15 Alcohol Misuse

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1 Summary

This chapter focuses on alcohol misuse, defined as the use of alcohol such as to damage or threaten to damage the health or social adjustment of the user, or those people directly affected by his or her drinking.

The main arguments presented are that:

- services should be planned with a maximum of integration between different agencies, and between different levels of care, preferably with a community alcohol team or substance misuse integration team playing a key integrative and facilitatory role
- service improvement should seek to improve the use, and training, of staff in existing service settings rather than invent new ad hoc arrangements
- primary care and generalist care should be the main settings for treatment, with specialist care skill necessary on occasions, but deployed selectively.

Statement of the problem

Alcohol misuse is a pervasive problem impinging on all sectors of health and social care. The planning context is described and mapped.

Sub-categories of alcohol misuse

For the purposes of this chapter a three-point classification will be used:

- Category I: excessive drinking without problems or dependence
- Category II: excessive drinking with problems but without dependence
- Category III: excessive drinking with the occurrence of both problems and dependence.

Additional and cross-cutting groups can be defined in relation to gender, ethnicity, age, handicaps, homelessness and 'significant others'.

Prevalence and incidence

Surveys suggest that:

- 30% of men and 15% of women may be classified as fulfilling criteria for Category I alcohol misuse
- during the course of 12 months, about 20% of men and 5% of women in the UK fulfil criteria for Category II alcohol misuse

- during the course of 12 months, about 8% of men and 2% of women in the UK fulfil criteria for Category III alcohol misuse.

Services available

The pervasiveness and the varied types and intensities of alcohol misuse have provoked an extraordinary array of service responses, including prevention, treatment and social services, with wide variations by area. This section maps the field and offers a framework for reviewing the baseline of provision at a district level.

Components focused on prevention include:

- health education in schools, workplace or targeted at general or special populations
- community local action on prevention, including intersectoral mechanisms.

Treatment interventions include counselling/psychotherapy, '12-step' programmes, detoxification and pharmacological treatments, as well as treatment or other help to address the problems arising from alcohol misuse. These may be provided in a variety of settings:

- statutory social services deal with many aspects of alcohol misuse in passing, notably in relation to child care and protection
- non-statutory general social services often deal with alcohol misuse as a complicating factor
- general practitioners (GPs) and primary health services constitute a highly important front line of engagement with alcohol misuse, but there are currently deficiencies in terms of the support and training offered to GPs to enable them to engage effectively in this work
- NHS general (non-psychiatric) hospital services
- NHS general district psychiatric services. Working in liaison with specialist alcohol services, these general services carry responsibility for up to 75% of the district case load generated by Category III misuse
- NHS inpatient alcoholism treatment services are an increasingly scarce component of local alcohol misuse service provision
- NHS community alcohol services (community alcoholism teams or substance misuse integration teams) have been developed as a vehicle for providing specialist support and shared care and training in relation to GP, generalist, NHS and voluntary sector provisions, and social work agencies
- specialist non-statutory agencies provide outreach, day-centre and hostel facilities for homeless drinkers, and have also developed counselling and information centres
- private hospitals are developing a capacity to offer relevant packages of district-level care
- alcohol misuse and the criminal justice system. Counselling and treatment liaison activities are being developed, mostly by the voluntary sector.

Effectiveness of services

Prevention

The most effective prevention is likely to come from central policies directed at pricing and control. Education may offer benefits in the long term as it influences the ground swell of public opinion. Local community initiatives, while commendable in terms of common sense, have been little tested.

Treatment of Category I alcohol misuse

Simple intervention in primary care and in general hospital settings is highly effective.

Treatment of Category II and III alcohol misuse

More does not always mean better, and research suggests that for many subjects less intensive, outpatient and shared-care responses may be as effective as intensive, inpatient and exclusively specialist care. Patients should, however, be matched individually to treatment, and for the more severely affected a more prolonged and intensive approach may be indicated.

Cost-effectiveness

Cost-effectiveness of prevention strategies

Evidence confirms the cost-effectiveness of central fiscal and control strategies. Failure to utilise these provisions in the public health interest will have a profound effect on district costs. There is a clear relationship between affordability and alcohol consumption. Health education is cheap but only moderately cost-effective, at least in the shorter term, while community action is cost-effective if it can be implemented successfully.

Interventions directed at Category I misuse

Simple advice provided by the GP or on hospital wards is highly cost-effective.

Interventions directed at Category II and III misuse

Failure to provide appropriate help constitutes an extremely costly policy; untreated alcoholics incur twice the health care costs of treated alcoholics. Relatively simple interventions are thought to be the first choice even for these categories of misuse in terms of cost-effectiveness, but that does not preclude the likelihood that for a troubled minority more intensive methods may be cost-effective. GP and outpatient approaches are more to be recommended than inpatient or residential voluntary agency approaches.

Models of care

Strategic options include:

- integration with drugs services or separate purchasing of alcohol services
- enhancement of effectiveness of existing services
- high-volume/low-intensity service provision
- low-volume/high-intensity service provision
- a comprehensive approach.

Building a planned, integrated and prioritised response requires at least three priorities to be addressed:

- a strategic review of existing services and needs
- establishment of a community alcohol service
- inter-agency integration and liaison.

Outcome measures

Separate outcome measures are required for different types of substance use. While multiple measures should be employed, reduction in drinking provides a good pointer to overall improvement. Local monitoring of alcohol-related deaths (liver cirrhosis, accidents) can provide useful pointers.

Targets

Targets are suggested in relation to overall reduction in alcohol misuse, enhancement of primary care and the effectiveness of generalist services and services for Category III patients.

Information and research priorities

The importance of creating a 'research culture' is stressed. Suggested priorities for research include evaluation of the effectiveness of:

- liaison teams
- service needs for the severely dependent alcohol misuser
- the respective and complementary roles of different providers
- the cost-effectiveness of the various approaches.

2 Introduction and statement of the problem

Alcohol misuse can be defined as the personal use of alcohol such as to threaten or damage the health or social adjustment of the user or those other persons directly affected by his or her drinking. This pragmatic and over-arching definition equally invites awareness of drinking over safe limits, alcohol-related problems and alcohol dependence.

Context

The context for understanding and responding to alcohol misuse in the UK is that of a society within which alcohol is freely available and acceptable, and in which only a minority of people choose not to drink alcohol at all (*see* Section 4). It is known that the degree of morbidity (social, physical and psychological) and mortality associated with alcohol use in a given population is correlated with the amount of alcohol consumed by that population. At an individual level, also, the risk of alcohol-related harm rises in direct proportion to the amount of alcohol consumed. Thus prevention (*see* Sections 5 and 6) has to address the per capita amount of alcohol consumed, as well as matters of individual variation in vulnerability to harm.

The problems arising from alcohol misuse are many and varied (*see* Figure 2 and Section 3). Social problems impact upon the family, workplace and wider society. They have implications for safety on the roads, law and order, and the economy. Health problems involve almost every aspect of medical practice and include the behavioural and traumatic consequences of intoxication, as well as acute alcoholic

poisoning and the behavioural and medical consequences of chronic heavy drinking. Alcohol misuse is also commonly associated with other psychiatric disorders and with other forms of substance misuse.

A particular alcohol-related problem with especial significance for treatment and prognosis is that of alcohol dependence (*see* Section 3). Individuals who have become alcohol dependent will experience a physical withdrawal syndrome if they stop drinking. This withdrawal syndrome is associated with potentially serious medical complications, and thus requires appropriate medical management (*see* Sections 5 and 6). When dependence is severe, a different approach to treatment and rehabilitation is indicated (*see* Sections 5 and 6).

Alcohol misusers are not a discrete category of people different to, or separate from, 'normal' drinkers. Alcohol misuse and dependence represent the extreme end of a continuum of drinking behaviour, which may be contrasted strikingly with the behaviour and experiences of light social drinkers who are at the opposite end of the spectrum.

It is also important to note that alcohol consumption may have beneficial consequences as well as being associated with harm. In particular, there is now reason to believe that moderate alcohol consumption may be associated with a reduced incidence of coronary heart disease in men over the age of 40 years and in postmenopausal women.[1]

Prevention

It is quite obviously preferable to prevent alcohol misuse and thus minimise the need for treatment services. Furthermore, there is extensive research to underpin the value and effectiveness of preventative measures at a whole population level.[2] However, despite this, prevention is often neglected and health care resources are directed primarily towards treatment. This occurs for a variety of reasons.

First, as described above, the per capita quantity of alcohol consumed within the population is a fundamental consideration in respect of reducing alcohol misuse. Many of the controls that are effective in influencing per capita consumption are only available to national government. Thus, for example, we know that increased taxation is an effective preventative measure, but this is not available to NHS commissioners or providers.

Secondly, there is a great need for a co-ordinated national alcohol strategy to guide and inform local and national preventative measures, but at present such a strategy is still awaited.

Thirdly, as with treatment provision, there is a need to bring together a wide range of services in order to effectively prevent alcohol misuse. The criminal justice system, social services, local government, education and a range of non-statutory agencies, as well as health services, all have an important part to play. With no co-ordinating body to address prevention of alcohol misuse in many parts of the country it is easy for each organisation to imagine that prevention is the responsibility of the others.

Preventive interventions have also encountered controversy surrounding the 'sensible drinking' message. The Royal College of Physicians, the Royal College of Psychiatrists, the Royal College of General Practitioners and the British Medical Association (BMA) have all recommended that men should drink fewer than 21 units of alcohol per week and women fewer than 14 units per week.[1,3] Both women and men are also advised that it is probably sensible to ensure that they have 'drink-free days'. There has been some debate about the most appropriate drinking limits, with advice from the Department of Health (DoH) referring to increased morbidity and mortality associated with drinking 'more than 3 to 4 units a day' for men and 'more than 2 to 3 units a day' for women.[4] The weight of medical and scientific argument, which relates largely to the longer-term effects of drinking on morbidity and mortality, would appear to support the recommendations of the Royal Colleges and the BMA. However, there is undoubtedly also a need to promote sensible daily limits which seek to avoid the dangerous effects of acute heavy drinking sessions.

An integrated response

In view of the multi-disciplinary nature of the problem, a degree of integration in health and social service responses is increasingly necessary. The appropriate vision should be of an integrated, interactive, multi-level and sustained response system targeted at multiple types and degrees of problem. Figure 1 offers a diagrammatic representation of the 'response contexts', while Figure 2 gives a representation of the 'problem contexts'.

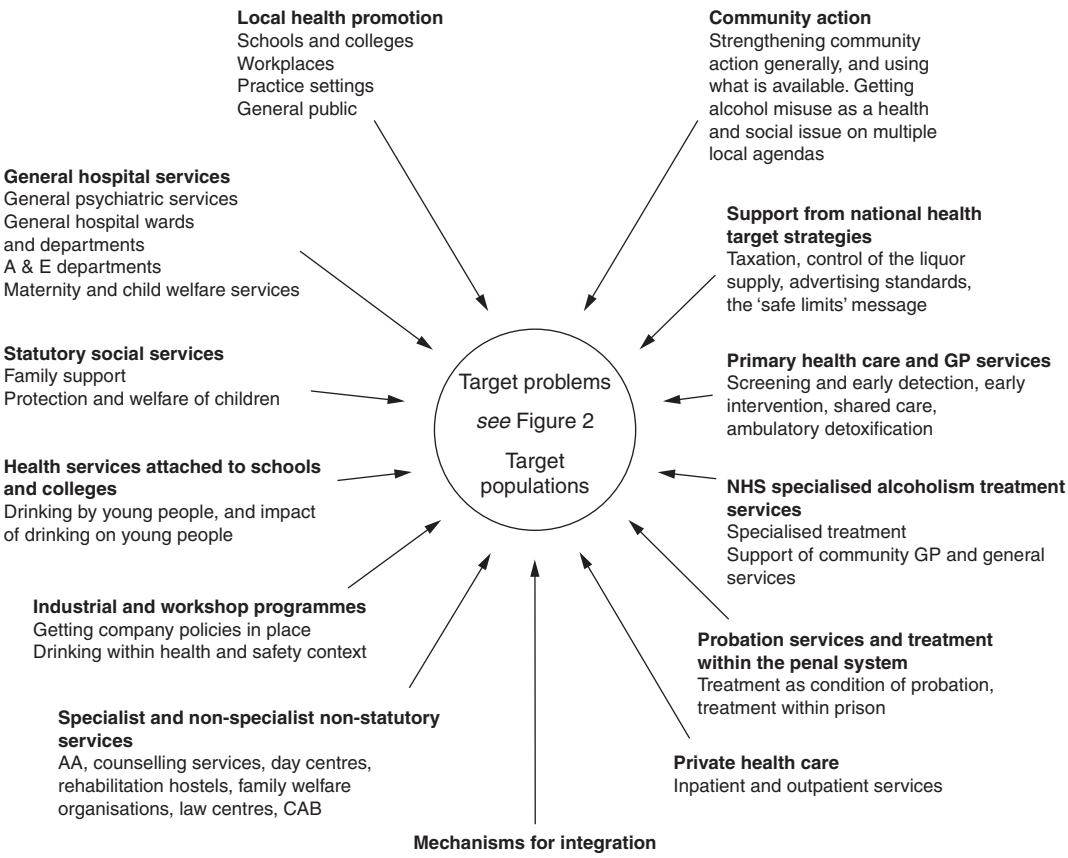

Figure 1: Alcohol misuse: the response system context.

The definition of the central issue as alcohol misuse implies the integration and totality of primary care and generalist and specialist services. Such an integrated service would meet the needs of the different categories of patients.

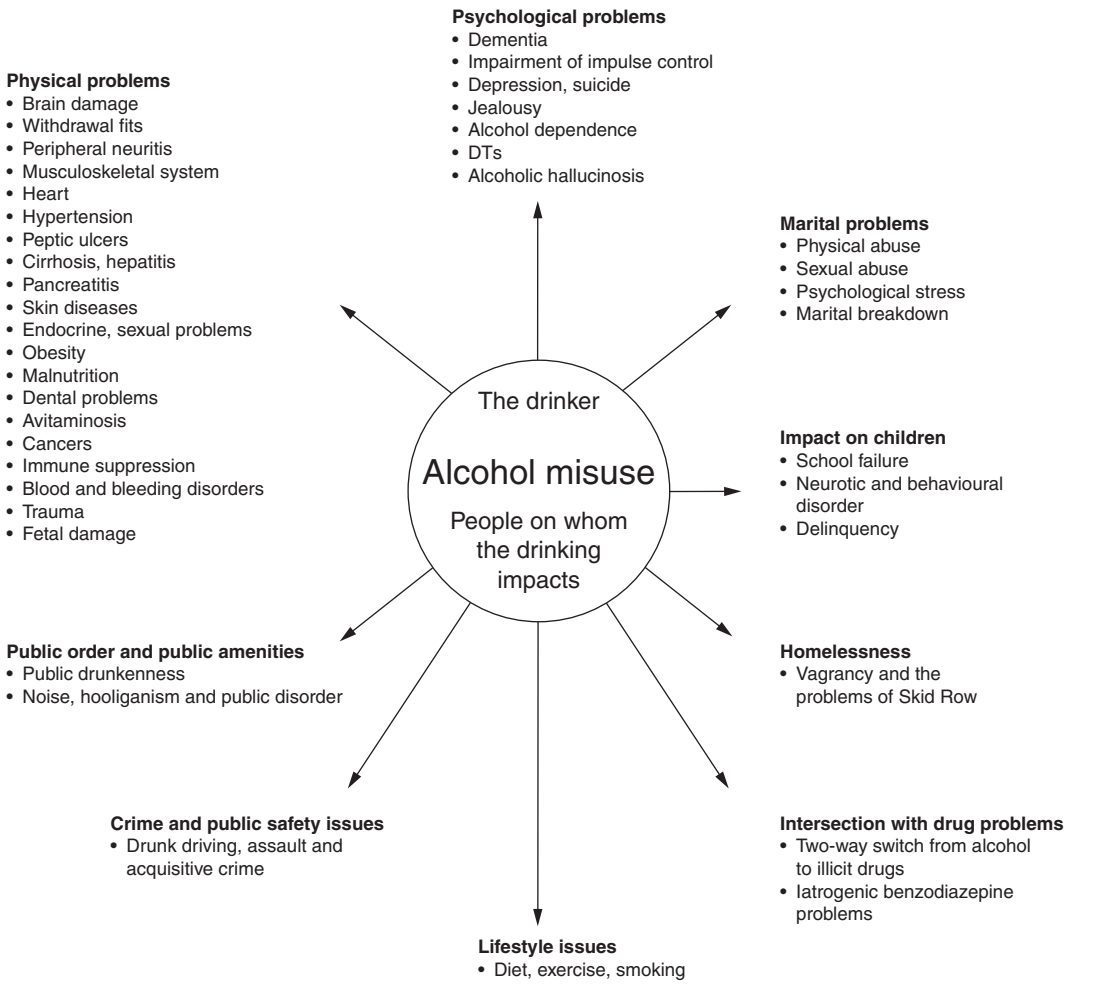

Figure 2: Alcohol misuse: the problem context.

