# Tackling alcohol misuse in NHS hospitals

Version 2 (February 2018)



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#### Foreword

Alcohol misuse places a considerable burden on the NHS and wider society. One in five adults in England drink above the Chief Medical Officers' low-risk drinking guidance and 595,000 people have a level of alcohol dependence needing specialist treatment. Alcohol contributes to a wide range of mental and physical illness and causes significant social problems for individuals and their families. Deaths from alcoholic liver disease have increased 400% since 1970 and alcohol related hospital admissions have doubled in the ten years to 2014.

Against a background of NHS services under unprecedented pressure from rising demand, there is an urgent need to reduce the burden of preventable alcohol related disease. The NHS and local authorities have a crucial role to play in this effort.

A series of reports from government and the Royal Colleges, together with a suite of recent NICE guidelines, set out the evidence based approaches to tackling alcohol related harm. Alcohol brief interventions for hazardous and harmful drinkers in primary and secondary care and specialist treatment for people with alcohol dependence have a strong evidence base and are cost effective. While some progress has been made in implementing these approaches this is not yet having sufficient impact on reversing the rising disease burden from alcohol. About 13% of people with alcohol dependence newly access alcohol treatment services each year and implementation of brief interventions remains a long way short of what has been achieved with smoking cessation interventions in the NHS.

This resource sets out the steps that need to be taken in NHS hospitals to tackle the rising burden. While hospitals are only one of several NHS settings in which wider implementation is needed, there is a particularly high concentration of people with complex alcohol related disease in hospitals, including people who have frequent alcohol related attendances. This places hospitals in a pivotal position to identify and help people with the highest level of unmet alcohol-related needs.

But hospitals and NHS professionals who work in them cannot solve these problems in isolation. There needs to be coordination between hospitals, NHS and local authority commissioners, specialist addiction services in the community, primary care, and social services in each locality, to develop a concerted response. Local Health and Wellbeing Boards have a key role in bringing these groups together to develop a coherent plan. Local Sustainability and Transformation Plans should, as some already have, include a coordinated response to alcohol as a key strategy to reduce pressure on the NHS.

Both this resource and key government and Royal College reports on the response to alcohol in hospitals identify the importance of local alcohol champions, usually senior clinicians, as key drivers of this transformation. These were also key recommendations of "Health First: an evidence based alcohol strategy for the UK" (Gilmore et al., 2013) and Public Health England's recent evidence review of alcohol policy options (Burton et al., 2016). This Resource Pack goes further and emphasises the importance of developing a local hospital alcohol strategy, bringing together the key actors in the NHS, commissioning and the local community, to support optimal and sustained change in tackling alcohol problems in the NHS. It shares the experiences within King's Health Partners in South East London; inevitably the experience in one inner city Academic Health Science Centre will need to be adapted to fit the particular circumstances and needs elsewhere. However, the core principles and building blocks for successful implementation described here are widely applicable.

While considerable progress has already been made in implementing effective alcohol care in hospitals in many parts of England, this is not yet universal. So the main aim of this report is to share knowledge and experience to drive sustainable change in tackling alcohol misuse across NHS hospitals.



~ Gen

Professor Sir Ian Gilmore Chair, Alcohol Health Alliance UK Past President, Royal College of Physicians Chair, Liverpool Health Partners and Professor of Hepatology, University of Liverpool



### **Executive Summary**

- Excessive alcohol use places a considerable burden on the NHS and wider society. Mortality from alcoholic liver disease has increased by 400% since 1970 and alcohol related hospital admissions doubled in the ten years preceding 2014, costing the NHS £3.5bn per annum, mostly through inpatient admissions.
- There are over 1m hospital admissions per year for alcoholrelated diseases in England but the underlying alcohol misuse is often not identified or treated. This is a missed opportunity to improve patients' health and reduce the likelihood of readmission.
- 3. The NHS Five Year Forward View, the National Confidential Enquiry into Patient Outcome and Death from alcoholic liver disease, Public Health England's Local Health and Care Planning: Menu of Preventive Interventions, and many other recent government and Royal College reports, highlight the pivotal role that hospitals need to play in preventing alcoholrelated harm in order to reduce the burden of alcohol on the NHS.
- 4. This resource provides a rationale for service improvement in NHS hospitals and a guide to the development of a local hospital alcohol strategy. It is primarily intended as a resource for clinicians and managers in NHS trusts to develop a business case for service development, bringing together key resources needed to prepare such a case. It should also be recommended reading for commissioners in clinical commissioning groups and local authorities, as well as local Health and Wellbeing Boards and key community actors including primary care and specialist alcohol services.
- There is an urgent need for a joined-up approach between NHS trusts, CCGs and local authorities, as well as other key community actors to develop integrated care pathways for patients with alcohol-related disease.
- 6. The central value proposition is that developing a comprehensive local response to alcohol-related admissions will not only reduce the burden of alcohol on the NHS and wider community, but is also highly cost effective. NHS Evidence states that alcohol care teams provide a saving of £3.85 for every £1 invested.
- 7. We identify four key populations of alcohol-related attender who will require different approaches to management: Patients with acute alcohol intoxication and poisoning; admissions wholly caused by alcohol; presentations partly caused by alcohol; and alcohol-related frequent attenders.
- 8. There are three main approaches recommended to address alcohol-related attendances:

- i. Screening and brief intervention (SBI) or identification and brief advice (IBA) works on a principle of Making Every Contact Count, in which all patients are routinely screened for alcohol use disorders. Brief advice or referral is then provided according to need. This is a highly effective and cost effective intervention, recommended by NICE. In 2017 this approach will be supported in NHS hospitals by a national CQUIN.
- ii. Alcohol care teams are recommended by numerous government and Royal College reports and strategies. Ideally these should be seven day hospital-based resources with consultant leadership, and part of a more comprehensive local hospital alcohol strategy. Alcohol care teams are intended to provide leadership on alcohol, training for front line staff in alcohol management, and direct clinical care for patients with more complex alcohol-related clinical needs. There should be effective liaison between hospital based alcohol care teams and community services, including specialist alcohol and drug treatment services.
- iii. Assertive outreach alcohol interventions should be developed for high impact alcohol-related frequent attenders. While this is a relatively small group of patients, it accounts for a high proportion of all alcohol-related activity and costs, and many of these patients have complex physical and mental comorbidities and social problems, including homelessness. They tend not to engage effectively with existing alcohol treatment services and therefore require more assertive outreach and integrated care pathways.
- All of these services need to be adequately resourced to have a significant impact. Given the high impact and rising prevalence of alcohol-related admissions and attendances, these services need to become part of the core business of NHS hospitals.
- 10. We recommend adequate use of hospital information systems to identify unmet needs and to plan services.
- 11. Each hospital needs a local hospital alcohol strategy as recommended by the Royal College of Physicians with key local clinical champions to oversee implementation.
- 12. Appropriate and sustainable commissioning arrangements need to be identified in each locality jointly supported by clinical commissioning groups, local authorities and NHS trusts.
- 13. Staff training is essential to support implementation of a local hospital alcohol strategy. Much of this can be provided by adequately resourced alcohol care teams in each hospital together with identified learning resources.
- 14. The impact of the local hospital alcohol strategy should be monitored using routine clinical and hospital information. Ideally hospital clinical information systems should contain routine recording of brief screening scores for all patients (e.g. AUDIT-C)
- 15. Several hospitals in England already have comprehensive alcohol strategies and alcohol care services in place and have demonstrated a significant impact on reducing alcohol-related attendances and admissions. However considerable work is needed to bring all hospitals up to this standard. Only then will we begin to make a lasting impact on the burden of alcohol on the NHS.



#### Introduction

Welcome to "Tackling Alcohol Misuse in NHS Hospitals" produced by the Health Innovation Network (HIN) and the Collaboration for Leadership in Applied Health Research and Care (CLAHRC) South London. Providing excellent alcohol care in hospitals offers real opportunities to improve patient outcomes and reduce NHS expenditure in the longer term. This Resource Pack has been designed for both clinicians and hospital managers looking to develop hospital based responses to alcohol, and for commissioners who wish to determine the local need for different levels of response.

This report provides further detail to a slide deck available online, where you can find links to all the resources signposted throughout this document. This report offers additional context and policy background, to better understand where we are in improving alcohol care in hospitals across England.

