Substance Misuse Health Needs Assessment
Lincolnshire 2015
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Executive Summary

The purpose of this health needs assessment is to inform the future commissioning strategy for Lincolnshire substance misuse services. It will take into consideration national and local strategies, policies and guidance; it is the start of a new era in substance misuse treatment, where changes can be made, improvements achieved and new ideas considered. The recommendations within this document will highlight areas that need to be maintained, those that require improvement and elements that need further consideration when commissioning future services.

Lincolnshire is a large county with a population of nearly 725,000 people spread over both rural and urban environments. Estimates indicate there are over 17,000 dependant drinkers and nearly 30,000 high risk drinkers as well as 3000 people dependant on heroin or crack cocaine. This causes significant harm and impacts on family life, health, crime and wellbeing of all who live in this unique diverse county. It is clear that the national recession is having an impact on Lincolnshire; the drive to reduce deficits and make financial savings will encapsulate all services that receive government funding. Inevitably this will impact on substance misuse services and equally may have an influence over the behaviour of the population as a whole. To this end, we need to be smarter, leaner and more innovative with our thinking toward alcohol and drugs; there needs to be a societal shift in thinking about what is normal and acceptable as well as consideration given to innovative approaches to treatment for the future.

Over the last 15 years drug treatment numbers have plateaued whilst problematic alcohol use has increased. Over this time different approaches to drug use and drug dependency have shown that varied approaches are required to have successful positive outcomes, but all can have significant impacts on the individual, their family and society. Alcohol use has also seen trend changes; with a significant shift to the purchase and consumption of alcohol within the home, although the night time economy still plays a significant role in the public perception of alcohol misuse and problematic drinking, including violent crime and anti-social behaviour. These issues have not gone unchallenged, but further work is required and this health needs assessment will highlight some areas for consideration.

The long and short term health of Lincolnshire’s residents is significantly affected by alcohol and drugs; recent access to hospital data has allowed analysis in this area for the first time. This combined with police crime data illustrates a better picture which will help those commissioning and providing services to develop solutions and better understand the problems ahead.

This health needs assessment does not replace the Lincolnshire Alcohol Needs Assessment published in 2014 but rather enhances it and adds a perspective that can be used to inform commissioning intentions. It should also be considered alongside the Lincolnshire Alcohol and Drug Strategy 2014-2019.
Recommendations

Commissioning

- Consideration needs to be given to the location of future service provision within main urban areas and smaller more rural locations, especially with regard to the most deprived areas of the county.
- Specific provision for dual diagnosis should be considered within any future commissioned model.
- Blood borne virus programmes should remain fully integrated in future services, hepatitis B vaccinations and hepatitis C screening should be available to all clients entering or engaged with treatment services regardless of the presenting substance.
- Needle syringe programmes should be appropriately placed across the county to enable easy access to all those who need it. Mapping should be utilised to identify under-represented areas and future services should take this into account.
- Future services should be able to accommodate changes in substance misuse behaviour, trends should be monitored and services commissioned in such a way that provision can be changed quickly to ensure treatment is always appropriate and effective.
- Future treatment services should consider if there is any way to better engage the night time economy to improve uptake of treatment services by this population including those who use alcohol and new psychoactive substances.
- Consideration should be given to a hospital liaison service that can be called upon by hospital staff following an overdose where illicit drugs and/or alcohol or alcohol related conditions are a contributing factor.
- Full access to data held by specialist services should be included within any future contracts, including the option to receive client level data through appropriate information sharing agreements to enhance the intelligence base of substance misuse and particularly treatment services within Lincolnshire.
- Health data to be utilised to highlight gaps in treatment provision to ensure services are developed to offer early intervention to avoid premature death wherever possible.
- A drug related deaths review process should be implemented and led by commissioners.
- Future service provision should be accessible to all ethnic groups with consideration given to Ethnic minority groups as they have a higher propensity to misuse substances. Although Lincolnshire has a low percentage population of these groups and so evidence does not indicate a separate service provision is required any future services will need to ensure they are accessible and sensitive to the needs of this population.
- Future commissioning strategies should consider different models for mutual aid provision to enhance and improve the current provision across Lincolnshire.

Partnership working

- Close working relationships should be developed with the department for work and pensions given unemployment plays a significant role in substance misuse.
- Future services should work closely with Youth Offending services, youth housing providers and Schools as Young people with complex needs are at greater risk of developing alcohol or drug problems.
Future services should work closely with children’s services and other family groups including families working together and family courts, because family history plays a significant role if a young person’s likelihood of developing alcohol or drug problems.

Consideration should be given to closer working links to sexual health services who are already engaged with this client group, particularly because gay and bisexual men have a much higher tendency to misuse alcohol and drugs as well as expose themselves to higher risks of contracting a blood borne virus than other groups.

Closer working relationships need to be developed with CCG’s as well as with providers of community mental health services and Child and Adolescent Mental Health Services (CAMHS) to improve joint working in regards to Dual Diagnosis as it is evident in a high percentage of those commencing mental health treatment.

Future services should develop close working relationships with those involved with domestic abuse incidents and engagement with this client group should be embedded in treatment services.

Close working relationships with the police and probation are vital, future services should have sufficient provision to engage both services at an appropriate level, given nearly one third of all crime has links to alcohol and many serious acquisitive crimes are linked to drug abuse.

Further development

- Regular night club goers have a higher propensity to use drugs, this should be explored further to establish if any future service can increase the uptake from this element of the night time economy.
- Most drugs are consumed in a domestic environment; consideration should be given to engaging with this difficult to reach group including social media and other engagement campaigns.
- The penetration into the problematic drinking population remains low. Hospital admissions data and crime data should be used to target appropriate groups that make up these statistics enabling engagement at an earlier stage before the misuse becomes problematic to both health and criminal justice services.
- Recovery is especially difficult for entrenched opiate users, services should develop techniques to address the representation rates of these clients including improved engagement with mutual aid services.
- It is difficult to pin point specific drug information from hospital data, further development work should be carried out with hospitals in order to improve data recording to enable appropriate information to be easily extracted.
- Homelessness and problematic street drinkers are not evidenced in this assessment, consideration needs to be given to this group and potential solutions to promote long term recovery should be considered.
- Consideration needs to be given around holding bespoke public consultation sessions regarding drug use i.e. neighbourhood panels or web surveys.
- Joint work is required with the Prescribing and Clinical Effectiveness Forum (PACEF) to better understanding prescribing practices within primary care and how these are being used to treat alcohol and drugs dependent patients.
**Glossary**

Drug: in common usage, the term refers to psychoactive drugs, and often more specifically to illicit drugs, of which there is non-medical use in addition to any medical use.

Illicit drug: a psychoactive substance, of which the production, sale or use is prohibited.

Poisoning (drug or alcohol): defines a state of major disturbance of consciousness level, vital functions and behaviour following the administration of excessive doses (deliberately or accidentally) of one or more psychoactive substances.

Misuse (drug or alcohol): indicates the use of a substance for a purpose not consistent with legal or medical guidelines, as in the non-medical use of prescription medication.

Prescribed drugs: require a prescription from a GP or other suitably qualified healthcare professional. Prescribed drugs are limited in that they can only be collected from a pharmacy or dispensing GP practice under the supervision of a pharmacist.

Proprietary drugs: commonly known as over-the-counter (OTC) drugs. These are sold without the need for a prescription but certain pharmacy-only medicines will only be sold under the supervision of a pharmacist.

Controlled drugs: are psychoactive substances and their precursors whose distribution is forbidden by law or limited to medical and pharmaceutical channels. Under the Misuse of Drugs Act 1971, the list of controlled drugs includes all class A, B and C drugs.

Dual Diagnosis (DD): refers to the Complex needs with coexisting mental health and substance misuse problems.

Polydrug use: is considered to be the use of more than one type of drug being taken either at the same time (simultaneous use) or more than one type of drug being taken within the same period of time, for example, in the last year (concurrent use). The corresponding measure of poly substance use includes the use of alcohol alongside drugs and is classified in the same way.

Payment by Results (PbR): A system for paying a contract on the outcomes it achieves rather than on inputs or throughput.

Treatment naïve: is a term used by Public Health England to describe those who enter treatment services for the very first time.
Aims and methodology

Scope

The purpose of this health needs assessment is to bring together key evidence on the effects of alcohol and drugs on the population of Lincolnshire, it will look at achieved and unmet need to give a broad overview of areas that require improvement and gaps in current services for the county. Previous needs assessments have looked at treatment services and how effective and functional they are; this health needs assessment has a much wider remit and will look at the population of Lincolnshire and how alcohol and drugs affect it. However it will also include adult and young person's treatment services as well as needle syringe programmes and developing areas such as mutual aid services.

Areas not covered by this health needs assessment are services within prisons or support to families and carers of substance misusers; this is due to differing commissioning arrangements for these services. There are also some gaps in the data which includes homelessness and street drinkers in Lincolnshire.

This health needs assessment includes information from initial engagement sessions with providers (Appendix A) but does not include comprehensive consultation with key stakeholders, service users or the public. To fulfil this element of the consultation process events and multifaceted engagement events will be undertaken as part of the commissioning phase that will follow publication of this HNA.

Aim

To develop an understanding of the health and broader social and economic impacts of alcohol and drugs across Lincolnshire, in order to inform and shape the future commissioning strategy prior to treatment services entering the commissioning cycle.

Objectives

- To give an overview of the scope and scale of health, social and economic impacts caused by alcohol and drugs across Lincolnshire
- To identify areas that should be considered as part of the future commissioning strategy for alcohol and drug services in Lincolnshire
- To identify key areas for further consultation with key stakeholders when developing a new treatment structure for Lincolnshire
- To consider the impact on key groups including adults, young people and those injecting drugs
Methodology: Epidemiological data

Hospital admissions data is taken from the Hospital Episode Statistics (HES) database, which is hosted by the Health and Social Care Information Centre (HSCIC). Within Lincolnshire Public Health hold data for both accident and emergency (A&E) and Admitted Patient Care (APC) admissions covering a six month period from April 1st to October 31st 2014.

Conditions of diagnosis are defined using two methods of classification. APC admissions are classified using the tenth revision of the International Classification of Diseases (ICD-10)¹ and specifically targets both admissions for mental and behavioural disorders due to psychoactive substance use and where the primary diagnosis is poisoning by illicit drugs as specified within the annual Statistics on Drugs Misuse publication for England².

Diagnosis for A&E attendances uses a broad classification system of clinical codes defined by the NHS data dictionary³. For this summary, we have isolated attendances due to poisoning (including overdose). Further analysis of attendances due to poisoning shows these attendances can be as a result of prescription drugs, proprietary drugs and controlled drugs. There is a fourth category for other unspecified substances including alcohol; however there is no way to distinguish between alcohol or drug use, so for the purpose of this analysis the 670 recorded attendances for April to October 2014 have been omitted. It should be noted that this data shows incidents of drug poisoning which does not include the use of illegally obtained substances.

Where geographical analysis is undertaken, the Lower Layer Super Output Area (LSOA) of the patient’s residence was aggregated to identify both the District Council and Clinical Commissioning Group (CCG) areas within which they reside.

LSOA’s are geographically coded areas provided by the Office of National Statistics to aid in the reporting of small area statistics⁴. As of the 2011 Census, there are currently 32,844 LSOA’s in England. Each LSOA contains a population between 1,000 and 3,000 residents and between 400 and 1,200 households.

National figures for drug-related deaths were taken from the ONS bulletin ‘Deaths Related to Drug Poisoning in England and Wales, 2013⁵. Mortality data is taken from the ONS Primary Care Mortality Database (PCMD) where the underlying cause of death has been coded to one of the following categories, shown with the corresponding ICD-10 codes (in brackets):

- Mental and behavioural disorders due to psychoactive substance use (excluding alcohol and tobacco) (F11 – F16, F18 - F19)
- Accidental poisoning by drugs, medicaments and biological substances (X40 – X44)
- Intentional self-poisoning by drugs, medicaments and biological substances (X60 – X64)
- Poisoning by drugs, medicaments and biological substances, undetermined intent (Y10 – Y14)
- Assault by drugs, medicaments and biological substances (X85)
For Lincolnshire, PCMD data was also used to look at all deaths registered between 2010 and 2013 (January to December) where the underlying cause of death was drug-related, using the above ICD-10 codes. Numbers were then split further by gender and quinary (five-year) age groups. 2013 ONS mid-year population estimates for Lincolnshire and the 2013 European Standard Population (ESP) were used to provide directly age standardised rates (DASR) of drug-related mortality for both males and females, shown as a rate per million of the population.

For alcohol-attributable hospital admission and mortality data, the Public Health England tool Local Alcohol Profiles for England (LAPE) has been used to identify DASR's at a local authority, county and national level. DASR's are shown per 100,000 of the population and standardised to the 2013 ESP. DASR's for alcohol-specific hospital admissions are shown separately for both males and females, as presented within the LAPE tool.

Ambulance data was obtained from East Midlands Ambulance Service (EMAS). The data analysed covered the time period July 2010 to December 2014. EMAS do not record if a 'call out' was alcohol related at the time of pick up and there are no specific data fields that allow the recording of alcohol related pick-ups. Therefore in order to estimate the level of alcohol related ambulance call-outs in Lincolnshire the following estimation was applied to the data:

- **Time of reporting**: 16:00 to 06:00 (the time has been extended from the commonly used 21:00 to 06:00 to emphasise the pattern of pick-ups over time)

- **Incident category**: "Chief Complaint" falling within five categories:
  - Overdose / ingestion / poisoning
  - Psychiatric / suicide attempt
  - Assault
  - Falls / back injuries
  - Unconscious / passing out

**Methodology: Crime and disorder data**

The data used to compile the report was sourced from a number of Police crime recording systems including Niche, IBase and Business Objects. In the first instance all drug offences which were committed and recorded between 01/09/2012 and 31/08/2014 were extracted using IBase, the two year time period allowed for year on year trends to be highlighted and assist in identifying peak time in offences throughout a year time period. Secondly all intelligence relating to drugs recorded between 01/06/2014 and 31/08/2014 was also extracted using IBase, a three month time period was selected in order to present the most prominent and relevant threats to the Force.