Screening and identification

Identification of people with alcohol misuse occurs in all of the services shown in Figure 1, as well as in a range of other health and social services, and in wider society. Problems of alcohol misuse are frequently detected in the workplace and in the criminal justice system. However, the underlying 'diagnosis' of alcohol misuse is often missed, and individual problems may be addressed without identifying or responding to the underlying cause. There is thus a need for social workers, workers in primary health care settings, managers, police and others to be better trained and supported in identifying clients and patients who have an underlying alcohol problem.

In some contexts, systematic attempts to screen a population for individuals who are heavy drinkers or who are misusing alcohol may be justified. Thus in safety-sensitive industries (e.g. transportation, operation of dangerous equipment, armed forces, etc.) it may be helpful to include questions about drinking, and possibly blood tests, to identify heavy drinkers within the process of regular medical

examinations. These measures are more or less unsatisfactory owing to the tendency of heavy drinkers to minimise or deny their drinking, and the imperfection of blood tests which cannot be confidently used to exclude heavy drinking. However, they can be effective in bringing to attention at least some hidden cases of alcohol misuse in some settings. Alternatively, or in addition, systematic (pre-employment, 'with cause', post-incident or post-accident) or random breathalysing of personnel might be used to identify those with a breath (or blood) alcohol above a certain level. This is especially appropriate in certain contexts in which intoxication might dangerously impair performance (e.g. drinking and driving).

Diagnosis

The official classificatory systems which offer approaches delineating the broad territory of alcohol misuse are described in Appendix I, together with appropriate code numbers. In summary they offer the following approaches.

ICD-10[5] gives F10 as the overall code for 'Mental and behavioural disorders due to use of alcohol'. Fourth character codes include acute intoxication, harmful use, dependence syndrome, withdrawal states, psychotic disorders, amnesic syndrome, 'other' mental and behavioural disorders, and 'unspecified' mental and behavioural disorders. DSM-IV[6] distinguishes between 'substance dependence' and 'substance abuse', with alcohol as one category of substance.

The Office of Population Censuses and Surveys (OPCS) in survey work has employed a scale of weekly alcohol consumption levels, varying from 'non-drinker' to 'very high' consumption. 'Fairly high', 'high' and 'very high' all represent levels of consumption above recommended limits.

Health care Resource Groups (HRGs) distinguish between alcohol or drug dependency (Code T12) and alcohol or drugs non-dependent use (Code T10, age > 16 years; Code T11, age < 17 years).

3 Sub-categories

This chapter proposes a simple three-point categorisation which reflects the recent scientific thinking and which offers a segmentation which usefully meshes with common types of health service presentation. Other categorisations will also be considered briefly.

Scientific consensus has moved towards a formulation which sees consumption, 'problems' and 'dependence' as three conceptually distinct dimensions of alcohol misuse. Each of these dimensions may vary in magnitude (consumption) or severity (problems/dependence). As indicated above (*see* Section 2) they are not independent of each other, but are strongly inter-correlated. Bearing in mind these relationships, the following categorisation is suggested as being helpful for the process of planning and delivering services.

Category I

Excessive drinking

Category I comprises anyone drinking over recommended limits (21 units/week for men or 14 units/week for women).[1,3] Strictly, for purposes of considering need for service provision, this should be limited to anyone who has not incurred problems or developed dependence. In practice, surveys of alcohol

consumption often do not exclude those individuals with such problems. Typically, this kind of misuse falls within the province of primary health care as a target for health education and advice. It should also be picked up in many general hospital settings.

Category II

Excessive drinking with occurrence of problems

The problems may be acute (e.g. an alcohol-related accident, pancreatitis resulting from a Saturday-night binge, the Mallory–Weiss syndrome) or chronic (e.g. hypertension, cirrhosis, non-specific alcohol-induced brain damage). These problems will have to be dealt with partly by the primary care team, but they also contribute to the case load of the general hospital.

Category III

Excessive drinking with problems and dependence

Although problems and dependence are conceptually distinct, in clinical reality patients who have developed dependence usually also have alcohol-related problems. Patients with dependence typically present to psychiatric services or specialised non-statutory services for help with the dependence itself or because of a cluster of associated health, interpersonal and social problems. The physical complications which such patients sustain imply that they will also present to general hospitals. Furthermore, severely dependent patients may on withdrawal suffer from a range of complications, which at the extreme can include delirium tremens and alcohol withdrawal fits; these patients require medical detoxification.

Other classifications

For most planning purposes this three-point system meshes conveniently with the required developments at different levels of health promotion and health service response. On occasion, however, it may also be useful to think in terms of certain additional and cross-cutting categories.

Dual diagnosis

Considerable concern has been generated recently in relation to patients with comorbid psychiatric and substance use disorders. Given the special service requirements of this group, separate consideration may need to be given to alcohol misusers with and without other psychiatric disorders.

It has been suggested that alcohol misuse can be separated into ‘primary’ and ‘secondary’ categories, depending upon whether it is merely a secondary consequence of another psychiatric disorder. In practice, this distinction is often difficult, if not impossible, to make. It is unlikely to be a helpful categorisation as a basis of service delivery, although a judgement as to the ‘primary’ disorder, in a general sense of severity and need for treatment, may often determine whether a patient is primarily under the care of a general psychiatric team or a specialist alcohol service.

Misuse of multiple substances

The combination of alcohol and other substance misuse can pose particular therapeutic challenges. As with dual diagnosis, separate purchasing and/or provision of services to these two groups may require that special consideration be given to their needs as distinct from those of people who misuse alcohol alone.

Gender

As women and men with drinking problems can have different service needs, the needs of women should not be overlooked.

Ethnicity

Service provision for ethnic minorities may require special attention, especially when the cultural and religious background stigmatises (or indeed tolerates) drinking.

Age

The occurrence of drinking problems in old age should not be ignored, nor should the fact that drinking can be a problem among children of school age.

Disability

Blind people and the deaf can develop drinking problems, as can the mentally handicapped or people who have suffered brain damage.

Homelessness

In many inner-city areas a special category of problem arises in relation to the interacting difficulties caused by drinking, homelessness, public drunkenness and petty crime.

Significant others

Service users might be classified into those seeking help for their own drinking problem and those seeking help because of the drinking of a spouse, relative or friend.

Type I/II

A popular classification in academic and scientific work distinguishes between alcohol misusers with early onset, a family history of drinking problems and greater severity, who are usually male, contrasted with those of later onset, no family history and lesser severity, who may be male or female.[7] This classification is currently of little relevance to issues of service provision.

4 Prevalence and incidence

Category I alcohol misuse

General Household Survey data

The General Household Survey (GHS) has been conducted annually by the OPCS since 1971. The 1996 survey[8] shows that 27% of men and 14% of women aged 16 years and over are drinking more than the recommended weekly limits (*see* Table 1). GHS findings over the preceding decade show little overall change in the proportion of men drinking more than 21 units/week. However, the proportion of women drinking more than 14 units/week has risen from 10% to 14%.

Health Survey for England

The Health Survey for England (HSE) has been commissioned annually by the DoH since 1991. The 1996 survey[9] showed that 30% of men and 15% of women aged 16 years and over drank more than the recommended limits (*see* Table 1). HSE surveys from 1993 to 1996 show that there has been little change in the amount of alcohol consumed by men. The proportion of women drinking more than 14 units/week has risen slightly since 1993, from 13.3% to 15.3%.

Table 1: Alcohol consumption by sex, in the General Household Survey, 1996, and the Health Survey for England, 1996.

Alcohol consumption	Males (%)		Females (%)	
	GHS	HSE	GHS	HSE
Non-drinker	7	7	13	11
Very low	8	8	20	20
Low	35	33	37	37
Moderate	23	22	16	17
Fairly high	15	15	9	8
High	7	8	2	5
Very high	6	7	2	2

Base 100, rounding errors. GHS, General Household Survey 1996 (adults aged 18 years and over); HSE, Health Survey for England 1996 (adults aged 16 years and over).

Age and social class

Alcohol consumption in both sexes tends to decrease in later life, with a marked decline evident in those aged 65 years or more in both the GHS 1996 and HSE 1996. In both surveys, consumption is seen to be heaviest among young adults under the age of 25 years.

In the HSE 1996, women showed higher consumption in higher social classes, especially classes I and II. For men, consumption was higher in classes II and V, with no consistent overall pattern. A similar trend for women, and a similar lack of consistent pattern for men, was evident in the GHS 1996.

Geographical variation

There is wide variation in drinking patterns around the country (*see* Table 2). In North Thames, only 25% of men were drinking more than the recommended limits according to HSE 1996, but in the North West this figure rises to 35%.

Category II alcohol misuse

In the UK a number of surveys have reported on problem rates, but the results of such research are dependent on the geographical area and the year of sampling. Furthermore, different surveys have used different definitions. Prevalence will be highly dependent on whether one is measuring point prevalence or 12-month prevalence, the types of problem which the survey instrument includes in its 'problem' schedule, and the cut-off point for scale scoring.

In the National Psychiatric Morbidity Survey, conducted in the UK in 1993–94,[10] it was found that 12% of all adults had experienced an alcohol-related problem during a 12-month period. Alcohol problems become increasingly frequent with higher levels of alcohol consumption (*see* Table 3, p. 318).

Geographical variation and cirrhosis death rates

Cirrhosis deaths provide a useful indirect indicator of alcohol problem prevalence. Table 2 gives data on death by 'chronic liver disease and cirrhosis' by health region, for the year 1990. The evidence points to considerable geographical variation in problem prevalence, with areas containing conurbations likely to have higher prevalence rates than predominantly rural areas.

Geographical variation and drink-driving

Drink-driving provides another indicator of alcohol-related problems. As with alcohol-related liver disease, there is considerable geographical variation (*see* Table 4, p. 319).

Hospital Episode Statistics 1995–96

Tables 5, 6 and 7 (pp. 320–24) show data from the Hospital Episode Statistics for 1995–96. It is not possible to determine from these data whether a particular episode was associated with alcohol dependence, and hence we may assume that many of these admissions will in fact belong appropriately to Category III alcohol misuse, rather than Category II.

A primary diagnosis of alcohol misuse (F10) is given in respect of over 30 000 NHS admissions per year (Table 5, p. 320). A further 9000 admissions relate to alcoholic liver disease. Over 17 000 NHS admissions are to psychiatric beds and over 22 000 admissions are to medical beds (Table 6, p. 321). On average, general medical admissions for alcohol-related diagnoses are three times longer than for other general medical admissions. When the statistics are viewed according to HRGs (Table 7, pp. 322–24), we may see that almost 9000 admissions are specifically for non-dependent use of alcohol and almost 6000 relate to chronic liver disorders.

Table 2: Alcohol consumption, deaths by chronic liver disease and cirrhosis, and alcohol dependence, by health region.

	Health region	Proportion drinking over recommended weekly limits	Deaths due to all chronic liver disease and cirrhosis (ICD 571)*	Deaths due to alcohol-related liver disease (ICD 571.0–571.3)*	Alcohol dependence†	
		HSE (%)	GHS (%)	Rate/100,000	Rate/100,000	Rate/1,000
Males	North and Yorkshire	34	32	10.5	7.3	75
	Trent	31	27	8.7	5.3	55
	Anglia and Oxon	27	25	6.4	3.7	51
	North Thames	25	23	9.5	3.4	79
	South Thames	27	27	9.7	5.5	68
	South and West	28	26	7.8	4.7	76
	West Midlands	31	28	9.5	6.9	67
	North West	35	31	13.2	8.3	105
	England	30	27	–	–	72
	Wales	–	25	9.7	5.5	99
	Scotland	–	25	–	–	87
Females	North and Yorkshire	17	15	6.4	1.3	24
	Trent	15	12	5.8	3.0	11
	Anglia and Oxon	12	15	5.1	2.6	18
	North Thames	14	11	5.7	2.4	24
	South Thames	18	14	5.9	2.5	19
	South and West	14	13	5.3	2.8	19
	West Midlands	14	12	6.2	3.6	32
	North West	19	18	8.2	4.1	18
	England	15	14	–	–	21
	Wales	–	16	6.8	2.9	21
	Scotland	–	11	–	–	20

GHS, General Household Survey 1996; HSE, Health Survey for England 1996.
* 1997 statistics supplied by ONS Mortality Statistics Section (personal communication, 1998).
† National Psychiatric Morbidity Survey 1993–94. In this survey, figures were quoted for smaller regions (e.g. the figures for Northern and Yorkshire were given separately). The figures given here are for the average of the smaller groups.

Table 3: Alcohol problems (%) in the UK, 1993–94,* according to consumption level.†

Alcohol problem	Light	Moderate	Fairly heavy	Heavy	Very heavy	All
Belligerence	1	10	21	29	43	8
Health problems	0	2	6	14	26	3
Problems with friends	0	3	7	10	19	3
Problems with spouse	0	2	6	11	16	2
Problems with relatives	0	1	3	5	17	2
Police problems	0	2	3	5	12	2
Accidents	0	1	2	3	8	1
Job problems	–	0	2	2	0	0
Any alcohol problem	2	13	29	43	63	12

* National Psychiatric Morbidity Survey.
† These categories are broadly similar to those used by the OPCS (*see* Appendix I).

Alcohol misuse and other substance use

Some but not all of the regional drug misuse databases collect information on alcohol as well as illicit drugs. Data for 1996–97 are summarised in Table 8 (p. 325). It is apparent from these data that the prevalence of alcohol misuse among illicit drug users on the database ranges from about 4% to 18%. However, the information collected is variable in definition, so that for some databases the quoted prevalence might represent a closer approximation to Category I alcohol misuse, and in other cases the prevalence of Category II alcohol misuse might have been underestimated. Despite this, it is probably fair to suggest that the prevalence of alcohol misuse is generally high in this group.

Category III alcohol misuse

The 12-month prevalence for alcohol dependence in the UK, as measured in the National Psychiatric Morbidity Survey in 1993–94,[10] was 47 per 1000. Prevalence was higher in urban (54 per 1000) than in rural (34 per 1000) areas.[11] Geographical variation by health region is shown in Table 2.

Hospital Episode Statistics show that there were almost 22 000 admissions for alcohol dependence in 1995–96 (*see* Table 7). However, this (misleadingly named) HRG actually includes ICD-10 diagnoses which related to non-dependent use, and thus includes Category II as well as Category III alcohol misuse.

Local needs assessment prevalence studies

Detailed local information about the prevalence of alcohol misuse can be obtained by conducting a needs assessment study. Further information on when and how to conduct such a study is provided in Section 7.

Table 4: Positive alcohol breath tests of drivers by police force area, 1995–96.