This Resource Pack is intended for use across England, and drawing from our own experience, and the HIN's remit, we refer to work undertaken in South London, and offer the King's Health Partners Alcohol Strategy. Similarly, more detailed data is provided for the twelve south London boroughs, and we urge organisations elsewhere to use these resources as a guide to seek equivalent local data.

#### The Health Innovation Network

The Health Innovation Network is the Academic Health Science Network (AHSN) for south London, one of 15 AHSNs across England. We work across a huge range of health and care services through each of our clinical and innovation themes, to transform care in diabetes, musculoskeletal disease, alcohol and healthy ageing, to accelerate digital health uptake into the NHS, and we're passionate about education. HIN acts as a catalyst of change – identifying, adopting and spreading innovation across the health and care system in south London.

The HIN would particularly like to thank Professor Colin Drummond, Clinical Lead for the CLAHRC South London Alcohol Theme and Professor of Addiction Psychiatry at King's College London, for his extensive time and input to this document, sharing the learning from his and colleagues' research and service development work currently underway in south London.



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### 1. Why do hospitals need to take alcohol misuse seriously?

#### 1.1 The burden of alcohol misuse on the NHS

Excessive alcohol use places a considerable burden on the NHS and wider society, and is the fifth leading cause of ill health, early mortality and disability globally, causing 5.3% of deaths worldwide (Lim et al., 2012). In the UK, for men, alcohol use is the second highest factor for years lived with disability. In England one in five adults (over ten million people) drink at levels that increase the risk of ill health and around 595,000 adults (1.4% of the adult population) have a level of alcohol dependence needing specialist treatment. So alcohol represents a significant public health problem in England.

Alcohol related disease has increased dramatically in the last 20 years in the UK. Liver disease is responsible for 86% of directly attributable mortality from alcohol in the UK (HSCIC, 2016), and mortality rates from alcoholic liver disease have increased 400% since 1970, and in people younger than 65 years have risen by almost five-times (Williams et al., 2014). Alcohol-related hospital admissions doubled in the ten years up to 2014 in England, accounting for 7% of all admissions. Alcohol-related ill health is estimated to cost the NHS  $\pm$ 3.5 billion per annum. The recent Global Burden of Disease study showed that a wide range of alcohol related conditions have been increasing in prevalence in the UK between 1990 and 2010, including liver cancer, pancreatitis, alcoholic liver disease, and alcohol use disorders, with between 40% and 100% increases (Murray et al., 2013).

#### UK Health Performance (Murray et al, 2013)



This graph shows the changes in overall disease burden in the UK, comparing al causes with those illnesses associated with alcohol. It can be seen that while the burden of disease from all causes has fallen in the UK over the last 20 years, diseases wholly or partly caused by alcohol have risen steeply. The underlying cause is a steep rise in population alcohol consumption over this period."

The UK National Confidential Enquiry Into Patient Outcome and Death (NCEPOD, 2013) on patients who died with alcohol-related liver disease was published in 2013. This identified failings in the NHS in preventing deaths from alcohol-related liver disease. 71% of patients had previous admissions to hospital in the two years prior to their final admission in which opportunities to provide preventive interventions were frequently missed.

In South London inpatient surveys 15-20% of all acute admissions are alcohol related (Kouimtsidis et al., 2003; Canning et al., 1999). This is particularly concentrated in acute medical admissions units. For example, in King's College Hospital a recent audit found 31% of patients admitted to the Medical Assessment Unit had an alcohol use disorder (Bell et al., 2011). In mental health inpatients in South London the prevalence of alcohol misuse is 50%, with 23% experiencing alcohol dependence (Barnaby et al., 2003). In emergency departments 40% of attendances are alcohol related, rising to 70% at weekends (Drummond et al 2005b).

## Chronic Liver Disease and Mortality Rates per 100,000 population, 1950–2006 (Leon and McCambridge, 2016)



This graph shows the changes in chronic liver disease and cirrhosis mortality rates per 100,000 population, for men and women aged 45-64 years over a 56 year period. Compared to other European countries where deaths have declined, in England, Wales and Scotland death rates have risen steeply in both men and women

## Alcohol related hospital admissions England 2003-2014 (Wholly and partly attributable to alcohol)





#### 1.2 Why does alcohol misuse impact on the NHS?

The World Health Organisation has identified over 200 different disease conditions that are wholly or partly attributable to excessive alcohol use. Wholly attributable conditions include alcohol intoxication and alcohol poisoning, alcoholic liver disease, alcoholic pancreatitis, alcohol dependence, and acute alcohol withdrawal. Public Health England Local Area Profiles for England (2017) identifies 34 wholly alcohol attributable conditions (See Resources section), and admissions for these conditions have doubled since 2003/04 to over 307,250 admissions per annum in 2015/16.

However, it is well documented that these conditions are underdiagnosed in hospitals, therefore this figure is likely to be a gross underestimate. For example, a recent audit in King's College Hospital found that only 17% of medical admissions had a documented alcohol history in the records compared to 35% who had a documented smoking history (Bell et al., 2011). In mental health inpatients in South West London, 27% had a partial alcohol history and 0.5% had a full history recorded in the clinical notes (Barnaby et al., 2003). Similarly, patients are not routinely screened for alcohol use disorders in most hospital emergency departments. Patients presenting with obvious alcohol intoxication represent only the tip of the iceberg of alcohol-related conditions presenting to this setting.

In addition to the wholly attributable conditions, there is estimated to be approximately 2.64 times as many admissions where alcohol is partly responsible for the clinical presentation. These include strokes, cardiovascular diseases, depression and self-harm, gastrointestinal disorders, hypertension and a number of cancers.

## 1.3 Why does alcohol misuse need to be tackled in the hospital setting?

There is clear evidence that patients admitted with alcohol-related conditions have longer lengths of hospital stay, often due to more complex multi-morbidities, poor social circumstances, and greater clinical complications during admission (Drummond et al., 2016). Alcohol liaison services are often asked to see patients who have developed alcohol related epileptic fits or delirium tremens some days after admission for an apparently unrelated condition. This primarily occurs because alcohol dependence was not diagnosed early enough to provide preventive withdrawal treatment. Once these untreated acute withdrawal states become established they are extremely difficult to clinically manage, prolonging hospital stays unnecessarily. Also failure to diagnose alcohol dependence and prescribe prophylactic thiamine treatment according to NICE guidelines (CG100) leads to the development of Wernicke's encephalopathy and potentially profound and permanent brain damage. Again adequate routine screening and history taking of all patients admitted to hospital would effectively prevent these costly complications.

Patients admitted with alcohol-related conditions are more likely to be readmitted in the subsequent two years and to have more frequent emergency department attendances than other patients (Currie et al., 2015). Adequate diagnosis, treatment and referral to specialist services for these patients not only shortens the length of admission but prevents the need for future alcohol-related admissions, and provides better clinical outcomes. There is a tendency in some areas to assume that diagnosis and treatment of alcohol misuse is not part of the hospital's remit and that these problems will be managed elsewhere in the NHS or by the local authority. While there have been some improvements in access to alcohol treatment in recent years, about 20% of people with alcohol dependence accesses specialist treatment services per annum. Patients are often reluctant to seek treatment for alcohol problems due to a high level of perceived stigma as well as a lack of awareness the need to get treatment, or what resources may be available. Many people with alcohol dependence and mental and physical ill health also have by consequence chaotic lives making their health more difficult to manage. Those who are also homeless (or who have no access to public funds) are not likely to be registered with a GP. The hospital therefore may be the only part of the NHS with which a patient is in contact, and so hospitals have a crucial role to play in identification, treatment and referral of patients with alcohol problems.

## 1.4 Why are hospitals failing to treat alcohol misuse adequately?

Research has identified many factors that contribute to the inadequate diagnosis and treatment of alcohol misuse in the hospital setting. There has been limited training on alcohol misuse at both undergraduate and postgraduate level for health professionals. This has not kept pace with the rising prevalence of these alcohol use disorders (although see Staff Training below for details of recent initiatives). Hospitals are busy and pressured working environments, and alcohol misuse may often be seen as one task too many to add to an already long list. Further, alcohol misusers are seen by some health professionals as an unpopular patient group, viewed as only having "themselves to blame for their health problems", which makes alcohol use disorders among the most stigmatised health conditions. Fortunately, we have come a long way in the last 20 years in recognising smoking as an addiction, which requires active clinical intervention. We need to achieve the same status and parity of esteem for alcohol use disorders.

