



## King's Health Partners

King's Health Partners brings together:

- three of the UK's leading NHS Foundation Trusts
- a world-leading university for health research and education
- nearly 4.8 million patient contacts each year
- 40,000 staff
- nearly 30,000 students
- a combined annual turnover of more than £3.7 billion
- services provided across central and south London and beyond, including nine mental health and physical healthcare hospitals and many community sites
- a comprehensive portfolio of high-quality clinical services with international recognition in cancer, diabetes, mental health, regenerative medicine, transplantation, cardiac and clinical neurosciences
- a major trauma centre and two hyper-acute stroke units

# About King's Health Partners

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King's Health Partners Academic Health Sciences Centre brings together one of the world's top research-led universities, King's College London, and three of London's most prestigious and highly regarded NHS Foundation Trusts – Guy's and St Thomas', King's College Hospital and South London and Maudsley.

Our partnership provides a powerful combination of complex clinical specialties that cover a wide range of physical and mental health conditions and a breadth of research expertise that spans disciplines from medicine and biomedical sciences to the social sciences and humanities.

There are three parts to our mission: excellence in research, education and clinical care.

To support our mission, we are delivering programmes of work to:

- join up mental and physical healthcare so that we treat the whole person, mind and body;

- increase the value of the care we provide and the outcomes we achieve for our patients and service users;
- integrate care across local primary, secondary and social care services to make it easier for people to get the care and support they need;
- improve the public health of our local community by tackling inequalities and supporting people to live healthy lives;
- bring together our collective strength and expertise in a range of specialist areas to deliver world-leading care, research and education;

We are uniquely structured to deliver our mission for excellence. Our 21 Clinical Academic Groups (CAGs) bring together all the clinical services and staff from the three trusts with the relevant academic departments of King's College London.

# Foreword

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At King's Health Partners we are committed to improving outcomes for our patients and service users and achieving maximum value for money in everything we do. We believe that being open and transparent about the care and outcomes we deliver results in a culture of improvement across our partnership.

This is why we are publishing a series of outcomes books that will help patients, service users, carers, referring clinicians and commissioners to make better informed decisions, and our staff to drive up the quality of the care we provide. The books report key outcomes for treatments provided by our 21 clinical academic groups (CAGs). CAGs form the building blocks of our Academic Health Sciences Centre. By bringing together our clinical and academic staff across teaching, training and research, we can use their combined expertise to achieve better outcomes for our patients and service users.

Our books are designed for a clinical and lay audience and contain a summary of patient volumes and measures (e.g. length of stay, re-admissions, patient experience), clinical outcomes, educational activities, technological and research innovations and publications. They also focus on other important measures, such as staff satisfaction and wellbeing.

The primary purpose of King's Health Partners is to improve health and wellbeing locally and globally. We must deliver this goal in a challenging economic environment with rising demand for, and costs of, healthcare. We will only achieve sustainable health improvement if we strive always to increase value. We define value in terms of outcomes that matter to patients, over the full cycle of care, divided by the cost of producing those outcomes. By publishing outcomes books we have more information to support us measuring the value of the healthcare we provide.

Our goal is to increase the depth and breadth of reporting each year. Books will be updated regularly to demonstrate progress against our mission to achieve world-class research, education and clinical care. We hope you find these data valuable. Please send comments and suggestions to us at [kingshealthpartners@kcl.ac.uk](mailto:kingshealthpartners@kcl.ac.uk).

For more information please visit our website at [www.kingshealthpartners.org](http://www.kingshealthpartners.org).



**Professor John Moxham**

Director of Clinical Strategy, King's Health Partners  
November 2017

# Foreword – CAG leaders

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The Addictions CAG outcome book demonstrates our commitment to the tripartite mission which defines King's Health Partners. We show many examples of how we have developed an evidence base and been able to implement treatments which improve the outcomes for the users of our services.

Addiction to a range of substances affect many of the communities served by the organisations who make up King's Health Partners (KHP). They contribute to the morbidity and mortality from a range of conditions and even more importantly to the outcomes from their treatment. The Addictions CAG is in a unique position of being able to work across the organisations in partnership to reduce morbidity from alcohol, tobacco and drug use. The best examples of this are the alcohol and tobacco strategies led by the Addictions CAG, particularly by Professor Colin Drummond and Professor Ann McNeill which have allowed the whole partnership to show a commitment to improving the health of our communities by reducing their substance use.

Our outcomes book illustrates the wide ranging nature of our areas of interest. We broadly divide our work into tobacco, drugs and alcohol. However within these categories we investigate use and addiction in a range of client groups including adolescents, early users and entrenched users who are resistant to treatment. We also investigate emerging drug use trends, such as that of new psychoactive substances where the evidence is lacking for treatments and we need to learn new ones. We are very proud of our research record.












Addictions clinical services are commissioned by local authorities as part of the provision of public health services. There is a highly competitive market in the provision of services driven by a need for commissioners to reduce costs. We have lost some services due to this competition but are proud of the consortia and partnerships which we have set up which have enabled us to continue looking after our vulnerable and stigmatised client group and enabling many of them to reduce the harm from their addictions and move towards recovery.

We became joint CAG leaders around 18 months ago. We are looking forward to continuing the work of the CAG and despite the difficult and complex commercial pressures in clinical services, we will continue to achieve excellence in research and educate the next generation of clinicians and researchers.

**John Strang**  
**Emily Finch**  
**Eleanor Bateman**

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# The value of partnership at King's Health Partners

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King's Health Partners aims to create a centre where world-class research, education and clinical practice (the 'tripartite mission') are brought together for the benefit of patients.

We want to make sure that the lessons from research are used swiftly, effectively and systematically to achieve better patient outcomes, improve public health and join up health and care services for people with physical and mental health problems.

By working together in this way, integrating care across different organisations and sectors, we can not only improve the health of the people we care for, but we can also achieve better value for money.

## Integrating mental and physical health

The mind and body are inseparable, and mental and physical health conditions are often connected.

The average life expectancy for someone with a long-term mental health illness is much shorter than for someone without, often due in part to smoking, obesity, diabetes or alcohol misuse. Likewise, many people with long-term physical health conditions suffer from depression or other mental health conditions.

Despite this, health services separate care into physical and mental and often fail to share patient information.



At King's Health Partners we are working to overcome these barriers by treating the whole person. We are committed to caring for vulnerable patients with both physical and mental ill health in an integrated manner with better, faster diagnosis and treatment because we know that addressing mental ill health improves physical health outcomes and vice versa.

Right across our partnership, we are committed to joining up and delivering excellent mental and physical healthcare, research and education so that we treat the whole person, by:

- screening all patients with chronic physical diseases for mental health conditions, and using the learning from this to improve the care we provide;
- improving our understanding of the physical health needs of people with severe mental ill health;
- addressing the traditional distinctions between the mind and body in research and education allowing us to train students and staff to deliver more integrated care;
- better organising and expanding current training provision for physical and psychiatric comorbidity;
- working with our local commissioners to find new ways of paying for integrated services;
- linking IT systems across our partner trusts so that clinicians have access to a person's physical and mental care records;
- investing in innovative programmes such as IMPARTS (Integrated Mental and Physical Healthcare: Research, Training and Services) and 3DfD (3 Dimensions of care for Diabetes);
- recognising the importance of employee mental and physical health and wellbeing.

## Public health

Public health is one of our biggest challenges. At the root of much of the ill health in south London is a high incidence of smoking, alcohol abuse and obesity. With our health and social care partners, we are developing strategies to tackle these public health priorities. We are also developing plans for a new Institute for Urban Population Health, a collaboration with local partners to bring about transformational change to health in local communities. We want to achieve a measurable improvement and impact on health gain and local management of physical and mental health problems through new evidence based interventions.

## Alcohol strategy – key aims

- Developing appropriate resources for clinical staff and patients;
- developing and implementing training for all staff on harmful drinking and, supporting early identification and intervention;
- establishing ourselves as a centre of excellence for integrated research, training and practice in the management and prevention of alcohol misuse;
- attracting funding for future alcohol clinical, training and research initiatives;
- monitoring the impact of the strategy on indicators of alcohol related harm.

## Tobacco strategy – key aims

- supporting all clinical sites to be smoke-free;
- developing an informatics structure for routinely and systematically recording smoking status;
- support, referrals and treatment uptake for smoking cessation across the partnership;
- co-producing clinical care pathway for nicotine dependence treatment;

- developing and implementing training packages for smoking cessation interventions for all our healthcare professionals;
- monitoring the impact of our smoking cessation strategy in relation to knowledge and uptake of skills by staff, uptake of smoking interventions, outcomes of interventions, user satisfaction, prevalence of smoking, cost-effectiveness of interventions.

## Informatics

Informatics is at the heart of our plans to join up care, research and education. Data is one of our most important assets at King's Health Partners. We are proud of our ability to control information systems for the purpose of data creation, curation and analysis with strong and transparent information governance processes throughout. This control enables our exploration of the relationship between clinical and biological data, extending at one end to clinical decision support embedded in electronic medical records (EMRs), sharing of clinical data to enhance care and outcomes, through to research recruitment and participation, with strong patient engagement throughout. We have developed a clear strategy and action plan to maintain and develop leadership in the field of informatics.

Systems have been developed to enable electronic healthcare records to be shared across our partner organisations and with other healthcare organisations. Our work includes the award-winning 'HealthLocker' programme, the Clinical Record Interactive Search (CRIS) and King's Health Partners Online. We are working with patients to make electronic patient information available in an anonymised format between partner trusts, primary care and social care. Together we have a powerful information resource for both practitioners and researchers.