Police force area	1995		1996	
	Positive/refused per 100,000 pop.	Positive/refused (%)	Positive/refused per 100,000 pop.	Positive/refused (%)
Avon and Somerset	89	19	205	20
Bedfordshire	147	14	202	17
Cambridgeshire	187	8	187	8
Cheshire	225	15	225	11
Cleveland	197	4	179	4
Cumbria	184	11	184	9
Derbyshire	146	7	188	6
Devon and Cornwall	123	29	130	22
Dorset	177	20	192	17
Durham	197	27	214	31
Essex	146	8	133	6
Gloucestershire	145	16	271	22
Greater Manchester	299	7	291	7
Hampshire	207	21	184	18
Hertfordshire	198	26	198	28
Humberside	169	17	124	14
Kent	103	17	97	18
Lancashire	182	16	224	12
Leicestershire	217	17	228	20
Lincolnshire	180	7	163	6
London, City of	–	16	–	16
Merseyside	175	16	182	17
Metropolitan	211	13	204	12
Norfolk	104	20	117	16
Northamptonshire	167	20	200	17
Northumbria	202	51	222	38
North Yorkshire	233	35	233	22
Nottinghamshire	233	43	262	29
South Yorkshire	153	18	161	16
Staffordshire	123	20	133	15
Suffolk	167	14	167	14
Surrey	193	16	206	15
Sussex	157	15	178	11
Thames Valley	274	12	274	14
Warwickshire	221	13	221	12
West Mercia	171	9	171	11
West Midlands	102	29	137	18
West Yorkshire	133	17	152	7
Wiltshire	254	15	220	21
Dyfed-Powys	148	15	169	14
Gwent	133	12	199	10
North Wales	258	12	258	12
South Wales	158	17	180	16
Total	182	13	194	13

Table 5: NHS Hospital Episode Statistics, 1995–96, for diagnostic categories including alcohol-related diagnoses.*

ICD code	Diagnosis	Admissions with primary diagnosis			Admissions with secondary diagnosis		
		Finished consultant episodes	Average length of stay†	Number of cases with length of stay > 100 days	Finished consultant episodes	Average length of stay	Number of cases with length of stay > 100 days
F10	Mental and behavioural disorders due to use of alcohol	30,427	9.2	263	40,574	5.9	183
G31	Other degenerative diseases of nervous system not elsewhere classified	189	12.8	2	258	14.4	3
G62	Other polyneuropathies	91	15	2	117	14.1	2
G72	Other myopathies	29	11.5	0	39	10.4	0
K29	Gastritis and duodenitis	869	2.4	0	257	5.2	372.2
K70	Alcoholic liver disease	8,933	9.2	14	7,944	7.9	11
K86	Other diseases of pancreas	1,098	6	4	355	7.5	1
T51	Toxic effect of alcohol	1,256	1.2	1	9,270	1.2	1
Y90	Evidence of alcohol involvement determined by blood alcohol level	0			196	2	0
Y91	Evidence of alcohol involvement determined by level of intoxication	0			657	2.2	1
Z50	Care involving use of rehabilitation procedures	1,125	10.7	1	1,223	13.4	10
Z71	Persons encountering health services for other counselling and medical advice not elsewhere classified	32	4.3	2	77	5	0
Z72	Problems related to lifestyle	69	6	0	3,497	5.3	5

* *See* Appendix I for a list of alcohol-related ICD diagnoses.

† For calculation of means, lengths of stay > 100 days were all 'trimmed' to 100 days' length. Day cases were counted as 0 days.

Table 6: NHS Hospital Episode Statistics, 1995–96, for admissions for alcohol-related diagnoses* by medical speciality.

Specialty	Finished consultant episodes for alcohol-related diagnosis (*n*)	Average length of stay† (days)	Number of cases with length of stay > 100 days (*n*)	Total finished consultant episodes (*n*)	Average length of stay (days)	Alcohol-related finished consultant episodes as proportion of total (%)	Ratio of average length of stay (alcohol related: total) ratio
Mental illness	16,534	13.8	933	33,776	14.7	49	0.9
Old age psychiatry	526	23.6	852	15,810	18.2	3.3	1.3
Other psychiatric specialties	15	31.2	9	66	23.4	22.7	1.3
General medicine	16,119	6.5	348	478,154	2.3	3.4	2.8
Gastroenterology	1,126	8.5	9	100,758	0.5	1.1	17
Geriatric medicine	1,325	10	1,304	86,796	13.3	1.5	0.8
Other medical specialties	3,465	2.3	182	105,049	3.3	3.3	0.7
Trauma and orthopaedics	199	1.4	169	90,899	12.5	0.2	0.1
Accident and Emergency	2,559	0.6	1	25,969	0.5	9.9	1.2
General surgery	1,623	5.4	343	507,484	2.8	0.3	1.9
Other surgical specialties	63	4.4	32	551,832	0.7	0	6.3
Other secondary care	134	6.8	44	303,534	2.1	0	3.2
Primary care	435	6.2	88	19,627	12.8	2.2	0.5

* *See* Appendix I for a list of alcohol-related ICD diagnoses.
† For calculation of means, lengths of stay > 100 days were all 'trimmed' to 100 days' length. Day cases were counted as 0 days.

5 Services available

The pervasiveness of alcohol misuse as a health and social problem has stimulated multiple and diverse health promotion, health service and social service responses at a district level. Much of the work is handled in passing by general services, but there are also elements of specialism. Non-statutory as well as statutory services are involved. Inter-sectoral issues arise in relation to the relevance to prevention of, say, police activity or liquor licensing. As already indicated in the descriptions of context given in Figures 1 and 2, a mapping of the total field of responses at the district level is likely to constitute a task of unusual complexity with uncertain boundaries. The account given in this section describes the general principles of prevention and treatment, and the main organisational elements in this web of activities.

Table 7: NHS Hospital Episode Statistics, 1995–96, for admissions for alcohol-related diagnoses,* by Health care Resource Group.†

HRG code	Health care Resource Group	Finished consultant episodes (alcohol-related) (*n*)	Average length of stay‡ (days)	Number of episodes trimmed for length of stay > 100 days (*n*)	Total finished consultant episodes (*n*)	Total average length of stay (days)	Alcohol-related finished consultant episodes as proportion of total (%)	Ratio of average length of stay (alcohol-related: total) ratio
A09	Peripheral nerve disorders, age > 69 years or with complications	25	11.1	24	2,168	11.9	1.2	0.9
A10	Peripheral nerve disorders, age < 70 years without complications	58	17.1	17	3,946	6.5	1.5	2.6
A11	Neuromuscular disorders	25	12.1	12	1,697	8.1	1.5	1.5
A16	Cerebral degenerations, age > 69 years or with complications	54	16.9	738	14,564	19.1	0.4	0.9
A17	Cerebral degenerations, age < 70 years without complications	124	10.8	110	5,366	8.8	2.3	1.2
C54	Mouth/throat procedures – Cat 6	16	23.5	57	3,276	22.1	0.5	1.1
F04	Oesophagus – therapeutic endoscopy/internal procedures with complications	84	8.3	13	2,789	7.8	3	1.1
F05	Oesophagus – therapeutic endoscopy/internal procedures without complications	210	2.9	5	14,243	1.7	1.5	1.7
F06	Oesophagus – diagnostic procedures	435	0.2	0	217,414	0.01	0.2	20
F13	Stomach/duodenum – major procedures, age > 49 years or with complications	12	12	12	5,849	11.3	0.2	1.1
F15	Stomach/duodenum – therapeutic endoscopy/internal procedures	18	0.1	0	3,200	0.1	0.6	1
F16	Stomach/duodenum – diagnostic procedures	129	0.3	0	133,584	0.01	0.1	30
F17	Stomach/duodenum disorders, age > 69 years or with complications	123	4.7	41	27,502	7.3	0.4	0.6

Continued opposite

Table 7: Continued.

HRG code	Health care Resource Group	Finished consultant episodes (alcohol-related) (*n*)	Average length of stay‡ (days)	Number of episodes trimmed for length of stay > 100 days (*n*)	Total finished consultant episodes (*n*)	Total average length of stay (days)	Alcohol-related finished consultant episodes as proportion of total (%)	Ratio of average length of stay (alcohol-related: total) ratio
F18	Stomach/duodenum disorders, age < 70 years without complications	613	2.3	6	19,389	3.4	3.2	0.7
F35	Large intestine – endoscopy/internal procedures	14	0.2	0	129,510	0.1	0	2
F43	General abdominal – endoscopy/internal procedures, age > 69 years or with complications	43	8.6	3	5,661	6.9	0.8	1.2
F44	General abdominal – endoscopy/internal procedures, age < 70 years without complications	88	5.3	1	8,549	3	1	1.8
F45	General abdominal – diagnostic procedures	16	16.3	4	2,322	9.3	0.7	1.8
F61	Gastrointestinal bleed – very major procedures	40	11.2	4	2,100	12.3	1.9	0.9
F62	Gastrointestinal bleed – major/therapeutic endoscopic procedures	327	5	1	4,097	4	8	1.3
G01	Liver transplant	59	19.5	4	440	22.7	13.4	0.9
G03	Liver – very major procedures	124	13.6	1	1,298	8.2	9.6	1.7
G04	Liver – major procedures, age > 69 years or with complications	180	9.5	4	3,559	9.3	5.1	1
G05	Liver – major procedures, age < 70 years without complications	616	4.8	2	7,536	3	8.2	1.6
G07	Chronic liver disorders, age > 69 years or with complications	2,312	10.5	21	7,513	10	30.8	1.1
G08	Chronic liver disorders, age < 70 years without complications	3,284	8.8	4	6,906	7.1	47.6	1.2
G15	Therapeutic pancreatic/biliary procedures	28	12.4	4	14,021	5.7	0.2	2.2
G21	Pancreas – complex procedures	24	22.1	10	737	23	3.3	1

Continued overleaf

Table 7: Continued.

HRG code	Health care Resource Group	Finished consultant episodes (alcohol-related) (*n*)	Average length of stay‡ (days)	Number of episodes trimmed for length of stay > 100 days (*n*)	Total finished consultant episodes (*n*)	Total average length of stay (days)	Alcohol-related finished consultant episodes as proportion of total (%)	Ratio of average length of stay (alcohol-related: total) ratio
G24	Chronic pancreatic disorders, age > 69 years	117	7.3	6	3,251	9.3	3.6	0.8
G25	Chronic pancreatic disorders, age < 70 years	774	5.1	0	3,714	5.7	20.8	0.9
G99	Complex elderly with a hepato-biliary/ pancreatic system procedure	14	10.2	2	400	13.2	3.5	0.8
J12	Soft tissue procedures	889	15.7	7	4,119	13.4	21.6	1.2
J37	Minor skin procedures – Cat 1 without complications	37	0.02	4	88,191	0.3	0	0.1
L20	Bladder minor endoscopic procedure with complications	13	15.7	65	20,043	3.7	0.1	4.2
L21	Bladder minor endoscopic procedure without complications	10	13.2	19	173,735	0.4	0	33
P14	Ingestion poison/ allergies	611	0.7	0	20,391	1.1	3	0.6
Q07	Miscellaneous internal/minor vascular procedures	22	14.7	16	7,520	5.7	0.3	2.6
S16	Poison toxic effects/ overdoses	599	1.6	28	79,038	1.7	0.8	0.9
S22	Planned procedures not carried out	72	2.4	8	57,435	0.9	0.1	2.7
S24	Holiday relief care	38	8.7	276	44,788	12.8	0.1	0.7
S25	Other admissions	83	5.5	536	62,959	6.9	0.1	0.8
T08	Presenile dementia	298	26.3	221	1,940	22	15.4	1.2
T11	Alcohol/drugs non-dependent use, age < 17 years	8,683	3.3	18	9,664	4	89.8	0.8
T12	Alcohol/drugs dependency	21,616	11.5	296	28,676	12	75.4	1
U01	Invalid primary diagnosis	251	13.1	102	2,124	15.2	11.8	0.9
U02	Invalid dominant procedure	649	7.5	449	83,721	6	0.8	1.3
U04	Age outside range 0–130 years	50	8.2	179	3,114	17.7	1.6	0.5
U08	Poorly coded dominant procedure	39	14.8	18	6,194	9.2	0.6	1.6

* *See* Appendix I for a list of alcohol-related ICD diagnoses.
† Only HRGs with 10 or more alcohol-related admissions for the year in question have been included in this table.
‡ For calculation of means, lengths of stay > 100 days were all 'trimmed' to 100 days' length. Day cases were counted as 0 days.

Table 8: Prevalence of alcohol misuse among drug users listed on regional drug misuse databases in the UK, 1996–97.

Database	Database includes secondary* alcohol (mis)use	Database includes primary† alcohol (mis)use	Prevalence of alcohol (mis)use (%)	Total drug users on database (*n*)	Prevalence of alcohol misuse amongst new drug users on the database (%)	Total new drug users on database (*n*)
Anglia and Oxford	Yes	No	12	4,285	–	–
Mersey	Yes	No	3.7	2,899	–	–
North West	Yes	No	6	7,897	–	–
Northern and Yorkshire	Yes	Yes	3.2 (secondary) 31.4 (primary)	14,623	–	–
North Thames	Yes	No	18	7,451	18.1	4,697
South Thames (West)	Yes	Yes	15.6 (secondary) 43.7 (primary)	5,930		
South Thames (East)	Yes	No	11.5	5,012	12.6	3,384
Trent	No	No	–	–	–	–
West Midlands	Yes	No	8.3	4,625	–	–
South West	Yes	Yes	7.7 (secondary) 2.4 (primary)	9,771	–	–
Welsh	Yes‡	Yes	29.5 (primary and secondary)	2,752	21.8 (primary)	1,808
Scottish	Yes	No	–	–	11.7	7,507

* Secondary alcohol (mis)use refers to use/misuse of alcohol among those subjects entered in the database primarily by virtue of their illicit drug misuse.
† Primary alcohol (mis)use refers to subjects for whom alcohol misuse is considered to be the primary problem and for whom secondary illicit drug misuse may or may not be a problem.
‡ It is not possible to discriminate between primary and secondary alcohol misuse, however, for the database as a whole. The overall prevalence is therefore for primary and secondary alcohol (mis)use.

In addition to the 'provider' services themselves, there are important sources of advice and information available to purchasers and providers of services. In particular, purchasers of services for alcohol misuse should be aware of the following.

Alcohol Concern (32–36 Loman Street, London SE1 0EE; Tel 020 7928 7377; Fax 020 7928 4644; www.alcoholconcern.org.uk) is the national agency on alcohol misuse in England and Wales. It works to reduce the costs of alcohol misuse and to develop the range and quality of helping services available to problem drinkers and their families. Since it began work in 1984 it has built up expertise on a wide range of alcohol-related issues. It uses this expertise to influence and support health and social policies both nationally and locally. Its services are available to purchasers, providers and others.

The Alcohol Harm Reduction Strategy for England was published by the Prime Minister's Strategy Unit in March 2004 (www.strategy.gov.uk/files/pdf/a104su.pdf). It sets out the Government's strategy for tackling the harms and costs of alcohol misuse in England. It will become a key feature of the public health policy.

Prevention

Alcohol policy and prevention of alcohol misuse

A broad range of policy issues is relevant to the prevention of alcohol misuse. In particular, taxation, licensing laws, minimum legal drinking age, drink-driving laws, workplace alcohol policy, by-laws governing drinking in public places and advertising all have an important part to play. Social and cultural attitudes towards drinking and drunkenness are also highly influential, although less readily open to manipulation by means of policy. The remainder of this section will focus on those preventative interventions which are most relevant to local community action.

Health education

Health education on drinking and alcohol misuse is likely to be provided through a number of different outlets.

Schools

The National Curriculum[12] specifies that children should be taught about alcohol, in the context of drug education, in school. The content of teaching includes:

- Key Stage 1 (5–7 years): the role of drugs as medicines
- Key Stage 2 (7–11 years): that tobacco, alcohol and other drugs can have harmful effects
- Key Stage 3 (11–14 years): that the abuse of alcohol, solvents, tobacco and other drugs affects health
- Key Stage 4 (14–16 years): the effects of solvents, tobacco, alcohol and other drugs on body functions.

