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## APPENDICES

### Alcohol Affordability: implications for Alcohol Price Policies. A Cross-Sectional Analysis in Middle and Older Adults from UK Biobank

#### APPENDIX 1

Translation table for ONS Region and UK Biobank Assessment Centre

Assessment Centre	ONS Region
Barts, London	London
Birmingham	West Midlands
Bristol	SW
Bury	NW
Cardiff	Wales
Cheadle (revisit)	NW
Croydon	London
Edinburgh	Scotland
Glasgow	Scotland
Hounslow	London
Leeds	Yorks & Humber
Liverpool	NW
Manchester	NW
Middlesbrough	Yorks & Humber
Newcastle	Yorks & Humber
Nottingham	East Midlands
Oxford	SE
Reading	SE
Sheffield	Yorks & Humber
Stockport	NW
Stoke	West Midlands
Swansea	Wales

There are three additional assessment centres in UK Biobank (Wrexham, Cheadle and Newcastle) but participants assessed at these were for either follow-up study or imaging studies only, these participants were therefore not included in the current study.

## APPENDIX 2

ONS structure of price quotes

### DIVISION

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- 01 Food and Non-Alcoholic Beverages
- 02 Alcoholic Beverages and Tobacco
- 03 Clothing and Footwear
- 04 Housing, Water, Electricity, Gas and other Fuels
- 05 Furniture, Household Equipment and Maintenance
- 06 Health
- 07 Transport
- 08 Communications
- 09 Recreation and Culture
- 10 Education
- 11 Restaurants and Hotels
- 12 Miscellaneous Goods and Services

### GROUP

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- 01.1 Food
- 01.2 Non-alcoholic beverages
- 02.1 Alcoholic beverages
- 02.2 Tobacco
- 03.1 Clothing
- 03.2 Footwear including repairs
- 04.1 Actual rentals for housing
- 04.3 Regular maintenance and repair of the dwelling
- 04.4 Water Supply and misc. services for the dwelling
- 04.5 Electricity, gas and other fuels
- 05.1 Furniture, furnishings and carpets
- 05.2 Household textiles
- 05.3 Household appliances, fitting and repairs
- 05.4 Glassware, tableware and household utensils
- 05.5 Tools and equipment for house and garden
- 05.6 Goods and services for routine maintenance
- 06.1 Medical products, appliances and equipment
- 06.2 Out-patient services
- 06.3 In-patient service
- 07.1 Purchase of vehicles
- 07.2 Operation of personal transport equipment
- 07.3 Transport services
- 08.1 Postal services
- 08.2 Telephone and telefax goods and services
- 09.1 Audio-visual, photographic and information processing equipment
- 09.2 Other major durables for recreation and culture
- 09.3 Other recreational items, gardens and pets

09.4 Recreational and cultural services  
09.5 Books, newspapers and stationery  
09.6 Package holidays  
10.0 Education  
11.1 Catering services  
11.2 Accommodation services  
12.1 Personal care  
12.3 Personal effects nec  
12.4 Social protection  
12.5 Insurance  
12.6 Financial services nec  
12.7 Other services nec

## APPENDIX 3

ONS alcohol price item descriptions and average price were used to determine whether the item was sold on- or off-trade.