In addition to the crime and intelligence data the report also drew on custody and warrant information. Furthermore, information relating to drug seizures within Lincolnshire and the current cost of drugs has been provided by a Drug Expert Witness.
Information and data was also collated from Partnership agencies including Lincolnshire County Council who provided data surrounding drug users currently in treatment and information regarding the most prevalent drugs of choice within the County. Addaction also provided some anecdotal information regarding drug treatment within the County. Information has also been sourced from the Home Office website in relation to national drug statistics and national emerging issues which may impact upon Lincolnshire.

Methodology: Provider consultation

A key area of intelligence came from a consultation undertaken by providers with those who are currently in contact with alcohol and drug treatment services. Their experience of accessing help was explored and the outcome of the responses have been analysed and fed into this health needs assessment.

The key themes that emerged are included within Annex A these are of relevance to the accessibility of service provision and the development of future recovery pathways.

Further consultation with service users, key stakeholders and the public is scheduled to be undertaken as part of the commissioning plan which will be developed follow publication of this health needs assessment.

Background and policy context

Overview - history

1998 saw the introduction of the government’s national drug strategy titled ‘Tackling Drugs to Build a Better Britain’. This new strategy saw a significant investment in drug treatment services across the country however this was not mirrored by investment in alcohol treatment which did not see a national strategy until 2004 and lacked serious investment until the revised strategy was released in 2007.

Since the 1998 drug strategy there have been a number of revisions on a National level; with a fundamental change of focus from maintenance to recovery. During this time NHS Primary Care Trusts (PCTs) were responsible for the contracting of substance misuse services and no re-procurement was undertaken. As a result the current services have been in place for some time and have not been subject to a competitive tender for 15 years. However, in April 2013 the responsibility for commissioning substance misuse services changed to Lincolnshire County Council as part of the NHS restructure and this re-commissioning is now to commence.

Despite the prolonged length of the contracts, services have not remained static; many changes have been implemented and services continually evolve to take account of changes in substance misuse behaviour, legislation and policy. Most recently the Drug Strategy 2010 changed the focus of treatment from maintenance to recovery which required a wholesale rethink of how services were being delivered. This was followed by Lincolnshire entering in to a Payment by Results national pilot in April 2012 which uniquely put the two adult treatment providers in direct competition with each other for the same client group, while an additional service was commissioned to govern the tariff setting process.
The young person's services were not subject to the Payment by Results pilot however they have experienced significant changes. These services have seen a substantial reduction in the number of young people requiring clinical interventions, but have noticed an increase in the consumption of new psychoactive substances and an upsurge in alcohol related problematic drinking.

The needle syringe programme has been in its current form since 2012 following a competitive tender; the service provides three specialists needle syringe programmes offering a 'pick and mix' style service. Further coverage is offered across the county by pharmacy based provision coordinated by one overall provider.

**National context**

The national context is driven by two key documents, the National Alcohol Strategy 2012 and the National Drug Strategy 2010. These overarching documents are underpinned by a vast array of guidance published by the Department of Health, National Institute for Health and Care Excellence (NICE), Public Health England (PHE) and previously the National Treatment Agency. Some of these documents detail procedures, some are guidelines, and some highlight best practice.

**Drug Strategy (2010)**

The Government have published a national drug strategy since 1998 with the latest version being released in 2010 which focusses on 3 key areas:

- Reducing demand
- Restricting supply
- Building recovery

This strategy fundamentally changed the way the government handled substance misuse and changed the focus for treatment services from maintenance to recovery.

**Medications in Recovery Re-orientating drug dependence treatment**

Following the publication of the 2010 Drug Strategy, Professor John Strang, a senior addictions researcher of King's College, London chaired an expert group to provide recommendations on improving recovery.

Professor Strang states that 'Entering and staying in treatment, coming off Opioid Substitution Treatment (OST) and exiting structured treatment are all important indicators of an individual's recovery progress, but they do not in themselves constitute recovery.' It concluded that OST helps prevent people dropping out of treatment, suppresses illicit use of heroin, reduces crime, reduces the risk of Blood Borne Virus (BBV) transmission and reduces the risk of death. However it does not supress other drug use.
The report recommends that time limited OST is not effective and can lead to a greater risk of relapse/overdose and should be used as a platform to recovery and not an end in itself. Recovery orientated drug treatment which builds on recovery capital is vital to generating successful outcomes.

The expert group also identified key elements for a successful treatment system that should be embedded into any current and future delivery of specialist services:

- A shared vision of recovery, and leadership
- Organisation and staff able to support and sustain change
- Staff who believe in the treatment they are delivering
- A structured programme with clear treatment goals
- Availability and range of OST medications
- Range and quality of psychosocial interventions
- Active referral to self-help and mutual aid
- Links to recovery orientated community organisations

**Drug Misuse and Dependence: UK Guidelines on Clinical Management**

Guidance for treatment services are extensive however the 'Drug Misuse and dependence: UK Guidelines on Clinical Management' published by the Department of Health in 2007 is the benchmark for how treatment services should manage their clients. The guidance is generally referred to as the 'Orange book' and covers all aspects of treatment including:

- Clinical governance
- Treatment provision
- Psychosocial components to treatment
- Pharmacological interventions
- Health considerations

Public Health England have recently started a consultation to revise these guidelines although a replacement document is not expected to be released in the near future. Moreover, there are elements within these guidelines that can be applicable to the treatment of alcohol addiction.

**Alcohol Strategy (2012)**

The most recent Government Alcohol Strategy was published in March 2012. The strategy focuses on preventing alcohol-related harm by reducing the number of people drinking to excess and making "less risky” drinking the norm, both through local and national action. This is expected in turn to reduce the impacts of alcohol on health, crime and other areas.

**NICE Local Government briefing - Alcohol (2012)**

Following publication of the 2012 Alcohol Strategy, the National Institute for Health and Care Excellence (NICE) issued guidance to local governments with recommendations on how to implement the messages within the national strategy, these included:
- A two pronged approach to combine of interventions aimed at:
  - Whole population - to help create an environment where lower-risk drinking behaviour is the norm
  - Individual - interventions to make people aware of the potential risks they are taking (or harm they may be doing) at an early stage
  - Brief advice, extended brief advice and structured treatment services to be in place.

When commissioning substance misuse services for both drugs and alcohol, other guidance/briefings that need to be considered is extensive but includes the following publications:

- Needle and Syringe Programmes – NICE, issued March 2014 (Public Health guidance 52)
- Alcohol Care in England's Hospitals – Public Health England 2014
- A guide to community-centred approaches for health and wellbeing – Public health England 2015
- Making the case: A practical guide to promote drug and alcohol treatment and recovery services locally – Drugscope 2014

Local context

Local policy context

Substance misuse services play a major part in the Public Health Outcomes Framework (PHOF), Joint Strategic Needs Assessment (JSNA) and Joint Health and Wellbeing Strategy; these documents outline Public Health responsibilities and are underpinned by the Annual Report of the Director of Public Health, Dr Tony Hill. To enable the wider Public Health outcomes to be achieved for substance misuse there are three documents that need to be considered:

1. Lincolnshire Alcohol Health Needs Assessment 2014\textsuperscript{11}
2. Lincolnshire Alcohol and Drug Strategy 2014-2019\textsuperscript{12}
3. Annual Report of the Director of Public Health, 2014\textsuperscript{13}

The Lincolnshire Alcohol and Drug Strategy 2014-2019 has three themes to supplement the national strategy which are:

- Promoting responsible drinking and preventing alcohol and drug related harm
- Tackling alcohol and drug related crime and anti-social behaviour
- Delivering high quality alcohol and drug treatment systems
To ensure the strategy remains focussed on current trends and issues, an annual delivery plan is developed and monitored through the Substance Misuse Delivery Group, this group reports to the Substance Misuse Senior Management Board and the Health and Wellbeing Board.

The Annual Report of the Director of Public Health on the health of the people of Lincolnshire 2014 highlights concerns around chronic liver disease, premature mortality, cancer, circulatory disease, suicide, respiratory diseases and accidents. All of which can be linked to alcohol or drug misuse to greater or lesser degrees. Specific issues raised include, 95% of all cases of liver disease are caused by lifestyle choices. Two of three main causes within this group are excessive alcohol consumption and hepatitis through the sharing of injecting equipment, with the third being obesity.

**Geography of Lincolnshire**

Lincolnshire is a large, rural county with an estimated population of 724,500 in 2013. The county has a diverse geography with large rural and agricultural areas, urban areas and market towns and a long Eastern coastline. The population density in the county is just 122 persons per square kilometre (less than a third of the average for England and Wales) and ranges from over 2,600/km² in Lincoln to 78/km² in East and West Lindsey. This causes its own challenges with commissioning of health services. Finite resources mean decisions have to be made as to where services can be located and to what capacity. The difficulty of access, with limited public transport, makes this even harder, particularly for the young or infirm.
Population

The population mid-year estimate for the area covered by Lincolnshire County Council in June 2013 was 724,500. The rate of increase in Lincolnshire’s population had slowed in recent years with the figures showing that it was below the national rate of growth. The annual percentage change between 2012 and 2013, however, shows the increase in the population of Lincolnshire (0.9 per cent) was higher than the national figure (0.7 per cent) for the first time in many years. Lincolnshire’s population is projected to increase by approximately 50,300 people by 2022, a growth rate of 6.8%. The largest growth is expected in the older population, with those aged 75 and over increasing by 39.9%. Conversely, it is expected that the numbers of 25-49 year olds in Lincolnshire will decline by 7,300 (-3.3%) by 2022, of which Lincoln, South Kesteven and West Lindsey will see the biggest loss of population from this age group.
Table 1: Summary of demographic and socio-economic characteristics in Lincolnshire

<table>
<thead>
<tr>
<th>Locality</th>
<th>Estimated population (1)</th>
<th>Proportion aged 65+ (2)</th>
<th>Projected increase by 2022 (3)</th>
<th>People in most deprived quintile (4)</th>
<th>Unemployment (5)</th>
<th>Youth unemployment (6)</th>
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<tbody>
<tr>
<td>Lincolnshire</td>
<td>724,500</td>
<td>22.1%</td>
<td>7.0%</td>
<td>11.8%</td>
<td>4.3%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Boston</td>
<td>65,900</td>
<td>20.6%</td>
<td>7.7%</td>
<td>18.9%</td>
<td>2.5%</td>
<td>4.3%</td>
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<td>East Lindsey</td>
<td>136,700</td>
<td>27.8%</td>
<td>5.3%</td>
<td>22.9%</td>
<td>3.8%</td>
<td>7.3%</td>
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<td>Lincoln</td>
<td>95,600</td>
<td>14.7%</td>
<td>1.7%</td>
<td>28.7%</td>
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<td>North Kesteven</td>
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<td>22.3%</td>
<td>7.9%</td>
<td>0.0%</td>
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<td>South Holland</td>
<td>89,200</td>
<td>23.8%</td>
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<td>1.8%</td>
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<td>South Kesteven</td>
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<td>20.7%</td>
<td>6.7%</td>
<td>3.2%</td>
<td>1.7%</td>
<td>3.0%</td>
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<tr>
<td>West Lindsey</td>
<td>90,700</td>
<td>22.5%</td>
<td>5.6%</td>
<td>10.5%</td>
<td>3.4%</td>
<td>7.0%</td>
</tr>
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Key to Table 1:
1) ONS, 2013 mid-year population estimate
2) Proportion of the 2013 population aged 65 or over; ONS 2013 mid-year population estimate
3) Total population increase based on the difference between 2013 mid-year estimates and the 2022 projected population estimates; ONS
4) Percentage of population living in 20% most deprived areas in England, based on 2013 population estimates and 2010 IMD scores
5) Claimant count as proportion of working age population, January 2015, NOMIS
6) Claimant count for ages 18-24, January 2015, NOMIS
Age structure

The proportion of children and young people in Lincolnshire (aged under 18) has fallen from approximately 21% of the total population in 2003 to 19% in 2013. Figure 2 below shows the predicted changes in the age structure of the Lincolnshire population between 2013 and 2023. We can see a decline in the 15-29 year age range as well as in the 40-54 year range, while there are expected increases in the 5-14 year, 30-39 year, 55-64 year and 70+ age ranges.

Figure 2: Population pyramid, age structure of the Lincolnshire population, 2013 estimates and 2023 projections

Source: ONS, 2013 Mid-year population estimate, June 2014; ONS Population Projections, 2012 based
Deprivation

Across the county, 12% of people live within the 20% most deprived areas of England. However, although this 'average' deprivation is lower than nationally, there are differences across the county. In Lincoln City 28.4% of people live within this national quintile of deprivation, followed by 22.3% in East Lindsey and 19.5% in Boston Borough. Nationally, deprivation tends to be associated with pockets of urban areas, which in Lincolnshire can be found in the areas of Lincoln, Gainsborough and Boston for example, however with relatively poor transport and broadband infrastructure the county also suffers from wide areas of rural deprivation.
Ethnicity and Country of Birth

At the 2011 census, the non-white population made up 2.4% of Lincolnshire residents compared to 1.4% in 2001. Despite the increase, the rate remains lower than the national non-white population of 14%.

Between 2001 and 2011 the number of Lincolnshire residents who were born outside the UK more than doubled. According to the ONS 2011 population census, the proportion of foreign-born residents in Lincolnshire stood at 7.1% (compared to 13.8% nationally). The majority of recently arrived international migrants came from Eastern and Central Europe and tended to be younger and more economically active than the UK-born residents of Lincolnshire (LRO, 2013).
Employment and skills

Average unemployment is lower than nationally, however there are pockets of long term unemployment as well as seasonal employment and unemployment in the major industries of agriculture and tourism. Unemployment among the younger population (aged 24 and below) is higher than the national average\textsuperscript{14}. The predominantly low-wage and low-skilled economy encourages the outflow of more highly educated residents and the general levels of education among adults are below the national and regional levels according to the ONS\textsuperscript{1}.