The requirements of the National Curriculum may be supplemented by input from outside speakers (e.g. local health promotion officer, community police officer, etc.), but this should not detract from the responsibility of teachers to provide drugs education themselves. The objectives of such input should be considered carefully and the suitability of the outside speaker should be assessed carefully.

Health Promotion Unit

These departments function in supporting various types of community-directed educational work through, for example, schools, GP services and workplace programmes. They may provide information and resources, training and consultancy/advice for other agencies. They also support local focused projects and programmes, which can usefully include alcohol-related matters. There is a great need for more work of this type to continue over a longer period. In some areas they may have more of a role in influencing commissioning than in direct service provision.

Local Community Health Council (CHC)

With their direct access to the community, such councils played a role in the provision of educational pamphlets and in pointing individual callers or families toward help. CHCs have recently been abolished.

Health Education Materials

Background support and materials for local educational activities used to be available from the Health Education Authority (HEA). Relevant HEA leaflets intended for the public include 'Drinking for two', 'Say when . . . How much is too much?' and 'Think about drink'. The HEA was replaced by the Health Development Agency (HDA) in April 2000. The HDA have produced a review of interventions for tackling alcohol misuse. Other resources can be found on HealthPromis, the national public health database for England (http://healthpromis.hda-online.org.uk). Alcohol Concern also produce materials for health professionals, educators and others.

As well as aiming at primary prevention, health education may also be targeted at encouraging alcohol misusers earlier into treatment by self-referral. A media campaign in the North-East demonstrated that such an initiative could (at least in the short term) increase self-referral rates. Before launching a campaign of this type it would indeed be wise to ensure that the relevant services had the capacity to deal with the increased case load that may be stimulated.

Community action on prevention

Many opportunities exist for local action at a community (non-NHS) level, directed at the prevention or amelioration of alcohol misuse or specific types of alcohol-related problem.[13] Examples include:

- the use of existing licensing provisions for public houses in the health interest rather than letting decisions be directed entirely by trade interests
- mobilisation of police activity in preventing under-age drinking
- alerting housing departments to the fact that non-payment of rent can be indicative of a drinking problem
- enhancing opportunities for using personal health insurance examinations as a stimulus toward help with drinking
- local inter-agency community safety groups which bring together council, police, probation, social services, education, health, church, commerce and other agencies to address a broad range of safety issues, within which alcohol-related crime is likely to be one of the priority concerns
- police encouragement to put into effect law on not serving drunk clients.

The ability of any district, in an imaginative and purposive fashion, to 'make use of what is there' does, however, depend on leadership and on mechanisms for integration which, at present, are too seldom in place.

Treatment of Category I alcohol misuse

Category I alcohol misuse is treated in the community (*see* below) by means of brief counselling and health education. Given that Category I drinking is, by definition, not yet associated with problems or dependence, it is also the focus of the preventative interventions described above.

Treatment of Category II and III alcohol misuse

Category II and III alcohol misuse is currently managed by a range of interventions, from brief counselling through to extended residential rehabilitation. In particular, the following approaches are commonly utilised (for more details, *see* Edwards *et al.*[73]).

Counselling or psychotherapy

These may take a variety of forms. Currently, cognitive-behavioural forms of psychotherapy are particularly popular, with motivational interviewing and relapse prevention being widely employed. Counselling and psychotherapy may be offered on an individual basis or in a group setting, and in some facilities there may be provision for family or marital therapy.

12-Step groups and programmes

Alcoholics Anonymous or 'AA' (for 'alcoholics') and 'Al-Anon' (for families of 'alcoholics') operate a self-help programme based upon a philosophy enshrined in their '12 steps'. Many non-statutory treatment centres (and a few NHS units) now operate a programme based upon the 12 steps, which strongly encourage involvement in AA and working of the 'steps'.[14] Psychotherapeutic techniques used within these programmes tend to be eclectic, and are also offered on an individual or group basis, often with attention also being given to the needs of families.

Detoxification

Prescription of a benzodiazepine tranquilliser may be necessary to reduce the discomfort and complications of alcohol withdrawal. In more severe cases, injections of vitamin supplements and other medications may be necessary to reduce or prevent serious morbidity and mortality.

Pharmacological treatments

Two drugs are currently licensed in the UK to assist in the maintenance of abstinence from alcohol. Disulfiram is a deterrent drug which produces an unpleasant interaction with alcohol, thus discouraging a patient from further drinking. Acamprosate also acts to support abstinence from alcohol, by means of its action on brain neurotransmitters, possibly by effecting a reduction in 'craving' for alcohol. Acamprosate is only licensed for use in conjunction with psychological treatments.

Treatment providers and settings

There is a substantial overlap in treatment provision, with certain agencies tending to focus more on Category I or Category II/III alcohol misuse, but with an inevitable mixture of categories being addressed in any particular agency. Similarly, many agencies now operate in a variety of treatment settings. For example, an NHS community team may offer 'satellite' clinics in primary care and also provide a liaison service to medical and surgical teams in a district general hospital, as well as operating clinics from its own premises. However, it is useful to consider here the main agencies/settings in which treatment is offered.

A detailed and comprehensive national quantification of alcohol services in the UK is not centrally available. However, Alcohol Concern publish an *Alcohol Services Directory*[15] biannually, and they regularly invite service providers (on a voluntary basis) to update the information that they hold. A summary of this information is shown according to type of service provider and type of service in Table 9. The information is summarised according to geographical region in Table 10.

On 4 December 1996, the first national census of UK alcohol treatment agencies was conducted.[16] On that day, 302 alcohol agencies (41% of the total) completed census forms on every person to whom they provided a service relating to problem alcohol use. Data were provided for 3990 people, based upon which it has been estimated that, across the UK, 10 000 people per day are receiving help with a drinking problem. Of these, 7% are seeking help concerning a relative or a friend with a drinking problem. Based upon the

Table 9: UK alcohol services in 1997 by type of service and provider.

	Advice and counselling services	Community alcohol teams	Residential services	Others	Total (%)
Non-profit/charity/voluntary	197	3	137	5	342 (63)
Statutory	62	50	28	4	144 (27)
Private	3	0	44	5	49 (9)
Partnership	5	2	2		9 (2)
Total (%)	267 (49)	55 (10)	211 (39)	14 (3)	544 (100)

Table 10: UK alcohol services in 1997 by region.

Region	Non-residential services (*n*)	Number/million of population	Residential services
North	32	10.5	12
Yorkshire and Humberside	29	5.7	13
North West	38	5.9	18
East Midlands	16	3.9	13
West Midlands	26	4.9	6
East Anglia	11	5.1	3
Greater London	77	10.9	48
South East (excl. London)	56	5.1	48
South West	23	4.7	32
Wales	30	10.3	10

Table 11: Main type of service received by users of UK alcohol services.

Main service received	Users (%)
Individual counselling/therapy	39
Residential rehabilitation	15
Group work	13
Detoxification	7
Assessment	6
Telephone counselling	6
Day care	5
Initial referral	5
Day programme	4

Figures taken from *First National Census of UK Alcohol Treatment Agencies.*[16]

census data, it has been possible to calculate the extent to which the main types of service were being offered by alcohol agencies on census day (*see* Table 11). Over half the clients/patients were receiving counselling/therapy on an individual or group basis in the community. A further 15% were in residential rehabilitation.

Statutory social services

A report by the Social Services Inspectorate discussed the role of social workers in dealing with drinking problems.[17] Current types of provision can be summarised as follows.

- Social services often deal with drinking problems only in passing, and as a complication affecting the main focus of the case.
- Authorities are aware of the potential importance of parental drinking in relation to child protection, and drinking is also seen as an issue which can complicate the problems and needs of the elderly.
- A minority of social work departments have appointed a specialist worker.
- Most departments do not see referral to them of a single person with a drinking problem as appropriate.

Social work training in this area is not well developed, and there are many other demands on time and resources. Dealing with drinking problems is, however, an inevitable if insufficiently recognised part of the social work job.

Under community care legislation, local authorities also have a duty to provide assessment for suitability for residential rehabilitation for alcohol misuse (*see* below).

Social services are now also often working closely with primary care trusts in the commissioning of services, and joint finance is often used to fund services with a joint health and social service relevance.

Non-statutory general social services

These organisations also encounter the problems set by alcohol misuse. While the problem drinker will no doubt often be dealt with wisely on the basis of much experience, and with appropriate referral to other agencies if needed, adequate training is rare. Some of the facilities particularly likely to encounter alcohol misuse include:

- those dealing with homeless people (including homeless young people)
- youth organisations in general
- legal advice centres
- organisations offering family and marital counselling
- ex-service welfare organisations.

GP and primary health care services

Primary health care services provide a highly important front line for dealing with alcohol misuse, as recognised by the Royal College of General Practitioners.[18] These services hold the major responsibility for screening, diagnosis and early intervention directed at excessive drinking and early problems. They also carry shared-care responsibilities for dealing with alcohol-related problems and alcohol dependence, the continuing care of the chronic case and for dealing with family problems. The GP contract requires that enquiry into drinking should be made of all new patients, and there are also opportunities for alcohol-related health promotion within the primary care setting. Many practices now have access to counselling services, which may include specialist addiction counsellors with a role in prevention as well as early intervention for alcohol misuse.

Category III drinkers may receive detoxification, management of medical complications and prescribing of medication in primary care. However, they are also the group which is most often referred by GPs to specialist services.[19]

Previous research evidence generally suggests that the gap between the ideal and reality of GP involvement has been wide. Although most patients over the course of a year contact their GP at least

once, and although GPs see primary care as the proper setting for the detection of alcohol misuse, such problems are identified infrequently in practice. There is evidence that GPs see patients with alcohol misuse as a difficult group to work with, that they do not see themselves as adequately trained for this work, and that they lack both the confidence and adequate support which are necessary for such work.[20]

Where a specific service has responsibility for alcohol misuse, such as a community alcohol team (CAT) or substance misuse integration team (SMIT), it might play an important role in supporting and facilitating improved links with GPs. There is also evidence of a need for guidelines to assist GPs with the management of all categories of alcohol misuse,[19] and at least one such set of guidelines has now been published.[21]

NHS general (non-psychiatric) hospital services

Hospital-wide responses to alcohol misuse

The majority of general hospitals lack systems to integrate relevant action on a hospital-wide base. A lead has, however, sometimes been taken by an interested department (public health medicine, for instance, or general practice) or by a specially committed consultant.

Joint clinics

Some joint medical/psychiatric clinics have been situated within a general hospital setting, which concentrate on liaison work and take referrals from all departments within the hospital.[22]

Screening and intervention on general hospital wards

A specially trained nurse can identify and counsel the many patients on general hospital wards who have been directly or indirectly hospitalised because of their alcohol misuse.[23]

Obstetric services

Despite evidence of significant levels of alcohol misuse among pregnant women, with possible risk to the health of the fetus, no programmes appear to have been developed in the UK specifically to target this population.

Accident and Emergency departments

As with maternity services, the prevalence of alcohol misuse among attenders at Accident and Emergency departments outruns treatment developments. The pressure on Accident and Emergency staff is such that any immediately presenting alcohol-related problems are likely to be dealt with (the intoxication, for example, or the broken bone), but the need to offer/arrange treatment for the underlying alcohol problem is ignored.

NHS general district psychiatric services

Even where specialist alcohol services have been established, it is unlikely that they will carry more than 25% of the overall case load of patients with alcohol dependence who are referred to psychiatric services.[24] Psychiatric admissions for alcohol dependency were 25 per 100 000 in 1986.[25] Alcohol misuse can exacerbate psychiatric problems in a variety of ways. It may destabilise community care plans for a chronic

schizophrenic, it may render the depressed patient unresponsive to antidepressant medication or increase the risks of suicide, it may be a cause of dementia, and it can exacerbate anxiety and phobia. Care delivered to drinkers by the NHS general psychiatric services will usually be according to the care programme approach (CPA).[26] Alcohol misuse also intersects with the work of drug misuse clinics.

NHS inpatient alcohol services

In the mid to late 1980s, there were about 30 specialised alcoholism treatment centres in England and Wales,[27,28] with 520 beds and 34 consultants, i.e. about two consultants per region, or 0.2 per health district. Most units provide an eclectic and varied range of services, and emphasise liaison with other statutory and non-statutory services.

Principal service elements include:

- inpatient detoxification
- inpatient treatment, often employing behavioural and relapse prevention methods, within a therapeutic milieu
- liaison with community services.

The overall tendency among UK specialists in recent years has been to move towards outpatient rather than inpatient care,[29] not least on grounds of cost-effectiveness. Most of these units have developed liaison teams to work with GPs and generalists, which are discussed below.

NHS community alcohol services

Very few of those suffering from alcohol misuse are in contact with appropriate services. One study showed that as few as 10–20% were in contact with appropriate help over a 12-month period.[30] The then existing pattern for service provision was failing to make contact with the majority of patients in need. The Maudsley Alcoholism Pilot Project[31] developed the concept of the community alcohol team (CAT). The adoption of the CAT formula was subsequently commended in an official report on 'Patterns and Range of Services'[32] as a key strategy for strengthening service provision and facilitating the work of GP and generalist services. Stockwell and Clement[33] reviewed experiences with implementation of this initiative. More recent developments have extended the CAT concept beyond a single-substance team toward a SMIT which integrates liaison work across substances (alcohol, tobacco, illicit drugs, benzodiazepines).

Principal service elements include:

- outpatient/community detoxification
- outpatient treatment, often employing behavioural and relapse prevention methods
- provision of day-patient treatment within a therapeutic milieu
- introduction to Alcoholics Anonymous
- liaison with other community services
- referral where appropriate to hostels or 'dry houses' for longer-term rehabilitation.

Specialised non-statutory services

The non-statutory sector makes an important contribution to service provision for alcohol misuse. The organisations involved include:

- Alcoholics Anonymous, which offers 2900 meetings in England and Wales each week (an average of 190 per region and 15 per district)

- alcohol counselling services, which are usually run by local Councils on Alcoholism (no national data are available)
- organisations such as Turning Point and the Alcohol Recovery Project, which provide half-way house, therapeutic community, lodging, day centre, detoxification and shelter facilities, often concentrating on the needs of the homeless drinker or the drunkenness offender.

A report[34] published in 1992 showed around 100 registered voluntary sector establishments offering residential care for alcohol and drug users, and 300 counselling, information and educational agencies. A breakdown in terms of those working exclusively with alcohol or drugs or jointly across substances is not available. This same document provided guidance on the implications for these agencies of the 1990 NHS and Community Care Act. The type of patient or client who is being dealt with by such agencies will predominantly be in Category III (alcohol dependence), but alcohol counselling services may also deal with less advanced problems.

Under community care legislation, local authorities have a statutory responsibility to provide assessment for suitability for residential rehabilitation for alcohol misuse. By way of example, Kent County Council Social Services (which now excludes the Medway Towns) placed 37 people from West Kent Health Authority area (population approximately 725 000) and 32 people from East Kent Health Authority area (population approximately 575 000) in such facilities during a 12-month period in 1997–98.

Private health care organisations

Private health care companies are developing more comprehensive packages of district-level specialist services for alcohol misuse. Although often purchased to provide social rehabilitation under community care funding, they are also used by PCTs, often for extra-contractual referrals (ECRs).

Alcohol misuse and the criminal justice system

Alcohol misuse frequently leads to court appearances. The alcohol-relatedness of the offence is most obvious with public drunkenness or drunk-driving, but alcohol is often involved in many other offences. Non-statutory organisations have worked closely with the courts and probation service in an attempt to divert the repeated-drunkenness offender from prison towards rehabilitation. Partnership between specialist statutory alcohol agencies and the probation service has also been used as a means to promote sensible drinking among offenders.[35] Some experiments have been set up to provide treatment for the group of drunk-drivers who have an underlying drinking problem.