The strategic landscape has not helped; commissioning of alcohol services has not kept pace with the rising prevalence of alcohol use disorders, and in addition the Health and Social Care Act has effectively moved the commissioning of alcohol treatment from the NHS to local authorities that are now contending with falling public health budgets. Despite exhortations over many years from the Royal College of Physicians and the British Society of Gastroenterologists, the Department of Health, Public Health England, NCEPOD, and NHS England's Five Year Forward view – which all emphasise the importance of tackling alcohol misuse in NHS hospitals – the NHS commissioning response has been patchy and often short-term.

Improvements in prioritisation of alcohol misuse in acute and mental health hospitals have only tended to happen where there is a strong local champion – usually a senior clinician or manager, who has persuaded hospital authorities to prioritise alcohol misuse to be taken seriously, opening the way for strategic support for service developments, staff training and other key factors needed to move forwards. A steady increase of the burden of alcohol misuse means that adequate alcohol care provision must be seen as a core NHS service activity, rather than an optional extra. The



question that ought to be asked is 'why does a hospital not have a comprehensive alcohol care service?'

#### 1.5 The policy context

It is now 15 years since the Royal College of Physicians published "Alcohol – Can the NHS Afford it? Recommendations for a coherent alcohol strategy for hospitals". This report recommended dedicated alcohol liaison nurses and named senior clinical leadership, to provide a focus for:

- Medical management of patients with alcohol problems within the hospital
- Liaison with community alcohol and other specialist services
- Education and support for other healthcare workers in the hospital
- Implementation of a case-finding strategy and providing brief advice within the hospital.

The National Institute for Health and Care Excellence (NICE) NHS Evidence (2012; 2014) provided a proven case study for quality and productivity "Alcohol Care Teams: Reducing acute hospital admissions and improving quality of care." This provides evidence for the implementation of alcohol care teams and services to address the needs of alcohol-related frequent attenders. The paper also makes the case for multidisciplinary alcohol care teams, which are provided seven days a week, as many services are provided only during office hours. Many alcohol related admissions take place on evenings and weekends, thus missing the opportunity for enhanced alcohol identification and care.

The Government's Alcohol Strategy (HM Government, 2012) endorses these recommendations and calls for all hospitals to have an alcohol care service that meets the key functions recommended by the Royal College of Physicians. Subsequently, "Health First: An evidence based alcohol strategy for the UK" (Gilmore et al., 2013) recommends that:

"Every acute hospital should have a specialist, multi-disciplinary alcohol care team tasked with meeting the alcohol-related needs of those attending the hospital and preventing readmissions".

Public Health England (2014) has published "Alcohol care in England's hospitals: an opportunity not to be wasted". This document sets out in more detail the evidence base on effectiveness and cost-effectiveness, as well as service models and commissioning approaches that will have the greatest impact. Implementation of comprehensive alcohol care teams in all hospitals in England remains a key Public Health England strategy to tackle alcohol misuse. In November 2016, PHE published "Local Health and Care Planning: Menu of preventative interventions", which aims to help local decision-makers consider evidence-based public health and preventative interventions as they seek options to address local challenges through the health and care planning processes. The menu of interventions is focussed on the "NHS Five Year Forward View" and outlines evidence-based, preventative public health interventions that can help improve the health of the population and reduce health and care service demand in the short to medium term. Among the five recommendations for addressing the impact of alcohol harm are:

- Establish and/or optimise alcohol care teams in district general hospitals
- Establish Alcohol Assertive Outreach Teams (AAOT) to reduce repeat users of hospital and other services such as police and social services.
- Establish clear care pathways to ensure sustained engagement with high volume service users.

Finally the "NHS Five Year Forward View" (NHS England, 2014) and the "Five Year Forward View for Mental Health" (Mental Health Taskforce, 2016) both emphasise the importance of the NHS tackling alcohol misuse and call for "hard hitting national action on (...) alcohol and other major health risks' within the NHS.

So the national policy support for improved alcohol care in acute hospitals in England could hardly be clearer.



#### 1.6 The value proposition

In the context of rising alcohol-related hospital admissions, many of which are preventable, and with a cost of over £3.5 billion per annum to the NHS, the case for change is strong. The evidence base for effective alcohol interventions in hospital is set out in three NICE guidelines:

- NICE PH24 describes the evidence base for alcohol screening brief interventions (IBA).
- NICE CG115 describes effective interventions for harmful and dependent drinkers
- NICE CG100 describes effective interventions for alcohol withdrawal, Wernicke's encephalopathy, alcohol related liver disease and pancreatitis.

Together these guidelines identify the key evidence-based interventions that improve clinical outcomes and are cost effective to implement in both the hospital setting and the community, many of which are applicable to acute and mental health inpatient care.

According to Public Health England the impact of improved alcohol care in hospitals ist as follows:

- Improving the quality and efficiency of care
- Reducing admissions, readmissions and length of stay for patients with alcohol-related problems
- Contributing to a potential reduction in A&E attendances
- Reducing mortality related to the misuse of alcohol by systematically identifying alcohol-related conditions
- Reducing the duration of detoxifications in hospital by working with services in the community to complete detoxification after discharge.

This report also sets out the return on investment that can be expected by developing alcohol care in hospital settings.

" At the Royal Bolton Hospital the cost of investing in a specialist nurse service is £165,000 annually. As a result of this investment 2,000 bed days are saved, liberating 4-6 hospital beds. This equates to a saving of £636,000, representing a return of £3.85 for every £1.00 invested." In Salford Royal Hospital an assertive outreach service targeting the most frequently admitted patients with alcohol related problems "resulted in a 59% reduction in emergency department attendances in the 3-month period post intervention. There was also a 66% reduction in average monthly hospital admissions. The annual service cost is £300,000, liberating 2-3 hospital beds and amounting to £556,500 in benefits – this represents a return of £1.86 for every £1.00 invested."

These estimates do not take account of wider savings as a consequence of the alcohol interventions, which include reduced primary care use, ambulance call outs, social services, criminal justice services. The interventions are also of direct benefit to patients' quality of life and improved health outcomes, including reduced mortality, and of benefit to their relatives and carers.

## Salford Alcohol Outreach Service - change in A&E attendance and admissions with 54 patients (Hughes et al, 2013)





### 2. Types of alcohol related presentation to hospital

#### 2.1 Alcohol intoxication and poisoning

The adverse effects of alcohol intoxication are commonly seen in emergency departments particularly at evenings and weekends. These include accidents and injuries (including head injury), assaults, collapse, falls, and unconsciousness. Such patients can be disruptive and challenging for emergency department staff and increase the risk of assault against staff. In severe cases, hospital admission. In many cases these patients have repeat attendances, however intoxication and poisoning only accounts for a small proportion of the overall alcohol-related attendances in emergency departments.

#### 2.2 Admissions wholly caused by alcohol

The largest proportion of admissions to hospital wholly caused by alcohol are for Mental and Behavioural Disorders due to the use of alcohol, of which complications of alcohol dependence are the largest category. Such presentations include acute alcohol withdrawal, withdrawal related seizures and delirium. The second largest category of wholly attributable alcohol admissions are for alcohol-related liver disease. These include acute alcoholic hepatitis, acute alcohol-related liver failure, and alcohol-related cirrhosis. Other large categories of presentation include alcoholic gastritis, alcoholic cardiomyopathy and alcohol-related pancreatitis.

While alcohol-related liver disease is an important driver of wholly alcohol attributable hospital admissions, a comprehensive response to alcohol-related admissions needs to address a much broader range of conditions and presentations. The 34 diagnostic codes that signify conditions wholly attributable to alcohol are easily obtained from Hospital Episode Statistics. Often these are not the primary reason for admission, therefore both primary and secondary diagnosis fields need to be searched to provide this data.

#### 2.3 Presentations partly caused by alcohol

Official statistics on conditions that are partly caused by alcohol have been generated using 'Alcohol Attributable Fractions'. These are the probability that a particular disease condition has been caused by alcohol multiplied by the number of admissions with that condition. This has two consequences:- first, these statistics in HES are estimates of the true burden of alcohol on the hospital, rather than having an alcohol diagnosis assigned by a clinician; and second, as estimates they do not allow the identification of individual patients in whom alcohol has been a contributory factor to their admission, unless a secondary directly alcohol attributable diagnosis has also been made and recorded. Based on analyses of these fractions, the largest group is hypertensive diseases, followed by cardiac arrhythmias, injuries and self harm, epilepsy, diseases of the digestive system, and cancers, including oral, oesophageal, breast and gastrointestinal cancers. Admissions partly caused by alcohol outnumber those wholly so, by a factor of 3:1. This emphasises the importance of systematic screening for alcohol use disorders in all patients admitted to hospital in order to identify alcohol as an underlying, otherwise hidden cause, and to provide appropriate advice, treatment and referral.