# Demonstrating our tripartite mission

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We address King's Health Partners' tripartite mission of research, clinical services, education, and also wider policy implications. Policy work includes leadership of reviews of scientific evidence for decisions about the shape of preventions and treatments. The CAG has been invited to chair several key committees for the National Institute of Health and Care Excellence (NICE) and the Department of Health, which enables our research findings and clinical experience to directly affect the policy making process.

The CAG aims to explore and understand addictive behaviours and to identify potential behaviour levers at a preventive or treatment and rehabilitation level. When we have identified potential ways to alter addictive behaviour, we design and conduct trials that study the impact of interventions when applied in real practice and consider how they can be rolled out to deliver public benefit.

# Introduction

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The Addictions Clinical Academic Group covers drugs, alcohol and tobacco. It is located within the Institute of Psychiatry, Psychology and Neuroscience and South London and Maudsley (SLaM), but the manifestations of addictive behaviours are felt right across our Academic Health Sciences Centre.

We are one of the largest providers of NHS addictions services in the UK in a competitive sector where many addiction services are now being provided by various voluntary sector organisations. Addiction services are now commissioned by local authorities and are subject to serious reductions in available funding. Our CAG has a strong commercial strategy designed to preserve our place in the market.

We have responded by building services around leading partnerships with the voluntary sector which reduce the cost of service provision and bring the strengths of voluntary sector services to our patients. We have developed a pathways based service model which is delivered in a consortium with a range of partners. Our Lambeth service was quoted

in the 2014 Chief Medical Officers (CMO) report as an example of good practice. We tailor services to individual patient needs with a focus on recovery as early as possible and our research helps us improve patient care.

We provide community drug and alcohol services in Lambeth, Wandsworth, Greenwich and Bexley. Our services are provided in the community both in standalone services but also in GP surgeries and in services run by our voluntary sector partners such as day programmes and hostels and criminal justice agencies.

We run a specialist smoking cessation service. We also run hospital liaison services in King's College Hospital and through the KHP alcohol strategy, helped St Thomas' set up their alcohol care team. We also provide specialist services for adults from around the country who need specialist care and treatment. Many of our staff are national and international experts in their fields.

In 2014 our in-patient services closed. We are helping fill the need for a service for complex drug and alcohol users by providing an

enhanced liaison service to a local voluntary sector detoxification unit enabling them to take a wider range of patients.

In 2014–2015, 295,224 individuals were in contact with drug and alcohol services nationwide (Public Health England 2015). Presentations for heroin use are dropping with those heroin users remaining in treatment largely being an ageing population. These individuals are becoming increasingly physically unwell and hard to treat. This means that an important area for the CAG is supporting 'hard-to-treat' groups, or patients who do not respond to existing treatments. These groups present us with the

challenge to develop more effective therapeutic interventions and look for ways in which treatments can reach out to them.

We also have The National Addiction Centre (NAC) within our portfolio of services. The NAC is a leading Addictions Research Centre, part of King's College London. It represents a network of clinicians, researchers and clinical teachers who have a shared commitment to excellence in addiction prevention and treatment work. The partnership of the NAC and clinical services enable us to deliver on the KHP tripartite mission.

# CAG leadership structure

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**Emily Finch**  
Clinical Director



**John Strang**  
Academic Director



**Ellie Bateman**  
Service Director

**Colin Drummond**  
Professor of Addiction  
Psychiatry – Alcohol

**Ann McNeill**  
Professor of  
Tobacco Addiction

**Michael Lynskey**  
Professor of  
Adolescent Addictions

**John Marsden**  
Professor of  
Addictions – Drugs

**Jo Neale**  
Professor of  
Qualitative Research

**Gail Gilchrist**  
Reader in Addictions  
Healthcare Research

**Paolo Deluca**  
Reader in  
Addiction Research

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## Addictions and public health

Public Health England (PHE) is an executive agency of the Department of Health and brings together public health specialists from more than 70 organisations to provide expert evidence and intelligence to support effective action.

Alcohol and smoking are the largest preventable causes of disease, premature death and health inequalities. They are major contributors to local mortality and morbidity.

Below are some of the findings from the Public Health Profiles showing the mortality rates for alcohol related illness, local tobacco profiles and the rate of admissions for substance misuse across some of the boroughs in London.

**Figure 1 | Alcohol mortality rates 2012–2014**

Compared with benchmark: ■ Better ■ Similar ■ Worse ■ Not compared

Indicator	Period	England	London Region	Lambeth	Southwark	Lewisham	Wandsworth	Bexley	Greenwich	Bromley
1.01 – Months of life lost due to alcohol (Male)	2012–14	12	10	12.7	11.9	11	10.4	9	11.3	9.4
1.01 – Months of life lost due to alcohol (Female)	2012–14	5.6	4.4	4.2	5.2	4.7	4.2	4.5	4.6	5.2
2.01 – Alcohol-specific mortality (Persons)	2012–14	11.6	9	12.4	12.7	9.9	8.2	6.5	10.7	9.8
2.01 – Alcohol-specific mortality (Male)	2012–14	16.1	13.5	21.6	18.8	15.7	12.4	8.1	16.1	12.8
2.01 – Alcohol-specific mortality (Female)	2012–14	7.4	4.8	4	7.4	4.7	4.6	5.1	5.6	7.1
3.01 – Mortality from chronic liver disease (Persons)	2012–14	11.5	10	12.9	13.4	13.2	7.4	7.6	13.6	10
3.01 – Mortality from chronic liver disease (Male)	2012–14	15.2	14.2	21.4	18.7	21	10.6	8.9	20.6	12.2
3.01 – Mortality from chronic liver disease (Female)	2012–14	8	6.2	*	8.7	*	*	*	*	8
4.01 – Alcohol-related mortality (Persons)	2014	45.5	39	47	48.7	41.9	37.3	35.3	44.4	39.8
4.01 – Alcohol-related mortality (Male)	2014	65.4	56.6	75	65.8	70	58	50.6	63.9	56.1
4.01 – Alcohol-related mortality (Female)	2014	28.8	24.3	22.8	34.6	19.7	22.2	23.1	28.6	26.9

<http://fingertips.phe.org.uk/profile/local-alcohol-profiles/data#page/0/gid/1938132832/pat/6/par/E12000007/ati/102/are/E09000028>



**Figure 2 |** Local tobacco control profiles

Compared with benchmark: ■ Better ■ Similar ■ Worse ■ Not compared

Indicator	Period	England	London Region	Lambeth	Southwark	Lewisham	Wandsworth	Bexley	Greenwich	Bromley
Smoking Prevalence in adults – current smokers (IHS)	2014	18	17	18.1	16.5	20.6	14.4	16.6	17.3	14
Smoking prevalence in adults in routine and manual occupations – current smokers (IHS)	2014	28	25.3	23.4	23.4	19.5	36.7	27.1	29.4	16.3
Successful quitters at 4 weeks	2014/15	2829	3064	2977	2056	3303	3670	3040	5228	2453
Smoking status at time of delivery	2014/15	11.4*	4.8*	3.4	3.1	4.9	3.8	7.9	*	4.7
Smoking attributable mortality	2012–14	274.8	261.4	305.8	316.8	312.6		269.7	323.2	237.2
Smoking attributable hospital admissions	2014/15	1671	1517	1764	1782	1968	1670	1435	1650	1287

[www.tobaccoprofiles.info/tobacco-control#page/0/gid/1938132885/pat/6/par/E12000007/ati/102/are/E09000022](http://www.tobaccoprofiles.info/tobacco-control#page/0/gid/1938132885/pat/6/par/E12000007/ati/102/are/E09000022)

For smoking status at time of delivery, the difference in rates reflect the regional variations (and inequalities of smoking) in pregnancy.

\*No data available

Substance misuse admissions coded with a Substance misuse diagnosis – PHE data.

**Figure 3 |** Hospital admissions due to substance misuse 2012–2014

Compared with benchmark: ■ Lower ■ Similar ■ Higher ■ Not compared

Indicator	Period	England	London Region	Lambeth	Southwark	Lewisham	Wandsworth	Bexley	Greenwich	Bromley
Hospital admissions due to substance misuse (15–24 years), per 100,000	2012/13–14/15	88.8	70.3	81.6	64.5	102.3	70.2	123.1	100.6	

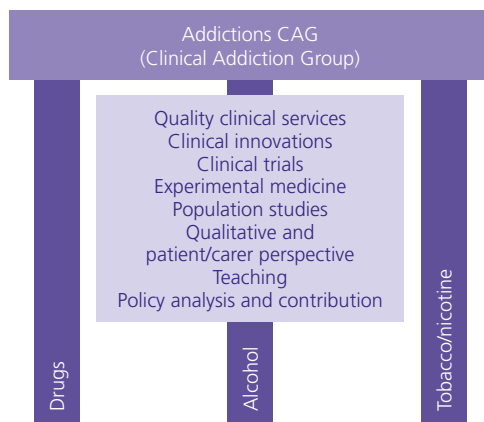
<http://fingertips.phe.org.uk/search/local%20drugs%20misuse%20profiles#page/0/gjd/1/pat/6/par/E1200007/ati/102/are/E09000028>

# Our strategy for the next five years

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## Our vision

We aim to provide a seamless integration of our tripartite mission, in order to inform, continuously improve and support delivery of innovation and excellence across all areas of academic research, education and training, and service delivery.