Under the Criminal Justice Act 1991, where a court is satisfied that an offender is dependent on alcohol, that his or her dependency caused or contributed to the offence in question, and that his or her dependency requires and may be susceptible to treatment, a probation order may be made to include a requirement that the offender shall submit to treatment for alcohol dependence. This should be 'under the direction of a person having the necessary qualifications or experience', and may be residential or non-residential.

Professional training

Basic training in most professions fails to impart the competence or confidence that staff require to deal effectively with alcohol misuse. University courses are available (e.g. at the University of London and University of Kent), mostly on a multi-disciplinary basis, at certificate, diploma and Masters level for the training of staff in the necessary skills for working as a specialist in this field. Most of these courses are

offered on a part-time or block-teaching basis, so as to allow admission of students who are currently working in the field. Some also offer a full-time option. Many short courses and day courses are also available.

A number of other agencies are available to provide help and advice. Alcohol Concern provides information on many aspects of relevant training. The Royal College of Nursing has fostered certain initiatives, social worker training has been reviewed, and for medical practitioners the key responsibilities are handled through the usual postgraduate training mechanisms. Finally, the Medical Council on Alcoholism can provide advice.

Establishing what services are currently provided

Table 12 provides a summary check-list of district-level organisations and activities as they commonly exist today. Not all these entries operate in the same way or to the same extent in all districts, but the list and the attached questions provide a framework at a local level for reviewing and auditing the baseline of relevant provision.

The service commissioner is in a key position to assess the needs of the population, the current service provision and the most appropriate strategy for future service provision. However, this position will only be exploited fully where there is close liaison with social services, with those working in education and the criminal justice system and with service providers. The Drug and Alcohol Action Team or primary care trust with commissioning responsibility can usefully provide a key co-ordinating function in the overall process of planning and delivering alcohol services.

6 Effectiveness and cost-effectiveness of services

Effectiveness

The literature review of different types of prevention and treatment response to alcohol misuse is summarised briefly here and in Table 13 (*see* p. 336). Treatment of drinking problems and assessment of service delivery systems have been the subject of extensive research and critical review. The overriding conclusion to be drawn from this literature is that different drinking problems and different patients require different types of help. The diversity of patients who present with alcohol misuse prompts complex questions. In appraising the effectiveness of services, it is important not to lose sight of the need to match the treatment to the patient, and to allow the patient to choose.

Prevention

Alcohol policy and prevention of alcohol misuse

Any strategy which prevented alcohol misuse would of course be preferable to treating the casualties. The most uncontroversial evidence on preventative efficacy relates not to any locally available option, but to national policies to control the liquor supply through pricing. Per capita alcohol consumption is related directly to indices of alcohol misuse, while consumption shows an inverse relationship to price. The affordability of alcohol is therefore an important public health issue.

Table 12: Establishing current service provision.

Prevention	
Health promotion	What role is being taken by the local Health Promotion Unit or equivalent?
Local action on prevention	Where does responsibility reside for the multiple aspects of community action?
Generic social services	
Statutory social services	Is there a specialist social worker? What mechanisms exist for training, and for monitoring the level of case work that involves alcohol misuse?
Non-statutory social services	What contribution may particular organisations be making to dealing with alcohol misuse? Are their support or training needs being met?
GP and primary health care	
GP and primary health care	Are the implications of the GP contract in relation to alcohol misuse being met? Is there liaison team (CAT or SMIT) support for the GP? What relevant training is being provided in screening, early detection and simple interventions?
NHS non-specialist hospital services	
General (non-psychiatric) hospital services	Is there an integrated policy or identifiable leadership on alcohol misuse? Has a joint clinic been established? At the level of individual wards or departments, have mechanisms for screening for alcohol misuse been introduced?
General district psychiatric services	Is there an articulated policy on the interlocking responsibilities of general and specialist psychiatric responses to alcohol misuse? What role are general psychiatric services able to play here? Are multi-disciplinary training needs being met?
Specialist services for alcohol misuse	
NHS Inpatient Alcohol Service	Has the commissioning body established such a service and defined its specific and liaison functions? Is the specialist service satisfactorily integrated with general psychiatric services?
NHS Community Alcohol Service	Has a liaison team been established within the CAT or SMIT model, and is it able to provide district-wide support to all relevant statutory (GP, hospital, social services) and non-statutory agencies?
Private and non-statutory alcohol services	Is a private health care organisation or other non-statutory service contributing to district provisions for alcohol misuse?
Alcohol misuse and the criminal justice system	
	What mechanisms have been established to support work with the drunkenness offender, the drunk driver and other types of offender where alcohol misuse may often be implicated?
Three over-arching questions	
	Within the locality, what mechanisms currently exist to determine adequacy of multi-disciplinary, multi-sectoral training in alcohol misuse? What mechanisms for integration exist? Has a local plan on alcohol misuse been formulated? Is it being implemented and updated?

Table 13: Effectiveness of different types of prevention and treatment response to alcohol misuse.

	Extent and nature of evidence on efficacy	Size of effect	Quality of evidence
1 Prevention			
(i) National strategies to control real price of alcohol and thus per capita consumption	Substantial international studies involving epidemiological analysis both across time and between countries, and often using cirrhosis as an indirect indicator, show that controlling the liquor supply is an effective way of reducing alcohol misuse.	A	II-2
(ii) Health education directed at general or school-age populations	It is difficult to determine impact on long-term behavioural changes in a multi-variable field where many other and longer-term influences may be at work. A considerable international research literature for the most part offers equivocal conclusions.	C	I-1
(iii) Local community action	Research has so far usefully mapped the multiple feasibilities but there is as yet little work to test objectively the efficacy of these strategies.	C	II-2
2 Treatment of Category I (misuse without problems or dependence)	Substantial evidence from controlled studies conducted in the UK and elsewhere indicates that advice given by the GP or other primary health care worker can reduce prevalence of alcohol misuse.	A	I-1
3 Treatment of Category II (problems) and Category III (dependence)			
(i) Advice	Advice, often of a fairly minimal intensity, if given by a credible professional informant can be effective in the treatment of Category II patients.	A	I-1
(ii) Intensive treatment	There is no evidence that the generality of Category II and Category III patients benefit more from intensive treatment than from less intensive interventions. There is evidence to suggest that the more severely dependent patients respond preferentially to sustained and intensive help.	A	I-1 for across-the-board approach II-2 for heavily dependent patients
(iii) Outpatient care	For the generality of patients in Categories II and III, outpatient care will be as effective as inpatient care.	A	I-2
(iv) Inpatient care	Inpatient care offers no general advantage over outpatient care, but clinical experience indicates the need for inpatient resources to deal with the complicated case and life-threatening situations.	A	I-1 (as routine) II-2 (as clinically determined)
(v) Detoxification	Clinical discrimination is needed, and by no means all such patients require drug treatment in withdrawal. In some circumstances (e.g. DTs), full medical cover is needed and can be life-saving.	A	I-1
(vi) Rehabilitation hostels and related day programmes	Uncontrolled descriptive outcome studies have reported on hostel rehabilitation for homeless drinkers and the drunkenness offender. Despite the lack of controlled experiment it is likely that hostels can confer benefit, and without such help there is often no way out of the cycle of drinking and homelessness.	B	III
(vii) Alcoholics Anonymous and Al-Anon	AA is not susceptible to controlled evaluation, but subjects who affiliate to AA fare substantially better than those who do not. AA is most effective with the severely dependent drinker. Al-Anon is an effective support for families of such patients, in terms of anxiety relief and aid to coping.	B	II-2

Health education

Although public and school-based education on alcohol misuse can be expected to influence the ground swell of public awareness in the long term, there is little research evidence to support the effectiveness of school-based educational programmes in reducing alcohol use, or in changing attitudes to alcohol use, although they may increase knowledge about the subject.

The limitations of widespread campaigns based on the 'sensible drinking' message must also be recognised. While recommended drinking limits may offer useful guidance to inform a doctor–patient consultation, there is no evidence that such guidance on a wider scale is an effective means of primary prevention of alcohol misuse.[36] Public education can, however, be effective in stimulating earlier self-referral and help-seeking.

Community action on prevention

Although improved 'use of what is there' has seldom been assessed through formal research designs, it has much to recommend it in terms of common sense. One may initially suspect that the potential effectiveness should be rated quite favourably.

Treatment of Category I alcohol misuse

The conclusions from a substantial research literature are unequivocal. Advice given in the primary care setting significantly reduces individual levels of alcohol misuse and thus the prevalence of misuse. Wallace *et al.*[37] showed for instance that at 1-year follow-up, 47% of alcohol misusers who received advice from their GP had reduced their drinking, as opposed to 25% of those who received no such advice.

Treatment of Category II and III alcohol misuse

It is necessary to remember that different patients will have different treatment needs in terms of setting, type, intensity and duration of help. Even when major drinking problems have been incurred, or significant dependence has been established, minimal intervention in terms of advice can often be as effective as more intensive treatments in improving drinking outcomes.[38,39] In general, about 50–60% of alcohol-dependent patients show a significant improvement over a 12-month period following treatment contact, whatever the intensity of the treatment offered.

Counselling or psychotherapy

Chick *et al.*[23] demonstrated the efficacy, in terms of reduced alcohol consumption 12 months later, of counselling given by a nurse on a general hospital ward to patients with drinking problems. A large multi-centre study of the treatment of alcohol misuse in the USA showed that motivational interviewing, cognitive-behavioural psychotherapy (incorporating relapse prevention) and '12-step facilitation' were all equally effective in improving drinking outcomes 12 months after treatment.[40] There is now an extensive research base to support the efficacy of motivational interviewing and cognitive-behavioural psychotherapy in the treatment of alcohol misuse.[41]

12-Step groups and programmes

If professional staff encourage attendance at these self-help groups, more patients attend. Encouragement can enhance attendance from perhaps 10% to 40% in the short term. Subjects who attend AA regularly do better than those who do not, with 40–50% of the former achieving several years of abstinence and 60–68%

showing at least some improvement.[42] Thus although there are no satisfactory controlled trials on AA's effectiveness, there are reasons to believe that treatment policies which encourage AA attendance are likely to confer benefit. In terms of drinking outcomes, 12-step therapy (in an outpatient setting) is at least as effective as motivational interviewing or cognitive-behavioural therapy, and 3 years after treatment appears to be more effective than motivational enhancement for patients with social networks that strongly support their drinking.[40,43] Residential 12-step programmes are probably also of at least equal efficacy, in terms of drinking outcomes at 1 year, to alternative inpatient treatments.[44]

Detoxification

In previous decades the mortality associated with delirium tremens was about 10%, and alcohol withdrawal fits and status epilepticus could also be life-threatening. The decline in the mortality associated with withdrawal status to zero (in competent hands) represents a therapeutic advance which deserves greater attention. Withdrawal at moderate levels of dependence can be handled safely and effectively by a GP or a CAT. Withdrawal in a sheltered environment with minimal medical care can also be effective in some circumstances. However, to deny medical care to the severely dependent patient is to put their life at risk, and inpatient detoxification remains the only safe option for a minority of cases. Benzodiazepines are recommended as the pharmacological agent of choice for almost all cases in which medication is necessary, but the dosage regime must be tailored to the individual case.[45]

Pharmacological treatments

Disulfiram, when accompanied by psychological support, is effective in reducing the number of drinking days, and the amount drunk, in compliant patients. For some it assists in maintaining abstinence, but interpretation of the research evidence is complex, and it clearly does not benefit all patients.[46] It is probably of most help to those patients who would in any case have the best prognosis. In 10 of 11 randomised controlled trials, acamprosate has been shown to double the locally achieved abstinence rates following treatment. The effect was achieved not only during the 12 months of administration, but also for a year or more afterwards.[47]

Treatment providers and settings

Statutory social services

Psychological support provided by trained social workers would be as effective as that provided by other suitable trained personnel (*see* above). Effectiveness of the performance of statutory duties, for example under the Community Care Act, as a means of enhancing outcomes has not yet been the subject of research attention.

Non-statutory general social services

There has been remarkably little research on the efficacy of non-statutory services, but the general comments (*see* above) regarding counselling, psychotherapy and 12-step programmes would all apply.

GP and primary health care services

There is one study which showed that management of alcohol misuse in primary care, when supported by specialist services, can be just as effective (in reducing alcohol consumption and alcohol-related problems

at 6 months) as with specialist outpatient care.[48] However, this research would not be expected to apply in circumstances in which primary care staff were reluctant or unwilling to engage in such work, or specialist support and liaison were not available.[49]

NHS general (non-psychiatric) hospital services

The effectiveness of such services in the management of alcohol-related morbidity (e.g. alcohol-related liver disease, pancreatitis, trauma due to alcohol-related accidents, etc.) is beyond the scope of this review. However, there is considerable research evidence to support the effectiveness of most of the treatments in question. There is also research evidence to support the efficacy in such settings of counselling by a nurse, directed at reducing the underlying alcohol consumption (*see* above).

NHS general district psychiatric services

Similar comments apply here to those made above for non-psychiatric hospital services.

NHS inpatient alcohol services

In general, inpatient and outpatient treatment have been shown to be equally effective in their impact on drinking outcomes.[29] However, some studies have shown that outcomes after inpatient treatment may be superior to other treatment options, in terms of both drinking[50] and mortality,[51] and a review of the research literature in this area suggests that traditional conclusions regarding the equivalence of outcomes for inpatient and community treatment should be reviewed.[52]

NHS community alcohol services

The work of the community alcohol service involves counselling, psychotherapy, use of detoxification and pharmacological treatments, and liaison with primary care, etc., all of which have been discussed above. For most patients, detoxification can be conducted as safely and effectively in the community as in hospital.[53] However, a significant minority cannot be detoxified safely in the community, and successful completion of detoxification (but not enhanced outcome 6 months later) may be somewhat more likely with hospital than community detoxification.[54]

Specialised non-statutory services

Rehabilitation hostels and associated day programmes are largely targeted at a disadvantaged group who are experiencing many social problems. While controlled studies on efficacy are few and unconvincing, these hostels may provide help of a type not available elsewhere, and succeed in ameliorating the drinking of perhaps 30–40% of their clients and help towards a good long-term adjustment of 20% who would otherwise circulate expensively around many other facilities.[55]

Private health care organisations

These services generally use similar techniques to those described above, although they may (in the UK) employ a 12-step programme more frequently than NHS services. Relevant comments made above would all therefore be applicable here.

Alcohol misuse and the criminal justice system

There is some evidence to suggest that drinking outcomes, and the proportion of patients reporting improvements in social functioning, 12 months after treatment are as good following court referral as they are following voluntary referral.[56] Rehabilitation programmes for drink-drivers are, however, apparently not effective in reducing recidivism.[57]

Cost-effectiveness

As data on cost-effectiveness are not available for many of the interventions described, and as there is no central source of information on costs of alcohol services in the UK, East Kent will be used here as an example of what the costs of alcohol services might be (based on actual 1997–98 costs). Consideration of these figures alongside the information provided on effectiveness (*see* above) will allow some impression of cost-effectiveness to be formed. East Kent has a population of about 600 000.

Prevention

Alcohol policy and prevention of alcohol misuse

The economic implications of national policies on alcohol pricing and liquor control are beyond the scope of this chapter. However, any national policy which allowed the progressive cheapening of alcohol would eventually have a follow-through in terms of district health and social service costs, while tighter tax policies would have positive consequences on reducing local health costs.

As alcohol consumption has doubled in the post-war period, with consequences for alcohol-related morbidity and mortality as well as health service spending, service commissioners might want to monitor the affordability of alcohol and the mortality associated with it (liver cirrhosis and alcohol-related accidents).

Health education

Other than large-scale media campaigns, public education at a local level represents a relatively low-cost activity. Even if short-term effectiveness is uncertain, such local initiatives seem likely to offer at least moderate long-term value for money. In the late 1990s, East Kent Health Authority spent approximately £10 000 per annum on health promotion.

