	Appraisal of quality of indicator for provisional CCG OIS
Indicator ref.: ALC43	**Indicator title:** Alcohol-related hospital admissions.
Key considerations for the NICE Committee	• The indicator is based on all alcohol-**specific** hospital admissions. • The alcohol-attributable fractions for England are available for all admissions in HES so it is possible to obtain all alcohol-**related** hospital admissions (see Scientific Validity). However, using fractions for readmissions in indicator ALC44 (Alcohol-related readmissions) would create issues with admission and readmission selection. To maintain consistency between the two indicators, it is proposed to use alcohol-specific hospital admissions for this indicator. • **Summary: the HSCIC view is that this indicator is feasible.**
Rationale	This indicator is based on the NICE Quality Standard 11: Alcohol dependence and harmful alcohol use, issued August 2011 http://guidance.nice.org.uk/QS11. Alcohol dependence and harmful alcohol use are associated with increased risk of physical and mental health comorbidities including gastrointestinal disorders (in particular liver disease), neurological and cardiovascular disease, depression and anxiety disorders and ultimately, premature death.
Suitability of indicator for purpose	Hospital Episodes Statistics (HES) will be used as the data source for the indicator. **Data Quality dimensions:** **Completeness** The overall coverage of the Admitted Patient Care HES dataset is deemed to very high as it has been flowing for many years. Completeness of individual fields with valid values within the dataset is also very high. For example, in the 2011/12 final dataset the level of population with valid values is: NHS number 98.7% and primary diagnosis 99.2%. It should be borne in mind that some of the valid values are more useful than others and vague categories such as “other” are valid for certain fields but not necessarily as useful. **Accuracy** There is no other national data set to compare against to obtain an overall quantitative estimate of accuracy. The data are completed from administrative records recorded by each Trust on their patient administrative system (PAS) with the clinical information added by clinical coders based on doctors’ notes. The Trusts are required to complete this information to inform how much they are paid under Payment by Results and the Audit Commission run a rolling programme of audits of organisations’ coding to check for accuracy. **Timeliness** The underlying data required for the construction of the indicator are available on a monthly basis around 4 – 5 months after the start of the month in which the attendance took place. The full year annual data refresh occurs around 8 months after the financial year end. **Accessibility** The underlying data are held by the HSCIC and are made available to customers via several mechanisms depending on their requirements. These include the publication of aggregated output; an extract service that covers both bespoke and routine extracts; and direct access via an interrogation tool to the underlying data for certain customers.

	Relevance CCGs could use this indicator to help raise awareness of the issue and when considering provision of public health education services.
What is measured	**Source of data** GP registered population, supplied by NHAIS (Exeter) and Hospital Episode Statistics (HES) Continuous Inpatient Spells (CIP), constructed by the HSCIC HES Development team. **Denominator** CCG level count of people registered with the constituent GP Practices. **Numerator** The number of admission spell records where the first episode contains a primary diagnosis of an alcohol-specific condition. See ICD-10 code descriptions below. ICD-10 diagnosis codes for heart failure are as follows: F10.- Mental and behavioural disorder due to use of alcohol E24.4 Alcohol-induced pseudo-Cushing's syndrome G31.2 Degeneration of nervous system due to alcohol G62.1 Alcoholic polyneuropathy G72.1 Alcoholic myopathy I42.6 Alcoholic cardiomyopathy K29.2 Alcoholic gastritis K70.- Alcoholic liver disease K86.0 Alcohol-induced chronic pancreatitis O35.4 Maternal care for (suspected) damage to fetus from alcohol T51.0 Toxic effect of alcohol, Ethanol Z50.2 Alcohol rehabilitation Z72.1 Problems related to lifestyle, alcohol use Or any first episode with a primary diagnosis of O99.3 (Mental disorders and diseases of the nervous system complicating pregnancy) combined with any one of the secondary diagnoses as follows: F10.- Mental and behavioural disorder due to use of alcohol G31.2 Degeneration of nervous system due to alcohol G62.1 Alcoholic polyneuropathy G72.1 Alcoholic myopathy Nb. Primary diagnosis is used in the indicator in order to capture alcohol-specific admissions only. Should it be decided to pursue the alcohol-attributable fractions method (see Scientific Validity); this would take all diagnoses into consideration to provide an alcohol-related admissions indicator.
How data are aggregated	This indicator calculates the rate per 100,000 of admissions per CCG for an alcohol-specific condition.
Risk adjustment	It is proposed for this indicator to be directly standardised by age and sex for the England population, in order to facilitate comparisons between CCGs that have different population structures. This will ensure consistency with other similar CCG OIS indicators (e.g. 1.8 Emergency admissions: Alcoholic liver disease).