General health

Based on the 2011 census, the proportion of people who declared having bad or very bad health was slightly higher in Lincolnshire than in England (5.9\% compared to 5.5\%). The data from the census shows a link between poor health and an ageing population, and also suggests a link between poor health and deprivation (although IMD scores themselves do include aspects of health). East Lindsey district had the highest proportion of self-reported poor health among the Lincolnshire districts across the entire adult population. The proportion of people of all ages whose day-to-day activities are limited is also greater in Lincolnshire than in England (20.4\% compared to 17.6\%)\textsuperscript{15}.

In Lincolnshire, it is estimated that there are 17,160 dependent drinkers, whilst 29,949 people drink at higher risk levels, and over 106,000 at levels of increasing risk. Existing data shows that hospital admissions due to alcohol are lower than the national average. However, problems due to alcohol are not evenly distributed across the county, and in Lincoln hospital admissions are considerably higher than the national average\textsuperscript{16}.

Latest treatment data shows there are 3,458 people in treatment services for alcohol or drug misuse, with heroin being cited as the most common substance for treatment in Lincolnshire. Drug related deaths for both men and women in Lincolnshire have seen an increase between 2010 and 2013; however rates are lower than those seen nationally.

Introduction to determinants and associated risk factors

A range of risk factors have been put forward for substance abuse, creating a complex array of influences on substance behaviours. A number of studies and data sources have identified risk factors or associations with increased drug taking and misuse and these are presented below. Both the ONS Crime Survey for England and Wales 2013/14 (CSEW 2013/14)\textsuperscript{17} and the HSCIC Statistics on Drug Misuse 2014 (SDM 2014)\textsuperscript{18} have been used to determine some of these risk factors; however these data sources will be covered in more detail within this Health Needs Assessment.

The CSEW 2013/14 is an annual survey of households and therefore will have a number of limitations. Responder bias may be present, although this is reduced by use of laptops to complete the survey and the capped cohort age range of 16–59 year old adults. The survey does not cover small populations that may present relatively high rates of drug use, such as the homeless, those living in student accommodation or those in prison. It is also unlikely that a
household survey will reach problematic substance users with busy or chaotic lives as they will rarely be at home or willing to participate in an interview. Therefore it is likely that the prevalence figures reported in the survey will be an underestimate.

**Determinants of drug and alcohol misuse**

**Age and gender**

Findings from the CSEW 2013/14 indicate that young adults, those ages 16-24 years are more likely to have used drugs in the last year than older adults. Findings from the SDM 2014 show that younger people are more likely to participate in drug taking than older people. Men are more likely to take drugs than women, with 11.8 % of men having taken drugs in the last year compared to 5.8% of women. Please see the section on Adult Treatment Services where this is explored further.

**Socio-economic**

Whilst drug misuse can affect all socio-economic groups, deprivation and social exclusion are likely to have an impact on maintenance of drug misuse. Findings from the CSEW 2013/14 show that people living in more deprived areas are more likely to be frequent drug users.

The Marmot review states “people with lower socio-economic status are more likely to abstain altogether, if they do consume alcohol, they are more likely to have problematic drinking patterns and dependence than people higher up the scale.”

**Looked after children**

Studies have shown that young people from more than one vulnerable group are at more risk of drug and alcohol misuse. The groups identified as being at risk are:

- Young offenders;
- Looked after children;
- Care leavers;
- Children affected by parental substance misuse;
- Children affected by domestic violence;
- Homeless young people;
- Young people at risk of sexual exploitation;
- Young people in gangs or at risk of gang recruitment;
- Excluded pupils and persistent truants.

In the CSEW 2013/14, pupils that reported truancy or exclusion in the past were more likely to report that they usually took drugs at least once a month compared to those that had never truanted or been excluded.
Sexual orientation

Findings from the CSEW 2013/14 indicate that gay or bisexual adults were more likely to have taken an illicit drug in the last year in comparison to heterosexual adults.

The higher levels of drug use in the gay or bisexual population are partially explained by the younger age profile of those identifying themselves as being in this group; however drug use variations according to sexual orientation do remain after controlling for differing age and gender distributions indicating that levels of drug use are relatively higher among the gay and bisexual adult population than heterosexual population.

Ethnicity

Findings from the CSEW 2013/14 detail that adults from a mixed background were the most likely to have participated in illicit drug taking in the last year compared to other ethnic groups. The ethnic group with the lowest level of drug taking was Asian or Asian British.

Family history

It is known that alcohol dependence follows families, with children of parents with alcohol dependence being four times more likely to develop similar alcohol dependence. A genetic component to the risk of alcohol dependence has been demonstrated through genetic studies, particularly in work with twins. Similar studies show that children of parents with a dependence on drugs are eight times more likely to develop an addiction than children whose parents are not dependent on drugs.

Mental Health

Alcohol is strongly associated with a range of mental health issues. Depression, anxiety, drug misuse, smoking and self-harm is all commonly associated with alcohol misuse. It has been reported that many as 41% of suicides are attributable to alcohol and 23% of those self-harming are known to have alcohol dependence.

Similar studies show that mental health problems and substance misuse co-exist, however causality is not always clear. It is estimated that three quarters of drug service users in the UK have mental health problems, the most common associations for substance misuse being depression, anxiety and schizophrenia. Significant life events such as childhood abuse and sexual, physical or emotional abuse in women are known to lead to later life mental health and/or addiction problems. It is estimated that 3-9% of those dying from suicide in the UK had underlying drug dependence, intentional or unintentional drug poisoning is the most common cause of death.
Environmental and cultural factors

Findings from the CSEW 2013/14 indicate that people who live in urban surroundings have higher reported levels of drug taking compared to those living in rural areas. This may be a reflection of greater availability and accessibility of drugs in urban areas.

A range of environmental and cultural factors, predisposing toward the development of alcohol disorders, have been reported\(^29\). These include the affordability and availability of alcohol, high consumption rates in the general population, occupational risk factors (such as working in the alcohol or hospitality industries), social pressure to drink, and religious and culturally attitudes related to alcohol.

Overview of substance misuse

National trends of substance misuse

The Health and Social Care Information Centre (HSCIC) publish annual 'Statistics on Drug Misuse', the latest report covering 2013/14. The report draws on a number of national statistics to provide a range of information on drug misuse among both adults and children. Within the report, the adult population covers those aged 16 to 64, young adults are those aged 16 to 24 and children and mostly those aged 11 to 15.

For adult and young adults data, the main sources used were the 2013/14 Crime Survey for England and Wales (CSEW 2013/14) and the 2007 Adult Psychiatric Morbidity Survey (APMS 2007), whilst for child data the Smoking, Drinking and Drug use among Young People in England survey (SDDE) and the 2012/13 Substance Misuse among Young People in England report were used.

Demography of drug use (Source: CSEW 2013/14)

- In 2013/14, around 1 in 11 (8.8%) adults aged 16 to 59 had taken an illicit drug in the last year, while usage in adults aged 16 to 24 (18.9%) is more than double the proportion seen in the 16 to 59 age group.
- Of all 16 to 59 year olds respondents, 35.6% had reported to have taken drugs at some point during their lifetime.
- The average age of people using an illicit drug in the last 12 months has increased from 26.6 years in 1996 to 29.3 years in 2013/14.
- Men are more likely to take drugs than women. 11.8% of men had taken an illicit drug in the last year, compared with 5.8% of women.
- People living in urban areas reported higher levels of drug use (9.3%) than those living in rural areas (6.5%).
- Adults from mixed ethnic backgrounds were the most likely to have taken any illicit drug in the last year compared with adults from other ethnic groups. Around half (53%) of users from mixed ethnic backgrounds were aged 16 to 29, whereas in the general population, the proportion was much lower at 31%.
Gay or bisexual men were most likely to have taken an illicit drug in the last year (33.0%), compared to gay or bisexual women (22.9%) and heterosexual men (11.1%). This high level of use may be due, at least in part, to the younger age profile of individuals identifying themselves as in this group.

A larger proportion (4.5%) of respondents who lived in more deprived areas reported frequent drug use compared with those in the least deprived areas (2.3%).

**Characteristics of drug use**

- There has been an increase in the usage of cocaine, ecstasy, LSD and ketamine between 2012/13 and 2013/14.
- The most commonly reported age for first taking cannabis was 16 years and for powder cocaine and ecstasy it was 18 years.
- Among those who were no longer regular drug users, the most commonly reported age for stopping taking cannabis was 18 and for powder cocaine and ecstasy it was 25.
- The proportion of young adults aged 16 to 24 classed as frequent drug users (6.6%) was more than twice as high as the proportion of all adults aged 16 to 59 (3.1%) in 2013/14.
- Frequent drug use was higher among those who visited nightclubs four or more times in the last month (10.9%) compared with those who had not (2.3%).
- 54% of adults who had taken drugs in the last year reported to have obtained them from someone well known to them (not a family member). 53% last obtained drugs from a domestic setting and 62% had taken drugs in a domestic setting.
- 56% of adults aged 45 to 59 reported to take drugs in their own home, compared to 16 to 24 year olds (20%).

**Emerging legal drug use**

- Salvia (*Salvia Divinorum*) and nitrous oxide have been identified as legal emerging drugs in the last year.
- There is a reported, although not significant, increase in adults aged 16 to 59 who have used nitrous oxide, from 2.0% in 2012/13 to 2.3% in 2013/14.
- Usage of salvia is less prominent; however there has been a statistically significant increase from 0.3% of adults in 2012/13 to 0.5% in 2013/14.
- Usage of both salvia and nitrous oxide is highest among young adults aged 16 to 24, at 7.6% and 1.8% respectively.

**Polydrug and polysubstance use**

- Almost all cases of simultaneous polydrug use (95%) involved the use of cannabis (73%), powder cocaine (49%), ecstasy (37%) and/or amphetamines (19%).
- 61% of adults who used drugs in the last year reported to have used alcohol at the same time.
- The highest rates of simultaneous polydrug use were found among those who had used methadone (58%), ecstasy (49%), ketamine (48%) and amphetamines (43%) the last time they had used drugs. The lowest rate of simultaneous polydrug use was found among those who had used cannabis (7%) the last time they had used drugs.
Whilst cannabis is most commonly used for polydrug use, it appears to be used more as a subsidiary drug with users preferring harder drugs such as methadone, ecstasy and ketamine as their primary drug.

**Attitudes towards drug use**

- 32% of adults thought it was acceptable for people their own age to take cannabis occasionally, while 66% thought it was never acceptable.
- Only 7% of adults thought it was acceptable for people their own age to take cocaine and ecstasy occasionally, while 93% thought it was never acceptable.
- Less than 0.5% thought it was acceptable for people their own age to frequently take heroin, cocaine or ecstasy.
- A small proportion of respondents (3.0%) felt it was 'very safe' to take cannabis, while 79% felt it was 'very unsafe' (47%) or a 'bit unsafe' (32%).
- The majority of respondents (98%) thought taking heroin was unsafe, while 86% felt taking cocaine or ecstasy was unsafe.


- In 2013, 16% of pupils had ever taken drugs, 11% had taken them in the last year and 6% had taken them in the last month. This is similar to the levels of drug use recorded in 2011 and 2012.
- The prevalence of drug taking amongst young people increased with age with 5% of 11 year olds reported that they had ever taken drugs, increasing to 30% amongst 15 year olds.
- Boys and girls were equally as likely to have taken drugs.
- Compared with White pupils, Mixed, Asian and Black ethnic pupils were more likely to have taken drugs in the last year.
- Pupils with relatively low reported levels of wellbeing (score less than 10 (on a scale of 0 to 20)) were more likely to have taken drugs in the last year than those with higher levels of wellbeing.
- Cannabis was the most widely used drug among 11 to 15 year olds in 2013, with 7% of pupils reporting having taken it in the last year.
- 3% of pupils said that they usually took drugs on a frequent basis (at least once in a month). This has declined from a peak of 7% in 2003.
- Pupils who reported that they had ever truanted or been excluded were more likely to say that they usually took drugs at least once a month than those who had never truanted or been excluded (10% and 1% respectively).
- Pupils who tried drugs at an earlier age were most likely to report sniffing volatile substances (glue, gas, aerosols or solvents) the first time they tried drugs, whereas pupils whose first experience of drugs was at an older age were most likely to have tried cannabis.
- Pupils who had taken drugs on more than one occasion were most likely to have taken cannabis the last time they took drugs while 61% had taken cannabis only.
- 58% of pupils who had taken drugs in the last year reported that they would like to give up now or in the future.
When asked about awareness of drugs, 92% of pupils have heard of Cocaine, Heroin (89%), and Cannabis (87%), while fewer had heard of Poppers (35%), Ketamine (35%) and Mephedrone (44%).

Specialist treatment services in Lincolnshire

Summary

- Prevalence of opiate and crack users is estimated to be higher in Lincolnshire than in both the East Midlands and England.
- Of the estimated 3,067 opiate and crack users in Lincolnshire in 2011/12, 55% were in treatment, however 32% were not known to any treatment providers.
- Latest treatment data show there to be 3,458 adults in drug or alcohol treatment in 2013/14, which equates to 7.84 clients per 1,000 of the population of Lincolnshire.
- Of those in treatment, almost a quarter went on to complete their course of treatment, with 13% re-presenting for further support within six months.
- Lincolnshire has seen a 21% increase in the numbers of adults entering treatment for substance misuse since 2011/12; however numbers of adults completing treatment has also risen by 39%.
- Almost three quarters of adults in effective treatment in 2013/14 were male and a third of adults were aged 25 to 34.
- Two thirds of those in effective treatment are opiate or crack users, 13% take cannabis and 8% use amphetamines. In the past three years methadone users have decreased in Lincolnshire, while numbers of opiate users and injectors have risen.
- More recent service provider data indicates that over half of those in treatment live within the Lincoln catchment area, as there are number of needle exchange sites in the city. There are a number of clients who live in areas with mid to high levels of deprivation, such as Horncastle, Market Rasen, Spilsby and Holbeach, where there is limited access to needle exchange sites.
- Between April and September 2014, there were 127 young people in substance misuse treatment in Lincolnshire, with this number increasing to 315 throughout 2014/15.
- Two thirds of young people in treatment were male.
- Cannabis is the most reported substance used by young people, followed by alcohol amphetamines and more recently new psychoactive substances such as Mephedrone.
- The majority of young people in treatment reported poly drug use with many having experienced domestic abuse as well as reporting episodes of self-harming and anti-social behaviour.
- There is a close association between substance misuse and mental health, as 39% of adults new to treatment in 2013/14, had a recorded dual diagnosis, which is more than double the proportion seen nationally.
- 38% of adults and 5% of young people identified as high risk completed a course of treatment for Hepatitis B in 2013/14, with 100% of adults and 8% of young people who were offered a Hepatitis C test.
- During the first half of 2014, there were 5,270 attendances at needle syringe programmes in Lincolnshire, or which most reported for use of heroin, amphetamine and...
Mephedrone; however it should be noted that presentation for use of NSP rose by 88% during the same period.