Community action on prevention

This type of strategy can make little or no call on health or social service budgets, but could put increased pressure on other agencies. For example, increased police action to curb under-age drinking or drink-driving implies costs on their budget. Estimates of cost-effectiveness that take account of such broad definitions of cost are difficult. In general, however, a favourable cost-effectiveness might be expected from measures which use available mechanisms to benefit the public health.

Treatment of Category I alcohol misuse

Brief interventions aimed at the patient/person drinking over safe limits take only a few minutes to deliver and are effective. As the costs of detection and provision of advice are low, in the region of between £15 and £47, the cost-effectiveness of such interventions is likely to be high.[58]

Treatment of Category II and III misuse

The relevant literature bearing on cost offset, cost–benefit and cost-effectiveness has been reviewed by Godfrey,[59,60] with the following conclusions.

- Failure to provide appropriate treatment for these types and degrees of alcohol misuse constitutes a policy of cost-ineffectiveness. Untreated or inappropriately treated patients make heavy and repeated demands on treatment services in an ad hoc, unplanned and often entirely unproductive fashion. One US study has suggested that the untreated alcoholic, on average, incurs 200% of the general health care costs of a non-alcoholic, with a sustained reduction in this excess after treatment.[61]
- Relatively simple advice directed at these types of patient will often confer benefit. Inpatient counselling and outpatient care are also likely to constitute highly cost-effective strategies.
- While, in general, a primarily inpatient approach to treatment is not cost-effective, inpatient care will be cost-effective for the complicated case.

A study of patients treated in the Edinburgh Alcohol Problems Clinic, which had been utilising both inpatient and outpatient treatment, revealed an average cost of £1134 over a 6-month period.[62] Costs correlated with a measure of alcohol-related problems, but not with the number of days of abstinence.[63]

Counselling or psychotherapy

Brief interventions are likely to be highly cost-effective in Category II misuse (although not Category III – for which they have not been evaluated), given the low cost of the intervention, the high cost of untreated alcohol misuse and the evidence of efficacy.[58] Where cognitive-behavioural therapy (or other psychotherapy) is provided by a clinical psychologist, the costs are likely to be much higher.

12-Step groups and programmes

AA, being a self-supporting organisation and a freely available service to all who wish to attend, must be a uniquely cost-effective resource, even given the little research evidence concerning its efficacy.

Detoxification

It is not clinically necessary to treat mild dependence on an inpatient basis. In one study, costs of inpatient detoxification for mild/moderate dependence were 9–20 times greater, with no difference in outcomes at 6 months after treatment.[54] However, for selected cases inpatient detoxification is essential in order to prevent serious morbidity and mortality, and in such cases cost-effectiveness (if evaluated) would undoubtedly be high.

Pharmacological treatments

Little is known about the cost-effectiveness of disulfiram or acamprosate. Acamprosate is a relatively expensive treatment (*c.* £650 for a year's course of treatment for one patient), but if used appropriately, given the evidence of efficacy, it is still likely to be highly cost-effective. Unfortunately, it is not clear from currently published literature that we know how to define 'appropriate' use in terms of health economic benefits. However, an evaluation conducted in Germany, and based upon the costs in their health care system, has estimated a benefit of 2600 DM per additional abstinent patient.[64] A year's course of disulfiram costs about £130 at standard dosage.

Treatment providers and settings

Statutory social services

If we assume that services will only be cost-effective when used for appropriate clients, the role of statutory social services in making assessments for community care funding must place them in a highly significant position in this regard. However, the actual cost-effectiveness of community care assessments will presumably depend upon the selection criteria employed for assessing clients as suitable for residential rehabilitation or other forms of community care. Given that these are not consistent around the country, and given the lack of research, we do not know how cost-effective this process is.

Non-statutory general social services

Little is known about the cost-effectiveness of such services, but the general comments made above concerning counselling and psychotherapy, etc., are probably applicable.

GP and primary health care services

It would be expected that interventions offered in primary care will be at least as cost-effective, and possibly more so, as similar interventions offered in secondary care.

NHS general (non-psychiatric) hospital services

Cost-effectiveness of such services, in terms of medical and surgical outcomes, is beyond the scope of this review, and is difficult to cost accurately. However, in the late 1990s, East Kent Health Authority estimated that it spent approximately £260 000 per annum on such services. Brief alcohol counselling by a nurse in this setting is highly effective, relatively cheap and probably also therefore highly cost-effective.

NHS general district psychiatric services

The cost-effectiveness of such services, in terms of general psychiatric outcomes, is beyond the scope of this review. However, liaison with specialist alcohol services would be expected to produce a mutual benefit in terms of both drinking and psychiatric prognosis. The cost-effectiveness of such liaison is therefore potentially good.

NHS inpatient alcohol services

Evidence of greater costs of inpatient treatment, and equal efficacy of inpatient and outpatient treatment, have generally been taken to indicate the greater cost-effectiveness of the latter. However, in selected cases (e.g. following the failure of outpatient treatment) inpatient treatment may still be more cost-effective.

NHS community alcohol services

A CAT is not a low-cost resource. For example, in the late 1990s, East Kent Health Authority spent approximately £430 000 per annum on its NHS community alcohol service. However, to the degree that it mobilises relatively cost-effective activity in primary and generalist settings, as well as delivering education and facilitation skills, it could be highly cost-effective.

Specialised non-statutory services

Specialised alcohol rehabilitation hostels are more cost-effective than the alternatives of placing such drinkers for long periods in psychiatric hospitals or hostels (psychiatric or non-specialist), where their behaviour may be uncontrolled and disruptive. The cost-effectiveness of non-residential services is subject to the considerations outlined above (e.g. for counselling). In the late 1990s, East Kent Health Authority spent approximately £10 000 per annum on such services.

Private health care organisations

Private providers, who cater largely for fee-paying patients, have been criticised for their emphasis on inpatient treatment with its attendant costs, which it has been suggested was driven by the profits associated with institutional rather than outpatient care.[65] ECRs for services available within the NHS are clearly not cost-efficient. However, the costs and efficacy of the treatments provided by different organisations are likely to vary, and therefore cost-effectiveness is also likely to be variable, and will usually be unknown. In 1997–98, East Kent Health Authority spent £25 000 on detoxification in private facilities, but its expenditure on such treatments in these settings was in continuing decline.

Alcohol misuse and the criminal justice system

Given the significant human, social and financial costs of alcohol-related crime, we might expect that services for offenders would be potentially highly cost-effective.

7 Models of care

The general requirements of any model to be developed are that it should emphasise the role of the primary care sector, while acknowledging local variation in its capacity or willingness to respond, and at the same time acknowledging a continuing supportive role for specialist services. In many districts, development of responses to alcohol misuse is likely to start from a relatively low baseline of activity and commitment. The problem will not be how to fund and hold in place a comprehensive, integrated and effective district response, but rather how to remedy extensive gaps in provision. It is therefore necessary to begin with an assessment of the nature and extent of present needs and services, before moving on to a consideration of the strategic options that are available.

Local needs assessment prevalence studies

In any given locality, a full needs assessment for alcohol misuse would ideally be conducted in order to provide an accurate guide to the type and volume of services required. In practice, this may not be possible due to lack of resources, time or expertise. It may also be perceived that such an exercise is unnecessary when good-quality services are available and seen to be meeting the need, or when there is a dearth of good services and the need is 'obvious'. There may be some truth in any or all of these reasons, in any particular locality. Equally, however, they may all be bad reasons for failing to conduct such a study. Investment of relatively few resources in such an exercise could avert an expensive waste of resources devoted to a service which is inappropriate or unnecessary. Apparently good service provision can mask unmet needs, and 'obvious' needs are not necessarily high priorities in relation to hidden ones.

A full health needs assessment should include an attempt to measure incidence/prevalence, existing service provision and effectiveness/cost-effectiveness of potential/actual services.[66] Only the first of these components will be considered here, the others having already been referred to above. However, it must be remembered that incidence and prevalence alone do not necessarily provide a good indicator of need. Also, information on all of these components will be available from national or regional sources, without the need for any specific or new research. Many such statistics are provided in this publication. However, routinely collected statistics can be inaccurate or misleading, and nationally collected data do not necessarily provide evidence of local variation.

If a decision is made to proceed with a local epidemiological study of alcohol misuse, then it will probably be appropriate to invite tenders from local organisations with the necessary expertise. This may result in the submission of proposals from very different groups. A 'market-research' survey by a firm of consultants is likely to provide very different data to an academic study by a university research group. Each may have its merits, but it will be important to clarify whether applicants have familiarity with working in this field (clinically as well as in survey or research work), what the limits of their methodology may be, and what definitions of target problems will be employed. Support from an independent research adviser with experience in this field will be valuable for purchasers who do not have the necessary 'in-house' expertise to assess the merits and demerits of competing submissions.

Given the prevalence of alcohol misuse in most parts of the UK, it will be necessary to sample a reasonably large population in order to gauge accurately the incidence and prevalence in various sub-samples (e.g. by age, sex, geography of residence, etc.). A decision will also need to be taken about the choice of general population sampling compared with sampling of 'at-risk' populations, which might require particular services, such as hospital or primary care patients, drink-drivers, offenders in the criminal justice system, etc. Numbers of clients/patients receiving help for alcohol misuse in specialist alcohol agencies, or in other services, can be useful but do not indicate unmet need. Certain alcohol-related problems may provide a proxy indicator of the overall level of alcohol misuse. For example, cirrhosis mortality, drink-driving convictions, drunkenness convictions or hospital admissions for alcohol-related diagnoses might all be useful for this purpose, and also provide information about specific services that might be required.

Ideally, information should be collected on quantity and frequency of consumption, as well as a range of social, psychological and medical alcohol-related problems, and alcohol dependence. This will allow a comprehensive picture of need to be built up, including an approximate allocation to Categories I, II and III, described above. A wide range of existing questionnaires and survey instruments of known reliability and validity is available for use in such an exercise. Personal interviews by trained staff will always provide superior estimates to self-report questionnaires, but will inevitably be more time-consuming and expensive, and may suffer from a lower response rate.

Strategic options

Having assessed the present needs of a community, and given the high prevalence of alcohol misuse, the high social and financial costs and the serious morbidity and mortality, it is assumed that no Drug and Alcohol Action Team or primary care trust will consider 'no response' as being an acceptable option.

Integration with drugs services or separate purchasing of alcohol services

A decision must be made as to whether alcohol and drugs services will be purchased separately or as a seamless whole. Clinical and scientific principles of treatment are very similar, and in many cases identical, for both alcohol and other drug misuse. Many patients/clients have problems with a range of drugs/

substances and it is somewhat artificial to separate out alcohol for separate attention. For these and other reasons, many substance misuse teams offer services to those with problems concerning alcohol misuse, other drug misuse, and both types of problem.

However, the similarities between different drugs often tend to highlight their differences. Quite apart from the pharmacological differences between alcohol and many other drugs, there are significant social and political differences. Alcohol is a socially and legally acceptable drug. The size of the alcohol problem in this country is correspondingly far greater than that of the illicit drug problem, so that there are much larger numbers of people requiring and requesting help with alcohol problems (85% of people attending alcohol agencies have not used illegal drugs).[16] Furthermore, although stigmatised themselves, alcohol misusers often do not consider themselves to be 'drug' users and prefer to receive help away from 'drug' services. Perhaps more importantly, alcohol services have often received far fewer resources, and bodies such as drug and alcohol reference groups can easily find their time, money and political concerns being primarily directed to other drugs. For these and other reasons it can therefore be beneficial to keep funding and delivery of alcohol services separate from other drugs services. However, neither option is lacking in advantages or disadvantages, and views of local service users and providers should play a significant part in any decisions on this matter.

Enhancing the effectiveness of existing services

A low cost and undemanding option in prevention and care is to maximise the effectiveness of existing mechanisms (e.g. licensing or policy) or resources (e.g. GPs and general hospitals). Effective treatment of alcohol misuse implies the ability to make better use of what is already to hand. This option may fail to address gaps in existing services, and will probably fail to match services to the needs of the population. However, although it is generally discouraged here, its success will depend to a large extent upon the appropriateness of existing service provision.

Responses to alcohol misuse are often fragmented, due to the diversity of medical and social needs of the affected population, and the haphazard growth of existing services spread between many agencies (NHS, statutory social services, private hospitals, voluntary sector). Fragmentation must be avoided by an integrated response to alcohol misuse and by co-ordination between these strategies and wider district health and social planning. A fragmented response to alcohol misuse is likely to waste money. Co-ordination of service provision, and enhanced liaison between services may therefore be a key to enhancing the effectiveness of existing services without increasing expenditure.

This approach might be extended to include the relatively unco-ordinated purchasing of additional services. This strategy adds to the fragmentation. Examples include:

- the funding of a counselling centre rather than enhancing the screening and intervention skills of GPs or hospital ward staff
- the setting up of a free-standing detoxification centre rather than strengthening the capacity of GP or outpatient services to meet detoxification withdrawal needs.

High-volume/low-intensity interventions

If a more strategic response is sought, the evidence of efficacy of brief interventions, the low cost of such interventions and the known high prevalence of Category I, and that proportion of Category II cases who are less severely affected, might be taken as a good basis for concentrating resources on providing brief interventions to a community on a large scale. This would almost certainly be very cost-effective and, especially if combined with other preventive measures (education and community action programmes, etc.), might effect a longer-term reduction in more serious alcohol misuse.

However, this approach leaves no provision for a smaller number of the more severely affected individuals in Categories II and III. These individuals are likely to inflict considerable ongoing costs upon health and social services and, moreover, will inappropriately consume the resources intended for individuals with a less serious problem. Overall, this strategy will therefore completely fail to meet the needs of the most seriously affected alcohol misuser, and this will in turn impose significant costs upon health and social services, families, employers and the criminal justice system.

Low-volume/high-intensity interventions

An alternative strategic response would be to prioritise only the more severe cases of Category II and III alcohol misuse. Service provision would therefore focus on more intensive and expensive longer-term or residential interventions, and on services for those who continue to drink heavily despite all efforts to help them. The rationale might be that if resources are limited, the more severe problems should be prioritised.

This option suffers from the reverse of the problems described for high-volume/low-intensity interventions. Although the most serious cases might be addressed effectively (and in fact this strategy may well be relatively ineffective and expensive), the bulk of alcohol-related problems in a community are contributed by the relatively more 'moderate' drinkers, because of their larger numbers. A considerable cost to the community would therefore continue to accrue as a result of this unaddressed large-scale albeit less severe alcohol misuse. If a low priority were also given to other preventative interventions, the problem might even escalate with time.

A comprehensive approach

The only strategy which can be recommended here is the creation of a planned and integrated response to alcohol misuse. Preferably this should be informed by a prior needs assessment study to identify and quantify the local prevalence of alcohol misuse and existing service provision. This approach requires both a sense of priority and a willingness to move in logical steps. It also implies integrated planning between service commissioners, primary care trusts and local authorities.

An integrated district response to alcohol misuse

This developmental model is summarised with approximate indications of staffing and costs in Table 14.

Table 15 (*see* p. 348) indicates the likely divisions of responsibility. Figure 3 (*see* p. 349) shows how different cases should present and flow through the system.

Planning of the integrated response, and provision of clinical services within it, should attempt to provide the optimum balance of low- and high-intensity interventions. Less intensive treatment should therefore more often be the initial treatment of choice. Such minimal intervention can be seen as a carefully observed 'therapeutic experiment'. This should not be misread as implying that there is no place for intensive treatment. The clinical indications for more intensive deployment of resources include:

- more heavily dependent patients
- the homeless and unsupported
- those with severe concomitant psychological or physical illness or drug misuse
- patients who present a suicide risk or who are a danger to other people.