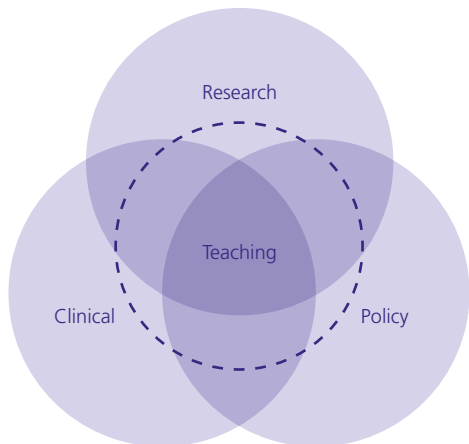


## Developing the five year strategic plan

Our five year strategy aims to:

- Build on current developments to deliver excellence through full integration of clinical, research and educational activities;
- be supported by an integrated management structure and single performance framework to inform business planning process and priorities;
- prioritise optimising services through developing local pathways and networks, partnership building, and leading and participating in effective and sustainable clinical services delivered within primary care and local communities;

- increase our engagement with acute services across King's Health Partners and continue to expand our specialist role and provision of services.



## Support the development and implementation of the King's Health Partners' Alcohol and Tobacco Strategies

We will:

- Scope current strategies, protocols, care pathways and practice in relation to alcohol misuse across King's Health Partners;

- consider current research, training, evidence and guidance on best practice in prevention and management of alcohol misuse to inform an alcohol strategy;
- develop an alcohol strategy to incorporate integrated care pathways, a comprehensive training programme for clinical staff in line with NICE guidelines, effective integrated information systems for monitoring and research, and a research strategy on alcohol;
- establish us as an international centre of excellence for integrated research, training and practice in the management and prevention of alcohol misuse;
- lead the Smoke Free initiative in SLaM and Denmark Hill site of KCL and support the Smoke Free initiative across the whole of KHP;
- lead training in SLaM and support training initiatives locally, nationally and internationally;



- support the implementation of NICE guidance on smoking cessation across all partner Trusts;
- develop a systematic approach to identifying opportunities for research and evaluation related to tobacco across KHP to build upon our growing portfolio of research in this area.

## Our research objectives

- Consolidate strength across the Addictions field: 'drugs' (Strang; Marsden; Neale; Gilchrist; Deluca), alcohol (Drummond; Deluca); tobacco (McNeill); gambling/behavioural.
- Further develop collaborative research across mind-body – alcohol and 'drugs' in A&E; tobacco and alcohol on acute wards; antenatal care; liver and viral treatment; cannabis, tobacco and psychosis; prison-release as opportunity; hospital discharge as opportunity.
- Develop new capacity for commercial trials activity to grow our reputation, (including the Clinical Research Facility at KCH) and establish joint working that generates new income.
- Flex scientific envelope – by moving into primary as well as secondary prevention and researching critical transitions in substance misuse.

## Our research outputs and the impact our research publications

The core of the Addictions research group is made up of 18 prominent researchers across the health partnership, from clinical leads to senior academics. Over the past 5 years (2011–2015) in KHP, this group has authored nearly 300 research articles. How does this measure up on the world scene?

A normalised measure of the research performance of an institution is its field weighted citation impact. A score of 1.00 is considered a world average, below this would indicate that this group of publications has been cited less than expected for that field, whilst above it would indicate that it has been cited more than expected.

The score for the Addictions group is 2.19\* indicating the current groups papers are cited considerably more than would be expected. This is reflected not only in the considerable citations (>4000) and online views (>8000) of its work over this time period, but the impact on informing both national and international clinical guidelines and practice. The Research in Focus sections outlined alongside each pathway provide a deeper insight into the work of each core group.

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\*Uses the Times Higher Education methodology for its 2015/16 university rankings, scaled to the research group by using the Elsevier database.

Scopus, interpreted using SciVal software. As such only journal articles, reviews and conference papers are used.

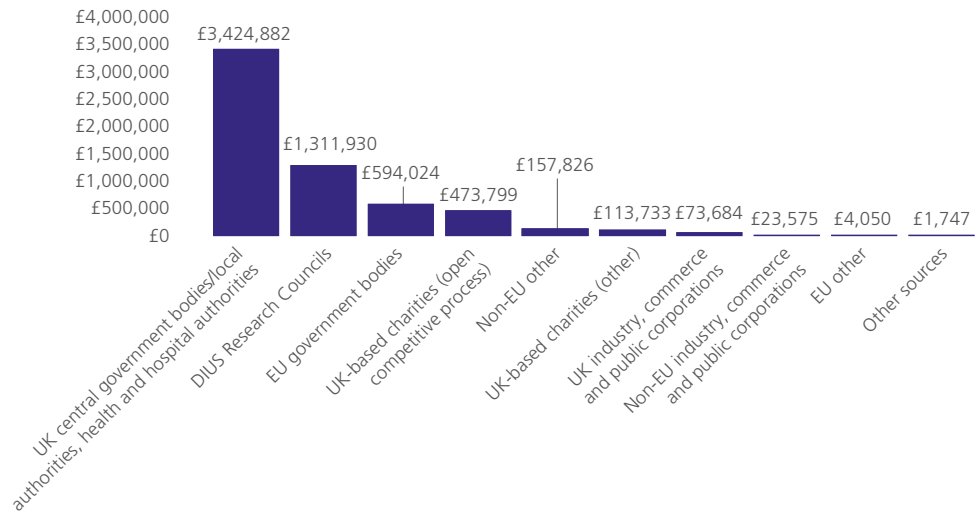
The scholarly output (number of publications) is a reflection of the articles completed whilst working in the partnership, excluding those authored externally. Due to the necessary time period required for calculations, the citation metrics and views can reflect time spent by researchers in other institutions, giving an indication of the group's research power.

**Figure 5 | Overall commercial income 2011 to 2015**

Sponsor	Total contract value (2012/13)
Martindale Pharma	£457,076
Reckitt Benckiser Pharmaceuticals	£967,035
<b>Grand total</b>	<b>£1,424,111</b>

## Research income

**Figure 4 | Overall research income through King's College London from 2011 to 2015**



## Our education and training objectives

As well as continuing to provide high quality specialist undergraduate and postgraduate training for nurses, psychologists and doctors we will:

- Develop and expand our successful MSc in addiction with specialist streams, with a restructure of staffing planned to support the continued involvement of clinicians;
- continue steady growth of our international programme of addiction studies (IPAS) and international collaborations;
- develop an optional module on alcohol and tobacco policy jointly with the UK Centre for Tobacco and Alcohol Studies (UKTAS);
- build on massive on-line open course (MOOC) and other distance learning options;
- develop our pilot Health Education South London (HESL) funded alcohol courses to be sustainable;
- scope certificate level staff training;
- CPD programme focused on priority areas for quality improvements.

## Our objectives for clinical service delivery

- Seek appropriate opportunities for growth with margin including international provision, training and education, occupational health provision and management consultancy in NHS, corporate and international markets.
- Responsive local services will continue to be at the heart of what we provide – defend current contracts, actively plan to win local areas.
- Develop SLaM evidence based addictions treatment models.
- Continue to develop strategic alliances with other Addictions providers in order to enhance our services and secure new business within London at lower cost.
- Maintain partnership with the Behavioural and Developmental Psychiatry (BDP) CAG in prison contracts in order to reduce operational overhead.
- Continue partnership building across KHP to implement alcohol strategy and develop alcohol care teams in KCH and SLaM.

# What are outcomes?

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## Patient experience

Collecting and analysing data about patients' experiences of healthcare is essential to achieving high quality care. Across King's Health Partners we are committed to using patient experience data to improve the quality of the care we provide. SLaM Uses PEDIC (Patient Experience Data Intelligence Centre) for systematic capturing of patient feedback:

PEDIC is an online data centre which provides a centralised and consistent approach for the purpose of patient experience and allows the Trust to coherently analyse and report on patient feedback.

The PEDIC devices are also able to explore and capture the qualitative experiences of service users either by enabling them to speak directly into the device or by inputting their comments through a keyboard.

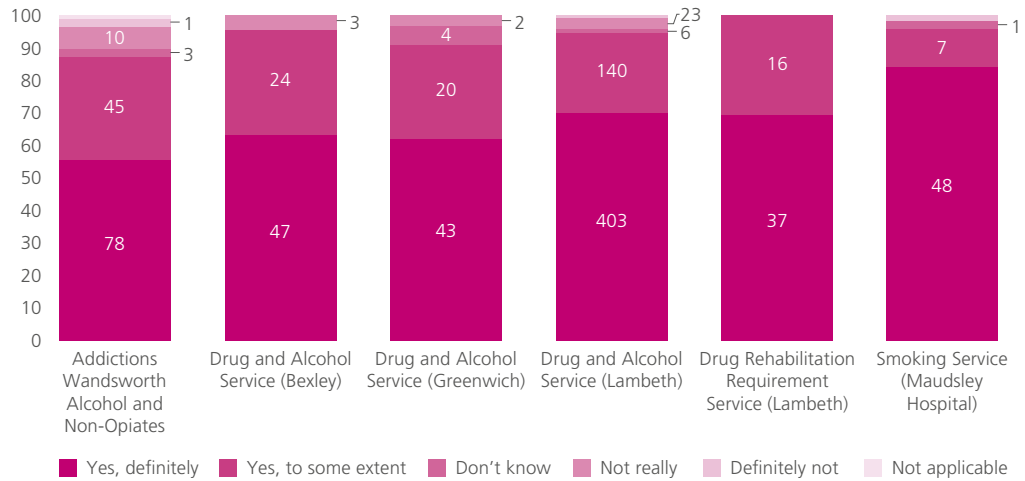
The Patient and Public Involvement team recommends that all services who engage in the PEDIC system devise their patient questionnaires in partnership with service users. In the addictions CAG PEDIC has been customised to ensure questionnaires are relevant to our patient care priorities

The patient experience questionnaires are collected by service type as demonstrated later in this book. The patient experience systems are currently being updated with the second edition of the outcome book showing patient experience in the new format.