Prevalence of substance misuse

Prevalence estimates for the number of opiate and crack users (OCUs) resident within the partnership are refreshed and released each year by Public Health England in conjunction with Glasgow University. The most available national prevalence estimates relate to 2011/12 and indicate an increase in the overall number of OCUs for Lincolnshire along with a widening of the upper and lower confidence interval rates, methodologies for these estimates can be found at www.nta.nhs.uk. Statistical neighbours used are those that appear in both the CIPFA and PHE LOC comparator tables for Lincolnshire and represent areas of similar demography and as a means of providing comparable benchmarking around a range of socio-economic indicators.

These estimates can be used to try and establish needs, demands and service provision. The 2011/12 ‘Bull's-eye’ diagram which follows shows (from inner-most to outer-most):

- The active caseload at 31st March 2012;
- The number of people who had been in contact with treatment services for the 12 months prior to 2011/12 year end;
- The number of people who are known to treatment services but who have not been in contact during the 2011/12 financial year;
- Finally the remainder of the OCU estimate when these first three figures are subtracted from it. It is this figure that is considered to be the treatment naïve ‘target’ group.

These treatment naïve clients can be sub-divided further in that the number of OCUs appearing on criminal justice caseloads who do not appear anywhere within treatment services datasets can give us an idea as to how many potential service users have had some contact with treatment service representatives but have opted out of entering specialist community treatment.

Table 2: Effective treatment Bulls-eye data for Lincolnshire and statistical neighbours, 2011/12

<table>
<thead>
<tr>
<th>Area</th>
<th>In treatment</th>
<th>In treatment during the last year</th>
<th>Known to treatment - not seen in the last 12 months</th>
<th>Not known to treatment</th>
<th>Total including those not known to treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridgeshire</td>
<td>970</td>
<td>286</td>
<td>237</td>
<td>286</td>
<td>1,779</td>
</tr>
<tr>
<td>Derbyshire</td>
<td>1,556</td>
<td>443</td>
<td>316</td>
<td>1,400</td>
<td>3,715</td>
</tr>
<tr>
<td>Leicestershire</td>
<td>909</td>
<td>287</td>
<td>222</td>
<td>433</td>
<td>1,851</td>
</tr>
<tr>
<td>Lincolnshire</td>
<td>1,379</td>
<td>407</td>
<td>290</td>
<td>991</td>
<td>3,067</td>
</tr>
<tr>
<td>Norfolk</td>
<td>1,721</td>
<td>512</td>
<td>412</td>
<td>1,281</td>
<td>3,926</td>
</tr>
<tr>
<td>North Yorkshire</td>
<td>869</td>
<td>293</td>
<td>199</td>
<td>705</td>
<td>2,066</td>
</tr>
<tr>
<td>Nottinghamshire</td>
<td>1,974</td>
<td>587</td>
<td>393</td>
<td>1,482</td>
<td>4,436</td>
</tr>
<tr>
<td>Suffolk</td>
<td>1,066</td>
<td>275</td>
<td>273</td>
<td>784</td>
<td>2,398</td>
</tr>
<tr>
<td>Warwickshire</td>
<td>793</td>
<td>238</td>
<td>250</td>
<td>524</td>
<td>1,805</td>
</tr>
</tbody>
</table>

Source: NDTMS
Prevalence estimates for 2011/12 indicate that there are 3,067 (6.77 per 1,000 15-64 population) OCUs across the county, of which 55% were in treatment and 32% were not known to treatment. This compares well against our statistical neighbours with Cambridgeshire and Leicestershire showing high proportions of OCU's in treatment and low proportions that were not known to treatment.

Nationally, there were an estimated 293,879 opiate and/or crack users. This corresponds to 8.40 per 1,000 of the population aged 15-64 and has decreased since 2010/11 where the figure was 298,752 (8.67 per 1,000 of the population aged 15-64).

When broken down by age the majority of estimated users in Lincolnshire are aged between 25 and 34 years (16.54 per 1,000 population). Interestingly, we can see from Figure 6 that the 15-24 age group has a higher prevalence rate than both the regional and national rates.
In addition to NTA data, the Adult Psychiatric Morbidity Survey (APMS) 2007 reported that 9.2% of adults had taken illicit drugs in the last year, while 29.9% of males and 21.8% of females reported to have taken an illicit drug once. The prevalence of drug dependence in 2007 was 3.4% (4.5% for males and 2.3% for females). Cannabis was the most dependent drug (2.5%) and symptoms of drug dependence were most commonly reported by adults aged 16 to 24.

Overview - Adult treatment services in Lincolnshire

Adult treatment services in Lincolnshire have been unique in comparison to other services in the United Kingdom. Lincolnshire is the only county where two providers compete directly for the same client base. This format was developed as part of the 2012-2014 Payment by Results pilot undertaken with Public Health England and the Department of Health. This approach combined with setting outcomes rather than specifying how treatment should be delivered allows providers more flexibility to develop their own innovative techniques to engage with alcohol and drug users in order to meet specific outcomes.

During the pilot PbR payments were triggered when outcomes were achieved throughout a client’s treatment journey, specifically after;

- achieving abstinence
- successfully completing treatment
- improving their quality of life
- improving their housing
- not-representing (after 12 months from successful completion of treatment)
- a reliable change had been achieved
Although the PbR payment structure drove significant changes across the treatment system in Lincolnshire it was not seen as sustainable during a commissioning process; therefore from April 2015 individual PbR payments ceased and a service credits model was introduced. This enables a proportion of funding to be linked to outcomes but significantly simplifies the payment process by using provider performance data rather than tracking individual clients. This model is seen as more sustainable through the tendering process.

Putting providers in direct competition drives them to ensure services are the most attractive to clients as well as producing the best possible outcomes to achieve PbR rewards.

Both providers have bases in Lincoln, Grantham and Boston as well as using satellite sites in other urban locations across the county. Services offered include psychosocial and clinical therapies. Techniques used include Cognitive Behaviour Therapy and Motivational Interviewing. Both providers have peer mentors to help improve the client journey but other elements such as mutual aid, auricular acupuncture, online services and physical education programmes are at the providers discretion to help improve and develop their offer to service users.

Shared care is a specific element to treatment services and is managed by one of the treatment providers. This service brings primary and secondary care services together to allow clients to receive clinical prescribing through their GP whilst receiving secondary support through the treatment provider. This service includes sixteen GP practices across the county with 274 clients in treatment throughout 2014/14.

To monitor the PbR process a third provider is commissioned to oversee the tariff setting process and ensure triggered payments have been achieved in line with agreed processes and procedures. This element of the PbR pilot also provides an advocacy service for clients who may wish to transfer from one provider to the other or who have specific issues with the service they have received or are being offered. The advocacy service will also provide impartial advice to anyone looking to enter treatment that is unsure which provider offers the best recovery options for their personal situation.

**Performance - Adult treatment services in Lincolnshire**

Public Health England provides more timely treatment data at a partnership level via their Recovery Diagnostic Tool (RDT), with data ranging between 2011/12 and 2013/14 and the National Drug Treatment Monitoring System (NDTMS) summary report on effective treatments for 2013/14. In addition, current drug and alcohol treatment providers in Lincolnshire provided summarised data for people who have entered and received treatment for drug and alcohol abuse between April 2014 and March 2015; however for this HNA, 2013/14 data has been used as it represents the most recent, complete year, and figures have been validated by PHE.

The RDT has been used to represent overall treatment figures for Lincolnshire and where appropriate, against national comparators. The RDT does not allow for treatment data at a

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1 Data covers period 01/04/2014 – 27/03/2014
lower tier local authority so identifying localised pockets of substance use will not be possible using this dataset.

Treatment data is divided into three core groups:

- opiate users
- non-opiate users
- alcohol users

For each group a summary is provided on:

- the numbers and rates of those who have completed a course of treatment
- those who have re-presented following completion of treatment
- those who are treatment naïve (Treatment naïve clients are those who have not previously been known to treatment services and have presented for the first time).

The NDTMS summary report provides more detailed data on characteristics of those in effective treatment as at 31/03/2014. Data is broken down by gender, age group, ethnicity, drug type and injecting status.

The best possible outcome for drug and alcohol treatment services is recovery for the client, where by people are no longer reliant on the substance and are able to re-engage with the community. This is measured by those who leave structured treatment ‘drug free’ and who do not re-present to treatment in the following 6 months.\(^{32}\)

**Table 3: Drug and alcohol treatment within Lincolnshire, 2013/14**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number in treatment</th>
<th>Crude rate (per 1,000)</th>
<th>Completions</th>
<th>Re-presentations within 6 months</th>
<th>Treatment naïve</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>Alcohol</td>
<td>1,163</td>
<td>2.64</td>
<td>489</td>
<td>42%</td>
<td>28</td>
</tr>
<tr>
<td>Opiate</td>
<td>1,813</td>
<td>4.11</td>
<td>131</td>
<td>7%</td>
<td>22</td>
</tr>
<tr>
<td>Non-opiate</td>
<td>482</td>
<td>1.09</td>
<td>187</td>
<td>39%</td>
<td>7</td>
</tr>
<tr>
<td>All users</td>
<td>3,458</td>
<td>7.84</td>
<td>807</td>
<td>23%</td>
<td>57</td>
</tr>
</tbody>
</table>

Source: Public Health England, National Treatment Agency

**Table 4: Trend of drug and alcohol treatment within Lincolnshire, 2011 - 2014**

<table>
<thead>
<tr>
<th>Category</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>% change (2011 - 2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers in treatment</td>
<td>2,869</td>
<td>3,197</td>
<td>3,458</td>
<td>21%</td>
</tr>
<tr>
<td>Completions</td>
<td>582</td>
<td>669</td>
<td>807</td>
<td>39%</td>
</tr>
<tr>
<td>Re-presentations within 6 months</td>
<td>44</td>
<td>36</td>
<td>57</td>
<td>30%</td>
</tr>
<tr>
<td>Treatment naïve</td>
<td>1,062</td>
<td>1,200</td>
<td>1,300</td>
<td>22%</td>
</tr>
<tr>
<td>Treatment naïve (national)</td>
<td>7,648</td>
<td>6,816</td>
<td>6,751</td>
<td>-12%</td>
</tr>
</tbody>
</table>
We can see from Table 4 that 3,458 people entered into treatment for drug and alcohol services during 2013/14, which represents a crude rate of 7.84 clients per 1,000 population. Of those who were in treatment, 52% were opiate users, 34% alcohol users and 14% non-opiate users.

The majority of adults in effective treatment in 2013/14 were male (74%), 37.1% of clients were aged 25 to 34 years and 97.2% of clients were of white ethnicity. It should be noted that the ethnicity is not White British and could include white categories such as White European and White Other. 66.8% of those in effective treatment are OCU's, 13.8% cannabis users and 8.7% are amphetamine users.

It is worth noting that while there was a marked increase of 21% in those who entered treatment for substance misuse in Lincolnshire in the past three years, there has been a much higher increase in numbers who have completed treatment (39%) over the same time period.

Completion rates were highest for those in treatment for alcohol (42%) and non-opiate (39%) use, both of which continued to show low numbers of clients re-presenting for additional treatment within 6 months of completion. Completion of treatment for opiate users on the other hand was significantly lower. For those who did complete, more than a quarter went on to relapse and re-present within 6 months.

There are proportionately fewer opiate users who were treatment naive during 2013/14 (24%), compared to both non-opiate (51%) and alcohol (54%) users. Within the county, numbers of treatment naïve clients have increased by 22% since 2011/12, which goes against the nationally declining trend over the same period.

During 2013/14, treatment naïve users are more likely to use heroin (56%) or methadone (16%), while 20% use alcohol 9 days or more a month. Between 2011 and 2014, the number of heroin users has fallen by 11%, while those using opiates daily increased by 64%.

Over the same period, non-treatment naïve users are also more likely to be heroin users (80%) or daily opiate users (17%). Over the past three years, methadone users have fallen by 16%, while daily opiate users and daily injectors have increased by 23% and 19% respectively.

More recent data from one current provider showed that there were 3,088 adults attending treatment services between 01/04/2015 and 27/03/2015, with a further 315 in young person’s services. This data however, includes those attending a needle syringe programme, and therefore figures will differ from those reported for 2013/14 as NDTMS data does not show this information.

Of the 3,088 adults attending treatment services with this provider, 53% (1,642) reside within the catchment area for the Lincoln treatment centre, 25% within the Boston catchment area and 18% in Grantham. 4% of clients had no area recorded. The majority of drug users in adult treatment services with this provider cited heroin as the primary substance upon entering treatment.
In addition, snapshot data from another current provider showed that as of 27/02/2015, there were 1,564 adults actively receiving treatment for drug and alcohol support, of which more than 60% were male and the majority were aged between 25 and 45.

As the data from both providers covers different periods of time, they cannot be compared, or combined.

Figure 7 shows the distribution of current clients in treatment, whose residence has been aggregated to a lower super output area (LSOA) from their postcode. The map shows the spread of socio-economic deprivation, taken from the 2010 Indices of Multiple Deprivation (IMD2010) and the locations of all current needle syringe programme sites within Lincolnshire.

It is evident that there are clusters of clients who live near a needle syringe programme site, with the largest cluster of clients seen in the Lincoln area. The map also highlights that clients are not exclusively bound to areas in close proximity to these needle syringe programme sites, but are dispersed across the county, and living in areas of mixed affluence.

