# IS THE MANAGEMENT OF ACUTE INTRACEREBRAL HAEMORRHAGE (ICH) GETTING ANY BETTER IN THE UK? DATA FROM THE UK NATIONAL STROKE REGISTRY

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# Background

Intracerebral Haemorrhage (ICH) represents 12% of all acute strokes in the UK and affects more than one million people worldwide annually. Two key hyperacute interventions are blood pressure lowering and anticoagulation reversal.

# **Methods**

Data were extracted from the Sentinel Stroke National Audit Programme (SSNAP), the UK national register of stroke covering 92% of the population, with a case ascertainment of 95% of acute hospital admissions. We evaluated the two time-critical evidence-based interventions of systolic blood pressure (SBP) lowering to 140mmHg within 1 hour, and urgent anticoagulant reversal for those using Direct Oral Anticoagulants (DOACs) or a Vitamin K antagonist, between December 2017 and September 2019.

# Results

Of 20,014 ICH patients admitted to UK hospitals over the study period, 7,759 were eligible for SBP lowering and 4,297 were on either a DOAC or a vitamin K antagonist/warfarin anticoagulation. Median [IQR] age was 78 years [68 -84], and 50% were female.

5,075 (65%) of eligible patients received SBP lowering treatment within 6 hours of hospital arrival. Median [IQR] time from treatment to SBP target (140mmHg) decreased slightly and non-significantly from 114 minutes [IQR 49-305] to 107minutes [IQR 48-272] over the study period (P=0.14). 298 (5.9%) eligible patients had SBP of 140mmHg achieved within 1h of arrival over the study period. 2,307 (54%) of eligible ICH patients received anticoagulation reversal. Median time from hospital arrival to reversal remained unchanged (157 min [IQR 85-299] to 158 min [IQR 83-293]) over the study period (P=0.76).



### Time from treatment initiation to target BP achieved

#### Time from hospital arrival to anticoagulant reversal





# Conclusions

Approximately one third of eligible ICH patients are not receiving blood pressure lowering treatment, and timings are suboptimal, although this observation may partly reflect appropriate exclusions from treatment. Nearly half of patients with anticoagulant-related ICH are not receiving reversal treatment, and those that do are receiving it on average more than two and a half hours after hospital arrival. Given that mortality and outcomes for ICH patients in the UK have changed little over recent years, further quality improvement in hyperacute ICH care is needed if disability and mortality outcomes are to be improved.

#### Acknowledgements

We are very grateful to all of the individuals and organisations who participate in SSNAP. SSNAP is funded by NHS England and Wales.