Alcohol Withdrawal in the Acute Medical Unit
An audit to inform the development of an alcohol care bundle

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Background
Alcohol dependence is common among people attending emergency departments (ED) and admitted to medical wards. In 2015 we estimate that >400 people with alcohol dependence were admitted to medical wards at Northwick Park Hospital.

Our hospital has alcohol withdrawal management guidelines based on NICE standards (PH24, CG100, CG115). However, as in any acute hospital, optimal alcohol withdrawal management is challenging due to high admission volume, large staff numbers & treatment priorities.

An earlier audit found that 8/26 patients developed delirium tremens during admission and only 10/26 were examined for signs of Wernicke’s encephalopathy. Consequently the Alcohol Care Team (ACT) has to advise on medical management of alcohol withdrawal, which limits the time available for the ACT to deliver psychosocial interventions.

Project Overview
We are developing a care bundle to improve the experience of care & long term well-being of hospital in-patients with alcohol dependence. This includes guidelines, a checklist and alcohol withdrawal observation chart. Our intended outcomes include:

1. Improved prescribing of Chlordiazepoxide and Pabrinex
2. Used of a validated alcohol withdrawal scale (AWS)
3. More timely and more appropriate referral to ACT
4. Reduction in the incidence of complications in hospital

In April 2016 we launched a trial version of our Alcohol Care Bundle on the four acute assessment unit wards (AAU). We used Plan-Do-Study-Act (PDSA) cycles to refine the bundle according to feedback. This audit was designed to inform development of the care bundle and help develop our approach to monitoring outcomes.

Objectives
1. To audit current alcohol withdrawal management against recommendations.
2. To evaluate accuracy of hospital coding as a means of case identification for monitoring outcomes.

Methods
Case notes were audited for all patients who were admitted to an acute assessment ward and referred to the ACT between 31 March 2016 and 08 June 2016.

To evaluate coding accuracy, lists of patients who received an alcohol-attributable diagnostic code between the same dates were generated from the two LNW coding systems which serve the ED and medical wards. In the ED, cases were identified as “alcohol withdrawal” or “alcohol intoxication”. From the wards, alcohol-specific diagnoses were included, such as alcohol-related hepatitis, cirrhosis, pancreatitis, and gastritis. These two lists were compared to check whether patients received an alcohol-attributable diagnostic code on one or both lists. The lists were also compared to the list of patients referred to the ACT.

Findings
Forty-nine people were referred to the ACT. Thirty-seven were suitable for auditing. Twelve cases were not suitable because they did not require alcohol withdrawal management, self-discharged early, or were too ill. Of the 37 people, 21 were admitted to the AAU wards where the pilot was taking place and received alcohol withdrawal management and 16 were admitted to other wards.

Findings: Casenote Review
All 21 patients had alcohol care bundles in their notes. Thirteen had the care bundle started within 24h of admission. Fifteen were prescribed regular chlordiazepoxide and had alcohol withdrawal symptom charting within 24h of admission, with 10 also having chlordiazepoxide prescribed ‘as required’.

Eighteen were prescribed Pabrinex within 24h at doses consistent with hospital guidelines.

Findings: Coding of alcohol problems
In the ED, 216 received an alcohol-related diagnostic code, 40 of whom were subsequently admitted. On the medical wards, 233 received an alcohol-related diagnostic code. This included the 40 people who were coded in ED, plus a further 193 people who were admitted via the ED but did not receive an alcohol-related code.

Of the 233 inpatients who received an alcohol-related diagnostic code, 46 had a primary diagnosis of withdrawal or intoxication, 12 had a primary diagnosis of an alcohol-attributable medical condition such as cirrhosis or pancreatitis and 175 had alcohol-specific conditions as secondary diagnoses.

Among the 49 people referred to the ACT, 28 had an alcohol-attributable diagnostic code on the inpatient coding system. Eight of these also had an alcohol-related diagnosis code on the ED data system. Twenty-one people referred to the ACT did not receive an alcohol-attributable diagnostic code in either the ED or inpatient wards.

Discussion
Although uptake of the alcohol care bundle was high, adherence to guidelines was incomplete. Our work so far has focussed on developing the care bundle to be understandable and easy-to-use by clinical teams. We now need to consider interventions to increase uptake and adherence.

We also found inconsistencies in the recognition and coding of alcohol-attributable conditions: a large number of people who did not receive an alcohol-related diagnostic code in the ED went on to receive one on the wards, while 2/5 of people seen by the ACT did not receive an alcohol-related diagnostic code. Further work on improving recognition and coding accuracy is needed in order to use diagnostic codes to monitor outcomes such as length of stay or readmission rates.

The relatively low proportion of patients with alcohol-related conditions referred to the ACT may reflect the current focus on optimising medical alcohol withdrawal management. Further work on optimising medical management by inpatient clinical teams by means of the alcohol care bundle will allow the ACT to change focus to case identification and delivery of psychosocial intervention.