#### 2.4 High impact or alcohol related frequent attenders

This term has been developed to describe a relatively small proportion of patients who make disproportionate use of NHS services through frequent emergency department attendances and/or multiple admissions to acute and mental health inpatient beds. They are sometimes referred to as 'high impact service users'. Different definitions and criteria have been used in different studies and clinical services. The current working definition at King's Health Partners is based on patients who have three or more inpatient admissions per year, of which one is recorded as alcohol-related (there is an assumption that as alcohol problems are underrecorded, one is enough to demonstrate that an alcohol problem exists, or is at least worth looking into). As this is where the bulk of the costs are incurred in the NHS, and hence, where the greatest possible savings through appropriate interventions can be made. Alcohol-related admissions for this purpose are defined as those admissions in which a primary or secondary diagnosis of a wholly alcohol-attributable condition has been made.

We have found that this group of patients has multiple and often complex mental, physical and social care needs and individuals are typically not in contact with specialist alcohol services in the community. Often they are unaware that alcohol is contributing to their problems and they can be challenging to engage in conventional treatment service models.

In an exercise two years ago to develop an Assertive Outreach Treatment response to this patient group for Lambeth and Southwark, we examined the distribution of admission frequency amongst patients admitted at least once with a wholly attributable alcohol diagnosis (WAAD) in a year using the Hospital Episode Statistics database. We have looked at Lambeth and Southwark residents being admitted to the three NHS Trusts in King's Health Partners (Guy's and St Thomas' Hospitals, King's College Hospital, and South London and Maudsley NHS Foundation Trusts). The 9% of patients who have three or more WAAD admissions, accounted for 29% of all WAAD admissions (Figure 1). This represents 324 patients who between them have 1,080 admissions (out of a total of 3,600 WAAD admissions). Some of these patients have seven or more admissions in the same year. The same group of 324 patients had on average five emergency department visits per year, totaling 1.620 visits.



## Patients in the London Boroughs of Lambeth and Southwark with a wholly attributable alcohol conditions versus admissions (Drummond et al., 2016)



Using PHE estimates of acute admission costs of £338 per day and an average of 5.2 days per admission, each admission costs on average £1,758. Therefore this group of patients who have three or more admissions per year, collectively costs approximately £1,900,000 per annum in hospital admissions. The cost of 1,620 emergency department visits (based on a reference cost of £114 per visit) cost £185,000 per year. Therefore the inpatient admission costs dwarf the emergency department costs by a factor of 10.

Extrapolating from King's Health Partners to the whole of England, approximately 90,000 WAAD admissions are by people having three or more alcohol related admissions in a year, costing around £158m. From several health economic studies we know that alcohol dependent patients incur a similar amount in annual criminal justice costs, so the potential cost to the NHS plus criminal justice services is likely to be closer to £300m per annum across England.

## 3. Interventions for alcohol misuse in hospitals

#### 3.1 Screening and brief intervention

Alcohol screening and brief intervention (also referred to as Identification and Brief Advice or IBA) is a highly effective and cost effective intervention approach. It can be effectively delivered by non-specialist practitioners with relatively brief training. NICE auidance (PH24) recommends roll out of IBA across the NHS. including in hospitals. IBA is designed to reduce drinking in hazardous and harmful drinkers and is not primarily intended for people with alcohol dependence who generally require more intensive interventions. It is usually delivered opportunistically at a healthcare consultation rather than for people seeking help for a self-identified alcohol problem. While IBA is effective and cost effective in research trials it is challenging to implement on the scale that is necessary to have a significant public health impact. Simply providing training and clinical tools to healthcare professionals does not typically result in sustainable implementation. A new national CQUIN has been developed to implement this in NHS Mental health and community trusts in 2017 and expanded in NHS acute trusts in 2018 (NHS England, 2016).

#### Factors promoting implementation include:

- Ongoing support for frontline staff by more specialist staff, including providing a rapid referral route for more complex cases,
- Embedding IBA into clinical systems (e.g. computerised screening and intervention tools),
- Providing financial remuneration.

In the hospital setting it has been shown that IBA is more effectively implemented when supported by specialist alcohol staff, and that alcohol care teams are needed to champion implementation and to provide training and support for on-going delivery. CQUINs can be applied to incentivise hospital services to implement IBA, and a new national CQUIN has been developed for this purpose (NHS England, 2016). While it is currently developmental rather than mainstream service delivery, electronic brief interventions (via the internet or smartphones) have considerable promise in cost effective delivery of IBA to a wider population. Access to electronic IBA facilitated by clinicians is currently being evaluated in primary care and could find an application in hospital settings.



#### 3.2 Managing alcohol dependence in hospital

Patients with alcohol dependence who are admitted to hospital present particular clinical challenges and can be complex to manage in a non-specialist setting. Often the alcohol dependence is not the primary reason for admission, but if poorly managed it can create complications in the management of the primary condition and lead to delayed discharge or poor clinical outcomes, or in extreme cases, preventable deaths. NICE guidance (CG100, CG115) sets out the key evidence approaches to managing alcohol dependence in hospital settings, including safe management of alcohol withdrawal, preventing Wernicke's encephalopathy, counselling, prescribing, relapse prevention and referral to community specialist services. While many of these interventions can be provided by non-specialist staff, many healthcare professionals lack the training or competence, and therefore confidence, to diagnose alcohol use disorders, deliver the interventions effectively or make appropriate referrals. Nurses, doctors, and counsellors, with specialist alcohol training, working in an alcohol liaison or alcohol care team capacity can significantly improve the management of these patients, effectively reducing length of stay and readmissions. Addiction specialists include addiction trained nurses (both mental health and general), addiction psychiatrists, alcohol counsellors or health workers, and liaison psychiatrists and physicians with specialist addictions training.

#### 3.3 Referral and aftercare

Since 20% of people with alcohol dependence access specialist alcohol treatment per annum, admission to hospital is commonly the first time that alcohol dependence is identified and diagnosed as an underlying or primary condition. Hospital admission therefore provides an ideal opportunity for early intervention and access to more comprehensive alcohol treatment. Patients who complete alcohol detoxification are more likely to engage in aftercare leading to better clinical outcomes. Therefore it is helpful if alcohol detoxification can be completed during the hospital admission or through transfer to community services to complete detoxification after discharge, thus reducing the cost of inpatient care. This requires a good knowledge of, and good working relationships with, local specialist alcohol services. It is also helpful to begin evidence based relapse prevention medications (e.g. acamprosate, naltrexone) during hospital admission to reduce the risk of relapse following discharge. Specialist alcohol care teams are well placed to foster the necessary links with community services and to recommend and/or prescribe appropriate relapse prevention treatments. Too often patients who have received a hospitalbased detoxification are discharged with no ongoing support in place or aftercare, resulting in almost inevitable relapse, and adding an additional layer of health issues and risks and probable readmission.

## **3.4 Assertive outreach for high impact alcohol related** frequent attenders

While high impact alcohol-related frequent attenders represent a relatively small proportion of all patients admitted with alcohol problems, they place a disproportionate burden on the NHS, including inpatient beds, emergency departments and primary care. They often have complex needs, including homelessness or unstable housing, and multiple comorbidities, and they can be challenging to engage in conventional specialist alcohol treatment services. This has led to the development of assertive outreach approaches that aim to proactively engage with these patients to address the wide spectrum of problems they experience and ultimately to facilitate engagement in specialist alcohol services and other community resources. Research at King's College London has shown that this is a heterogeneous group, but they commonly are socially isolated and lacking in social capital. This requires a more intensive response than can typically be offered by existing community services, and it requires professionals with a high level of training and competence, supported by community support workers. Assertive outreach services for alcohol frequent attenders in Salford and the King's Health Partners, London have been able to demonstrate high levels of engagement in specialist treatment and reduced unplanned health care use, including reduced admissions and emergency department attendances, through this approach. In Salford this approach led to a 67% reduction in inpatient admissions and a 60% reduction in emergency department attendances (Hughes et al., 2013). Similarly a recent trial of assertive outreach with difficult to engage alcohol dependent patients found reduced alcohol consumption and hospital admissions together with increased engagement in specialist alcohol treatment (Drummond et al., 2016).