Item ID	Item Description	On-trade	2007		2008		2009		2010	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD
310218	APPLE CIDER 500-750ML 4.5-5.5%	No							£1.83	0.12
310207	BITTER-4CANS-440-500ML	No	£3.92	0.17	£3.88	0.18	£3.85	0.20	£3.86	0.18
310314	BOTTLE OF CHAMPAGNE	No	£32.07	3.48	£32.54	3.29	£33.86	3.76	£34.82	3.78
310423	BOTTLE OF CHAMPAGNE 75 CL	No	£21.92	1.28	£22.53	1.34	£24.42	1.48	£25.89	1.55
310112	BOTTLE OF LAGER IN NIGHTCLUB	Yes	£2.93	0.26	£2.99	0.28	£3.09	0.32	£3.20	0.34
310315	BOTTLE OF WINE 70-75CL	Yes	£11.80	0.86	£12.29	0.57	£12.61	0.46	£12.96	0.58
310111	BOTTLED PREMIUM LAGER 4.3-7.5%	Yes	£2.43	0.12	£2.50	0.13	£2.60	0.14	£2.69	0.15
310405	BRANDY 70CL BOTTLE	No	£13.27	1.11	£13.38	1.15	£14.31	1.15	£15.03	1.39
310205	CIDER 1-2 LITRE BOTTLE	No	£2.47	0.23	£2.63	0.22	£2.71	0.17		
310106	CIDER-1/2PT OR 275-340ML BOT	Yes	£1.30	0.07	£1.33	0.08	£1.38	0.08		
310113	CIDER-PER PINT OR 500-568ML	Yes							£2.85	0.14
310102	DRAUGHT BITTER (PER PINT)	Yes	£2.18	0.14	£2.26	0.14	£2.35	0.16	£2.44	0.16
310104	DRAUGHT STOUT PER PINT	Yes	£2.55	0.14	£2.63	0.14	£2.75	0.15	£2.87	0.14
310406	FORTIFIED WINE (70-75CL)	No	£5.69	0.60	£5.85	0.60	£6.36	0.80	£6.60	0.67
310109	LAGER - PINT 3.4-4.2%	Yes	£2.34	0.12	£2.42	0.13	£2.53	0.14	£2.63	0.13
310216	LAGER 12 - 24 CANS (440-500ML)	No	£7.85	0.22	£8.06	0.34	£8.44	0.42	£9.22	0.33
310217	LAGER 12-24 BOTTLE (250-300ML)	No					£11.23	1.32	£11.51	1.55
310215	LAGER 4 BOTTLES- PREMIUM	No	£3.80	0.17	£3.90	0.17	£3.91	0.21	£4.00	0.14
310213	LAGER 4 CANS- PREMIUM 4.3-7.5%	No	£4.11	0.14	£4.10	0.13	£4.12	0.18	£4.35	0.17
310214	LAGER STUBBIES 4.3-7.5% ABV	Yes	£10.26	0.96	£10.08	1.25				
310307	LIQUEUR PER NIP SPECIFY ML	Yes	£1.93	0.15	£1.99	0.16	£2.07	0.14	£2.15	0.15
310110	PREMIUM LAGER - PINT 4.3-7.5%	Yes	£2.61	0.12	£2.70	0.13	£2.82	0.14	£2.94	0.14
310421	RED WINE- EUROPEAN 75CL	No	£4.73	0.33	£4.63	0.38	£4.75	0.39	£5.16	0.38
310422	RED WINE- NEW WORLD 75CL	No	£4.82	0.24	£4.94	0.25	£5.27	0.32	£5.64	0.32
310425	ROSE WINE-75CL BOTTLE	No							£5.57	0.74
310417	SPIRIT BASED DRINK 250-330MLS	Yes	£1.32	0.08	£1.26	0.08	£1.24	0.09	£1.24	0.08
310309	SPIRIT BASED DRINK 275ML	Yes	£2.58	0.15	£2.65	0.12	£2.73	0.13	£2.80	0.14
310302	VODKA (PER NIP) SPECIFY ML	Yes	£1.80	0.15	£1.87	0.15	£1.99	0.15	£2.08	0.16
310403	VODKA-70 CL BOTTLE	No	£9.99	0.31	£10.22	0.34	£10.53	0.55	£10.88	0.51
310301	WHISKY (PER NIP) SPECIFY ML	Yes	£1.81	0.15	£1.88	0.16	£1.96	0.15	£2.03	0.15
310401	WHISKY-70 CL BOTTLE	No	£11.82	0.49	£12.10	0.58	£13.02	0.65	£13.36	0.57
310419	WHITE WINE- EUROPEAN 75CL	No	£4.26	0.31	£4.22	0.29	£4.64	0.41	£4.99	0.41
310420	WHITE WINE- NEW WORLD 75CL	No	£5.37	0.18	£5.53	0.19	£5.67	0.26	£5.87	0.27
310310	WINE, PER 175 - 250 ML SERVING	Yes	£2.44	0.14	£2.52	0.14	£2.56	0.25	£2.66	0.31

## APPENDIX 4

### Alcohol-related ICD 10 Codes

This is a summary of the distinct primary/main diagnosis codes a participant has had recorded across all their hospital inpatient records. Diagnoses are coded according to the International Classification of Diseases version-10 (ICD-10) and includes primary, secondary and external causes.