Table 14: Building an integrated and prioritised community response to alcohol misuse.*

Item	Functions	Staffing	Cost pa (× £1,000)
1 CAT or SMIT liaison team	Functions multiple, flexible, exploratory and entrepreneurial, but likely to include: (i) first wave of generalist services collaborations including GPs, general hospitals, district psychiatric and social services (ii) liaison with voluntary sector alcohol agencies including AA and Al-Anon (iii) immediate specialised service delivery and shared care through outpatient and liaison clinics (iv) direct/indirect assistance with detoxification (v) pharmacological treatments (disulfiram and acamprosate) (vi) professional training (vii) overseeing and stimulating prevention (viii) special responsibility to liaise with district drug dependence services.	Full-time consultant, half-time specialist registrar, full-time SHO, 8-person team with variable skills mix drawn from CPN, SRN, social worker, occupational therapist, psychologist, counsellor, with in and out attachments from voluntary agencies, and secretarial support.	400–500
2 Access to 8–10 hospital beds in psychiatric setting (or larger facility shared by two districts)	Dealing with psychiatric comorbidity; detoxification of severely dependent patients who cannot be managed in outpatient departments.	Medical cover from liaison team. Full nursing cover, occupational therapist, psychology support, investigation facilities.	300–400
3 Services for the homeless drinker	Outreach shop-front, day centre and hostel facilities.	Likely to be provided by non-statutory agency.	Determined by very variable extent of district need.
4 Counselling and information centre	Ready access to confidential advice and information in community setting; development of initiatives for special population groups; training of volunteers.	Two to three trained counsellors, volunteers, secretarial support.	80–100
5 Ensuring that prevention receives adequate attention	Education through schools and workplace; local community action; the GP component.	Liaison team to stimulate and support these activities.	Option 1: 10–20 for material and resources. Option 2: (additional) appoint staff person, 25
6 Additional resources for liaison team	Functions include: (i) holding in place established collaborations (ii) expansion of multi-disciplinary training (iii) second wave of collaboration, e.g. courts, workplace programmes (iv) development of family support system.	Add one or more extra staff to mixed skills team, possibly on basis of attachment or training attachment from other statutory or voluntary services.	25–50

* Figures assume a population of *c.* 500 000.

Table 15: Level of different types of service involvement with three categories of substance misuse.

Category of alcohol misuse	Service involvement*				
	Generalist		Specialist		
	Primary care	General hospital	General psychiatric	Specialist psychiatric	Specialist voluntary sector
Excessive drinking without problems	●●●	●			
Excessive drinking with problems	●●	●●●	●	●	●
Alcohol dependence	●●	●	●●	●●●	●●●

* ●, Slight; ●●, considerable; ●●●, very considerable.

Key priorities

The first priority should be for a strategic review of what services are already available and what services would be provided ideally. This should preferably be accompanied by an assessment of the local prevalence of alcohol misuse.

The second priority is to establish a community alcohol service with responsibilities for liaison and the support of other providers, as well as a role in service provision to the more severely affected Category II and III drinkers.

The third and ongoing priority is for the community alcohol service to take a lead in developing ongoing liaison and collaboration between all service providers. This is strategically important for service planning, and some or all of this aspect of the work could be delegated to a multi-agency alcohol service providers group, convened by the Drug and Alcohol Action Team or primary care trust. In some areas, this function might be undertaken by a drug and alcohol reference group, although the size of the drugs agenda is likely to be such that there is a danger of alcohol-related matters being given insufficient committee time.

It is also important that there is a separate forum for liaison concerning clinical matters so that, giving due regard to issues of confidentiality, the most appropriate form of care is offered to each individual client/patient, with cross-referrals and joint working taking place on a regular basis, governed by clinical need.[67] Where patients are already receiving care from general psychiatric services, the CPA will already be in place and the involvement of alcohol workers should be encouraged as a part of it. Where general psychiatric services are not involved, the general principles of CPA (assessment of health and social needs, a named key worker, identifiable care plans and setting of care review dates) would seem to be very relevant to this client/patient group, whether they are being seen by a statutory or non-statutory agency. However, it is unlikely that formal CPA meetings will be necessary, feasible or desirable for all Category II and III drinkers, and an inter-agency clinical liaison meeting will ensure that multi-agency involvement of patients not involved in the formal CPA process is nonetheless regularly reviewed.

Prevention

The liaison team might be charged with monitoring preventive initiatives, and a small support and development budget will be needed. Alternatively, a specialised member of staff might be provided to give focus to this work. Multi-agency collaboration will again be vital, and should also be addressed by the multi-agency alcohol services provider group described above.

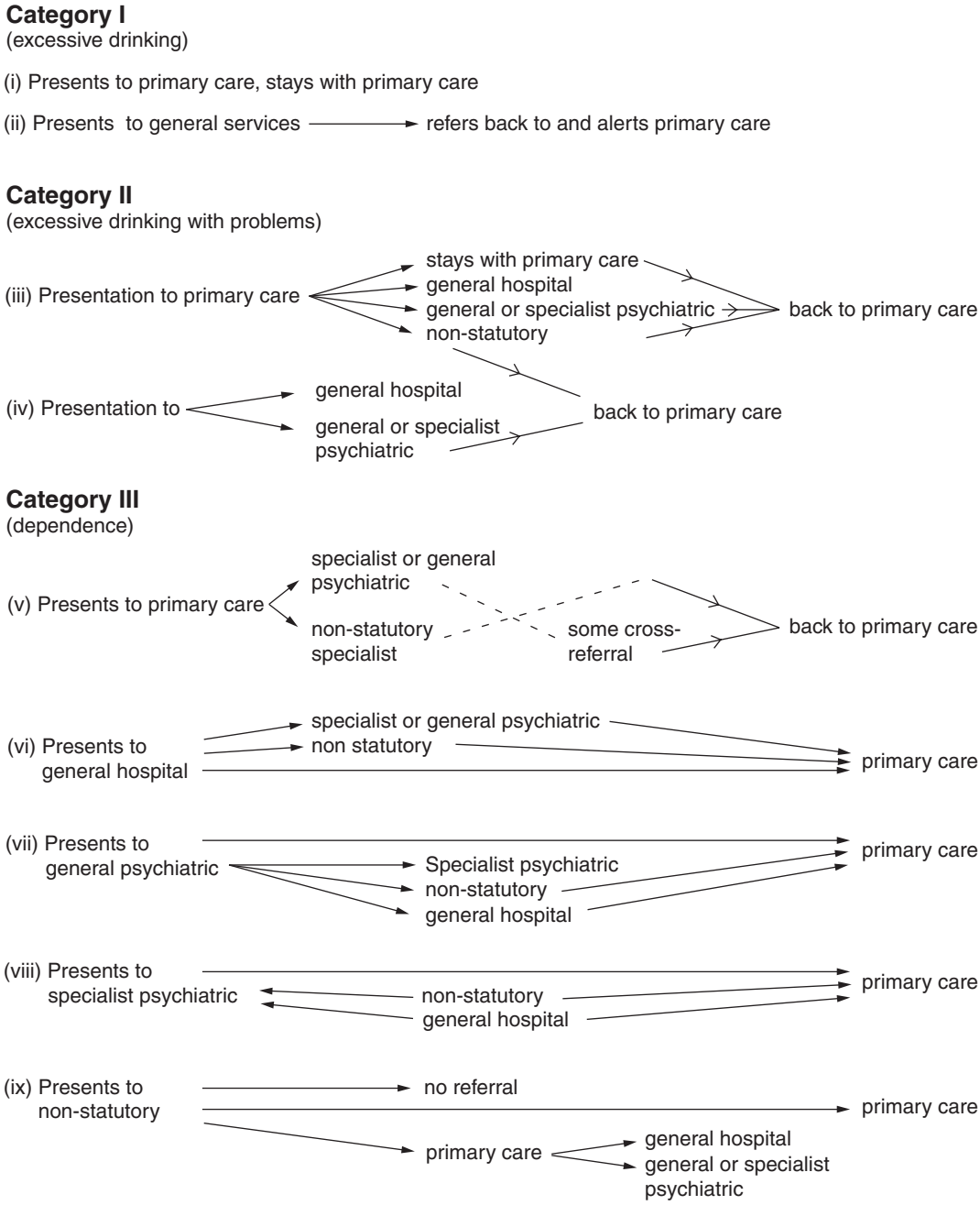

Figure 3: Flow charts for different categories of case presentation.

Community services

Without the establishment of a CAT or SMIT team, no progress can be expected towards a comprehensive local community response to alcohol misuse. The size of the team will depend upon local prevalence, geography and available resources. A team of about eight staff, plus a consultant psychiatrist and junior medical staff (e.g. one senior house officer and 0.5 whole-time equivalent specialist registrar), should be appropriate for a population of 500 000.

A voluntary counselling and information centre may be viewed by some alcohol misusers and their families as more accessible than a hospital-based outpatient centre and can, for example, be used to develop work with ethnic minorities or services for women. However, care should be taken to ensure that such facilities do not do work which GP and primary health care services can accomplish equally well and within a more integrated health care formula.

In establishing a community alcohol service, the following considerations need to be addressed.

Organisational location

CATs or SMITs are likely to be best supported if drawing on, and organisationally related to, specialised NHS alcohol and drug services.

Multi-disciplinary structure

The team will work best if it has a multi-disciplinary structure. The skill mix can be varied, but is likely to be drawn from general and psychiatric nursing, social work, occupational therapy, psychology and psychiatry.

Defining the work focus

Such a team can, for instance, manage home detoxification of a patient for a GP, and take those immediate clinical responsibilities largely off the GP's hands. Much more difficult is the successful implementation of the originally intended formula, which emphasised facilitation of multiple front-line agencies rather than taking over their responsibilities.

Management, leadership and training

The difficulties of facilitating existing services suggest that management skills require attention. Unless the objectives of the liaison team are kept in place, it will tend to become another service agency rather than a catalytic instrument across district services.

Inpatient and residential services

Although specialist inpatient units are increasingly uncommon, there is still a need for short-stay beds for detoxification and assessment, and for medium-stay beds for treatment of 'dual-diagnosis' patients and other complex cases, as well as for research and development work. It is likely that a population of 500 000 will require 10–12 beds or fewer. Sharing larger facilities with other districts may be an option, but fragmentation will best be avoided by combining these beds with general district psychiatric inpatient care.

Services for the homeless drinker

Provision of help to homeless drinkers may consume disproportionate NHS resources. The most likely provider will be a non-statutory organisation and advice will be obtainable from Alcohol Concern or Turning Point. Shopfront day centres, court liaison and residential facilities may be required. Good liaison between these services and the CAT or SMIT is likely to be helpful in enhancing entry into treatment and ensuring the most efficient use of resources. The community reinforcement approach to treatment (employing social, recreational, vocational and other reinforcers to modify drinking behaviour) has been found to be particularly successful with homeless drinkers in the USA.[68] There is a need to develop and evaluate this and other approaches to helping the homeless drinker in the UK.

(Non-specialist) secondary care within an integrated response

The overall conclusion to be drawn in relation to general hospitals' engagement with alcohol misuse must be that there are large opportunities waiting to be taken up. Those few innovations which have been implemented, such as joint clinics and ward counselling, point to feasible and promising new directions. In psychiatric and general hospital services, all professional disciplines require competence in dealing with drinking problems, and the complementary roles of generalists and specialists need to be defined and agreed. Since alcohol misuse may coexist and complicate every type of general psychiatric presentation,[69] a policy based only on specialism runs against the clinical realities.

Primary care within an integrated response

The role of primary care within a comprehensive service provision for alcohol misuse is crucial. However, it must be recognised that not all GPs are able or willing to manage specialist problems of alcohol misuse themselves. The CAT will therefore need to make liaison with primary care a priority, and should advise and support GPs according to their level of interest, training and expertise in this field. Where possible, patients can and should be managed within the primary care setting. Where this is not possible, many GPs will be happy to work in liaison with the CAT. If neither of these options is feasible, CATs should be ready to assist in the process of referral to their own or other services.

Gaining further GP involvement in screening, early detection and early interventions directed at alcohol misuse constitutes a potentially fruitful priority. We may hope that increased influence of GPs in the purchasing of health services through primary care trusts will improve this situation. Close liaison between service commissioners and local medical committees is also vital.

Training

A backlog of training deficit may be met in the short term by day courses, or by short courses or training secondments directed at individual professions. However, a longer-term and more definitive view will require that key members of staff are encouraged and allowed to pursue specialist training in the field.

8 Outcome measures

A process of monitoring service delivery in partnership with purchasing authorities, and of routine clinical audit and outcome evaluation, should normally be set in place. This should include monitoring of such considerations as numbers of patients seen, clinics offered, educational interventions offered, liaison and

support offered to other services, detoxifications completed, etc. The quality of the service should also be considered and patient satisfaction, record keeping, delay between referral and appointment offered, etc., should be monitored. Alcohol Concern has published a guide to such considerations. However, clinical outcomes will be of most interest to purchasers, providers and patients, and these will be the most difficult to measure. Good outcome monitoring requires an investment of staff time and resources to set adequate procedures in place. Advice can be obtained from Alcohol Concern and elsewhere.

Category I

Outcome here can be measured individually in terms of reduction of alcohol intake to safe limits at, say, 6 or 12 months, or in population terms of average percentage reduction, or percentage of patients reducing to safe limits. In practice, such patients would not normally be routinely followed up and so outcome monitoring would either become a research question or the subject of additional funding to support the process of tracing patients and identifying outcomes. As ample research has demonstrated the benefits of such interventions, it may be more cost-effective simply to monitor the quality of the intervention and to ensure adequate training of the staff who deliver it.

Category II

Here outcome may be measured in terms of both reduction in alcohol intake (as above) and amelioration of stated problems or overall problem score (Alcohol Problems Questionnaire, APQ). In general, there is a high correlation between amelioration in drinking and decrease in problem experience. Simple measures are available to rate time spent in different drinking-level bands over a 12-month period.[70] Health economists favour a 'quality-of-life' type of measure.[59] In one health economic study, quality of life was found to correlate inversely with a measure of alcohol-related problems, and the latter also correlated with an estimate of resource costs.[63] Alcohol-related problems, or at least the measure of them used in this study, may therefore act as a proxy measure for quality of life and resource use.

Category III

Outcome measurement with dependent patients sets similar problems to Category II. Outcome measures should be multiple and be able to discriminate graded levels of improvement in drinking, health and social adjustment, rather than dealing with the issue only in categorical terms such as 'drinking vs. sober'.

9 Targets

Overall reduction in alcohol misuse

The *Health of the Nation* strategy proposed an overall reduction of alcohol misuse from 28% of men and 11% of women drinking more than recommended limits in 1990, to 18% and 7%, respectively, by 2005.[71]

Our Healthier Nation[72] also recognises the impact of alcohol on health, and refers to the Government's intention to introduce a national alcohol strategy. Alcohol Concern has produced proposals for such a strategy which include, for example, a target to reduce the level of alcohol misuse by 5% over a 5-year period.

Concerted district-level initiatives to support primary care will help to meet these targets, but such patient-directed efforts will achieve little without increased taxation of alcohol.

Targets for enhancement of primary care and generalist involvement and effectiveness

At a district level, an appropriate and achievable initial target would be to ensure that effective ongoing contact has been established between the liaison team and every general practice and relevant service of the district general hospitals, and also with statutory and relevant non-statutory social services. Co-ordination with local medical committees, primary care trusts and Drug and Alcohol Action Teams is necessary.

Service provisions for Category III patients

A reasonable target would be the establishment of a case register at district level and evidence that provision was in place to ensure shared and ongoing care with effective liaison between medical and social services. For all patients receiving care from general psychiatric services, implementation of the CPA would seem to be a helpful target. Similar principles of care should be expected for all Category III patients not receiving general psychiatric treatment.

10 Information and research priorities

Creation of a 'research culture'

Research is often seen as a luxury or, worse still, as an unnecessary inconvenience. Quite apart from the general importance of research for advancing medical knowledge and informing purchasing or delivery of effective health care, a 'research culture' has benefits for the recruitment, continuing professional development and commitment of high-quality staff. Clinical audit is also likely to be facilitated in such an environment. Drug and Alcohol Action Teams, primary care trusts and NHS trusts should therefore encourage research activity and, where possible, foster links with academic institutions.