There are pockets of clients, particularly around Horncastle, Market Rasen, Spilsby, Holbeach, Bourne and North Lincoln city that are not locally placed near any needle syringe programme sites and therefore may have difficulties in accessing services, particularly as these areas are showing mid to higher levels of socio-economic deprivation; therefore factors such as unemployment, housing, financial issues and crime will be more likely to impact residents in these areas.
Figure 7: Clients in treatment for substance misuse, by LSOA of residence, needle syringe programme sites and overall rank of deprivation (IMD2010), 2015

Table 5 shows prescribed items from GP surgeries across Lincolnshire which are used for the treatment or detoxification of those dependant on alcohol or drugs. The data shows that shared care GP practices prescribed 10,437 items whereas GP surgeries not linked to shared care prescribed a further 1844 items. Many medications used to treat alcohol or drug dependency have other uses; methadone for example is often prescribed to manage severe pain. Therefore these figures can be used to indicate the level of prescribing in primary care but cannot definitively show what individual drugs are being prescribed for.
**Table 5** medication commonly used for alcohol and drug treatment which was prescribed by Lincolnshire GP's, January (1st) to December (31st) 2014

<table>
<thead>
<tr>
<th>Prescribed drug type</th>
<th>Shared care surgeries</th>
<th>Non-shared care surgeries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drugs</td>
<td>10,215</td>
<td>1,216</td>
</tr>
<tr>
<td>Alcohol</td>
<td>222</td>
<td>628</td>
</tr>
<tr>
<td>Total</td>
<td>10,437</td>
<td>1,844</td>
</tr>
</tbody>
</table>

Source: NHS Arden and Greater East Midlands Commissioning Support Unit

**Overview – Young person’s treatment services in Lincolnshire**

Young people accessing services in Lincolnshire are offered psychosocial therapies including motivational interviewing, cognitive behaviour approaches, harm reduction initiatives and care planned counselling. Pharmacological services are also in place although the number of young people requiring this has reduced significantly over recent years. Education and awareness sessions are also available; these can be for any alcohol or drug related issue and delivered to young people or professionals. There is also a specific service for new psychoactive substances aimed at year nine and ten pupils but is also made available to professionals or specific groups of pupils outside the target areas that are deemed at higher risk. Additional services (not commissioned by Public Health) are linked to the Amy Winehouse Foundation to provide a resilience programme to five schools per year across the county.

Young person’s services only have one building base in Lincoln city where those receiving treatment are seen. Those receiving treatment are generally seen wherever is most comfortable for the young person, locations for sessions include schools, children's centres, housing providers, colleges, the young person's home or within families working together centres.

**Performance – Young person’s treatment services in Lincolnshire**

Availability of data around substance misuse among young persons, particularly those in treatment services is limited. Public Health England produces a quarterly Young People Activity Report, which contains data submitted to NDTMS via treatment providers. The latest available data from NDTMS covers the period between 1st April 2014 and September 30th 2014 and represents a total of young people in treatment as at the end of the reporting period.

During the reported period, 127 young people were in specialist substance misuse services in Lincolnshire, of which 61 were new presentations (48%). The three main problematic substances cited by all who entered treatment were cannabis, alcohol and amphetamines.

Of the 61 young people new to treatment, 21 were referred from education services (34%), 11 from both children and family services and youth justice services (18%), 10 from family and friends (16%), 7 from health and mental health services (7%) and 7% from other sources. On entering treatment, services are made aware of certain vulnerabilities which may impact or exacerbate substance misuse. The majority of new clients reported poly drug use (87%) as a substance specific vulnerability, with wider vulnerabilities included domestic abuse (25%),
NEET² (20%), self-harm (18%), anti-social behaviour (18%). From a social care perspective, 8% of new clients were looked after children (LAC), 3% were children in need (CIN) and 2% were under a child protection plan (CPP).

On further interrogation of this data, the majority of young people in treatment are aged 16 (31%) or 17 (28%) and almost two thirds are male (65%). When we look at ethnicity, 94% of those in treatment are 'White British', with the remaining gave their ethnicity as 'Other White', 'White & Asian' and 'Other Mixed'.

Of those in treatment, 44% were in mainstream education prior to entering treatment, 31% were in alternative education and 13% were not in education or employment. Despite strong links to absenteeism and substance misuse, only 2% of all young people in treatment were persistent absentees from education, while 1% had been permanently excluded.

In addition to this detailed data, local service provision data for 2014/15 shows that there were 315 young people in treatment for substance misuse, as at 27/03/2015, of which 40% live within the Lincoln catchment area, 33% within the Boston catchment and 21% within Grantham. Cannabis was cited as the most common substance upon entering treatment, followed by alcohol and NPS, including Mephedrone and cannabis derivatives such as 'Spice'. Reported use of heroin amongst young people is minimal as was use of dissociative or hallucinogenic NPS.

Analysis of the Young People Activity Report for 2014 highlighted that 18% of young people who had newly entered treatment during this period reported self-harm concerns and 10% reported having a non-specific mental health problem.

**Dual diagnosis**

In addition to treatment data provided by the PHE RDT, the NDTMS Adult Partnership Activity Report for 2013/14 provides some insight into the proportion of clients entering treatment who have a recorded dual diagnosis of problematic substance misuse and an associated mental health illness. Data from 1st April 2013 and 31st March 2014 shows that 39% of clients entering a new treatment journey/episode were recorded as having a dual diagnosis.

Nationally, 18.7% of clients were recorded as having a dual diagnosis during the same period, indicating that co-morbidity of mental health and substance misuse amongst new clients is more prevalent in Lincolnshire than in England and Wales.

Guidance on collecting and classifying clients with a dual diagnosis is not clear. NICE released guidelines on ‘Psychosis with coexisting substance misuse’ in March 2011, however this covers a very prescribed area of mental health, namely people affected by hallucinations and delusions, and does not cover wider mental health issues and associated substance usage.

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² Definition: Young person aged 16-17, Not in Education, Employment or Training (NEET)
The Social Care Institute for Excellence (SCIE) released a research briefing\(^34\) which stated the prevalence of co-existing mental health and substance use problems may affect between 30 and 70% of those presenting to health and social care settings, while results from a study by Carrá and Johnson\(^35\) found that reported drug and alcohol misuse rates in psychosis varied in the UK, however was much higher in mental health settings (between 20 and 37%) than in addiction settings (between 6 and 15%). As estimates vary between studies, no beneficial comparison can be made.

**Injecting and blood borne viruses**

The World Health Organization (WHO) defines Hepatitis as an inflammation of the liver, most commonly caused by a viral infection\(^36\). Hepatitis types B and C lead to chronic disease in hundreds of millions of people worldwide and combined, are the most common cause of cirrhosis, liver failure and cancer.

Transmission of these two types of Hepatitis is different, as Hepatitis B (HepB) can be found in blood and bodily fluids so are commonly spread during unprotected sex, the sharing of needles to inject drugs and from pregnant women to their babies. HepB is treatable with antiviral medication and most people who are infected can fully recover. Vaccination treatments are usually recommended for those deemed as high-risk, such as injecting drug users (IDU's) or healthcare workers. It is reported that both the availability of HepB vaccination and its uptake by IDU's is poor in the UK, with poor patient attendance at GP practices and a lack of promotion for the vaccine being cited as barriers to vaccination\(^37\).

Hepatitis C (HepC) is also found in blood and bodily fluid, however it is more concentrated in blood, so spread of the virus is more common through blood-to-blood contact, such as sharing of needles to inject drugs, which account for 90% of all cases in England. There are no immediate symptoms for HepC, so it often goes unnoticed. As a result, testing is strongly recommended for those deemed as high-risk, such as being a current or former IDU. Despite there being no vaccine available for HepC, treatment using antiviral medications will cure between 50% and 80% of those infected, dependent on the strain of the virus\(^38\).

The 2013/14 NDTMS Adult Partnership Activity Report contains data both nationally and locally for those under specialist drug treatment, who completed a HepB vaccination treatment course between 1\(^{st}\) April 2013 and 31\(^{st}\) March 2014. In addition, data is provided for those assessed as being a current or previous injector and their HepC intervention status, as recorded on NDTMS. The 2014 Young People Activity Report contains HepB and HepC treatment data as well as injecting status, however there are currently no young people injecting in Lincolnshire.
Table 6: Summary of HepB and HepC treatment outcomes for adults and young people, 2013/14

<table>
<thead>
<tr>
<th>Adults Lincolnshire</th>
<th>National</th>
<th>Young people Lincolnshire</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injecting status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currently injecting</td>
<td>13.1%</td>
<td>8.5%</td>
<td>-</td>
</tr>
<tr>
<td>Previously injected</td>
<td>14.1%</td>
<td>14.1%</td>
<td>-</td>
</tr>
<tr>
<td>HepB intervention status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offered and accepted</td>
<td>3.9%</td>
<td>21.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>HepB vaccination status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Started treatment</td>
<td>56.9%</td>
<td>17.3%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Finished treatment</td>
<td>38.5%</td>
<td>15.6%</td>
<td>4.9%</td>
</tr>
<tr>
<td>HepC intervention status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offered and accepted</td>
<td>21.1%</td>
<td>44.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>HepC test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Took a HepC test</td>
<td>100.0%</td>
<td>72.8%</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

Source: NDTMS

Table 6 shows that within Lincolnshire, 27.2% (455/1,671) of clients starting a new treatment journey/episode identified as current or former IDU's. Of these, 3.9% were offered and accepted HepB vaccination treatment, equating to 65 clients. Just over half of these clients went on to start vaccination treatment for HepB and 38.5% went on to finish the course. Comparably fewer young people in Lincolnshire started and completed HepB treatment; however take-up was slightly higher than that seen nationally. This is because most young people do not inject or snort substances but tend to present to services with cannabis use (which they smoke) or alcohol (which they drink). Their risk of HepB is more likely linked to their sexual activity which may or may not be related to their substance misuse.

Interestingly, when we look at those adults who were offered a HepB intervention, 84% refused, leaving a significant gap in high-risk clients who are not immunised and who are not being treated although this data does not show the proportion of that 84% who have previously received vaccination.

By comparison, national figures show that 22.6% of new clients identified as current or former IDU's, of which 21.3% offered and accepted HepB treatment. Despite a much higher acceptance rate nationally, only 17.3% of those clients who accepted started their vaccination treatment and 15.6% completed the course.

From the same cohort of new clients, 21.1% of those clients identified as current or former IDU's were offered and accepted a HepC blood test to determine if they carried any strain of the virus. Everyone who accepted took the test. Nationally, 44.1% of clients were offered and accepted a HepC blood test, of which 72.8% took the test. Again, a much smaller proportion of younger
people across the county took a HepC blood test (8.2%) although take-up was above that seen nationally.

**Needle Syringe Programme (NSP)**

Needle and syringe programmes are commissioned by local authorities to provide an outlet for adults and young people who inject drugs to safely discard their used drug paraphernalia, thus reducing the potential spread of blood borne viruses and the risk to members of the public. Providers can be based in local authorities, NHS and other organisations in the public, private, voluntary and community sectors. This includes: specialist drug services, community pharmacies, urgent and emergency care departments.

There are three specialist needle syringe programmes and fifteen pharmacy based schemes in Lincolnshire. Addaction are commissioned to provide these services and run the 3 specialist NSP’s at their sites in Lincoln, Boston and Grantham and have provided quarterly data for quarter 2 (1st July to 30th September) and quarter 3 (1st October to 31st December) 2014. Numbers for both quarters have been combined and where appropriate patterns of change will be identified. Please note that as individuals are likely to present to NSP’s on a regular basis, it is expected that there is an element of double counting within the data; therefore the numbers will not correspond to individuals, but rather attendances.

During the reported period there were 5,270 attendances at the provider NSP, of which 82% were recorded as male and 18% as female. Almost three quarters of all attendances were at the Lincoln branch (74.7%), while 21% attended Grantham and 4.3% Boston.

Figure 8 shows that for all attendances in the reported period, the majority were heroin users (55.65%), followed by amphetamine (25.81%) and Mephedrone (MCAT) (7.57%). Further analysis of the data shows that although the proportion of New Psychoactive Substances (NSP) attendances was comparatively low, the numbers of people presenting to the specialist NSP had seen a significant increase from 11 in quarter 2 to 99 in quarter 3.

If we break the substance type down by location, 92% of amphetamine users reported to Lincoln, 72% of MCAT users reported to Grantham, 85% of steroid users reported to Lincoln and 100% of New Psychoactive Substances (NSP) users reported to Lincoln.
New Psychoactive Substances (NPS)

The United Nations define New Psychoactive Substances (NPS) as substances that are not controlled by the international conventions on narcotic drugs and psychotropic substances. They are specifically designed to evade drugs laws and are often marketed as legal alternatives to banned drugs, although they have the potential to pose serious risks to public health and safety, and can be fatal.

In this context ‘new’ does not necessarily mean a newly invented substance. Many NPS were synthesised decades ago, but it is only recently that they have become widely available or their chemistry slightly modified to produce effects similar to illicit substances.

There are usually acknowledged to be around seven main groups of substances, some of which, like synthetic cannabinoids and synthetic cathinones, are specifically designed to replicate the experience of taking an existing drug such as cannabis and khat. These synthetic replacements tend to be of much greater potency than the drug they are designed to mirror.39

The terms ‘NPS, legal highs, designer drugs and club drugs’ are often used interchangeably and mean different things to different people. For example, some substances described as ‘legal highs’ may not actually be legal, when in fact these substances are neither regulated nor safe to take. In 2013/14, nearly a fifth (19%) of the substances found in the ‘legal high’ drug samples collected by the Home Office’s forensic early warning system were controlled drugs.

Some NPS may have been legally available when first introduced but are now controlled under the Misuse of Drugs Act. These include Mephedrone, 2-DPMP (sold as ivory wave) and some...
synthetic cannabinoids (often called spice). Some NPS are associated with club culture (such as Mephedrone) but 'club drugs' also include long established drugs such as ecstasy and MDMA, and methamphetamine.\(^{40}\)

Data from the 2014 PHE Young People Activity Report shows a gradual increase in the use of NPS amongst young people in treatment. Figures for 01/04/2014 – 30/09/2014 show that 25 young people reported abuse of NPS, which is an increase on the 17 reported during 01/04/2014 – 30/06/2014. Of the 25 reported to be using NPS, 80% were male, and 84% were aged between 15 and 17 years.