Code	Description
E24.4	Alcohol-induced pseudo-Cushing syndrome
E51.2	Wernicke encephalopathy
F10.0	Mental and behavioural disorders due to use of alcohol: Acute intoxication
F10.1	Mental and behavioural disorders due to use of alcohol: Harmful use
F10.2	Mental and behavioural disorders due to use of alcohol: Dependence syndrome
F10.3	Mental and behavioural disorders due to use of alcohol: Withdrawal state
F10.4	Mental and behavioural disorders due to use of alcohol: Withdrawal state with delirium
F10.5	Mental and behavioural disorders due to use of alcohol: Psychotic disorder
F10.6	Mental and behavioural disorders due to use of alcohol: Amnesic syndrome
F10.7	Mental and behavioural disorders due to use of alcohol: Residual and late-onset psychotic disorder
F10.8	Mental and behavioural disorders due to use of alcohol: Other mental and behavioural disorders
F10.9	Mental and behavioural disorders due to use of alcohol: Unspecified mental and behavioural disorder
G31.2	Degeneration of nervous system due to alcohol
G40.5	Special epileptic syndromes
G62.1	Alcoholic polyneuropathy
G72.1	Alcoholic myopathy
I42.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70.0	Alcoholic fatty liver
K70.1	Alcoholic hepatitis
K70.2	Alcoholic fibrosis and sclerosis of liver
K70.3	Alcoholic cirrhosis of liver
K70.4	Alcoholic hepatic failure
K70.9	Alcoholic liver disease, unspecified
K85.2	Alcohol-induced acute pancreatitis
K86.0	Alcohol-induced chronic pancreatitis
O35.4	Maternal care for (suspected) damage to fetus from alcohol
R78.0	Finding of alcohol in blood
T51.0	Toxic effect: Ethanol
X45.0	Accidental poisoning by and exposure to alcohol home while engaged in sports activity
X45.1	Accidental poisoning by and exposure to alcohol home while engaged in leisure activity
X45.2	Accidental poisoning by and exposure to alcohol home while working for income
X45.3	Accidental poisoning by and exposure to alcohol home while engaged in other types of work
X45.4	Accidental poisoning by and exposure to alcohol home while resting sleeping eating or engaging in other
X45.8	Accidental poisoning by and exposure to alcohol home while engaged in other specified activities
X45.9	Accidental poisoning by and exposure to alcohol home during unspecified activity

X65.0 Intentional self-poisoning by and exposure to alcohol home while engaged in sports activity

X65.1 Intentional self-poisoning by and exposure to alcohol home while engaged in leisure activity

X65.2 Intentional self-poisoning by and exposure to alcohol home while working for income

X65.4 Intentional self-poisoning by and exposure to alcohol home while resting sleeping eating or engaging

X65.8 Intentional self-poisoning by and exposure to alcohol home while engaged in other specified activities

X65.9 Intentional self-poisoning by and exposure to alcohol home during unspecified activity

Y15.0 Poisoning by and exposure to alcohol, undetermined intent, home

Y15.1 Poisoning by and exposure to alcohol, undetermined intent, residential institution

Y15.2 Poisoning by and exposure to alcohol, undetermined intent, school, other institution

Y15.3 Poisoning by and exposure to alcohol, undetermined intent, sports and athletics area

Y15.4 Poisoning by and exposure to alcohol, undetermined intent, street and highway

Y15.5 Poisoning by and exposure to alcohol, undetermined intent, trade and service area

Y15.6 Poisoning by and exposure to alcohol, undetermined intent, industrial and construction area

Y15.7 Poisoning by and exposure to alcohol, undetermined intent, farm

Y15.8 Poisoning by and exposure to alcohol, undetermined intent, other specified places

Y15.9 Poisoning by and exposure to alcohol, undetermined intent, unspecified place

Y90.0 Blood alcohol level of less than 20 mg/100 ml

Y90.1 Blood alcohol level of 20-39 mg/100 ml

Y90.2 Blood alcohol level of 40-59 mg/100 ml

Y90.3 Blood alcohol level of 60-79 mg/100 ml

Y90.4 Blood alcohol level of 80-99 mg/100 ml

Y90.5 Blood alcohol level of 100-119 mg/100 ml

Y90.6 Blood alcohol level of 120-199 mg/100 ml

Y90.7 Blood alcohol level of 200-239 mg/100 ml

Y90.8 Blood alcohol level of 240 mg/100 ml or more

Y90.9 Presence of alcohol in blood, level not specified

Y91.0 Mild alcohol intoxication

Y91.1 Moderate alcohol intoxication

Y91.2 Severe alcohol intoxication

Y91.3 Very severe alcohol intoxication

Y91.9 Alcohol involvement, not otherwise specified

Z50.2 Alcohol rehabilitation

Z71.4 Alcohol abuse counselling and surveillance

Z72.1 Alcohol use