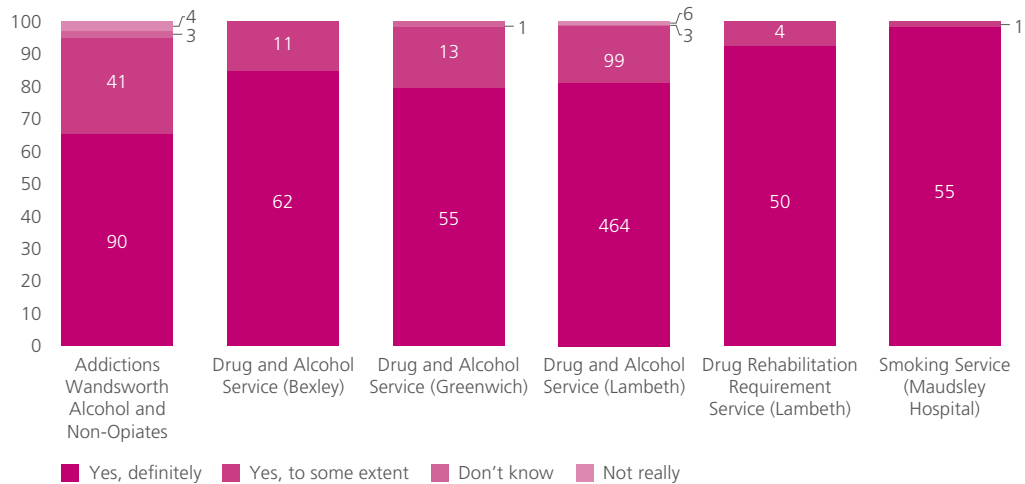
The following stack charts show the patient experience for all the services by PEDIC question outcomes as of September 2015. Questions where the response is poor the services produce action plans to ensure performance is improved.



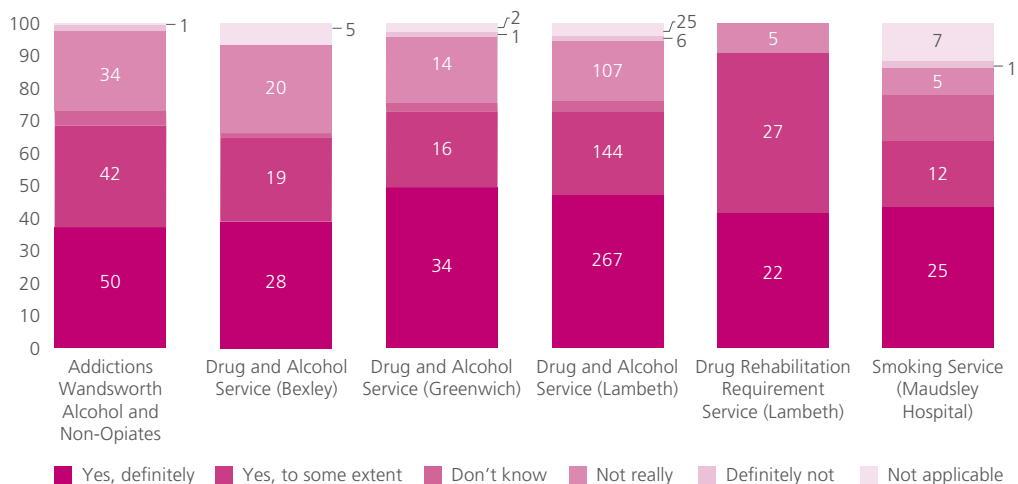
**Figure 6 |** Answers to PEDIC question 5 across all addictions services: Do you feel involved in your care?



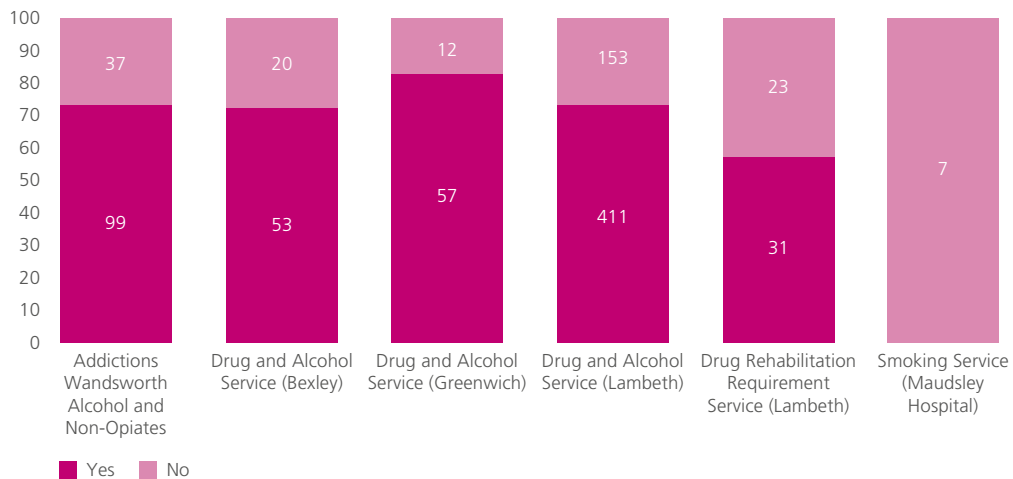
**Figure 7 |** Answers to PEDIC question 6 across all addictions services: Are staff kind and caring?



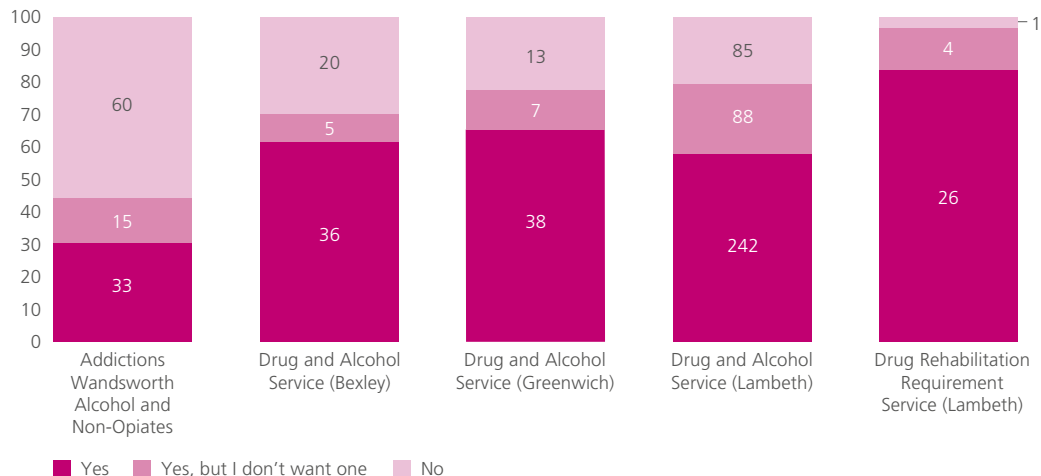
**Figure 8 |** Answers to PEDIC question 7 across all addictions services: Do you know how to make a complaint?



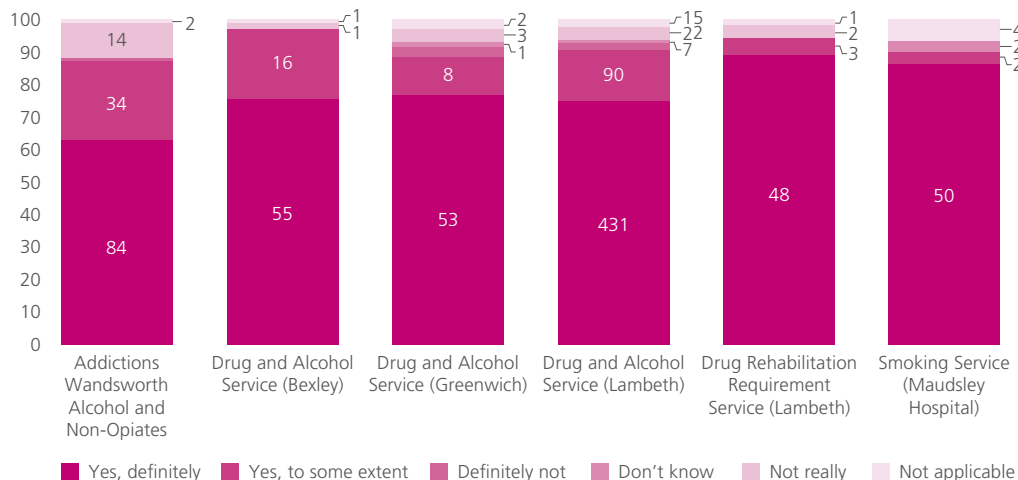
**Figure 9 |** Answers to PEDIC question 8 across all addictions services: Are you here because you have a problem with opiates?



