

Background

Alcohol withdrawal syndrome (AWS) is recognized to be a common complication in patients with alcohol use disorder (AUD) who are admitted to the general hospital setting. The rate of occurrence of AWS is reported to be 8 – 11%^{1,2} during general hospital admissions, however detailed audit data is scarce. This is in part due to the variable definition of AWS and its severity. A number of protocols have been proposed to improve this definition including the Glasgow Modified Alcohol Withdrawal Scale (GMAWS)³, which quantifies the severity of a patient’s symptoms and guides frequency and dosing of benzodiazepine treatment. A GMAWS score of >3 is classified as severe alcohol withdrawal syndrome (SAWS). The aim of the present study was to examine the relationship between admission characteristics, severity of alcohol withdrawal and requirement for treatment in consecutive patients presenting to a busy inner city Emergency Department (ED).

Methods

A retrospective case note review of all patients admitted via the Emergency Department at Glasgow Royal Infirmary between the 1st-31st January 2015 was performed. Each attendance where notes were available was recorded as a unique admission (n= 2,105). Notes were screened for presence of a GMAWS chart, indicating that the patient was judged to be at risk of AWS by a healthcare professional during that admission. An unselected group of patients who did not have GMAWS assessment recorded were taken as a control group.

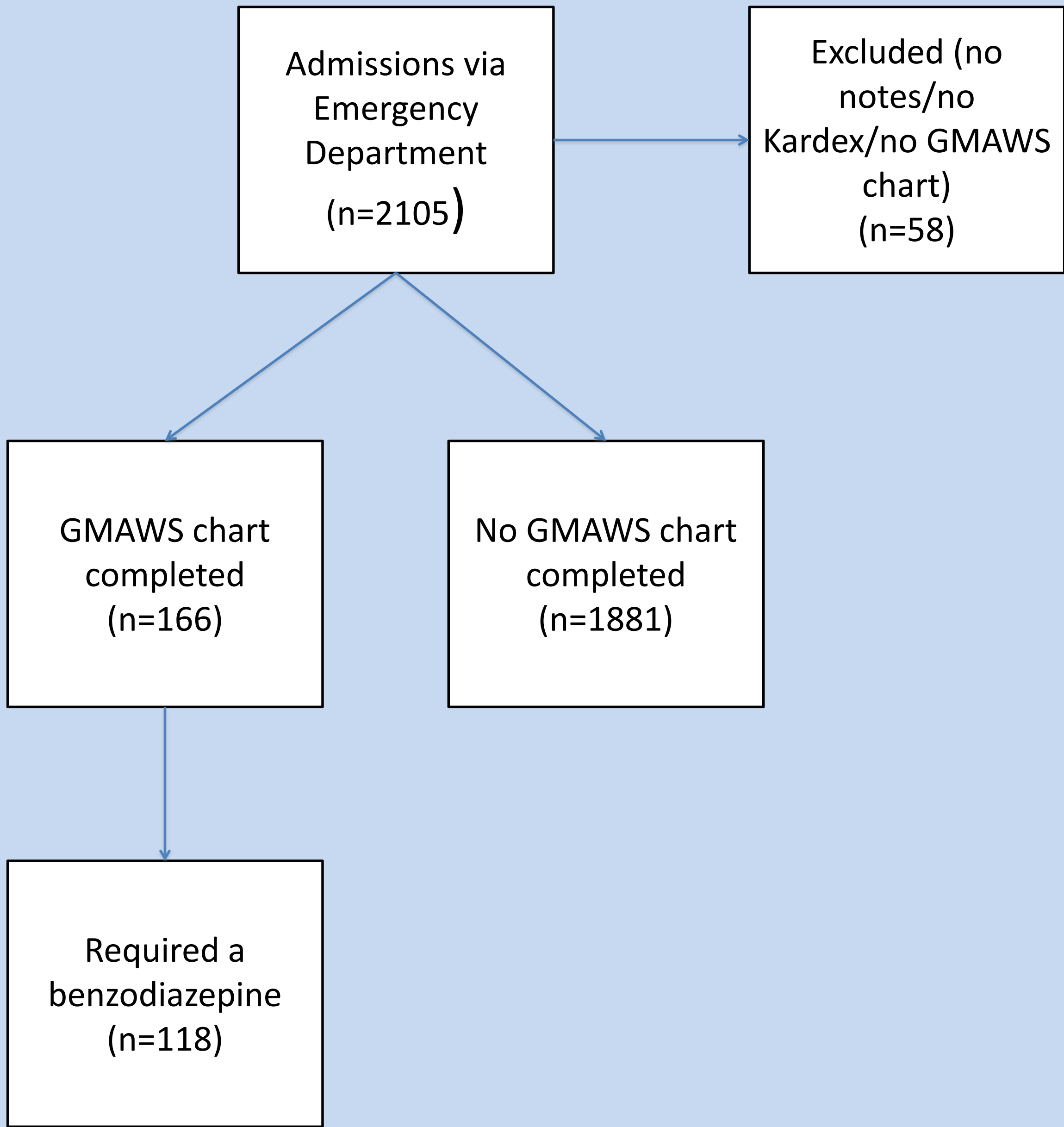


Figure 1. Enrolment method

References

1. The course of alcohol withdrawal in a general hospital. Foy, A. Kay, J. Taylor, A. 1997, QJM: An International Journal of Medicine , Vol. 90, pp. 253-261.
2. Quantification of the alcohol withdrawal syndrome in 487 alcoholic patients. Benzer, D. 7, 1990, Journal of Substance Abuse Treatment, pp. 117-123.
3. NHS Greater Glasgow and Clyde. Adult Therapeutics Handbook: Management of Alcohol Withdrawal Syndrome. 2018.

Results

GMAWS assessment was performed during 166 of the 2,105 (8%) admissions. Compared with the control group (n=166) those patients who underwent GMAWS assessment were more likely to be under the age of 65 years (p<0.001), were male (p= <0.001) and were more deprived as categorized by the Scottish Index of Multiple Deprivation (SIMD) (p=0.003). In those patients who underwent GMAWS, the median score was 3 (0-8). Of those who underwent GMAWS assessment 70% (n=118) received treatment with a benzodiazepine. All patients with a GMAWS >3 received treatment with a benzodiazepine (p<0.001). When those patients who received benzodiazepines were compared to those who did not there was no significant difference in age (p=0.849) and deprivation according to SIMD (p=0.112). However, more males received benzodiazepines (p=0.018) independent of a GMAWS >3 (p=0.08).

Discussion/Conclusions

AWS severe enough to require administration of a benzodiazepine occurred in 6% of admissions of patients admitted via ED. The majority of patients who underwent GMAWS assessment were under the age of 65, male and more deprived when compared with a control group. Requirement for administration of a benzodiazepine was strongly associated with a GMAWS >3 and male gender but was not dependent on age or deprivation.