Current treatment data from an existing provider that between 1\(^{st}\) April 2014 and 27\(^{th}\) March 2015, 70 adults reported for treatment due to abuse of NPS, which equates to 2% of all recorded adults in treatment during this period. In addition, 55 young people reported for treatment for abuse of NPS, which equates to 17.5% of all young people in treatment during this period.

**Mutual aid**

Mutual aid services in Lincolnshire are predominantly provided by Alcoholics Anonymous (AA), Narcotics Anonymous (NA) and Cocaine Anonymous (CA) with no specific commissioned services although both substance misuse providers have peer support networks and some mutual aid programmes. Lincolnshire also has a recovery champion led initiative that started in 2014 and is developing in Lincoln city.

Public Health England released guidance titled 'Improving access to mutual aid' in two documents in 2014 for commissioners and service managers.\(^{41} 42\) This guidance highlights the importance of mutual aid in the recovery process especially regarding service users community integration, their social networks and recovery outcomes, along with the health and wellbeing of their families and relatives.

Mutual aid requires further development across Lincolnshire, AA currently have good coverage across the county but NA and CA only have a single meeting in Lincoln and Grantham respectively. The initiatives run by service providers and others are only based in Lincoln, Boston and Grantham.

The data within table 7 shows the differing uptake on mutual aid services across the East Midlands and only 4% of Lincolnshire's clients accessing mutual aid services. Work has commenced to improve the uptake of mutual aid but future services will need to develop this further to enable Lincolnshire to implement PHE's vision of utilising mutual aid services to promote recovery.
Table 7: shows how mutual aid participation varies across the East Midlands

<table>
<thead>
<tr>
<th>Partnership</th>
<th>New treatment journeys*</th>
<th>Number with peer support sub intervention recorded</th>
<th>Percent with mutual aid sub intervention completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derby</td>
<td>271</td>
<td>6</td>
<td>1%</td>
</tr>
<tr>
<td>Derbyshire</td>
<td>431</td>
<td>36</td>
<td>11%</td>
</tr>
<tr>
<td>Leicester</td>
<td>722</td>
<td>103</td>
<td>7%</td>
</tr>
<tr>
<td>Leicestershire</td>
<td>235</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>Lincolnshire</td>
<td>477</td>
<td>18</td>
<td>4%</td>
</tr>
<tr>
<td>Nottingham</td>
<td>306</td>
<td>45</td>
<td>25%</td>
</tr>
<tr>
<td>Nottinghamshire</td>
<td>529</td>
<td>36</td>
<td>9%</td>
</tr>
</tbody>
</table>

* Number of clients whose latest journey started on or after 1st November 2012, lasted longer than 6 months and crossed into the latest 18 months.

** Percentage of all new treatment journeys.

Source: Public Health England

Health related to substance misuse

Summary

- Alcohol-related hospital admissions in Lincolnshire have seen a general decline in the past five years.
- Admission rates are highest in Lincoln, Boston and East Lindsey and are above the national and Lincolnshire average.
- Alcohol-specific hospital admission rates in Lincolnshire are considerably higher among men than women, with rates for both being highest in Lincoln and Boston.
- Alcohol-related mortality rates are lower in Lincolnshire than nationally and regionally, but they have increased from 2009 to 2012, particularly amongst women.
- The most common causes of alcohol-related mortality locally are alcoholic liver disease and fibrosis and cirrhosis of the liver.

- Nationally in 2014, a drug-related inpatient admission was almost five times more likely to result from mental and behavioural disorders than from poisoning by illicit drugs.
- Drug-related inpatient admissions in England have risen by 10% since 2012/13.
- Drug-related hospital admissions were highest in Lincoln and Boston in 2014.
- Men account for 54% of all drug-related inpatient admissions, while women make up 57% of all drug-related A&E attendances.
- The highest number of drug-related inpatient admissions can be seen in the 25 to 34 age group, which mirrors the national picture; however there were more 16 to 24 year olds admitted to A&E in Lincolnshire for drug-poisoning related conditions than any other age group.
- Within Lincolnshire, the main causes of drug-related inpatient admissions were poisoning by narcotics and hallucinogens (including opioid use).
- The main cause of drug-poisoning related A&E attendances in Lincolnshire was the use
of prescriptive drugs.

- Mortality rates due to drug-related poisoning and drug misuse in Lincolnshire for both males and females were lower in 2013 than the national equivalent.
- Drug-related mortality is significantly higher among men than women.
- Age-specific mortality rates are highest among those aged 30 to 39 in Lincolnshire.
- In Lincolnshire, men aged 40 to 49 and women aged 50 to 59 were most likely to die from drug-related causes.

Alcohol and health in Lincolnshire

Lincolnshire County Council produced and published an Alcohol Health Needs Assessment (AHNA) in October 2014, which assessed the health, crime and socio-economic impact of alcohol in Lincolnshire. The AHNA serves to provide a complete overview of alcohol related health needs in Lincolnshire; however, as alcohol is a direct cause of many cases of substance misuse, a refresh of data has been provided on key health indicators such as alcohol-related and alcohol-specific hospital admissions, alcohol-related deaths and alcohol-related ambulance call-outs.

Alcohol related hospital admissions

As at 2013/14, the rate of alcohol related hospital admissions in Lincolnshire is slightly lower than the national average. Across the county, rates of hospital admissions are highest in Lincoln, while admissions seen in Boston and East Lindsey are above the national average. South Holland has historically had the lowest rates across Lincolnshire however between 2012/13 and 2013/14, rates in South Kesteven have dropped where South Hollands have risen.

Figure 9: Alcohol related admissions in Lincolnshire (DASR), 2009 to 2014

![Alcohol related admissions in Lincolnshire](source)
Over the last five years, there has been general decline in alcohol related admissions across Lincolnshire. Despite having the highest rates of admissions, Lincoln has seen a 23% fall in alcohol related hospital admissions since a peak in 2011/12 of 909.4 (per 100,000) and now stands at 728.4 in 2013/14. East Lindsey and South Holland have both seen increases in their hospital admission rates since 2009/10, of 5.4% and 10.7% respectively. Nationally, there has been no noticeable change over the same period.

**Alcohol specific hospital admissions**

Looking solely at alcohol specific conditions (those considered to have been caused entirely by alcohol), male admission rates were more than twice as high as female rates in 2012/13, with Lincoln and Boston having showing the highest rates across the county for both genders.

When compared against the national rate, Lincolnshire has lower than average female admission rates across six of its seven district areas, with Lincoln being the only area which exceeds the national average.

**Figure 10: Male alcohol specific admissions in Lincolnshire (DASR), 2009 to 2013**

Source: PHE, Local Alcohol Profiles for England (LAPE)
Alcohol related mortality

According to data from the ONS\textsuperscript{43}, males accounted for two thirds of alcohol related deaths in England in 2012, and mortality rates were the highest among men aged 60 to 64 and women aged 55 to 59. Overall, mortality rates doubled from 1992 to 2008, but since then have been more variable. Rates amongst women have remained relatively stable in the last ten years, with more fluctuation amongst men.

Figures for Lincolnshire are also available for 2012. In total, there were 330 alcohol related deaths in Lincolnshire between 2009 and 2012. Table 8 shows that mortality rates are generally lower in Lincolnshire than in England and the East Midlands, but they have increased from 2009 to 2012.

Mortality rates are much higher amongst males than amongst females, as seen nationally. However, there was an increase observed in the female mortality rates between 2011 and 2012. Over the whole period from 2009 to 2012, there appears to have been a greater increase in female mortality rates than male. In 2012, female mortality rates in Lincolnshire were comparable to national rates and higher than those seen regionally. In terms of age, mortality rates were the highest among people aged 65 to 74 in Lincolnshire, slightly older than the peak age group nationally.
Table 8: Age-standardised alcohol related mortality rates (per 100,000 population) for Lincolnshire, East Midlands and England, 2009 to 2012

![Bar chart showing age-standardised alcohol-related mortality rates for Lincolnshire, East Midlands, and England from 2009 to 2012.]

Source: ONS, Primary Care Mortality Database (PCMD)

The most common causes of alcohol related deaths in Lincolnshire are alcoholic liver disease, fibrosis and cirrhosis (scarring) of the liver. These problems usually result from gradual damage due to excessive drinking over a long period of time, and around 70% of people with alcohol related liver disease have an alcohol dependency problem. Death can occur due to internal bleeding, build-up of toxins in the brain, kidney failure and also liver cancer. In severe cases, a liver transplant may be the only effective treatment, but is only possible if the person is well enough to survive a major operation and can commit to abstaining from alcohol for the rest of their lives.\(^{44}\)

**Alcohol related ambulance call outs**

Using the estimation measure described in the methodology there were 46,261 alcohol related ambulance call outs in Lincolnshire between July 2010 and December 2014. Table 9 below shows the crude rate per 1,000 population by district in Lincolnshire.
Table 9: Alcohol related ambulance call outs (crude rate per 1,000 population), July 2010 to December 2014

<table>
<thead>
<tr>
<th>District</th>
<th>No. of ambulance call outs</th>
<th>Rate per 1,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston</td>
<td>4,003</td>
<td>15.4</td>
</tr>
<tr>
<td>East Lindsay</td>
<td>10,077</td>
<td>18.4</td>
</tr>
<tr>
<td>Lincoln</td>
<td>9,981</td>
<td>26.6</td>
</tr>
<tr>
<td>North Kesteven</td>
<td>5,326</td>
<td>12.2</td>
</tr>
<tr>
<td>South Holland</td>
<td>5,373</td>
<td>15.2</td>
</tr>
<tr>
<td>South Kesteven</td>
<td>6,867</td>
<td>12.7</td>
</tr>
<tr>
<td>West Lindsay</td>
<td>4,634</td>
<td>12.9</td>
</tr>
<tr>
<td>Lincolnshire total</td>
<td>46,261</td>
<td>16.1</td>
</tr>
</tbody>
</table>

Table 9 highlights that the rate of alcohol related ambulance call outs was greatest in Lincoln district, despite actual numbers of call outs being higher in East Lindsey. An inference may be made that this is related to the night time economy.

Temporal analysis found that 8,226 (18.1%) of call outs were on a Saturday in Lincolnshire. Figure 12 shows that Lincoln district has a higher proportion of call outs on a Saturday compared to the rest of Lincolnshire. This analysis also showed that Lincoln district had more call outs in the early hours of the morning than the rest of Lincolnshire.

**Figure 12:** Comparison of call out days for alcohol related ambulance callouts between Lincoln district and the rest of Lincolnshire, July 2010 to December 2014

Source: East Midlands Ambulance Service, 2015
Figure 13: Comparison of call out times for alcohol related ambulance callouts between Lincoln district and the rest of Lincolnshire, July 2010 to December 2014

Drugs and health in Lincolnshire

Drug related hospital admissions

This section details admissions to NHS hospitals where the primary or secondary diagnosis was related to drug related mental health and behavioural disorders, as well as admissions where the primary diagnosis was caused by illicit drug poisoning.

Admitted Patient Care (APC) (Inpatient)

The Statistics for Drug Misuse: England 2014 report\(^2\) shows that there were 67,926 admissions with a primary or secondary diagnosis of drug related mental health and behavioural disorders in 2013/14, with numbers increasing by 10% from 2012/13. By comparison, there were 13,917 admissions with a primary diagnosis of poisoning by illicit drugs, indicating that a drug-related APC admission is almost five times more likely to be related to mental and behavioural disorders than from poisoning by illicit drugs.

Between April 1\(^{st}\) and October 31\(^{st}\) 2014, there were 136 primary or secondary drug related mental health and behavioural disorder admissions and 163 due to poisoning by illicit drugs which shows that despite national patterns of hospital admissions, people in Lincolnshire are more likely to be admitted due to drug poisoning than for mental and behavioural disorders.

Figure 15 shows APC admission rates (crude, per 100,000 population), based on the usual residence of the patient being admitted. We can see that people living in Boston, East Lindsay, North Kesteven and South Holland are more likely to be admitted for drug poisoning, while...
those patients resident in Lincoln, South Kesteven and West Lindsay are more likely to be admitted as a result of a drug related mental or behavioural disorder.

**Figure 14:** All drug related hospital admissions in Lincolnshire, by LSOA of residence, April to December 2014

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Source: Health and Social Care Information Centre, Hospital Episode Statistics
Further analysis of the diagnosis codes shows that over half (69.8%) of all drug-related admissions were classified as 'poisoning by narcotics and psychodysleptics (hallucinogens)' (of which 16.5% were specified as opioids) and 'multiple drug use and use of other psychoactive substances' (13.1%).

Nationally, people aged 25 to 34 accounts for about a third of all patients admitted with a drug related mental health and behavioural disorder, while more than twice as many males than females were admitted with this diagnosis. Similarly, admissions due to poisoning by illicit drugs were highest amongst 25 to 34 year olds; however while the gender split shows that more males were admitted, the gap is not as wide as with drug-related mental health and behavioural disorder admissions.

Figure 16 show that for drug-related mental health and behavioural admissions, Lincolnshire follows the national pattern with the 25 to 34 age group having the highest proportion of admissions, and more than twice as many males being admitted than females. Figure 17 shows that admissions due to poisoning by illicit drugs does not mirror national figures, with the highest proportion of admissions being within both the 16 to 24 and 45 to 54 year age groups and more females were admitted than males.