## 4. Service models and systems to deliver alcohol care in hospitals

#### 4.1 Making every contact count

There are several models of implementing IBA in hospital settings. Approaches have been developed for emergency departments, outpatient clinics, and inpatient units. Interventions can be delivered by both non-alcohol specialist and specialist staff, and can include onward referral to a specialist alcohol service for patients who require more support. In our experience successful embedding of IBA into clinical practice requires the following components:

- A senior clinical specialist champion
- Alcohol specialist staff to oversee and support implementation, including providing training and developing clinical protocols
- Senior clinical and management support for implementation, ideally as part of a hospital wide alcohol strategy
- Clinical protocols should detail the appropriate screening and intervention tools, clinical criteria for delivering IBA and referral to specialist services;
- Adequate resources (e.g. CQUINS, specialist alcohol care staff);
- Clinical protocols need to be specific to the hospital systems and settings;
- An implementation plan including methods to embed IBA into clinical information and patient management systems;
- Ongoing monitoring of implementation.



#### 4.2 Alcohol care teams

A recent survey of alcohol care teams by Public Health England (2014) showed that the number of hospitals reporting having an alcohol care team has increased considerably over the last 10 years. The survey also shows that there is no single service model or configuration that predominates in England. Services range from a lone worker from local community alcohol services visiting the hospital to accept referrals on a once a week basis, to psychiatric liaison services with a remit for alcohol referrals, all the way through to comprehensive hospital-based, consultant or nurse-led, seven day alcohol care teams, which provide direct clinical care as well as training and support to non-specialist staff. Only the comprehensive consultant led model has been demonstrated to have a significant cost impact.

While it is encouraging that most acute hospitals have some alcohol specialist service input, few mental health hospitals currently do, even though they have a high proportion of alcohol-related hospital admissions. Further, the more comprehensive the alcohol care team, the greater the proportion of alcohol-related inpatients will be reached, and hence the greater the impact on admission lengths, readmissions and clinical outcomes, and hence cost savings to the NHS. It is unlikely that a single alcohol specialist nurse in a large hospital with high levels of alcohol-related admissions will have much impact on the in-need population.

The British Society for Gastroenterology, NCEPOD, the Alcohol Health Alliance and Public Health England have all separately recommended that the standard hospitals should aspire to a seven day comprehensive multidisciplinary alcohol care team in order to have an impact on reducing alcohol-related hospital admissions and morbidity and mortality from alcohol-related disease.

#### 4.3 Alcohol assertive outreach services

A recent survey by the CLAHRC South London (Collaboration for Leadership and Health Research and Care) has examined the provision of assertive outreach services for alcohol-related frequent attenders in England. Similar to the PHE survey of alcohol care teams, it found that there was considerable variation in what was being provided. 26% (36/141) of hospitals reporting any alcohol intervention activity identified themselves as providing assertive outreach treatment for frequent attenders. However, only four (11%) services met current criteria for comprehensive assertive outreach. These services varied greatly across hospitals: duration of contact with patients (6 weeks – 12 months); size of team (1 – 7.7 wte) and average caseload per worker (10 - 40 patients). Consistent features were community based appointments, at least weekly contact and support with a range of problems other than alcohol use; including housing, mental health, physical health and getting involved in community activities, education or employment support.

Given the complexity of patients who are high impact alcohol related frequent attenders, these services need to be equipped to provide a sufficiently intensive level of response in order to have an impact on engagement and reduced alcohol related admissions. In severe mental illness where assertive outreach services are more established, the following features have been described as contributing to positive treatment outcomes (Burns et al., 2000):

- A maximum caseload of 15 patients per assertive outreach practitioner;
- 2. Input from a multidisciplinary team (including psychiatrists and substance misuse specialists);
- Regular contact (minimum of once a week), with 50% of contacts occurring outside of the service settings either in the patients' home or neighbourhood, and in which short frequent contacts rather than long complex contacts were encouraged;
- Assertive engagement where there were persistent and repeated attempts to contact, and an emphasis on maintaining contact and building relationships;
- A focus on both health and social care needs, including accommodation, leisure, occupation, and physical and mental health;
- 6. A flexible approach, focusing on the patient's goals even when these were peripheral to the alcohol dependence;
- 7. Practitioners were explicit about their role both in care planning and in visits;
- An ethos of 'going out of your way', where practitioners are encouraged to step outside of professional roles and 'go the extra mile' for patients;
- 9. Extended care provided for a prolonged period of 1 year.

We have found that there is considerable variation in the rates of alcohol related admissions and the number of identified alcohol related frequent attenders across the CCG areas of South London. which is highly correlated with indices of social deprivation. Areas such as Lambeth and Southwark which have the highest level of deprivation have 145 frequent attenders per 100,000 population, whereas Richmond, which has the lowest deprivation index, has 19 frequent attenders per 100,000: a difference by a factor of 7.6. It is likely that different service models will be required in different hospitals. It is therefore recommended that provision varies according to the identified local need. In high frequent attender areas, there is a good case to be made for a dedicated specialist assertive outreach service for this population, whereas in lower prevalence areas, assertive outreach might be more easily incorporated into existing community specialist alcohol services, with one or more specialist assertive outreach workers, providing there is good liaison between hospital and community services.

All three interventions now feature in the recently released Public Health England Menu of Preventive Interventions (PHE 2016).



## 5. How to develop alcohol care in hospitals

#### 5.1 Needs assessment

A key first step in developing alcohol care services is establishing the scale of the problem to be addressed in a specific hospital. Given that few hospitals routinely screen all patients for alcohol misuse, the most reliable data is likely to be from Hospital Episode Statistics (HES) or locally through Secondary Use Service (SUS) data, both managed by NHS Digital. The discussion above describes that the most useful data relating to alcohol related hospital admissions is the 34 wholly attributable alcohol conditions reported by HSCIC (see resources section). This can be expressed as the total number admitted with a wholly alcohol attributable primary or secondary diagnosis (WAAD) in the past year, or as the rate of WAAD admissions per 100,000. For hospitals that mainly serve one borough or CCG area, the borough level data can be used. For hospitals that service multiple boroughs it makes more sense to look at the whole hospital level data (although this creates difficulties in working out population rates). Hospital admission data are more reliable than Emergency Department data due to limitations of recording in the latter dataset.

Recalling the discussion above, due to considerable underdiagnosis of alcohol-related conditions, these figures are likely to represent a gross under-estimate of the total burden of alcoholrelated admissions on the hospital. There are likely to be almost three times as many admissions that are partly attributable to alcohol. This needs to be taken into account in planning alcohol care service provision.

To estimate the number of alcohol related frequent attenders there are several definitions in use. The King's Health Partners development work has pragmatically chosen three or more WAAD admissions in the past year as our working definition. Given that alcohol disorders are under-diagnosed and alcohol dependence is mostly a chronic condition it can be justifiably assumed that if one of three admissions has a WAAD admission, the other two admissions are likely to have been alcohol related as well.

So the criterion is three admissions in the past year of which one admission has a primary or secondary WAAD. This gives a total number of alcohol frequent attenders across Lambeth and Southwark of 324 in 2014/15. Since the King's Health Partners assertive outreach team started contacting these patients to engage them, it has been verified that they have all experienced chronic alcohol dependence. Therefore we believe that this is a useful working definition to identify the target population.

#### 5.2 Developing a hospital alcohol strategy

The Royal College of Physicians (2001) recommended that all NHS Trusts should have a hospital alcohol strategy. The purpose of the strategy is to provide the necessary leadership and guidance to staff to tackle alcohol misuse appropriately. The following recommendations were made:

- a screening strategy for early detection of harmful/coincidental hazardous drinkers, administered as part of routine admission procedures through lifestyle questionnaires
- b) early assessment of dependence severity by appropriately trained staff
- c) widely available and audited protocols for the pharmacotherapy of detoxification
- readily available 'acute response' from liaison or specialised alcohol psychiatry services for the management of more complex patients undergoing alcohol withdrawal
- e) assessment of the need for referral to on-going support services by appropriately trained staff with knowledge of local services
- f) provision of brief interventions for coincidental hazardous drinkers
- g) provision of general staff education
- h) occupational policies for alcohol for all hospital health care workers, for example with respect to drinking at work
- i) close liaison with general practitioners on discharge.