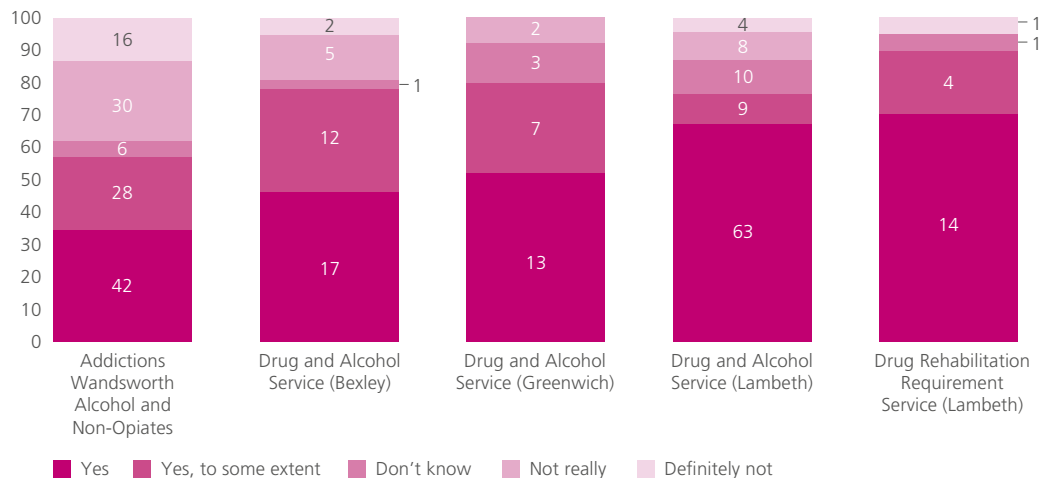
**Figure 10** | Answers to PEDIC question 9 across all addictions services: Have you been provided with overdose training and offered a Naloxone kit?



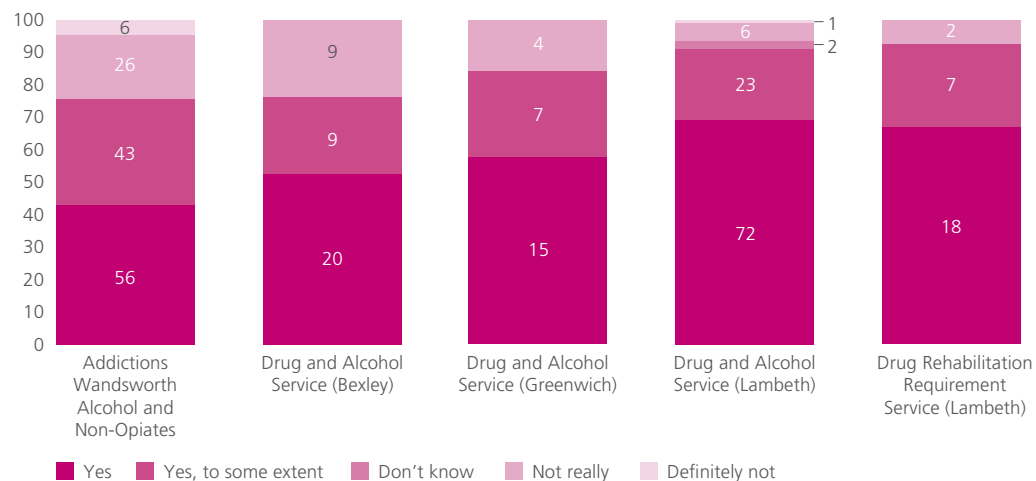
**Figure 11** | Answers to PEDIC question 10 across all addictions services: Do we treat you as an individual by considering your culture, spirituality, disability, gender, sexuality, age and ethnicity?



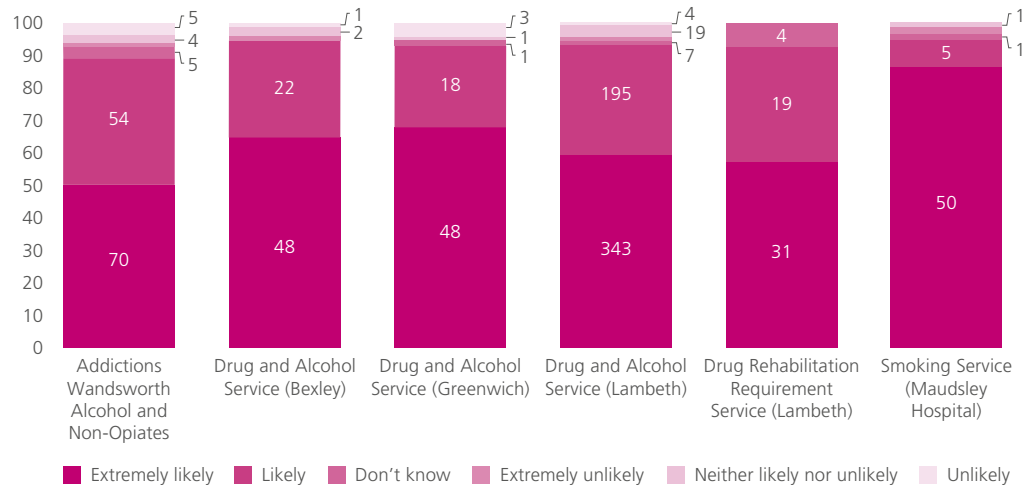
**Figure 12** | Answers to PEDIC question 11 across all addictions services: Have you been given written information about the benefits and side effects of the medication we prescribe?

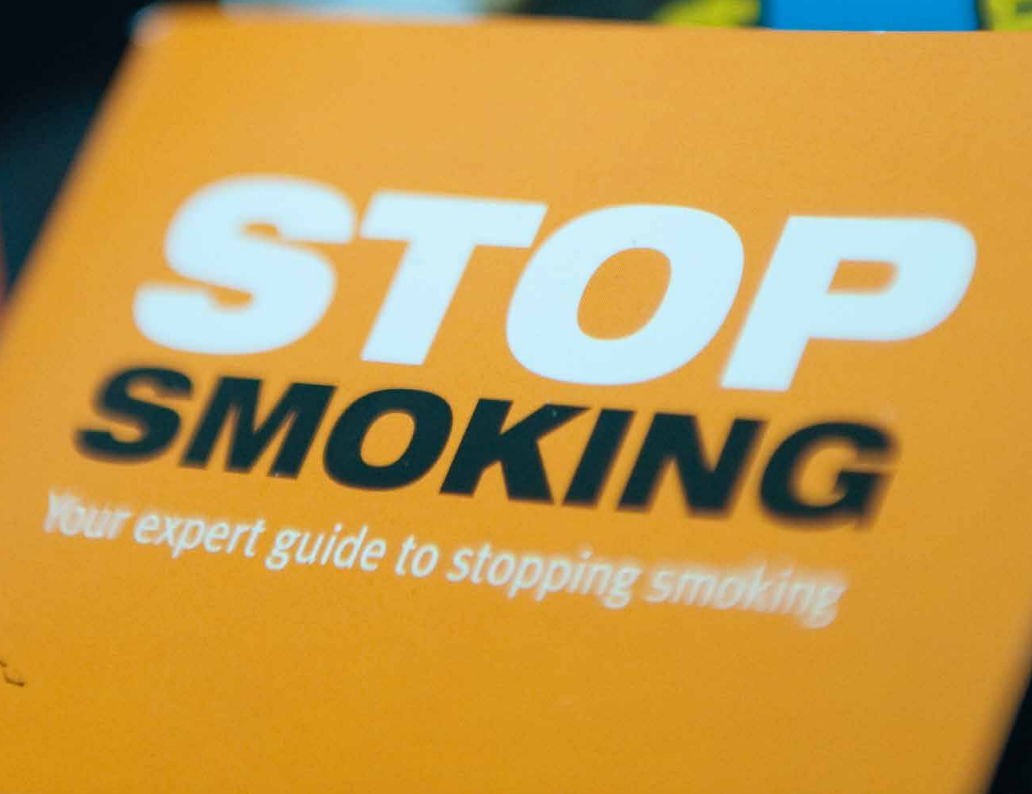


**Figure 13** | Answers to PEDIC question 12 across all addictions services: Have staff here talked with you about how you spend your day and how to do more useful and enjoyable activities eg education, volunteering?



**Figure 14** | Answers to PEDIC Family and Friends test question across all addictions services:  
Would you recommend this service to friends and family?





Tobacco and  
Nicotine

# About the tobacco and nicotine programme

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## Introduction

The Addictions CAG has a long history of clinical innovation, research and education in the area of tobacco, dating back to the 1970s when Professor Mike Russell and colleagues established the Addiction Research Unit. In October 2012 we rejuvenated our programme of work in this area with the appointment of Ann McNeill, Professor in Tobacco Addiction, who had worked at the Addiction Research Unit in the 1980s completing her PhD on the development of dependence on smoking.

Despite declines in smoking in the UK, smoking is still the largest single preventable cause of death and disease and health inequalities. A comprehensive tobacco control strategy has driven down smoking in England but consolidation of these strategies and new ones will be needed to drive rates down further. Smoking and other tobacco use is largely driven

by dependence on the drug, nicotine, which is contained in tobacco. Smoking cigarettes or roll-your-own tobacco is the most common form of tobacco use in the UK (around 10 million smokers), but other forms of tobacco are also smoked (such as water pipes or shisha) and a significant proportion of the South Asian population in the UK chew tobacco. Smoking is the most harmful form of tobacco and nicotine use. Most users wish to stop or reduce the harmfulness of their tobacco use.

Professor McNeill set up the Nicotine Research Group which focuses on understanding what international, national and local policies and interventions will: 1) help existing tobacco users to stop as soon as possible; 2) reduce the uptake of tobacco; and 3) reduce the harmfulness of nicotine use for those who wish to continue using it (for example by using other forms of non-combustible nicotine delivery).

## Demonstrating our tripartite mission

Addiction clinicians in the South London and Maudsley NHS Foundation Trust and The Nicotine Research Group in the Addictions Department, Institute of Psychiatry, Psychology and Neuroscience (IoPPN) work closely together to inform each other's work. As an example of this – the CAG led the implementation of a comprehensive smoke-free policy in SLaM, (on 1st October 2014), including the development of a new tobacco dependence treatment pathway and staff training pathway. We also played a key role in the development of the KHP Tobacco Strategy and recently led the implementation of a smoke-free strategy on the Denmark Hill campuses of King's College London.