Scientific validity	There may be local variation in data quality, particularly diagnostic and procedure coding. We propose to use alcohol-specific hospital admissions for this indicator but we have also investigated using alcohol-attributable fractions. Almost every type of admission could have a link to alcohol consumption and the alcohol-attributable fractions assign an attributed fraction to diagnosis codes to indicate the likelihood that alcohol was the cause, providing an indication of the public health effects of alcohol. The alcohol-attributable fractions for England (developed by the North West Public Health Observatory, details available at this link) are available for all admissions in HES. Using alcohol-attributable fractions could be suitable for this indicator, but if both this indicator and ALC44 are recommended for inclusion in the CCG OIS the two methods should be consistent; therefore we recommend that this indicator is constructed using alcohol-specific conditions as listed in the numerator. There are sufficient volumes of activity to enable monitoring at CCG level. HSCIC would recommend using ages 10 and above in the indicator as the 0-9 age group consists of very small numbers, which will impact on the robustness of any standardisation calculation. This aligns with Quality Standard 11.
Interpretation	A low rate is desirable. The data can support a variety of ways of identifying outliers including confidence intervals and control limits.
Equality assessment	The following fields are available in HES which would support analysis by the following equality dimensions: Age Gender Ethnicity Deprivation (using Index of Multiple Deprivation linked from postcode)
Use, follow-up investigation and action	The data could be analysed by the equality dimensions to investigate if there are specific issues within certain groups. HSCIC will assess the options for this analysis as part of further development and checking for data quality issues. Publication of the indicator broken down by the equality dimensions may be restricted due to suppression (numbers of 5 or less are not published to ensure that individuals cannot be identified), but CCGs could also undertake local analysis.
Feedback from HSCIC consultation	

Question	N	Response (%)				
Organisation	4	Clinical Commissioning Group or PCT (25%), Mental Health and Community Trust (25%), General Practice (25%), HSCIC (25%)				
		Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**	**Don't Know**
Well-defined	4	0.0%	50.0%	25.0%	25.0%	0.0%
Well-constructed	4	0.0%	75.0%	25.0%	0.0%	0.0%
		Yes, significant issues	**Yes, minor issues**	**No Issues**	**Don't Know**	
Data Quality issues	4	75.0%	0.0%	25.0%	0.0%	

		Highly likely	Quite likely	Quite unlikely	Highly unlikely	Don't know
Likely service improvements	4	0.0%	25.0%	25.0%	25.0%	25.0%
Results group dependant	4	0.0%	0.0%	25.0%	0.0%	75.0%
Likely perverse incentives	4	0.0%	25.0%	25.0%	0.0%	50.0%

If you do not agree that the indicator is clearly defined and unambiguous please describe how you think the definition could be improved

Is there a list of the conditions? Is it elective admissions, emergency admissions, admissions via A&E?

Looking at HES data, alcohol very seldom primary diagnosis - and primary diagnosis often incorrect

If you do not agree that the indicator is suitably constructed please describe how you think the construction could be improved.

If you expect that there will be data quality issues associated with this indicator please provide more detail as to what you think these might be.

Issues with primary diagnosis - may be alcohol related but not necessarily alcohol specific.

A&E data will have often list Alcohol as a secondary cause - this could to an extent mask a portion of the harmful alcohol usage.

If you think that it is unlikely that service changes can be implemented as a result of the reporting generated by this indicator please explain why.

Reporting on these admissions alone will not necessarily change the commissioning or service provision. Perhaps linking these admissions with the service setting, such as acute medical or acute psychiatric setting would provide richer data set for the commissioners.

As alcohol related problems seldom the primary diagnosis, need will be significantly under estimated.

If you would expect to see different results for particular groups please describe what differences you would expect to see and for which groups

MH Services report on the markers for deprivation. Not sure if the admissions into acute medical wards will also be reported against this parameter to enable full coverage of the report.

Depends on how admissions are Coded - and whether a different Coding would attract a higher tariff

If you think that it is likely perverse incentives may occur please explain what kinds of issues you think may arise.

PBR

Do you have any other views or general feedback that you would like to provide about this indicator?

Many patients with alcohol problems have significant other problems: This indicator relates

	to alcohol related admissions as a primary diagnosis: figures bound to be unreliable

Sample data – This sample data is for the full-year 2011/12. There is no standardisation in the sample data.

CCG	Denominator	Numerator	Rate per 100k
CCG1	340,195	32	9
CCG2	170,576	46	27
CCG3	206,432	66	32
CCG4	326,901	115	35
CCG5	126,784	46	36
CCG6	114,495	44	38
CCG7	178,238	70	39
CCG8	162,644	65	40
CCG9	155,137	63	41
CCG10	199,082	82	41

CCG	Denominator	Numerator	Rate per 100k
CCG202	279,320	595	213
CCG203	208,937	446	213
CCG204	261,359	586	224
CCG205	172,525	388	225
CCG206	241,022	586	243
CCG207	188,626	463	245
CCG208	215,391	532	247
CCG209	284,706	749	263
CCG210	250,525	679	271
CCG211	331,370	906	273