Additionally, the committee recommended the following:

" Responsibility for the development of the alcohol strategy and its implementation should be undertaken by a steering group consisting of the above clinical staff together with senior managerial personnel from the acute trust and mental health trust, and representatives from local primary care services, public health and purchasers."

To support implementation the following resources are advised:

- a senior member of medical staff and a senior member of nursing staff to act as a focus for alcohol strategy and to support more junior members of staff
- b) senior psychiatric colleague with an interest in the management of alcohol problems to act as the primary link between the acute hospital trust and local mental health services. This individual may or may not be employed by the acute trust
- c) one or more dedicated alcohol health workers employed by and answerable to the acute trust. The roles will include:
  - » implementation of screening strategies
  - » detoxification of dependent drinkers
  - » brief interventions in hazardous drinkers
  - » referral of patients for on-going support and with access/ knowledge about locally available non-statutory and voluntary agencies
  - » provision of links with liaison/specialist alcohol psychiatry
  - » an educational resource and support focus for other health care workers in the Trust.



In 2013 an alcohol strategy was developed within King's Health Partners (South London's Academic Health Science Centre [AHSC]): 'Good Health: An alcohol strategy for King's Health Partners'. The main aim of the strategy is to reduce alcohol related disease in the population served by the three NHS trusts within King's Health Partners: Guy's and St Thomas', King's College Hospital and South London and Maudsley NHS Foundation Trusts. The strategy is shown in Appendix 2.

A senior stakeholder strategy group, including clinicians, managers, and local commissioners, was established in 2013 and early tasks were to scope the current activities and gaps in alcohol care across King's Health Partners. This was supported by a development grant from the Guy's and St Thomas' Charity. As a consequence it was possible to attract significant new investment to establish a comprehensive seven day alcohol care team at Guy's and St Thomas' NHS Foundation Trust. A full grant application was then successfully submitted to Guy's and St Thomas' Charity to fund new specialist Alcohol Assertive Outreach team for alcohol related frequent attenders. This was established within South London and Maudsley NHS Foundation Trust serving the whole of King's Health Partners. Further service developments are ongoing in the other partner trusts.

Other related local activities were undertaken:- e-learning resources in IBA for frontline staff were developed, along with shared clinical protocols to manage alcohol misusing patients, and Health Education South London provided funding for alcohol short courses for frontline staff. In the past three years the total new investment in clinical services and training has been £3.5 million. A further £11 million in research income has been attracted to King's Health Partners to evaluate the implementation of alcohol interventions. None of this would have been as successful without having an alcohol strategy that set out the ambitions with senior management support.

Therefore the development of a local hospital alcohol strategy is a crucial component of implementing effective alcohol care in hospitals, and cannot be over-emphasised. But in order to be effective, it required dedicated senior leadership and senior management and commissioning support.

#### 5.3 Establishing specialist alcohol services

The most effective way to improve alcohol care within hospitals is to develop a specialist multidisciplinary alcohol care team. Other models exist, but they have less impact than a dedicated hospital based team. This requires adequate resourcing, including senior clinical leadership with dedicated clinical and management sessions by a consultant in a relevant speciality (e.g. addiction psychiatry, gastroenterology, emergency medicine), and nursing staff to provide a wide range of alcohol care functions. The following are the functions of the Guy's and St Thomas' NHS Foundation Trust (Part of King's Health Partners) alcohol care team (ACT) established in 2014:

- 1. To provide a seven days per week alcohol service for inpatients.
- To provide training for frontline staff in acute and mental health care inpatient units and the emergency departments in the identification and appropriate management of patients with alcohol-related attendances. This will include training in alcohol

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- screening and brief interventions. To develop effective systems and care pathways for inpatients with Alcohol Use Disorders (AUD).
- To liaise with and support frontline staff caring for acute and mental health inpatients and emergency departments in the appropriate, NICE compliant management of patients with AUD.
- 4. To provide direct clinical care for inpatients with AUD including diagnosis, clinical assessment, prevention and management of alcohol withdrawal and Wernicke's encephalopathy, appropriate medication prescribing, alcohol related brain damage.
- 5. To advise on and effect appropriate referrals and community engagement with patients with AUD, including the inpatient care pathway to the Addictions Assessment Unit at the Maudsley Hospital.
- 6. To provide ongoing outpatient clinical support to patients with alcohol dependence.
- 7. To support development and implementation of the KHP alcohol strategy in acute and mental health care.

The King's Health Partners alcohol care team bid included the following staffing structure to provide a seven day service in one large NHS teaching hospital Trust:

- Lead clinician 0.5 wte: clinical background in gastroenterology, hepatology, acute medicine or addiction psychiatry/addiction medicine, to provide clinical leadership.
- Addiction psychiatry/addiction medicine 0.2 wte to provide specialist addictions input.
- Senior Alcohol Clinical Nurse Specialist 1.0 wte to act as lead nurse for the service. Background in either acute medicine, gastroenterology, addiction nursing.
- Alcohol Clinical Nurses 4.0 wte
- Specialist addictions clinical psychologist 0.2 wte to support training and psychological assessment
- 0.2 wte senior management time
- 0.2 wte Data and administrative support.

#### 5.4 Commissioning

There is considerable variation in the amount and sources of funding for alcohol care in hospitals across England. Prior to the Health and Social Care Act, alcohol care teams were mostly funded by Primary Care Trusts with considerable variation in provision across England. Mostly services were funded as part of the Substance Misuse Service funding envelope and many were an extension of an existing Community Drug and Alcohol Service. Since the Health and Social Care Act, addiction services are largely commissioned by local authorities. In terms of hospital alcohol care teams, Public Health England has identified a range of funding options, including teams exclusively funded by local authorities as part of the public health grant, some are funded by Clinical Commissioning Groups or acute trusts themselves, and some are jointly funded from a variety of these sources.

The current lack of local and national consensus on appropriate funding models for in-hospital alcohol care teams is unsatisfactory. While local authorities have responsibility to fund addiction services,



the benefits of alcohol care teams are mainly felt by the NHS. Further, with cuts in local authority funding many of the existing addiction services, including alcohol care teams, are under threat. While the value proposition of CCGs investing in alcohol care teams to reduce the burden of alcohol on hospital services is clear, there is a risk that CCGs view alcohol care as being the responsibility of local authorities. Given the benefits to both the NHS and the local community, the most appropriate funding model for hospital based alcohol care teams should be shared between CCGs, hospital trusts and local authorities.

These unresolved issues further emphasise the importance of a hospital alcohol strategy group, which has effective high level engagement with local commissioners including local authorities and CCGs. A business case needs to be developed to provide a compelling case for investment in alcohol care teams, drawing on local intelligence, including comprehensive alcohol needs assessment.

#### 5.5 Staff training

It is essential to develop a sufficiently trained and competent workforce to support implementation of effective alcohol care in hospitals and the community. This needs to extend from undergraduate training through postgraduate and continuing education for all staff. All clinical staff in the NHS should be competent to identify, advise, manage and appropriately refer alcohol misusing patients. A recent report from the Academy of Medical Royal College has set out the core medical competencies for alcohol and other drugs (AMRC, 2012). There have also been initiatives by the International Centre for Drug Policy at St George's University of London (ICDP, 2012) and the Medical Council on Alcohol (MCA, 2017) to increase the level of undergraduate medical training in managing alcohol and other drugs.

At postgraduate level the Royal College of General Practitioners provides a certificate course in the management of alcohol problems in primary care and several universities provide courses on alcohol and substance misuse at postgraduate certificate, diploma and masters level. Several NHS trusts offer training on alcohol including e-learning courses and Health Education England is developing e-learning resources. Also Public Health England provides a wide range of alcohol learning resources through the online Alcohol Learning Centre platform (PHE, 2017).