### SLaM and IoPPN training event

The Nicotine Research Group in the Addictions Team has a wide array of research focusing on epidemiology, policy, treatment for disadvantaged smokers and education. We have contributed to White Papers on tobacco, National Institute for Clinical and Public Health Excellence, Department of Health, Public Health England, Action on Smoking and Health strategies and reports. We chair or are active members of various committees concerning tobacco, such as the Public Health England Implementation Board, Royal College of Physicians Tobacco Advisory Group, Society for Research on Nicotine and Tobacco (International and European

Chapter), the Tackling Illicit Tobacco for Better Health national roundtable and we meet regularly with a variety of stakeholders and policy-makers. We also play a leading role in the UK Centre for Tobacco and Alcohol Studies (UKCTAS) one of five UK Clinical Research Collaboration Partners (UKCRC)-funded Public Health Research Centres of Excellence, and a consortium of 13 universities (12 in the UK, one in New Zealand) working to reduce the harm to individuals and society caused by tobacco use. Ann McNeill is a Deputy Director of the centre and co-leads the teaching and training and harm reduction themes.

We lead on the development, delivery and evaluation of staff training for tobacco dependence treatment in local mental health settings. We also deliver a module of the MSc In Addiction Sciences Contemporary Advances in Evidence Based Policy, Practice, and the Alcohol module: Alcohol Problems, Policy and Practice, in conjunction with the UKCTAS.





## Our services and innovative models of care

### Tobacco dependence treatment service

Researchers and clinicians in the Addictions CAG have been at the heart of developing and evaluating treatments for tobacco dependence since the 1970's. The Maudsley Smoker's Clinic was established 40 years ago and is the longest running specialist smoker's clinic in the United Kingdom helping thousands of smokers to quit. Our treatment approach, now nationally and internationally known as the Maudsley Model, was identified as a model of good practice in the White Paper on Smoking (1998) and there are now approximately 150 specialist stop smoking clinics in the UK, all based on the Maudsley Model. The Smokers Clinic provides support for smokers living or working in Southwark. A combination of psychological support and medication (e.g. nicotine replacement therapy or varenicline) is the most effective way to stop smoking for good. If you have this support from a specialist stop smoking service, you are up to four times more likely to succeed than if you try to quit without help.

In 2014 we extended the provision of tobacco dependence treatment for smokers in SLaM and made the following key changes. The outcomes of these key changes will be reported in future publications of our outcomes.

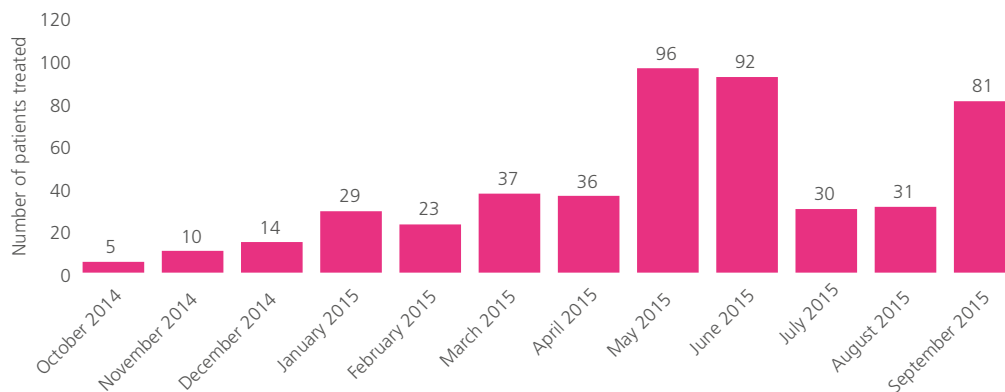
- 1. New smoke-free policy and treatment guidelines:** SLaM was the second mental health Trust to implement the NICE Guidelines for smoking cessation in secondary care (NICE, 2013). We developed the new SLaM Smoke-free Policy and Tobacco Dependence Treatment Pathway.
- 2. Electronic cigarette policy:** Electronic cigarettes (e-cigarettes) are a less harmful form of nicotine delivery and offer another choice for mental health patients who smoke to manage temporary abstinence from tobacco use or who want to make a quit attempt. SLaM has taken a pragmatic decision to support e-cigarette use within its hospital services. A policy outlining the safe use and management of e-cigarettes includes recommending that their use is part of a smoker's care plan, they cannot be used in communal places or during therapeutic activities. Risk assessments and management plans ensure that if required devices are charged by staff following the manufacturer's guidance.
- 3. New tobacco dependence treatment pathway:** We have developed a new Trust wide tobacco dependence treatment service. Four new posts have been created to support new hospital satellite services. For the first time in SLaM, there is a lead hospital tobacco dependence treatment advisor providing in-reach support to our 4 mental health hospital sites. The lead advisors provide specialist tobacco dependence treatment and advice to in-patient services and a bridging

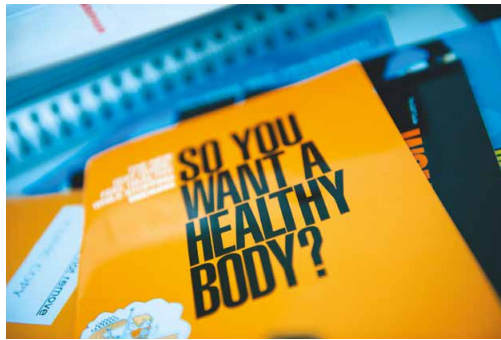
service between the ward and community specialist stop smoking services. We have created a staged approach to the new treatment pathway, supported by treatment algorithms, depending on the smoker's intention to stop and the point in the patient journey. We also offer support to staff who wish to stop smoking.

4. **Enhancement to electronic patient records and new electronic referral system:** With the support of the NIHR Biomedical Research Centre (SLaM and KCL), we have initiated the mandatory recording of smoking status and new smoking cessation referral system within the patient electronic health records. The mandatory recording has been in place since January 2014, a manual smoking cessation referral system was implemented on October 2014 and an electronic referral system implemented in September 2015.

5. **Improved access to NRT products:** When making a quit attempt or temporarily abstaining from smoking, smokers need prompt access to NRT. We worked with SLaM Pharmacy to add two new ways to access NRT during an inpatient admission. We took the lead role in writing a new Patient Group Direction for NRT, which enables qualified nurses to administer a combination of two NRT products without a doctor's prescription. We also secured agreement from Pharmacy to add a limited supply of NRT to the existing Trust Homely Remedies (Medicines Management) Policy. These two initiatives ensure that smokers can be offered NRT 24 hours a day without delay and without a doctor's prescription. This programme of work is also supported by NIHR CLAHRC South London tobacco project.

**Figure 15 |** Number of referrals for tobacco dependence support





## Research and innovation

### Smoking and substance abuse

Due to high smoking prevalence among those misusing other substances, we conducted a survey in 2013 to establish smoking behaviours and attitudes towards nicotine dependence treatment among clients and staff in substance abuse treatment settings. We surveyed 163 staff and 145 clients from seven local community and residential addiction services and found a high smoking prevalence in both clients (88%) and staff (45%); Despite 79% of clients who smoked expressing a desire to quit and 46% interested in receiving advice, only 15% had been offered support to stop smoking during their current treatment episode. Staff rated smoking treatment significantly less important than treatment of other substances and only 29% of staff thought it should be addressed early in a client's primary addiction treatment,

compared with 48% of clients. The findings of this study led to improvements in the provision of smoking cessation support in local community Drug and Alcohol services.

The current programme of research of The Nicotine Research Group in the Addictions Department, IoPPN focuses on policy, epidemiology, treatment, education and training.

### Understanding smoking behaviour

- **Longitudinal online survey of smokers and ex-smokers:** we designed a bespoke survey to assess smokers and ex-smokers dependence on tobacco, motivation to stop, urges to smoke, attempts to quit, and use of nicotine containing products, including electronic cigarettes. This is carried out by IPSOS MORI, England, annually funded mainly by CRUK.
- **Development of a tool to measure norms towards tobacco:** funded by the Department of Health and in collaboration with the University of Stirling and The Public Health Consortium, we have developed a survey tool to measure social norms around smoking, exposure to second-hand smoke and the tobacco industry.

## Smoking cessation with disadvantaged smokers

- **Cessation in smokers with mental health problems:** funded by a Cancer Research UK three-year fellowship award, we are using existing clinical datasets, undertaking surveys and piloting a relapse prevention intervention.
- **BEAT Psychosis:** South London Collaboration for Leadership in Applied Health Research and Care (CLAHRC): funded by the NHIR and in collaboration with the Health Services and Population Research Department, IoPPN, we are leading on the development, implementation and evaluation of a tobacco dependence treatment and training pathway for services users with psychosis in SLaM.
- **Contingency management to support smoking cessation in opioid-dependent smokers:** Incentivising people to change health behaviours is an effective intervention for many addictions, though relatively untested in smokers with a comorbid substance use. This PhD study is testing the feasibility of using such an intervention in a local Community Drug and Alcohol Service with people who use opiates and smoke tobacco.
- **Qualitative research with substance misuse workers:** in collaboration with the Florence Nightingale School of Nursing,

a PhD student is 1) the attitudes and behaviour of staff who smoke and work in local drug and alcohol services, 2) the experience of stopping smoking in people who misuse substances, 3) a new intervention for cannabis and tobacco smokers.