As a part of the creation of a research culture, routine data collection within clinical services should be reviewed and enhanced. This does not necessarily mean that more data should be collected, but that the reasons for data collection and the process of data collection need careful consideration. Thought should be given to research and audit requirements, as well as the practicalities of data collection and analysis, in order to ensure that adequate and complete data are available to support relevant and realistic research and audit requirements. Purchasers of health services are also in a good position to ensure that there is comparability of data collection across different service providers.

The effectiveness of the liaison team

Given the potential importance of the primary care and generalist sectors in responding to alcohol misuse, research on the effectiveness and cost-effectiveness of CAT or SMIT in enhancing competence at these levels is a priority. Only before-and-after controlled designs can provide the necessary answers.

Service needs and the severely dependent alcohol misuser

Up to now, the conventional research approach in relation to this problem has been the controlled study which determines the relative efficacy of different treatments at, say, 12 months. Such research ignores the fact that many of these patients will be setting service needs far beyond the closure of that study. Research is needed on long-term needs and costs of different methods for long-term handling and community care. Poorly handled, a small proportion of severely dependent patients may be disproportionate consumers of resources.

Prevalence studies

Prevalence studies should be conducted and repeated in different settings such as primary care, Accident and Emergency departments, general hospital wards and maternity services. Rather than describing drinking levels and enumerating problems, surveys should be service- and need-oriented. Thus they should examine issues such as alcohol misuse within health belief contexts, the need for and relevance of information or help, and the ability of family members, employer or onlooker to respond to an individual's alcohol misuse.

The complementary contributions of different providers

Patterns of response to alcohol misuse have grown by chance and local circumstances. The respective NHS, private and voluntary sections need to be charted, tested and more rationally defined. The principles used by community care assessors in their allocation of scarce resources to particular patients need to be studied scientifically.

Research in the area of health economics

Better information is needed on the costs of alcohol misuse, and the cost-effectiveness and cost–benefits of different prevention and treatment strategies.

Appendix I: Classificatory systems

ICD-10[5]

F10, Mental and behavioural disorders due to use of alcohol: 4th- and 5th-character codes for specifying the clinical condition

.0	Acute intoxication	
	.00	Uncomplicated
	.01	With trauma or other bodily injury
	.02	With other medical complication
	.03	With delirium
	.04	With perceptual distortions
	.05	With coma
	.06	With convulsions
	.07	Pathological intoxication
.1	Harmful use	
.2	Dependence syndrome	
	.20	Currently abstinent
	.21	Currently abstinent, but in a protected environment
	.22	Currently on a clinically supervised maintenance or replacement regime (controlled dependence)
	.23	Currently abstinent, but receiving treatment with aversive or blocking drugs
	.24	Currently using substance (active dependence)
	.25	Continuous use
	.26	Episodic use (dipsomania)
.3	Withdrawal state	
	.30	Uncomplicated
	.31	With convulsions
.4	Withdrawal state with delirium	
	.40	Without convulsions
	.41	With convulsions
.5	Psychotic state	
	.50	Schizophrenia-like
	.51	Predominantly delusional
	.52	Predominantly hallucinatory
	.53	Predominantly polymorphic
	.54	Predominantly depressive symptoms
	.55	Predominantly manic symptoms
	.56	Mixed
.6	Amnesic syndrome	
.7	Drug- or alcohol-induced residual state	
	.70	Flashbacks
	.71	Personality or behaviour disorder
	.72	Residual affective disorder
	.73	Dementia

.74	Other persisting cognitive impairment
.75	Late-onset psychotic disorder
.8	Other mental and behavioural disorders
.9	Unspecified mental and behavioural disorder

These diagnoses are defined according to general criteria applicable to all groups of substances. The criteria for F1x.1 *Harmful Use* and F1x.2 *Dependence Syndrome* will be given here. The reader is referred to the ICD-10 manual for further information regarding other diagnoses.

F1x.1 Harmful use

A pattern of psychoactive substance use that is causing damage to health. The damage may be physical, as in cases of hepatitis from the self-administration of injected drugs, or mental, for example, episodes of depressive disorder secondary to heavy consumption of alcohol.

Diagnostic guidelines

The diagnosis requires that actual damage should have been caused to the mental or physical health of the user.

Harmful patterns of use are often criticised by others and frequently associated with adverse social consequences of various kinds. The fact that a pattern of use or a particular substance is disapproved of by another person or by the culture, or may have led to socially negative consequences, such as arrest or marital arguments, is not in itself evidence of harmful use.

Acute intoxication (*see* F1x.0) or 'hangover' is not in itself sufficient evidence of the damage to health required for coding harmful use.

Harmful use should not be diagnosed if dependence syndrome (F1x.2), a psychotic disorder (F1x.5) or another specific form of drug- or alcohol-related disorder is present.

F1x.2 Dependence syndrome

A cluster of physiological, behavioural and cognitive phenomena in which the use of a substance or a class of substances takes on a much higher priority for a given individual than other behaviours that once had greater value. A central descriptive characteristic of the dependence syndrome is the desire (often strong, sometimes overpowering) to take psychoactive drugs (which may or may not have been medically prescribed), alcohol or tobacco. There may be evidence that return to substance use after a period of abstinence leads to a more rapid reappearance of other features of the syndrome than occurs with non-dependent individuals.

Diagnostic guidelines

A definite diagnosis of dependence should usually be made only if three or more of the following have been experienced or exhibited at some time during the previous year:

- a strong desire or sense of compulsion to take the substance
- difficulties in controlling substance-taking behaviour in terms of its onset, termination or levels of use
- a physiological withdrawal state (*see* F1x.3 and F1x.4) when substance use has ceased or been reduced, as evidenced by the characteristic withdrawal syndrome for the substance or use of the same (or a closely related) substance with the intention of relieving or avoiding withdrawal symptoms

- evidence of tolerance, such that increased doses of the psychoactive substance are required in order to achieve effects originally produced by lower doses (clear examples of this are found in alcohol- and opiate-dependent individuals who may take daily doses sufficient to incapacitate or kill non-tolerant users)
- progressive neglect of alternative pleasures or interests because of psychoactive substance use; increased amount of time necessary to obtain or take the substance or to recover from its effects
- persisting with substance use despite clear evidence of overtly harmful consequences, such as harm to the liver through excessive drinking, depressive mood states consequent to periods of heavy substance use, or drug-related impairment of cognitive functioning; efforts should be made to determine that the user was actually, or could be expected to be, aware of the nature and extent of the harm.

Narrowing of the personal repertoire of patterns of psychoactive substance use has also been described as a characteristic feature (e.g. a tendency to drink alcoholic drinks in the same way on weekdays and at weekends, regardless of social constraints that determine appropriate drinking behaviour).

It is an essential characteristic of the dependence syndrome that either psychoactive substance taking or a desire to take a particular substance should be present; the subjective awareness of compulsion to use drugs is most commonly seen during attempts to stop or control substance use. This diagnostic requirement would exclude, for instance, surgical patients given opioid drugs for the relief of pain, who may show signs of an opioid withdrawal state when drugs are not given but who have no desire to continue taking drugs.

The dependence syndrome may be present for a specific substance (e.g. tobacco or diazepam), for a class of substances (e.g. opioid drugs) or for a wider range of different substances (as for those individuals who feel a sense of compulsion regularly to use whatever drugs are available and who show distress, agitation and/or physical signs of a withdrawal state upon abstinence).

It includes:

- chronic alcoholism
- dipsomania
- drug addiction.

Physical diagnoses attributable to alcohol misuse

In addition to the above F10 codes, the following diagnoses related to alcohol use/misuse are included elsewhere in ICD-10:

G31	G312	Degeneration of nervous system due to alcohol
G62	G621	Alcoholic polyneuropathy
G72	G721	Alcoholic myopathy
	G721	Alcoholic myopathy
K29	K292	Alcoholic gastritis
K70	K700	Alcoholic fatty liver
	K701	Alcoholic hepatitis
	K702	Alcoholic fibrosis and sclerosis of liver
	K703	Alcoholic cirrhosis of liver
	K704	Alcoholic hepatic failure
	K709	Alcoholic liver disease, unspecified
K86	K860	Alcohol-induced chronic pancreatitis
T51	T501	Toxic effects of ethanol
Y90	Y900	Blood alcohol level of less than 20 mg/100 ml
	Y901	Blood alcohol level of 20–39 mg/100 ml
	Y902	Blood alcohol level of 40–59 mg/100 ml

	Y903	Blood alcohol level of 60–79 mg/100 ml
	Y904	Blood alcohol level of 80–99 mg/100 ml
	Y905	Blood alcohol level of 100–119 mg/100 ml
	Y906	Blood alcohol level of 120–199 mg/100 ml
	Y907	Blood alcohol level of 200–239 mg/100 ml
	Y908	Blood alcohol level of 240 mg/100 ml or more
	Y909	Presence of alcohol in blood, level not specified
Y91	Y910	Mild alcohol intoxication
	Y911	Moderate alcohol intoxication
	Y912	Severe alcohol intoxication
	Y913	Very severe alcohol intoxication
	Y919	Alcohol involvement, not otherwise specified
Z50	Z502	Alcohol rehabilitation
Z71	Z714	Alcohol abuse counselling and surveillance
Z72	Z721	Alcohol use

DSM-IV[6]

Alcohol use disorders

303.90 Alcohol dependence
305.00 Alcohol abuse

These diagnoses are defined according to the general criteria for substance dependence and substance abuse (*see* below).

Alcohol-induced disorders

303.00 Alcohol intoxication
291.8 Alcohol withdrawal
291.0 Alcohol intoxication delirium
291.0 Alcohol withdrawal delirium
291.2 Alcohol-induced persisting dementia
291.1 Alcohol-induced persisting amnestic disorder
291.5 Alcohol-induced psychotic disorder, with delusions
Specify if: with onset during intoxication/with onset during withdrawal
291.3 Alcohol-induced psychotic disorder, with hallucinations
Specify if: with onset during intoxication/with onset during withdrawal
291.8 Alcohol-induced mood disorder
Specify if: with onset during intoxication/with onset during withdrawal
291.8 Alcohol-induced anxiety disorder
Specify if: with onset during intoxication/with onset during withdrawal
291.8 Alcohol-induced sexual dysfunction
Specify if: with onset during intoxication
291.8 Alcohol-induced sleep disorder
Specify if: with onset during intoxication/with onset during withdrawal
291.9 Alcohol-related disorder not otherwise specified

Criteria for substance dependence

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

1 tolerance, as defined by either of the following:
   (a) a need for markedly increased amounts of the substance to achieve intoxication or desired effect
   (b) markedly diminished effect with continued use of the same amount of the substance
2 withdrawal, as manifested by either of the following:
   (a) the characteristic withdrawal syndrome for the substance (refer to Criteria A and B of the criteria sets for withdrawal from the specific substances)
   (b) the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms
3 the substance is often taken in larger amounts or over a longer period than was intended
4 there is a persistent desire or unsuccessful efforts to cut down or control substance use
5 a great deal of time is spent in activities necessary to obtain the substance (e.g. visiting multiple doctors or driving long distances), use the substance (e.g. chain-smoking) or recover from its effects
6 important social, occupational or recreational activities are given up or reduced because of substance use
7 substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g. current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption).

Specify if:

- with physiological dependence: evidence of tolerance or withdrawal (i.e. either Item 1 or 2 is present)
- without physiological dependence: no evidence of tolerance or withdrawal (i.e. neither Item 1 nor 2 is present).

Course specifiers (see DSM-IV for definitions):

- early full remission
- early partial remission
- sustained full remission
- sustained partial remission
- on agonist therapy
- in a controlled environment.

Criteria for substance abuse

A. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:
   1 recurrent substance use resulting in a failure to fulfil major role obligations at work, school or home (e.g. repeated absences or poor work performance related to substance use; substance-related absences, suspensions or expulsions from school; neglect of children or household)
   2 recurrent substance use in situations in which it is physically hazardous (e.g. driving an automobile or operating a machine when impaired by substance use)
   3 recurrent substance-related legal problems (e.g. arrests for substance-related disorderly conduct)
   4 continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g. arguments with spouse about consequences of intoxication, physical fights).

B. The symptoms have never met the criteria for substance dependence for this class of substance.

OPCS drinking categories

OPCS drinking categories are shown in Table A1.

Table A1: OPCS drinking categories.

Alcohol consumption level	Units per week	
	Male	Female
Non-drinker	No alcohol in the last year	No alcohol in the last year
Very low	< 1	< 1
Low	1–10	1–7
Moderate	11–21	8–14
Fairly high	22–35	15–25
High	36–50	26–35
Very high	51+	36+

Health care Resource Groups

The main HRGs specifically relating to alcohol misuse are shown, with corresponding ICD-10 diagnoses, in Table A2. HRGs relating to specific complications of alcohol misuse are shown, with corresponding ICD-10 diagnoses, in Table A3.

Table A2: Health care Resource Groups relating to alcohol misuse and corresponding ICD-10 diagnoses.

Health care Resource Group	ICD-10 diagnoses
T10 Alcohol or drugs, non-dependent use, age > 16 years T11 Alcohol or drugs, non-dependent use, age < 17 years	F10.0 Mental and behavioural disorders due to use of alcohol: acute intoxication F19.0 Mental and behavioural disorders due to use of multiple/psychoactive drugs: acute intoxication R780 Finding of alcohol in blood Z502 Alcohol rehabilitation
T12 Alcohol or drugs, dependency	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 F10.7 Mental and behavioural disorders due to use of alcohol: residual and late-onset psychotic disorders 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 disorders

Table A3: Health care Resource Groups relating to specific complications of alcohol misuse and corresponding ICD-10 diagnoses.

Health care Resource Group		ICD-10 diagnoses	
A09	Peripheral nerve disorders, age > 69 years or with complications	G621	Alcoholic polyneuropathy
A10	Peripheral nerve disorders, age < 70 years without complications		
A11	Neuromuscular disorders	G721	Alcoholic myopathy
A16	Cerebral degenerations, age > 69 years or with complications	G312	Degeneration of nervous system due to alcohol
A17	Cerebral degenerations, age < 70 years without complications		
G07	Chronic liver disorders, age > 69 years or with complications		
G08	Chronic liver disorders, age < 70 years without complications	K700	Alcoholic fatty liver
		K701	Alcoholic hepatitis
		K702	Alcoholic fibrosis and sclerosis of liver
		K703	Alcoholic cirrhosis of liver
		K704	Alcoholic hepatic failure
		K709	Alcoholic liver disease, unspecified
G24	Chronic pancreatic disease, age > 69 years	K860	Alcohol-induced chronic pancreatitis
G25	Chronic pancreatic disease, age < 70 years		
K05	Other endocrine disorders, age > 69 years or with complications	E244	Alcohol-induced pseudo-Cushing's syndrome
K06	Other endocrine disorders, age < 70 years without complications		
N01	Neonates – died < 2 days old	P043	Fetus and newborn affected by maternal use of alcohol
		Q860	Fetal alcohol syndrome (dysmorphic)
N02	Neonates with multiple minor diagnoses	P043	Fetus and newborn affected by maternal use of alcohol
N03	Neonates with one minor diagnosis	Q860	Fetal alcohol syndrome (dysmorphic)
N04	Neonates with multiple major diagnoses	P043	Fetus and newborn affected by maternal use of alcohol
N05	Neonates with one major diagnosis	Q860	Fetal alcohol syndrome (dysmorphic)
N12	Other maternity events	O354	Maternal care for (suspected) damage to fetus from alcohol
		P043	Fetus and newborn affected by maternal use of alcohol
P14	Ingestion poisoning or allergies	T510	Toxic effects – ethanol
S16	Poisoning, toxic effects or overdoses	T510	Toxic effects – ethanol
S25	Other admissions	Z040	Blood-alcohol and blood-drug test
		Z714	Alcohol abuse counselling and surveillance
		Z721	Alcohol use
		Z811	Family history of alcohol abuse
T08	Presenile dementia	F106	Mental and behavioural disorders due to use of alcohol: amnesic syndrome

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