Many hospital based alcohol care teams provide structured and ad hoc training for frontline NHS clinicians in identification and management of alcohol misuse as part of their core remit, although this varies between hospitals depending on the resourcing and objectives of the individual service. There is also a need for more specialist training for staff working in alcohol care teams. The Royal College of Psychiatrists, together with the Royal College of Physicians, British Society for Gastroenterology, and nursing organisations, is currently developing a set of core competencies for clinicians working in alcohol care teams which is due to appear as a joint report in 2017. Due to the level of stigma that some patients with alcohol-related problems experience there is a need for alcohol awareness training for all staff with an emphasis on destigmatising this patient group. The Health Innovation Network South London in conjunction with King's College London and the South London and Maudsley NHS Foundation Trust has developed a film and training pack for NHS staff and health educators for this purpose. This is available in two formats: 1) a film and facilitator's notes for face to face group training, and 2) an e-learning individual study session – both are available on Health Education England's e-Learning for Health online resource (www.e-lfh.org.uk/programmes/alcohol-stigma/).

#### 5.6 Monitoring the impact

There is currently a lack of routine monitoring of the impact of implementing alcohol intervention programmes in NHS hospitals (and primary care) outside of specific clinical research trials and local CQUINs. Routine monitoring is important both in terms of measuring the impact of implementation and in building business cases for continuing support of alcohol care and intervention initiatives.

Routine hospital administrative data is held in the Secondary Uses Service (SUS) database. This includes diagnostic codes that can be used to identify wholly attributable hospital admissions at hospital, Clinical Commissioning Group or local authority level. We recommend using the 34 diagnostic codes used by NHS Digital in its annual alcohol reports, signifying wholly attributable admissions (HSCIC, 2015). This should be examined in both primary and secondary diagnostic fields since alcohol conditions are often not the primary reason for an admission. Information departments in hospitals should be able to provide regular reports on the number of wholly attributable alcohol admissions, the number of individuals admitted with these conditions, and the number of individuals who have frequent (defined in King's Health Partners as three or more in a year) alcohol related admissions.

Emergency department alcohol attendance data is more difficult to obtain from SUS since there is no specific diagnostic information provided. This is currently a significant gap, although some hospitals already have local systems in place. These include having a routine field in electronic patient records for alcohol screening score for short screening tools such as AUDIT-C (Alcohol Use Disorders Identification Test – Consumption) and FAST (Fast Alcohol Screening Test). When routinely applied for all hospital attenders this provides not only a measure of the success of implementation of screening and brief intervention, it also provides an estimate of the proportion of hazardous and harmful drinkers attending the hospital. Routine implementation of AUDIT-C screening and recording across the NHS would be a huge step forward.



Hospitals currently implementing assertive outreach interventions for alcohol-related frequent attenders often track subsequent admissions and emergency department attendances of these cohorts of patients to measure the impact of the interventions. Again this can be easily done through SUS data when it is appropriately set up.

#### 5.7 Sustainability

Too often hospital alcohol care initiatives are set up on short-term (e.g. one year) funding, inadequate resourcing, a lack of clear objectives for the work, and a lack of agreed monitoring or 'success' criteria. This results in a stop-start form of service delivery, poor staff morale, and a lack of impact. Often under-resourced alcohol care teams (for example, one alcohol nurse covering an entire general hospital) fail to achieve a significant impact because they reach only a small proportion of the total in-need alcohol population attending the hospital. Many alcohol admissions take place on evenings and weekends and during periods of staff annual leave resulting in sub-optimal implementation. Staff working in these conditions can become overwhelmed by the volume of referrals and a continual feeling of failure, resulting in high staff turnover and a consequent interruption of services.

Given the high and increasing level of alcohol need presenting to NHS hospitals, the preventable nature of many of these often repeated admissions, and the imperative of reducing the burden of alcohol on the NHS, we need to move to a situation where alcohol care teams are seen as core clinical services in the same way as diagnostic radiology or intensive care units. These services need to be adequately resourced, consultant-led, with seven-day coverage, at a level of staffing commensurate with the level of identified needs, and funded in a sustainable way. The impact of such services need to be measured in years rather than months. Only then will we begin to make a lasting impact on the burden of alcohol on the NHS. This will require a commitment from NHS clinicians, hospital managers, NHS and local authority commissioners, and engagement with local community services, to develop integrated care for this complex patient group.

#### References

Academy of Medical Royal Colleges (2012) Alcohol and Other Drugs: Core Medical Competencies. Royal College of Psychiatrists, London.

https://orca.cf.ac.uk/69084/1/Alcohol%20and%20drugs.pdf

Barnaby, B, Drummond, C, McCloud, A, et al. (2003) Substance misuse in psychiatric inpatients: comparison of a screening questionnaire survey with case notes. British Medical Journal, 327, 783–784.

Bell, J, Hunter, R, Morinan, G, Webzell, I, Wilson-Jones, C, O'Grady, J (2011) Alcohol Problems in King's College Hospital. South London and Maudsley Foundation NHS Trust, London.

Burns T, Fiander, M, Kent A et al (2000) Effects of case-load sizeon the process of care of patients with severe psychotic illness. Br J Psychiatry 177: 427-433

Burton, R, Henn, C, Lavoie, D et al (2016) A rapid evidence review of the effectiveness and cost effectiveness of alcohol control policies: an English Perspective. Lancet, DOI: NHS Digital (2016) Statistics on Alcohol: England, 2016. NHS Digital. https://assets.publishing. service.gov.uk/government/uploads/system/uploads/attachment\_ data/file/583047/alcohol\_public\_health\_burden\_evidence\_review. pdf

Canning, UP, Kennel-Webb, SA, Marshall, J, Wessely, SC, Peters, TJ (1999) Substance misuse in acute medical admissions. Q J Med, 92; 319-326

Currie, C, Davies, A, Blunt, I, Ariti, C, Bardsley, M. (2015) Alcohol-Specific Activity in Hospitals in England. Nuffield Trust, London.

Department of Health (2009) Signs for Improvement: Commissioning Interventions to Reduce Alcohol-Related Harm. Department of Health, London.

http://www.ias.org.uk/uploads/pdf/HSR/dh\_104854.pdf

Drummond, C, Gilburt, H, Burns, T, Copello, A, Crawford, M, Day, E, Deluca, P, Godfrey, C, Parrott, S, Rose, A, Sinclair, H, Coulton, S (2016) Assertive community treatment for people with alcohol dependence: a Pilot randomized controlled trial. Alcohol and Alcoholism, doi: 10.1093/alcalc/agw091

Drummond, C, Oyefeso, N, Phillips, T, Cheeta, S, DeLuca, P, Winfield, H, Jenner, J, Cobain, K, Galea, S, Saunders, V, Perryman, K, Fuller, T, Pappalardo, D, Baker, O & Christopolous, A (2005a) Alcohol Needs Assessment Research Project: The 2004 National Alcohol Needs Assessment for England. Department of Health, London. http://webarchive.nationalarchives.gov.uk/20051207090009/ http://www.dh.gov.uk/PublicationsAndStatistics/ Publications/PublicationsPolicyAndGuidance/ PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT\_ ID=4122341&chk=WIR9wX

Drummond, C, Phillips, T, Coulton, S, Barnaby, B, Keating, S, Sabri, R, Moloney, J (2005b) National prevalence survey of alcohol-related attendances at accident and emergency departments in England. Alcoholism Clinical and Experimental Research, 29, 5, 36A-36A (suppl)

Drummond, C, Pilling, S, Brown, A, et al. (2011) Alcohol Use Disorders: Diagnosis, Assessment and Management of Harmful Drinking and Alcohol Dependence. NICE Clinical Guideline 115. National Institute for Health and Clinical Excellence, London. https:// www.nice.org.uk/guidance/CG115

Drummond, C, Wolstenholme, A (2013) Good Health: An Alcohol Strategy for King's Health Partners. King's Health Partners, London. http://www.kingshealthpartners.org/assets/000/000/992/KHP\_ alcohol\_strategy\_Final\_16.08.13\_original.pdf?1481280013

Drummond, C., Wolstenholme, A., Blackwood, R. (2016) Social deprivation and alcohol related hospital admissions: study of routine hospital admissions data. Alcoholism: Clinical and Experimental Research, 40, S1, 49A. DOI: 10.1111/acer.13084.