Interestingly, Lincoln has the highest proportion of both 16 to 24 (19.1%) and 25 to 34 (15.4%) year olds amongst its resident population compared to other districts within Lincolnshire, which might explain why admissions are so high within this area and particularly amongst these age groups.
Patterns of drug taking in areas of high socio-economic deprivation are well known. Figure 18 illustrates that within Lincolnshire there is a positive relationship between deprivation and hospital admission rates, with higher crude admission rates seen in the most deprived quintiles, and rates declining towards the least deprived quintiles.
Figure 18: Drug-related hospital admissions (crude rate per 100,000) in Lincolnshire by quintile of deprivation, 2014 (Apr-Oct)

Within the county, there have been 814 similar attendances due to poisoning (including overdose) in the six months from April to October 2014, which equates to 0.5% of all A&E attendances during this period. Figure 19 shows that Lincoln has the highest rate of drug-related A&E attendance, at 230.1 per 100,000, while South Holland and South Kesteven have the lowest at 72.9 and 65.2 respectively.

Further analysis of the A&E clinical coding shows that of the 814 attendances at A&E, 63.3% were classified as 'prescriptive drugs', 24% were from 'proprietary drugs' and 12.8% from 'controlled drugs'. When we look closer at this data, females made up 58.1% of 'prescriptive drug' and 56.7% of 'proprietary drug' attendances while males made up 51% of 'controlled drug' attendances.
We can see from Figure 20 that drug-related A&E attendances are most frequent amongst 16 to 24 year olds in Lincolnshire, with more females being admitted than males. Alarmingly, there were a high proportion of under 16’s admitted (17.8%), 58% of which were female.

Temporal analysis of A&E data shows that most attendances to A&E occurred on a Friday and Sunday, however 30.5% of those recorded on a Sunday took place between 00:00 and 07:59.
indicating that these could be overflow from the Saturday night. Interestingly, there is a spike in attendances from use of controlled drugs on Thursday's and Sunday's, predominantly from those aged 16 to 34. When we look at the time of admission to A&E, on average the pattern shows a steep increase in attendances from 06:00 throughout the day reaching a peak between 23:00 and 23:59.

Further to this, there was a higher proportion of attendances in April (18.1%) and May (15.7%) compared to latter months in the covered period and attendances due to controlled drug use was also highest in April.

**Drug related deaths**

The statistical bulletin ‘Deaths Related to Drug Poisoning, England and Wales – 2013’ shows that deaths due to drug poisoning and drug misuse were significantly higher in males than females. The mortality rates due to drug-related poisoning and drug misuse in 2013 were 73.3 deaths (per million population) for males and 32.7 (per million) for females. Since 2010, rates for both males and females have increased by 7% in England and Wales.

It should be noted that mortality rates for drug misuse were lower for both genders thus highlighting that not all drug poisoning deaths are a result of drug misuse. When looking at age-specific mortality, rates were highest amongst 30 to 39 year olds (130.7 deaths per million).

At a county level, 2013 mortality rates due to both drug poisoning and drug misuse were 69.5 deaths (per million) for males and 21.1 (per million) for females. As with national figures, rates for males are significantly higher than for females in Lincolnshire although Table 10 shows that mortality rates are lower in the county than seen nationally.

**Table 10: Age-standardised mortality rates (per million population) for deaths related to drug poisoning and drug misuse, by gender: 2010 to 2013**

<table>
<thead>
<tr>
<th>Year</th>
<th>Males</th>
<th></th>
<th>Females</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lincolnshire</td>
<td>England</td>
<td>Lincolnshire</td>
<td>England</td>
</tr>
<tr>
<td>2010</td>
<td>57.3</td>
<td>68.6</td>
<td>26.2</td>
<td>30.7</td>
</tr>
<tr>
<td>2011</td>
<td>49.8</td>
<td>64.3</td>
<td>18.5</td>
<td>31.5</td>
</tr>
<tr>
<td>2012</td>
<td>67.4</td>
<td>61.6</td>
<td>24.2</td>
<td>31.8</td>
</tr>
<tr>
<td>2013</td>
<td>69.5</td>
<td>73.3</td>
<td>21.1</td>
<td>32.7</td>
</tr>
</tbody>
</table>

Source: Primary Care Mortality Database (PCMD), 2010 to 2013

Overall, age-specific mortality rates were highest amongst 30 to 39 year olds, at 210.2 (per million), however rates are higher amongst 40 to 49 year old males and 50 to 59 year old females. Mortality rates amongst 20 to 29 year olds have fallen from 153.9 in 2010 to 76.3 in 2013, while rates for 40 to 49 year olds have seen a marked increase from 57.9 in 2010 to 189.4 in 2013.

On further analysis of the causes of death, 90% of all drug related deaths in Lincolnshire in 2013 were caused by drug poisoning, of which 58% were accidental, 19% were intentional and
13% with undetermined intent. The remaining deaths were caused due to mental and behavioural disorders. In Lincolnshire, deaths caused by both accidental and intentional drug poisoning have increased since 2010.

**Crime and disorder related to substance misuse**

**Summary**

- From 2009 to 2013, there were over 16,000 alcohol-related offences and incidents. About a third of these were assaults and around a sixth were traffic incidents.
- Key locations, particularly in Lincoln city centre and Skegness, saw a large proportion of alcohol-related crime and specifically of violent crime.
- Levels of alcohol-related violence have risen since 2009, but now appear to be falling compared to last year. Seasonal peaks occur in August, October and December.
- Alcohol-related violence is linked to the night-time economy in towns across the county, with high risk periods during late evening and early hours at the weekend.
- Almost a fifth of alcohol-flagged offences were domestic, but this is likely to be an underestimate. Repeat victimisation is also under-reported and data related to victims is poor.
- Alcohol was considered to be an influencing factor in offending for 36.2% of male offenders and 31.1% of female offenders.
- Street drinking is difficult to quantify and appears to be under-reported.
- In the last three years, there have been 45 positive breathalyser tests on drivers involved in fatal or serious accidents, and 204 in slight accidents.
- Between 2012/13 and 2013/14, levels of drug related offences have risen by 9.2% in Lincolnshire.
- There is a strong relationship between drugs and crime, with half of all serious acquisitive crimes being drug related. Around three quarters of heroin and crack cocaine users commit other crimes to fund their habit.
- Two thirds of all offences related to possession of illicit drugs, of which possession of cannabis comprised the majority of offences.
- There have been 248 offences leading to drug seizures, of which 34 related to the admitted possession of Mephedrone. It is thought these numbers are under-reported due to the limited capabilities of drug testing for Mephedrone in Police stations.
- Offences tend to be concentrated within populated residential areas and town centres. In Lincolnshire, the majority of offences occurred in Lincoln and Boston.
- Patterns of drug related offences occur most on weekends and between the hours of 20:00 and 00:59, which can be linked with the night-time economy.
- Drug related offences are predominantly committed by men (90%) and by those aged 20 to 29 years. Drug related offences become less common as the age of the offender increases.
Alcohol

Crime data for the 2014 Alcohol Health Needs Assessment was provided by Lincolnshire Police from searches of the Niche records management system and analysis of the quantity, type, location and timing of offences for the period August 2012 to July 2013 and the totals and spread of offences from April 2009.

This section provides a summary of findings from the Health Needs Assessment. For further detail around alcohol related offences, such as seasonality, location and offender profiling, the full document can be viewed via the Lincolnshire Research Observatory46.

Lincolnshire Police provided data from April 2009 to July 2013. In this period, there were over 16,000 offences and incidents related to alcohol, in almost 8,000 different locations. There were 189 different types of crime or incident, of which, 36.0% were assault and 15.7% were alcohol-related traffic incidents.

Overall, 19.4% of all alcohol flagged offences and incidents were also flagged as domestic. Public order offences (such as affray and use of threatening words or behaviour), anti-social behaviour (such as drunken behaviour) and criminal damage were also common. Shoplifting was the seventh most common alcohol related offence.

Offences peak in the summer (generally August), with smaller peaks in October and December, and the lowest numbers are recorded in February and November. Summer peaks may be associated with increased alcohol consumption and high numbers of visitors and tourists. Skegness experiences particularly high levels in the summer months with higher numbers in August. In Lincoln, spikes are seen in December, with increases towards the summer. Further analysis found that the highest risk periods for an alcohol related offence are during weekends, suggesting a link with the night-time economy, particularly in Lincoln, where Saturdays saw more than double the offences of any other day except Sunday (Sunday includes crimes in the early hours following on from Saturday night).

Named offenders were listed on 11,474 of the alcohol related crimes and incidents, of these there were 8,285 different offenders, 22 linked to 10 or more offences and 157 linked to 5 or more offences. The majority of the offenders were male (84.6%). Over 36% of all offenders were aged between 15 and 24 years and a high proportion of offenders were unemployed (37.8% of males and 47.8% of females).

Drugs

Lincolnshire Police produced a drugs problem profile in August 2014. This profile predominantly focused on police data covering the period 1st September 2012 to 31st August 2014. It also considered partner intelligence including health and probation.

The information contained within the crime and disorder section has been taken from this profile and has been approved by the Director of Intelligence (Lincolnshire Police) for inclusion in this Health Needs Assessment.
The level of drug misuse within Lincolnshire is currently a well debated issue amongst the department of Health, the Police, drug workers, charities and the County Council. Obtaining an exact figure of the prevalence of drugs within the County is an impossible task due to the clandestine nature of the offending behaviour.

To clarify, drug user estimates stem from research based on drug treatment, probation, police and prison data. Combined, this data will cover drug users that seek help to combat addictions or drug users who may be classified as problematic and have subsequently come to police attention. Drug users which deem they have their drug use under control or do not commit further offences in addition to or as a result of their drug use may be omitted from drug use statistics.

**Official statistics**

Official statistics, such as the Crime Survey for England and Wales (CSEW), should be observed with a level of caution, as estimates are produced from responses to a self-completion module of the survey that is completed at the end of a face-to-face interview. The interview covers questions on experiences of crime victimisation and perceptions of crime-related issues.

The difficulty in researching any aspect of illicit drug use compared to, for example, alcohol use, stems from the illegality of the behaviours of interest. Respondents may not feel completely at ease disclosing personal information to statisticians working on behalf of the Home Office. This may result in false or inaccurate answers being given.

CSEW estimates are also based on a relatively small number of users, therefore it is important to remember that identified trends cannot necessarily be generalised for England and Wales as a whole, or indeed Lincolnshire, due to variances in demographics across the country. Additionally, the self-completion module of the CSEW is restricted to those respondents aged 16 to 59 years. The exclusion of those aged 60 and over reflects the very low prevalence rates for the use of prohibited drugs; however excluding under 16’s may lead to a large misrepresentation of the scale of the national drug market.

**Force overview**

Lincolnshire Police crime data showed that overall drug offences have increased by 9.2% between 01/09/2013-31/08/2014 when compared against the same time period within 2012/2013. In total 1,671 offences have been committed and recorded which relate to offences of production, supply and possession of Class A, B and C drugs.

The breakdown of the offences reveals that 1,368 offences relate to the possession of illicit drugs of which the possession of cannabis holds the largest majority of offences within the category with 66.67% of offences.
There were 192 offences related to the supply or possession with intent to supply illicit drugs. Possess with intent to supply cannabis holds the largest majority of offences within the crime category with 48 (25%) offences.

111 offences relate to the production or importation of illicit drugs, which shows no difference when compared to the previous year.

**Offender profiling**

Between September 2013 and August 2014, 1,978 subjects have been aligned to the 1,671 recorded possession and supply drug offences. Additional research highlights that 220 are repeat offenders, equating to 1,706 individual offenders identified within the crime data during the analysed time period. Repeat offenders were responsible for 25% of overall drug offences and 25% of identified repeat offenders committed more than one offence type, for instance a possession and a supply offence.

Of those offenders linked to drug offences committed and recorded within Lincolnshire, 1,772 (90%) were male and 206 (10%) were female. The majority of these were linked to possession offences.

When we look at offences by age group, 45% of all drug-related offences are committed by those aged 20-29 and from age 30 onwards, numbers begin to decline with offences at their lowest amongst those aged 50 and over.

There appears to be no direct link between drug-related crime and the offenders ethnicity as 92% of those who committed drug offences in Lincolnshire were classed as 'White British', followed by 'Black' and 'No ethnicity stated' (both 3%). This highlights a true representation of the population of Lincolnshire according to the 2011 Census in which 93% of the resident population are White British.

It is widely reported that half of all serious acquisitive crimes (SAC) are drug related and around three quarters of heroin and crack cocaine users commit crime to fund their habit. In order to understand the link between drug use and crime within Lincolnshire, research has been conducted on those individuals who have been linked to drug possession offences within the 12 month time period. The results of the research show:

- 152 (11%) people who are linked to drug possession are also linked to a serious acquisitive crime (Burglary, robbery, vehicle crime).
- 226 (17%) people who are linked to drug possession are also linked to a violent crime offence.
- 103 (8%) people who are linked to drug possession are also linked to shoplifting offences.
- In total 369 (28%) people who are linked to drug possession are also linked to a different criminal offence.
- 954 (72%) people who are linked to drug possession have not been linked to another criminal offence.
Drug seizures

The number of total drug seizures within Lincolnshire is currently difficult to determine as the data is not extractable from Niche. Seizures of a low quantity are primarily tested in a Police Station and disposed of immediately; as a result the information is not passed to the Drugs Expert Witness for recording. The capabilities of individual police stations to test drugs is also limited, at the present time testing for Mephedrone cannot be done therefore the suspected seizure of Mephedrone can only be confirmed through external forensic testing or if the offender admits to the possession.

The limited use of internal drug testing may also be used to explain the high number of offences of possession/supply of other Class A or Class B drugs within Lincolnshire as these charges appear to be used when the seizures have to be forensically tested by an external agency to confirm the identity of the drug. Between 01/09/2013 and 31/08/2014, 248 recorded crimes have resulted in drug seizures being sent for forensic testing. The results of the testing found:

- 18 seizures resulted in 9,332 grams of cannabis (skunk);
- 24 seizures resulted in 2,151.03 grams of Amphetamine/Methamphetamine;
- 34 seizures resulted in 310 grams of Mephedrone;
- 17 seizures resulted in 191.39 grams of Heroin;
- 24 seizures resulted in 172.29 grams of Cocaine;
- 16 seizures resulted in 122.36 grams of Crack Cocaine;
- 2 seizures resulted in 54 grams of Ecstasy Powder;
- 43 seizures resulted in the identification of other drugs including Buprenorphine, Methadone and Diazepam.

