

# Psychosis Patients' Treatment with Medication within 2 days during wait in A&E, and its correlation with length of Inpatient Stay: A Retrospective Database Study

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## BACKGROUND

NICE guidance outlines **reducing hospital stay for psychiatric patients** as one of the 'critical goals' for liaison services [\*]. Psychotropic medication is an important tool in psychosis treatment, although research that determines the **efficacy of early administration of medication** is limited.

## AIMS AND HYPOTHESIS

The aim of this project was to **assess the effects of early medication commencement** (within 2 days of arriving in A&E) on **length of inpatient stay for psychosis patients**. We hypothesized that psychosis patients who had medication started within 2 days of A&E wait-time would have shorter inpatient stays than those who did not.

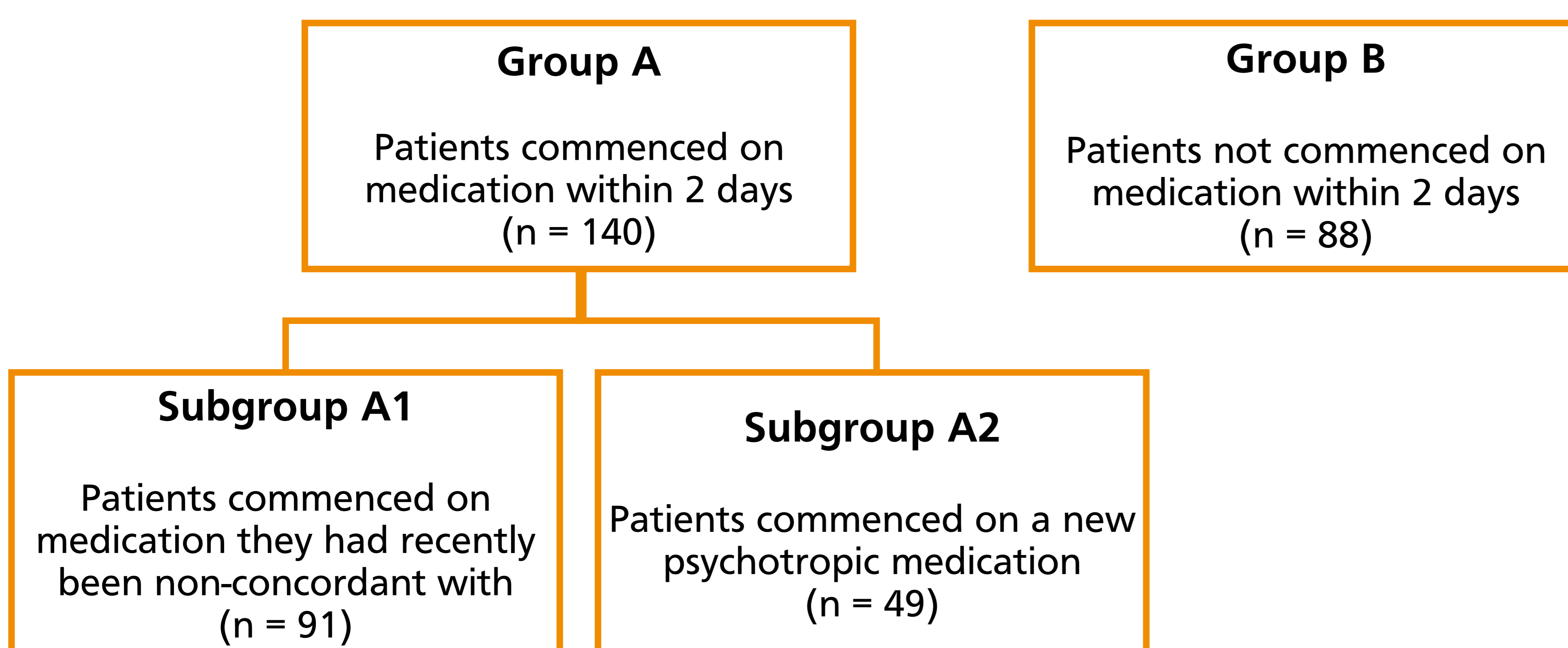


Figure 1. Flow diagram overviewing subgrouping of patients

## METHODS

We gathered data on patients presenting to South London and Maudsley (SLAM) NHS Trust A&E sites (King's College Hospital, St Thomas' Hospital, Lewisham University Hospital, and Croydon University Hospital) who were subsequently admitted to, and discharged from, a SLAM Trust bed with a final discharge diagnosis of a psychosis presentation between 1st Jan 2015 to 31st Dec 2020. The analysis set consisted of **228 patients, of which 140 patients were started on medication within 2 days of A&E wait (group A), and 88 were not (group B)**. (See Figure 1.)

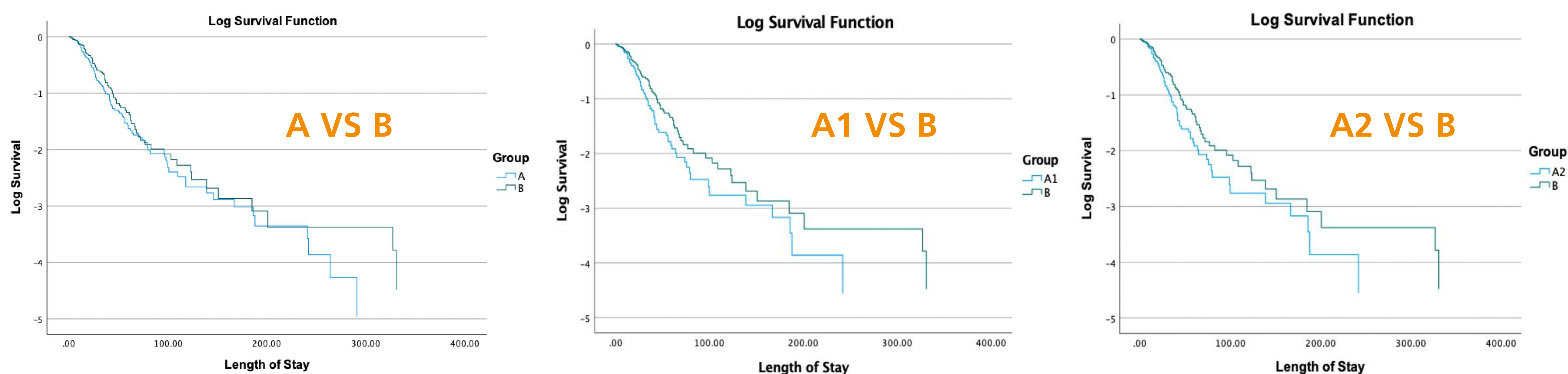


Figure 2. Kaplan-Meier survival plot for time to discharge between groups A and B, A1 and B, and A2 and B respectively.

## RESULTS (See Figure 2.)

**Kaplan-Meier survival curves with log-rank tests** determined that although group A had a shorter inpatient stay than group B, this was not statistically significant ( $p = .214$ ). Further analysis revealed that the **subgroup A1 (who were, while in A&E, restarted on the medication they had recently been non-concordant with;  $n = 91$ ) had a significantly shorter length of stay than group B ( $p = .05$ )**. While commencing psychotic patients on a novel medication (A2) has some effect on reducing the duration of inpatient admission, the effect did not reach statistical significance.

## CONCLUSION

The results suggest that **restarting a psychosis patient on the medication they were recently taking, within 2 days of arrival at A&E, is associated with a shorter inpatient stay**. The limitation of a relatively small sample size should be addressed in future research.

## REFERENCE

\* <https://www.nice.org.uk/guidance/ng94/documents/draft-guideline-23>