## Policy

- **International Tobacco Control Policy Evaluation Project:** this is the first international research programme for systematically evaluating the population effect of key policies of the WHO Framework Convention on Tobacco Control. The project conducts long term cohort surveys in over 20 countries and we lead the UK project.
- **Adult Tobacco Policy Survey:** funded by Cancer Research UK and The British Heart Foundation and in collaboration with The University of Stirling, this is a long term web based survey exploring the impact of tobacco control policies (e.g. standardised packaging) on smokers and ex-smokers.
- **Understanding the impact of tobacco tax increases and tobacco industry pricing on smoking behaviours and inequalities:** funded by the NHIR and in partnership with Bath University, we are using a number of datasets to evaluate the increase in tobacco taxation and the price of tobacco on smoking behaviour.

- **Evaluation of the implementation of a comprehensive smoke-free policy in The South London and Maudsley NHS Foundation Trust:** in collaboration with CLAHRC South London we have led on the development and implementation of a comprehensive smoke-free policy in the local mental health Trust. We are undertaking a series of audits of the direct effects (e.g. uptake and outcome of tobacco dependence treatment) and indirect effects (impact on violence, absconding and fires) of the policy.



## Electronic cigarettes

- **Report on current evidence on electronic cigarettes:** commissioned by Public Health England, this is an update of the evidence on e-cigarettes, including prevalence, knowledge and attitudes towards e-cigarettes, impact on tobacco smoking behaviour and safety issues.
- **A qualitative study of adults' natural history of e-cigarette product use:** we have interviewed 30 current and former tobacco smokers plus current and former e-cigarettes users to explore the natural progression of e-cigarette use.
- **Secondary analysis of survey data:** funded by Cancer Research UK, we analysed several data sets to explore attitudes and use of e-cigarettes and their impact on smoking and nicotine use in the UK.
- **Acceptability, Patterns of Use and Safety of Electronic Cigarette in People with Mental Illness (APUS-eCig):** funded by The Maudsley charity and in collaboration with the Psychosis CAG we have evaluated the impact of e-cigarette use on smoking in people with psychosis.

## Prevention

- **Craving and plain packaging:** we led a Cochrane review of the effects of plain packaging on smoking behaviour.

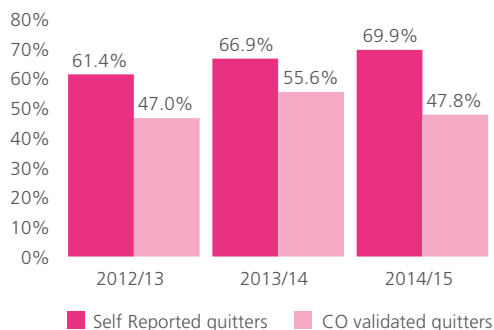
## Clinical outcomes

### Tobacco Dependence Treatment Service

#### Maudsley Smoker's Clinic

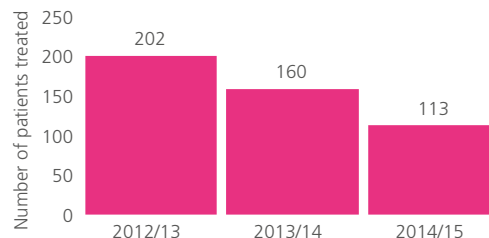
Over the past three years (April 2012–March 2015) the Maudsley Smoker's Clinic has treated 459 smokers of whom 310 (62%) report having quit 4 weeks after their quit date. This compares to a national average quit rate of 51% in the similar time period (Figure 16). The success rate of unassisted quitting is considerably lower, at 1–2% at one year.

**Figure 16 |** Percentage of successful quitters



There has been a **national** decline in the number of smokers who access specialist stop smoking services (38% fewer smokers between April 2012 and March 2015), although self-report quit rates have remained at around 51% and CO validated rates at 35%. This is similar to our local data. We have seen 34% fewer smokers access the Maudsley Smoker's Clinic between April 2012 and March 2015, however CO validated rates remain stable at 47% and self-report quit rates have improved from 61.4% in 2012/13 to 70% in 2014/15 (Figure 17).

**Figure 17 |** Number of patients treated at the Maudsley Hospital Smokers Clinic



## Research in focus

### Randomized trial of nicotine replacement therapy (NRT), bupropion and NRT plus bupropion for smoking cessation: Effectiveness in clinical practice

**Addiction, 2013**

*Stapleton, J., West, R., Hajek, P., Wheeler, J., Vangeli, E., Abdi, Z., O'Gara, C., Mcrobbie, H., Humphrey, K., Ali, R., Strang, J., Sutherland, G.*

**Background and aims:** Bupropion was introduced for smoking cessation following a pivotal trial showing that it gave improved efficacy over the nicotine patch and also suggesting combination treatment was beneficial. We tested in clinical practice for an effectiveness difference between bupropion and nicotine replacement therapy (NRT), whether the combination improves effectiveness and whether either treatment might be more beneficial for certain subgroups of smokers.

**Design:** Open-label randomized controlled trial with 6-month follow-up.

**Setting:** Four UK National Health Service (NHS) smoking cessation clinics.

**Participants:** Smokers (n=1,071) received seven weekly behavioural support sessions and were randomized to an NRT product of their choice (n=418), bupropion (n=409) or NRT plus bupropion (n=244).

**Measures:** The primary outcome was self-reported cessation over 6 months, with biochemical verification at 1 and 6 months. Also measured were baseline demographics, health history, smoking characteristics and unwanted events during treatment.

**Findings:** Abstinence rates for bupropion (27.9%) and NRT (24.2%) were not significantly different (odds ratio=1.21, 95% confidence interval =0.883–1.67), and the combination rate (24.2%) was similar to that for either treatment alone. There was some evidence that the relative effectiveness of bupropion and NRT differed according to depression ( $\chi^2=2.86$ ,  $P=0.091$ ), with bupropion appearing more beneficial than NRT in those with a history of depression (29.8 versus 18.5%). Several unwanted symptoms were more common with bupropion.

**Conclusion:** There is no difference in smoking cessation effectiveness among bupropion, NRT and their combination when used with behavioural support in clinical practice. There is some evidence that bupropion is more beneficial than NRT for smokers with a history of depression.

## E-cigarettes: Prevalence and attitudes in Great Britain

### Nicotine and Tobacco Research, 2013

*Dockrell, M., Morrison, R., Bauld, L., McNeill, A.*

**Introduction:** Electronic cigarettes (e-cigarettes) are a means of recreational nicotine use that can potentially eliminate the need to smoke tobacco. Little is known about the prevalence of use or smokers' attitudes toward e-cigarettes. This study describes the use of and attitudes toward e-cigarettes in Britain.

**Methods:** Respondents from three surveys were recruited from a panel of adults in Britain. Preliminary online and face-to-face qualitative research informed the development of a smokers' survey (486 smokers who had used e-cigarettes and 894 smokers who had not). Representative samples of adults in Britain were then constructed from the panel for population surveys in 2010 (12,597 adults, including 2,297 smokers) and 2012 (12,432 adults, including 2,093 smokers), generating estimates of the prevalence of e-cigarette use and trial in Great Britain.

**Results:** Awareness, trial, and current use increased between 2010 and 2012; for example, current use more than doubled from 2.7% of smokers in 2010 to 6.7% in 2012. The proportion of ever-users currently using e-cigarettes was around one-third in both years. In 2012, 1.1%

of ex-smokers reported current e-cigarette use, and a further 2.7% reported past use. Approximately 0.5% of never-smokers reported having tried e-cigarettes.

**Conclusions:** While we found evidence supporting the view that e-cigarette use may be a bridge to quitting, we found very little evidence of e-cigarette use among adults who had never smoked. British smokers would benefit from information about the effective use, risks, and benefits of e-cigarettes, as this might enable the use of e-cigarettes to improve public health.

## Prevalence and characteristics of e-cigarette users in Great Britain: Findings from a general population survey of smokers

### Addictive Behaviours, 2014

*Brown, J., West, R., Beard, E., Michie, S., Shahab, L., McNeill, A.*

**Background:** E-cigarettes may be effective smoking cessation aids and their use by smokers has been growing rapidly. It is important to observe and assess natural patterns in the use of e-cigarettes whilst experimental data accumulates. This paper reports the prevalence of e-cigarette awareness, beliefs and usage, including brand choice, and characterises the socio-demographic and smoking profiles associated with current use, among the general population of smokers and recent ex-smokers.



**Methods:** Data were obtained from 3,538 current and 579 recent ex-smokers in a cross-sectional online survey of a national sample of smokers in Great Britain in November and December 2012. Differences between current and recent ex-smokers in the prevalence of e-cigarette awareness, beliefs and usage were examined and the socio-demographic and smoking profiles associated with current use of e-cigarettes was assessed in a series of simple and multiple logistic regressions.

**Results:** Ninety-three percent of current and recent ex-smokers ( $n = 3,841$ ) were aware of e-cigarettes. Approximately a fifth ( $n = 884$ ) were currently using e-cigarettes, whilst just over a third ( $n = 1,507$ ) had ever used them. Sixty-seven percent of the sample ( $n = 2,758$ ) believed e-cigarettes to be less harmful than cigarettes; however, almost a quarter ( $n = 994$ ) remained unsure. Among both current and recent ex-smokers, the most popular reasons for using were health, cutting down and quitting (each  $> 80\%$ ) and 38% used the brand 'E-lites'. Among current smokers who were aware of but had never used e-cigarettes, approximately half ( $n = 1,040$ ) were interested in using them in the future. Among current smokers, their use was associated with higher socio-economic status (OR = 1.48, 95%CI = 1.25–1.75), smoking more cigarettes (OR = 1.02, 95%CI = 1.01–1.03) and having a past-year quit attempt (OR = 2.82, 95%CI. = 2.38–3.34).

