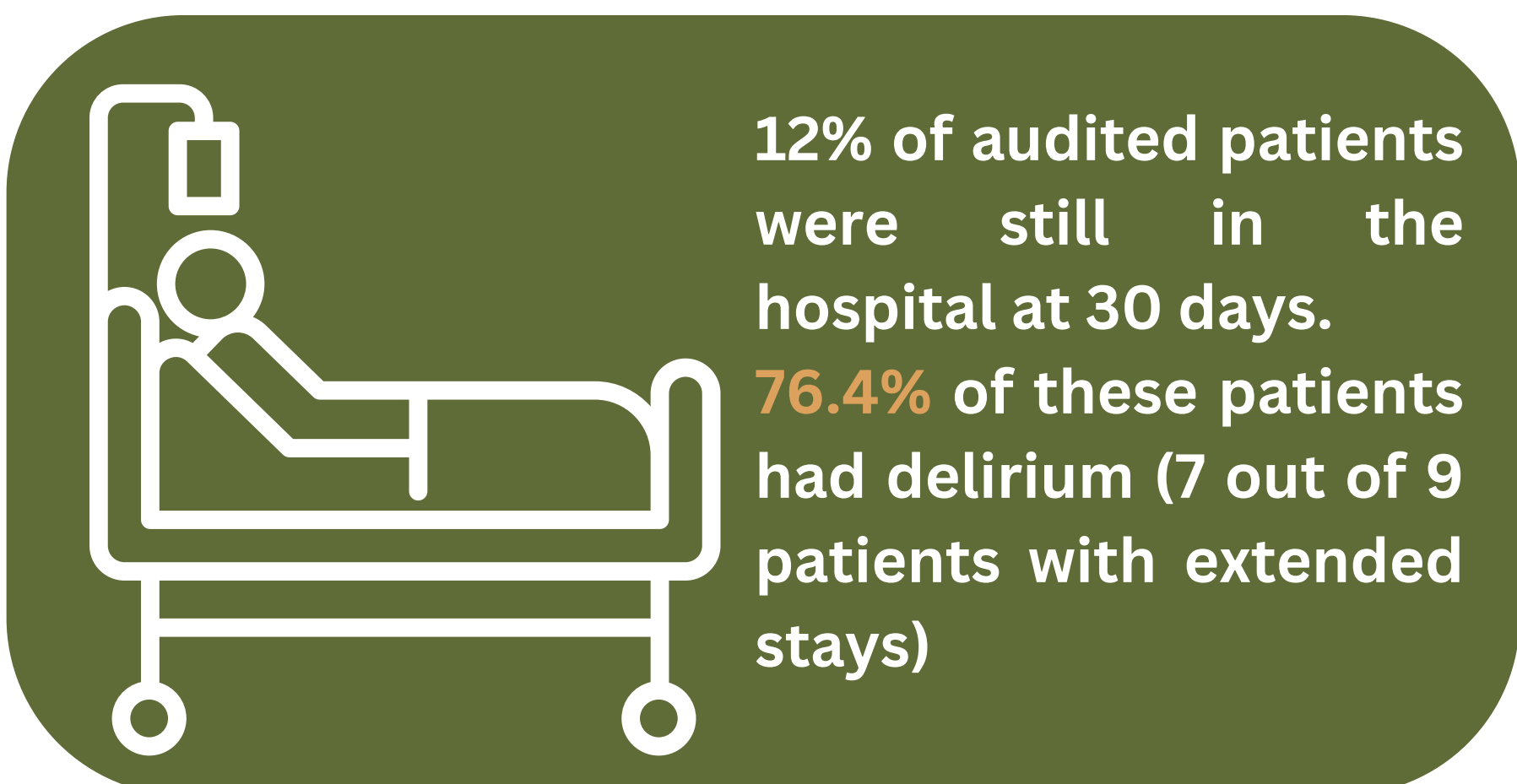
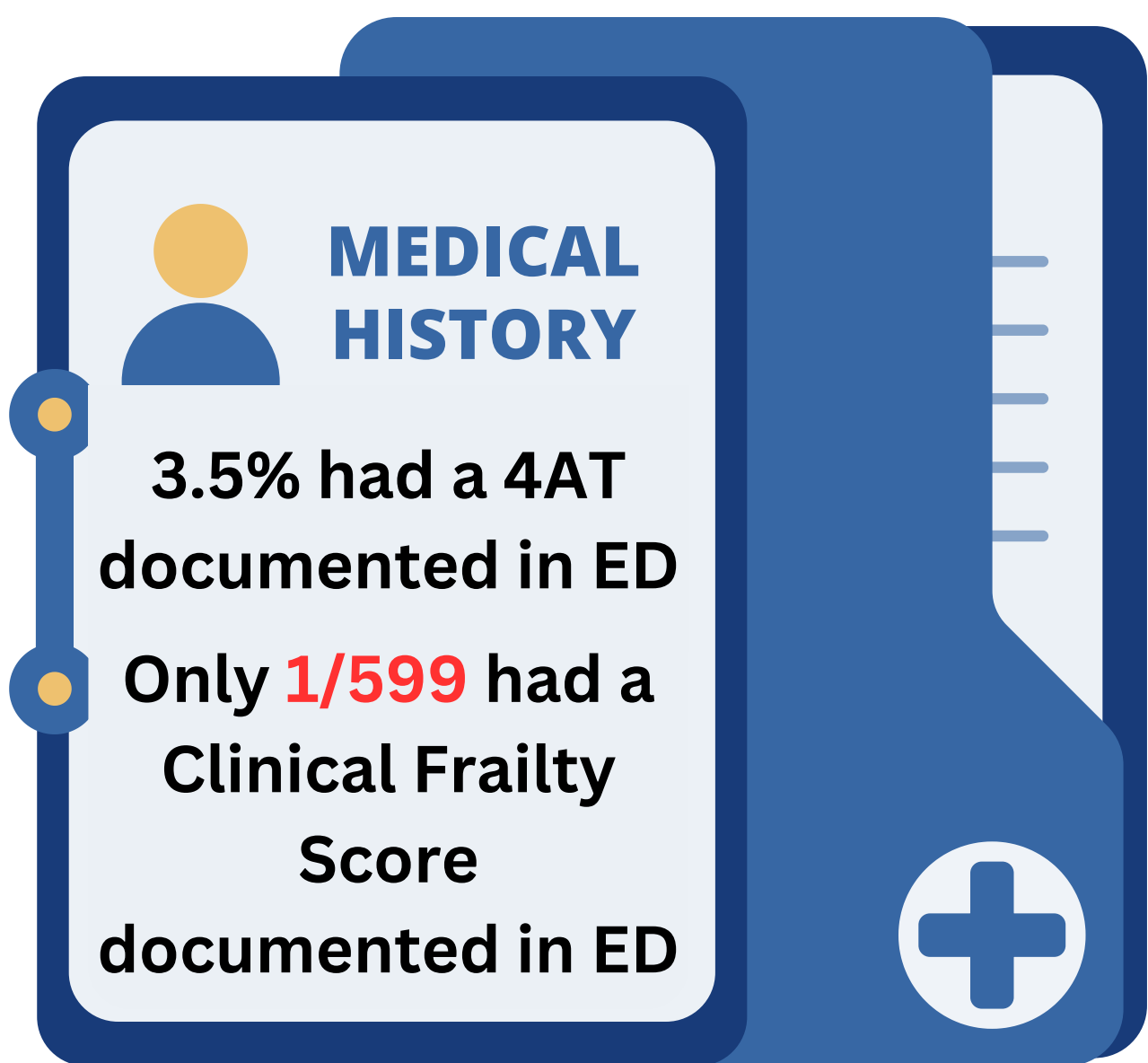
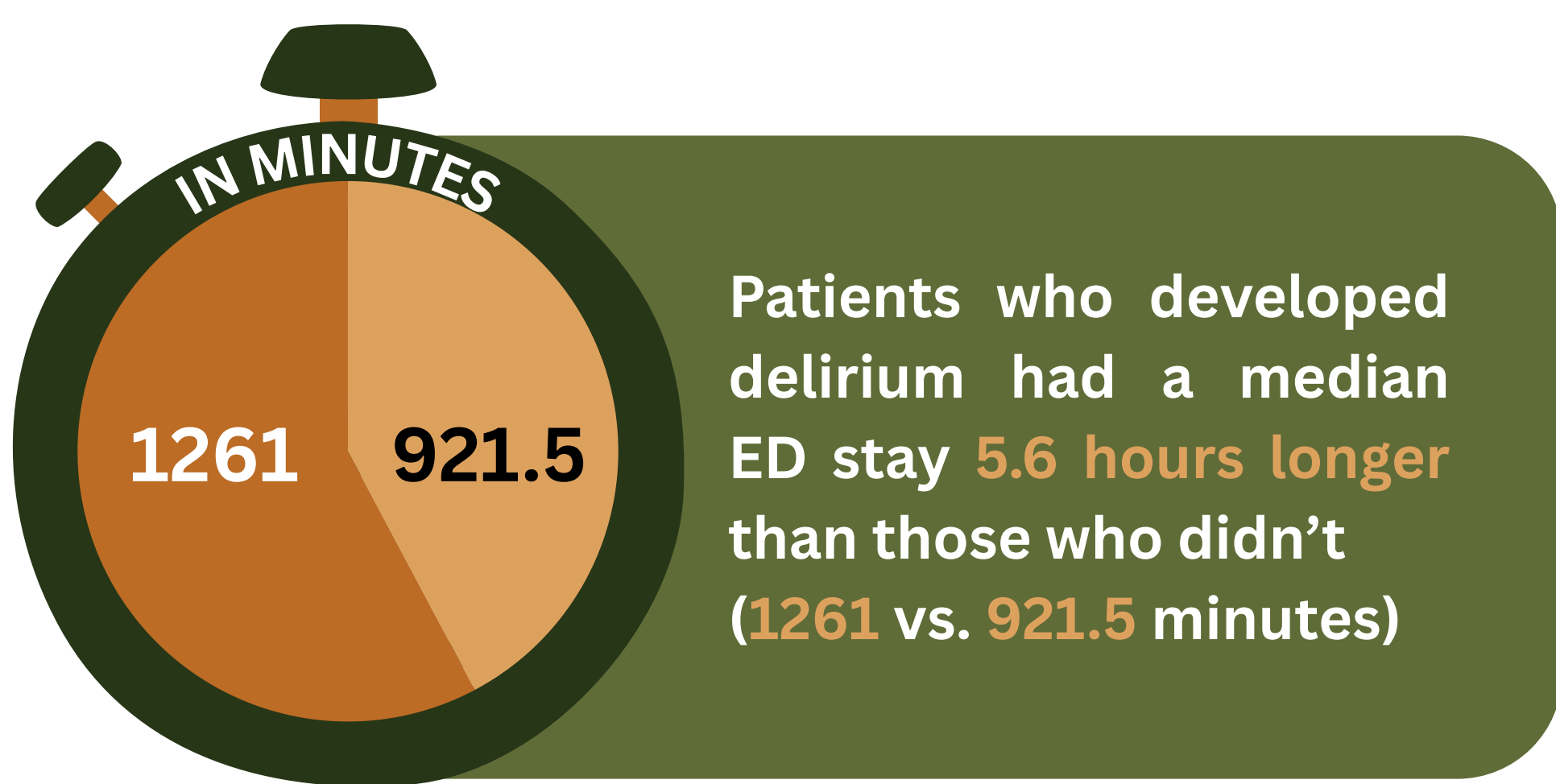
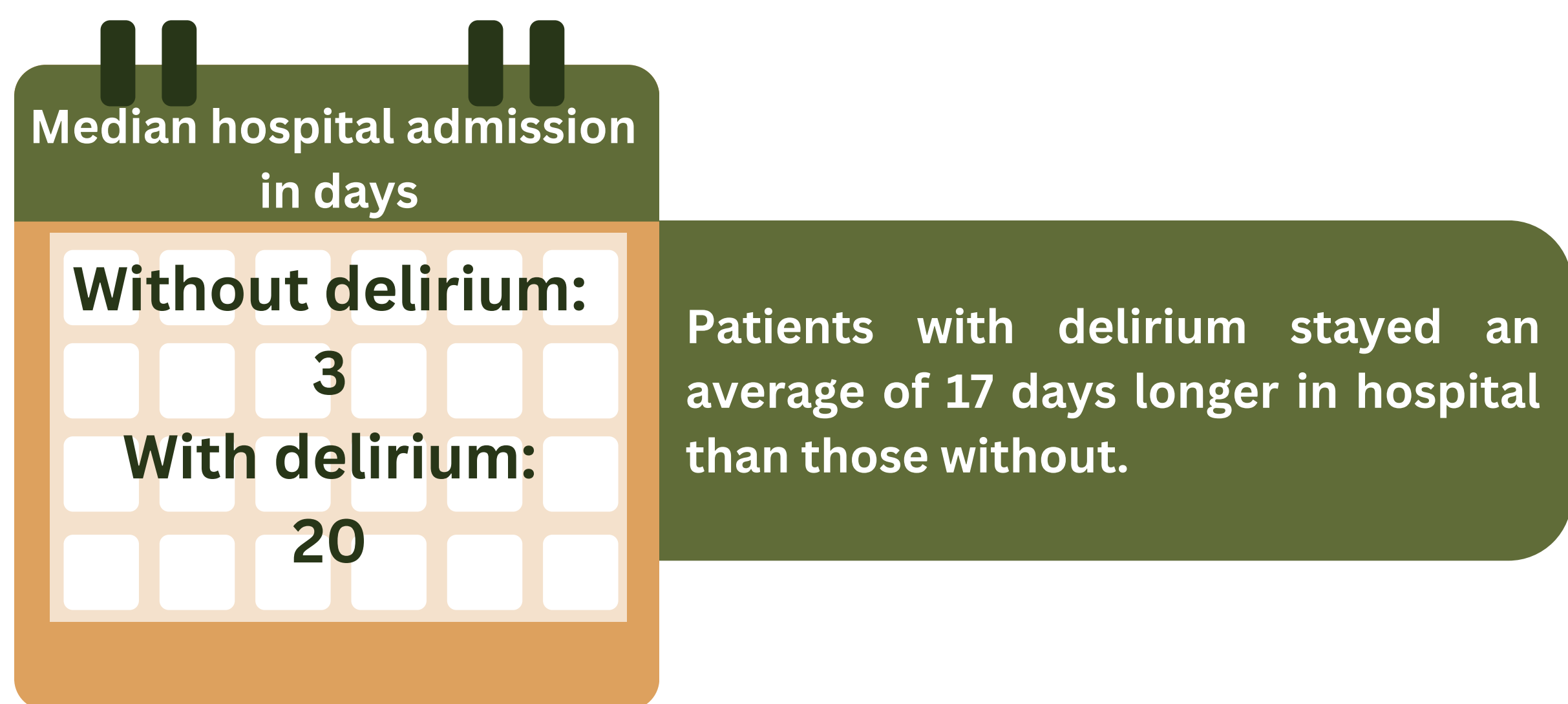


Figure 1. Relationship between ED LoS and Delirium Onset in ED vs. Inpatient Care



Mortality during index hospitalisation was **9% (54 patients)**; of these, **64.8%** had delirium.

## Conclusions

Prolonged ED stays were linked to higher delirium risk during hospitalisation. Despite this, delirium screening was rarely documented—only 3.5% had a 4AT score and just one had a Clinical Frailty Score. These gaps highlight the urgent need for better screening, prevention, and staff training in the ED. Implementing tools like 4AT and CFS could boost early detection and improve outcomes. A follow-up audit is recommended to track progress and impact.