Gilmore, I, Anderson, W, Bauld, L et al. (2013) Health First: An Evidence-Based Alcohol Strategy for the UK. University of Stirling http://www.stir.ac.uk/media/schools/management/documents/ Alcoholstrategy-updated.pdf



Health Innovation Network Alcohol Stigma Training http://www.e-lfh.org.uk/programmes/alcohol-stigma/

HM Government (2012) The Government's Alcohol Strategy. HM Government, London. https://www.gov.uk/government/uploads/ system/uploads/attachment\_data/file/224075/alcohol-strategy.pdf

HSCIC (2015) Statistics on Alcohol, England 2015. HSCIC. Available from: https://digital.nhs.uk/data-and-information/ publications/statistical/statistics-on-alcohol/2015

Hughes, NR, Houghton, N, Nadeem, H, Bell, J, McDonald, S, Glynn, N, Scarfe, C, Mackay, B, Rogers, A, Walters, M, Smith, M, McDonald, A, Dalton, D. (2013) Salford alcohol assertive outreach team: a new model for reducing alcohol-related admissions. Frontline Gastroenterology, 4, 130-134.

International Centre for Drug Policy (2012) Substance Misuse in the Undergraduate Curriculum. ICDP, London.

http://www.sgul.ac.uk/images/docs/idcp%20pdfs/Substance%20 misuse%20in%20the%20undergrad%20medical%20curiculum/ Substance\_Misuse\_Guidance\_Undergraduate\_Medical\_ Curriculum\_2007.pdf

Kouimtsidis C, Reynolds M, Hunt M, Becket J, Drummond C, Ghodse H (2003) Substance Use in the general hospital. Addictive Behaviours, 28; 483-499.

Leon, DA, McCambridge, J (2006) Liver cirrhosis mortality rates in Britain from 1950 to 2002: an analysis of routine data. Lancet, 367 (9504). Pp. 52-6. 10.1016/S0140-6736(06)67924-5

Lim S, Vos T, Flaxman A et al (2012) A comparative risk assessment of burden of disease and injury attributable to 67 risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. The Lancet Vol 380, No 9859, p2224-2260, 15 December 2012

http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)61766-8/abstract

Moriarty KJ (2014) Alcohol Care Teams: Reducing Acute Hospital Admissions and Improving Quality of Care. NICE Quality and Productivity: Proven Case Study. British Society of Gastroenterology and Bolton NHS Foundation Trust. http://arms.evidence.nhs.uk/ resources/gipp/29420/attachment

Murray, CJL, Richards, MA, Newton, JN, et al. (2013) UK health performance: findings of the Global Burden of Disease Study 2010. Lancet, 381, 997-1020.

National Confidential Enquiry into Patient Outcomes and Death (2013) Measuring the Units: A review of Patients Who Died with Alcohol-Related Liver Disease: A Report by the National Confidential Enquiry into Patient Outcome and Death. NCEPOD, London. http://www.ncepod.org.uk/2013arld.html and http://www.ncepod.org.uk/2013report1/downloads/ MeasuringTheUnits\_FullReport.pdf NHS England (2014) Five Year Forward View. NHS England, London. https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfvweb.pdf

NHS England (2016) Five Year Forward View for Mental Health. Mental Health Taskforce. NHS England, London https://www.england.nhs.uk/wp-content/uploads/2016/02/ Mental-Health-Taskforce-FYFV-final.pdf

NHS England (2016) Commissioning for Quality and Innovation (CQUIN): Guidance for 2017-2019. NHS England. https://www.england.nhs.uk/publication/commissioning-forquality-and-innovation-cquin-guidance-for-2017-2019/

National Institute for Health and Care Excellence (2010a) Alcohol Use disorders: preventing harmful drinking. http://www.nice.org.uk/guidance/ph24

National Institute of Health and Care Excellence (2010b) Alcohol Use Disorders: Diagnosis and Management of Alcohol Related Physical Complications. *https://www.nice.org.uk/guidance/cg100* 

Public Health England (2017) Alcohol Learning Centre Training resources https://www.gov.uk/government/collections/alcoholand-drug-misuse-prevention-and-treatment-guidance

Public Health England (2014) Alcohol Care in England's Hospitals: An Opportunity Not to be Wasted. Public Health England, London. https://www.rcem.ac.uk/docs/External%20Guidance/10d.%20 Alcohol%20care%20in%20England%27s%20hospitals%20-%20 an%20opportunity%20not%20to%20be%20wasted%20(PHE,%20 Nov%202014).pdf

Public Health England (2016) Local Health and Care Planning: Menu of Preventative Interventions. Public Health England, London. https://assets.publishing.service.gov.uk/government/uploads/ system/uploads/attachment\_data/file/683016/Local\_health\_and\_ care\_planning\_menu\_of\_preventative\_interventions\_DM\_NICE\_ amends\_14.02.18\_2\_.pdf

Royal College of Physicians (2001) Alcohol - Can the NHS Afford it? Recommendations for a Coherent Alcohol Strategy for Hospitals. Royal College of Physicians, London. *https://cdn.shopify.com/s/ files/1/0924/4392/files/alcohol\_nhsweb.pdf*?1709961806511712341

Williams R, Aspinall R, Bellis M, Camps-Walsh G, Cramp M, Dhawan A, et al (2014). Addressing liver disease in the UK: a blueprint for attaining excellence in health care and reducing premature mortality from lifestyle issues of excess consumption of alcohol, obesity, and viral hepatitis. Lancet. 2014;384(9958):1953–97.



## 34 ALCOHOL ATTRIBUTABLE DIAGNOSTIC CODES - HSCIC (2015)

Wholly attribuable conditions		
ICD10 code	ICD 10 Diagnoses	
F10	Mental and behavioural disorders due to use of alcohol	
F10.0	Acute intoxication	
F10.1	Harmful use	
F10.2	Dependence syndrome	
F10.3	Withdrawal state	
F10.4	Withdrawal state with delirium	
F10.5	Psychotic disorder	
F10.6	Amnesic syndrome	
F10.7	Residual and late-onset psychotic disorder	
F10.8	Other mental and behavioural disorders due to the use of alcohol	
F10.9	Unspecified mental and behavioural disorders due to the use of alcohol	
К70	Alcoholic liver disease	
K70.0	Alcoholic fatty liver	
K70.1	Alcoholic hepatitis	
K70.2	Alcoholic fibrosis and sclerosis of liver	
K70.3	Alcoholic cirrhosis of liver	
К70.4	Alcoholic hepatic failure	
K70.9	Alcoholic liver disease, unspecified	
T51 <sup>8</sup>	Toxic effect of alcohol	
T51.0	Ethanol poisoning	
T51.1	Methanol poisoning	
T51.9	Toxic effect of alcohol, unspecified	
Other wholly attributable conditions		
E24.4	Alcohol-induced pseudo-Cushing's syndrome	
G31.2	Degeneration of nervous system due to alcohol	
G62.1	Alcoholic polyneuropathy	
G72.1	Alcoholic myopathy	
142.6	Alcoholic cardiomyopathy	
K29.2	Alcoholic gastritis	
K85.2	Alcohol-induced acute pancreatitis	
K86.0	Alcohol-induced chronic pancreatitis	
Q86.0	Fetal alcohol syndrome (dysmorphic)	
R78.0	Excess alcohol blood levels	
X45	Accidental poisoning by and exposure to alcohol	
X65	Intentional self-poisoning by and exposure to alcohol	
Y15	Poisoning by and exposure to alcohol, undetermined intent	
Y90	Evidence of alcohol involvement determined by blood alcohol level	
Y91	Evidence of alcohol involvement determined by level of intoxication	



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Design and production was provided by:-

Raffertys and Associates Ltd

## We would like to thank the following people for their guidance and contributions to this work:-

Dr Nancy Kuchemann, Southwark Clinical Commissioning Group Dr Sarah Hughes, St George's Hospital NHS Foundation Trust Iain Armstrong, Public Health England Don Lavoie, Public Health England Andrew Brown, Public Health England Stephanie Fincham-Campbell, CLAHRC South London Julie Winnington, South London and Maudsley NHS Foundation Trust Dr Agnes Marossy, London Borough of Bromley Dr Nada Lemic, London Borough of Bromley Lisa Fannon, London Borough of Southwark Des Langan, Service user representative John O'Toole, Service User representative Martyn Penfold, independent consultant

And members of the HIN Alcohol-related Frequent Attenders Clinical Network

#### Funding:-

This work was funded by the Health Innovation Network South London.

Colin Drummond is part funded by the NIHR CLAHRC South London and the NIHR Specialist Biomedical Research Centre at the South London and Maudsley NHS Foundation Trust.

The views in this document are those of the authors and do not necessarily represent the views of the NHS, NIHR or PHE.