As the seizure figures suggest, in a number of cases more than one drug type has been seized and tested within one incident. In total 35 offences resulted in multiple drug types been sent for analysis. The data indicates Heroin and Crack Cocaine are more commonly seized together than any other drug types; however, it is not uncommon for Heroin or Crack Cocaine to be seized with other drugs. Overall no further patterns have been identified regarding the relationship between common drug types seized together.

124 cannabis cultivations have been identified within the Force area between September 2013 and August 2014, of which one held 674 plants.

The discovery of the cultivations primarily resulted from police activity within premises for unrelated matters, such as concern for welfare, response to Domestic Violence or making an arrest or search for offences not related to cannabis cultivation. However, in 23.16% of cases the cannabis cultivation was discovered as a result of a Misuse of Drugs Act Warrant following a Police investigation.
Spatial analysis

Analysis of the offences in respect of the geographical distribution of the crimes highlights offences are concentrated in populated residential areas and town centres. Furthermore, the geographical analysis of drug use and supply within Lincolnshire found that the County mirrors the national picture highlighted in the 2013/14 CSEW.

Table 11 summarises where in Lincolnshire the offences occurred and what classification of drugs were involved. By location, more offences occurred in the Lincoln/West Lindsey (30.7%) and Boston/South Holland (29.7%) areas, while there were comparably fewer in the North/South Kesteven areas (17.8%). Further analysis of the data found that 80% of all offences within Lincoln/West Lindsey were concentrated within Lincoln (North, Centre and South).

Overall, Class B possession offences make up the majority of offences across Lincolnshire and this is consistent across all four areas shown. Interestingly, 19 out of the 27 Class C possession offences in Lincolnshire were isolated to the Lincoln/West Lindsey area, as were the most of the few Class C supply offences (4 out of 7).

Table 11: Age-standardised mortality rates for deaths related to drug poisoning and drug misuse, by gender: 2010 to 2013

<table>
<thead>
<tr>
<th>Offences</th>
<th>Lincoln/West Lindsey</th>
<th>Boston/South Holland</th>
<th>North/South Kesteven</th>
<th>East Lindsey</th>
<th>Total offences</th>
<th>% of offences, by classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class A</td>
<td>32</td>
<td>14</td>
<td>24</td>
<td>27</td>
<td>97</td>
<td>5.8%</td>
</tr>
<tr>
<td>Class B</td>
<td>35</td>
<td>21</td>
<td>9</td>
<td>23</td>
<td>88</td>
<td>5.3%</td>
</tr>
<tr>
<td>Class C</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>0.4%</td>
</tr>
<tr>
<td>Possession</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class A</td>
<td>94</td>
<td>64</td>
<td>46</td>
<td>48</td>
<td>252</td>
<td>15.1%</td>
</tr>
<tr>
<td>Class B</td>
<td>282</td>
<td>365</td>
<td>197</td>
<td>242</td>
<td>1,086</td>
<td>65.2%</td>
</tr>
<tr>
<td>Class C</td>
<td>19</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>27</td>
<td>1.6%</td>
</tr>
<tr>
<td>Production/import of Class B</td>
<td>45</td>
<td>28</td>
<td>17</td>
<td>19</td>
<td>109</td>
<td>6.5%</td>
</tr>
<tr>
<td>Total offences</td>
<td>511</td>
<td>494</td>
<td>297</td>
<td>364</td>
<td>1,666</td>
<td></td>
</tr>
<tr>
<td>% of offences, by location</td>
<td>30.7%</td>
<td>29.7%</td>
<td>17.8%</td>
<td>21.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Temporal analysis

Temporal analysis in respect of drug offences is a notoriously difficult task due to the time and the date of the offence often being linked to police pro-activity, for instance the time in which illicit drugs were found as a result of a search opposed to actual drug use/supply times. Further analysis of intelligence data also reveals little information in respect of peak time for offending, information regarding drug use/supply is often linked to the habits of the individual and cannot therefore be attributed to specific peak times. As a result the following information should be viewed as an estimate rather than exact peak times.

Figure 21 illustrates that overall drug offences have occurred consistently throughout the 12 month period, with notable peaks within the month of December followed by the months of February and June. Offences in these months mirror peak times of possession of cannabis
offences; therefore this is seen to have a direct impact on the peak time of overall drug offences.

Despite the increase within these months, there was no statistically significantly difference and drug offences remained at a relatively consistent level throughout the year with an average of 139 offences per month.

**Figure 21: Overall drug offences in Lincolnshire, by month**

The number of offences has been broken down further to highlight the volume of overall offences by day of the week. The peak day for offending within the Lincolnshire force area is Saturday, in total the weekend period (Friday night – Sunday night) experiences 49% of the overall offences, the reason for this could be due to links with the night-time economy.

Similarly, drug possession offences are once again seen to mirror the overall offence peak times. The crime data highlights drug possession offences are commonly identified on a Saturday and in total the weekend period is seen to experience 51% of offences. Peak days for offending in relation to drug supply offences is seen to differ in respect of drug possession offences as supply offences are more commonly identified on a Friday and Thursday. In total the weekend period is seen to experience 34% of supply offences, however, this may be representative of the availability of resources opposed to peak time of drug dealing within Lincolnshire.
Peak time for offending has been identified as being between the times of 00:00-01:59 whereby 283 offences have been committed in the Lincolnshire area. 63% of the offences committed within this time period occurred during a Friday, Saturday and Sunday night. Figure 23 highlights a noticeable decline in offences after 01:59 where offences continue to reduce until 07:00-07:59. Offences are seen to increase slightly and remain at a consistent level throughout
daytime hours. From 20:00-20:59 offences make a marked increase and are seen to remain at a consistent level until hitting the previously identified peak time between 00:00-01:59.

**Youth offender substance and alcohol misuse**

The Lincolnshire youth offender population, those coming into contact with Youth Offending Services (YOS), is approximately 270 to 300 individuals per annum aged 10 to 18 years. From a recent Health Needs Assessment (HNA) of youth offenders in Lincolnshire, self-reported recent alcohol use was reported in 70% of offenders (49 out of 70), although this may be an underestimate, as the alcohol consumption for 11.4% of offenders (8 out of 70) was unknown. Only one person said that they had never used alcohol.

As reported in the YOS HNA, children who are poorly monitored by their parents and carers begin to drink at an earlier age, and are likely to develop problematic drinking patterns. In the Lincolnshire HNA cohort, 46.3% of offenders were considered to have inconsistent supervision or boundaries, and 75% of those offenders used alcohol.

In addition, family members or carers for 15% of the young offenders were heavily involved in alcohol abuse, and 70% of these young offenders used alcohol. However from the 23% of young offenders whose family members were involved in drug abuse, 81% of them used alcohol. This suggests that drug abuse within the offender's family may have a greater influence on alcohol use by the offender than alcohol abuse within the family.

Of the offenders in the audit, 74% had used drugs in the past, 57% of whom admitted to having recently used drugs. Only 3% claimed never to have tried drugs. This level of drug use is considerably higher than that reported nationally. In England, current or past drug use for 11 to 15 year old males and females is 15% and 17% respectively. The most common drug being used by offenders in the Lincolnshire HNA was cannabis, which had been used or tried by 74%, with 47% of them using it recently. As shown in Figure 24, the next most common substances being used were 'other' and solvents.
From another recent Health Needs Assessment of young offenders, it was reported that young people in contact with the Youth Justice Service started using drugs between the ages of 11 and 15 years, the average being 14 years\textsuperscript{48}. This is mirrored in Lincolnshire YOS referrals to the young person's substance misuse services; 22% of which are for 12 to 15 years old.

Considerable financial benefits may be gained from supporting young offenders. A meta-analysis of a life skills programme for young people misusing drugs (which focussed on self-esteem, self-confidence and coping with anxiety) found that it provided good value for money, with evidence of £25 being saved for every £1 spent\textsuperscript{49}. 

**Figure 24: Asset cohort, recent and ever substance (has been used in the past) use**
Appendices

Appendix A

Provider engagement events

During February and March 2015 a total of 6 initial provider engagement events and meetings took place, this consisted of one event for group discussion and five individual meetings with the current providers, the Lincolnshire Local Medical Committee and the Lincolnshire Local Pharmaceutical Committee to discuss potential future treatment priorities. The following is a summary of the key points that came from these sessions.

Substance Misuse Re-tender Initial Engagement Session

Health factors

Q1. Which subset of the population do you feel are most at risk from substance misuse?

- Legal High/NSP users
- People with socio-economic issues
- Older drinkers
- Upper-middle class drinkers
- Long-term misusers

Q2. Which areas of Lincolnshire are of greatest concern for substance misuse?

- East Coast as a whole, not just Boston
- Lincoln: NPS increased use and injecting on the rise
- Grantham: MCAT
- Skegness: Transient Population
- Rural Population
- Needle syringe programme does not cover all areas of the county

Q3. How do you think hospital admissions and mortality related to substance misuse can be most effectively reduced in Lincolnshire?

- Tackle alcohol over NPS
- Set aside political/socio-cultural factors for treatment focus
- Emphasis on prevention in deprived areas
- 10-20 year plan: early intervention IBA, but treatment at Primary Care Level
- Focus on alcohol over wider issues would reduce number of admissions/bed days per person
- GPs don’t have much impact currently
- GPs to have more constructive impact
Q4. What are the potential health risk factors from substance misuse?

- Pregabalin: recognised in prison
- Physical/Emotional/Mental health
- Self-medication around MH
- Mental health issues around cannabis
- BBV through sharing injecting equipment

Q5. What interventions do you have in place to support clients with a dual diagnosis of mental health and substance misuse problems?

- Current parallel model is not working. It should be DD-lead or a smaller team
- Services need to be properly linked together, which already happens in a small number of cases, but this is the exception not the rule although shows it can be done
- Injecting is a major risk in Lincolnshire, especially NPS
- Essential to ensure needle exchange provision is not lost, particularly in rural areas
- Pabrinex is routinely overlooked

Q6. Would you say that substance misuse as a health problem is getting better or worse in Lincolnshire?

- The situation ebbs and flows
- The types of substances being misused is constantly changing
- There is likely to be an explosion in the use of synthetic opioids in the near future
- The current trend is psychedelic stimulants

Socio-economic factors

Q7. What social risk factors do you feel influence substance misuse?

- There are limitless and constantly changing social risk factors
- Benefit sanctions / Universal Credit add another layer of marginalisation

Q8. Are there certain characteristics or behaviours people have that may influence this?

- Impulsivity and recklessness
- The privileged can become bored or hedonistic
- Some communities bring different perspectives from cultures from their countries of birth

Q9. Are there any interventions in place to tackle these risk factors?

- Some small projects exist in localised areas such as Boston, but nothing county wide as the groups are so small

Q10. Considering the influencing characteristics and behaviours, what are the different ways to engage with them? Do you currently use these techniques?
A tailored approach of targeting different socio-economic groups in different locations is paramount in order to make them feel welcome and comfortable accessing services.

Crime and disorder

Q11. Consider acute and chronic use of drugs and alcohol and their influence on crime and disorder e.g. acute abuse may influence levels of violence in built-up areas while chronic abuse may lead to domestic abuse, petty crime such as shoplifting and serious crimes such as theft.

Q11 and Q12 were answered simultaneously

Q12. Which of these areas are currently a priority for your work area and why?

- Young drinkers and fall-out from pubs and clubs
- Drug-driving is currently unaddressed by treatment services
- Domestic violence and aggression
- Inter-gang violence
- Alcohol and violence in the night time economy and DV
- Acquisitive crime due to the high cost to society

Q13. What interventions would you put in place to help reduce this influence on crime and disorder?

- Grantham are currently doing much work around domestic violence and aggression

Q14. Which areas of Lincolnshire are of greatest concern for drug and alcohol related crime and disorder?

- Lincoln
- East coast

General discussion points

Value of hospital data

- It can establish residence and can pinpoint where patients are coming from: particularly if they are out of area yet accessing Lincolnshire A&E
- Will aid in determining who is responsible for ongoing care: most likely GP-based
- Provides a map

Drug deaths

- Does the data include prescription drug deaths?
- The list and categorisations can be reviewed to see if it needs to be looked at in further detail particularly because of the increase in prescription drug abuse on the East Coast

Young people
The picture of drug use for young people has changed especially regarding NPS as young people can be using and yet not presenting with symptoms

4 categories on NDTMS for NPS

NPS is regional with Grantham and Gainsborough experiencing a reduction in Heroin and NPS

Emerging trend is an increase in NSP for NPS

**Pharmacies**

- North Lincoln city and some rural towns have little or no NSP cover
- What about contingency plans for those receiving PBSAP if they get banned from a pharmacy in an outlying area where there is only one pharmacy

**LGBT/University**

- There is a need to understand the under-represented, and to see whether they should be targeted
- Treatment to be available to all regardless of how an individual identifies themselves

**Gaps**

- Clear definition is needed within young person (YP) data capture. The (YP) service is up to 19 years but the data only reaches 18 years with the youth offending service running up to 17 years, and adult service running from 18 years
- Mental Health (MH): referrals - who do they cover? If a client is not diagnosed, it should not be recorded on NDTMS. There is a need to engage with MH commissioners. It would be useful to gather service user's views. Benchmarking visits ought to be undertaken. Correlation to be established as to where priority sits. Co-commissioning to be considered
- Education on substance misuse for YP as many are not in formal education
- Data sent from providers: local information, Tier 2 and NSP required. Requests should be sent to providers for them to complete and return
- O.T.C / Steroids / Prescription: what is the need? Resources need to be attached to these 'emerging trends' in order that resources are not removed from stock clients
- Early intervention: What does this look like? Who will deliver it? Generic service as these don't identify as PDU therefore is treatment best placed to do this?
- Prevention: requests from other professionals etc.
- 'Stronger Communities': identify issues, services available, mutual aid. Education for those outside the field 'in reach'. Neighbourhood teams and the role substance misuse has in them
- Client group: age is increasing (pharmacy), there is still a need for a medical model, feel clients are getting older when they enter treatment. Data required on NSP age group of new users
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