**Conclusions:** There is a near universal awareness of e-cigarettes and their use appears to be common among smokers in Great

Britain although a quarter of all smokers are unsure as to whether e-cigarettes are less harmful than cigarettes. E-lites – a brand that delivers a low dose of nicotine – is the most popular. E-cigarette users appear to have higher socio-economic status, to smoke more cigarettes per day and to have attempted to quit in the past year.

## The delivery of smoking cessation interventions to primary care patients with mental health problems

### Addictions, 2013

*Szatkowski, L., Mcneill, A.*

**Aims:** To quantify the extent to which smokers with indicators of poor mental health receive smoking cessation support in primary care consultations compared with those without.

**Design:** Cross-sectional study within a database of electronic primary care medical records.

**Setting:** A total of 495 general practices in the United Kingdom contributing data to The Health Improvement Network (THIN) database.

**Participants:** A total of 2,493,085 patients aged 16+ registered with a THIN practice for the year from 1 July 2009 to 30 June 2010.

**Measurements:** The proportion of patients with a clinical diagnostic Read code or British National Formulary (BNF) drug code indicating a mental health diagnosis or psychoactive medication prescription, respectively, who smoke and who have cessation advice or a smoking cessation medication prescription recorded during consultations within the 1-year study period.

**Findings:** 50.6% of 32,154 smokers [95% confidence interval (CI): 50.0–51.2] with a mental health diagnosis and 49.3% (95% CI: 49.0–49.7) of 96,285 smokers prescribed a psychoactive medication had a record of cessation advice, higher than the prevalence of advice recording in smokers without these indicators (33.4%, 95% CI: 33.3–33.6). Similarly, smoking cessation medication prescribing was higher: 11.2% (95% CI: 10.8–11.6) of smokers with a mental health diagnosis and 11.0% (95% CI: 10.8–11.2) of smokers prescribed psychoactive medication received a prescription, compared with 6.73% of smokers without these indicators (95% CI: 6.65–6.81). Smoking cessation support was offered in a lower proportion of consultations for smokers with indicators of poor mental health than for those without. Advice was recorded in 7.9% of consultations with smokers with a mental health diagnosis, 8.2% of consultations with smokers prescribed psychoactive medication and 12.3% of consultations with smokers without these indicators; comparable figures for prescribing of cessation medication were 2.9%, 3.2% and 4.4%, respectively.

**Conclusions:** Approximately half of smokers with indicators of poor mental health receive

advice to quit during primary care consultations in the United Kingdom, and one in 10 receive a cessation medication. Interventions are lower per consultation for smokers with mental health indicators compared with smokers without mental health indicators.

## REF Impact Statements

Although a nascent group, the National Research Group (NRG) has already achieved impact for its research.

### Electronic cigarettes

The Public Health England report published in 2015 received widespread media coverage and has been used in policy debates. Two examples illustrate this. Prime Minister David Cameron referred to the report in Prime Ministers Question Time (16/12/2015) and the Greater Glasgow Health Board utilised the report in the development of its smoke-free policy.

### Standardised tobacco packaging legislation

Legislation to introduce standardised packaging for tobacco was passed in the UK parliament in the spring of 2015 and implemented from May 2016. The NRG was involved in the Department of Health funded Public Health Research Consortium systematic review

of standardised packaging which underpinned a public consultation on the issue. Oral evidence was also provided to Sir Cyril Chantler, a leading paediatrician, who was asked to assess the evidence in 2014. His report identified the review as 'the most comprehensive evidence to date' and he supported the introduction of standardised packaging. A report led by NRG researchers was also used in the parliamentary debate on standardised packaging.

## Science in politics

### **Research report quoted by Baroness Tyler during the standardised packaging debate in the UK House of Lords on 11 March 2015.**

The British House of Commons voted in favor of tobacco plain packaging and the regulations were approved on 16 March and took effect on 20 May 2016.



## Smoke-free NHS secondary care progress

NRG members were involved in NICE programme development groups producing guidance on tobacco harm reduction (PH45) and smoking cessation in secondary care (PH48). SLaM has followed PH48 guidance in going smoke-free, the second trust in the country to do so. Members of the NRG have been involved in many policy meetings on this guidance and supported other trusts to go smoke-free. We have also supported Public Health England's videos, conferences and guidance to encourage mental health trusts to introduce smoke-free policies and treatment

## Smoke-free legislation in cars

Legislation prohibiting smoking in cars carrying children in England and Wales came into force October 2015. Ann McNeill contributed to the Royal College of Physicians' report on passive smoking and children in 2010 and wrote a report for the Department of Health on the implementation of smoking in cars legislation around the world (in all countries that had already implemented similar policies) and this was used in both the Westminster and Scottish parliaments to inform relevant bills.



Drugs

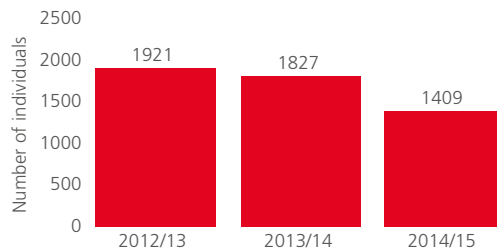
# About the drug programme

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## Introduction

We deliver drug, alcohol and smoking cessation services in the community through GP surgeries, outpatient teams and specialist support clinics. Substance misuse services are provided for people living in Lambeth, Bexley, Greenwich and Wandsworth and we also provide specialist national services for adults.

**Figure 18** | Showing the number of individuals that are starting new treatment



Our portfolio includes the National Addiction Centre (NAC), a leading addictions research centre representing a network of clinicians, researchers and clinical teachers who have

a shared commitment to excellence in addiction prevention and treatment work. We also have a substance misuse liaison team based at King's College Hospital.

## Demonstrating our tripartite mission

Special supervised heroin-prescribing clinic for entrenched heroin addicts previously considered untreatable

Our seminal **Randomised Injectable Opiate Treatment Trial (RIOTT)** of this high-cost, intensive intervention established the feasibility of working in this way with major improvement for longstanding, entrenched heroin addicts.

The trial results further confirm the extraordinary achievements of some of these most severely-afflicted patients, many of whom have continued to progress beyond the formal research trial period.

Results after 26 weeks:

- 80% of patients remained in assigned treatment
- 88% of patients were on supervised injectable heroin
- 81% of patients were on supervised injectable methadone
- 69% of patients were on optimised oral methadone.

Proportions of patients achieving 50 per cent or more weekly negative samples for street heroin between weeks 13–26 were highest in the injectable heroin group (66 per cent) followed by injectable methadone (30 per cent) and oral methadone (19 per cent).

The measure of improvement, the pre-selected primary outcome, was that, through months 4–6, at least 50 per cent of randomly collected urines tested negative for street heroin (from weekly random urine analysis). A similar greater benefit of the supervised heroin treatment was seen, compared with the other two treatments.

The clinic continued in a pilot phase for a further three years with the SLaM staff supporting clinics in Brighton and Darlington.

The results of this trial have already been incorporated into today's policy and practice from the Department of Health, and we are helping shape best models for future delivery elsewhere.

## Sexual health specialist clinic in a community drug service for women and men

An innovative partnership between sexual health at GSTT and SLaM addictions set up a partnership clinic. This clinic supports community drugs services and offers screening and follow up for sexually transmitted infections, emergency contraception, contraception advice (including long acting reversible methods), pregnancy testing, and additional training to all staff to assess sexual health.

## Identification and improved management of respiratory disease

### Lung Health in Addictions Services

*Project Leads: Dr Caroline Jolley (KCH) and Dr Mike Kelleher (SLaM)*

### Background

Although smoking-related respiratory disease contributes to the excess mortality in drug and alcohol addiction, screening for lung disease is not routinely offered in community drug and alcohol treatment services (CDATs). To address this unmet need, we established a pilot weekly drop-in "Lung Health Clinic" in Lorraine Hewitt House CDAT, as a collaborative project between Respiratory Medicine (King's College Hospital) and Addictions (SLaM). This project has been adopted by King's Improvement Science (2014) and benefits from an active Service User group (Aurora Project, Lambeth).

### Aims

- To improve recognition and documentation of respiratory ill-health in clients attending community drug and alcohol services;
- To improve uptake and success of smoking cessation services;

- To achieve parity of access to respiratory healthcare within Addictions Services.

### The Clinic

Assessments include handheld spirometry (lung function) and blood oxygen levels using pulse oximetry (SpO<sub>2</sub> %). We record symptoms of lung disease including breathlessness and chronic cough, and record cigarette smoking status and inhaled/smoked drug use.

### Outcomes

112 clients (88 male, mean (SD) age 46(9) years) attended Jan–Dec 2015, the majority being current or previous users of heroin, crack cocaine and cannabis. 81% were current cigarette smokers. Almost two-thirds of clients reported chronic cough, and 20% reported significant breathlessness during everyday activities. Lung function and clinical history were consistent with COPD in 36% of clients seen, and 13% had low blood oxygen levels (SpO<sub>2</sub> %  $\leq$  95%).

### Conclusions and future work

There is a significant unmet burden of undiagnosed chronic lung disease, and respiratory symptoms, in our local CDAT. This project has also highlighted the need to improve uptake of smoking cessation services tailored to the complex needs of CDAT clients. An economic model of expected gain in life expectancy and Quality Adjusted Life Expectancy (QALYs) from quitting is in development.

## Our services and innovative models of care

All our services operate as partnerships with the voluntary sector using different models depending on the needs of the local community and the local authority commissioners. We provide services lead by consultant psychiatrists and in most cases consultant psychologists. Our services provide evidence based interventions, both pharmacological and psychological which are compliant with national guidelines. We have a model of service provision, based on clinical pathways which we adapt according to local need and circumstances.

### Lambeth Drug and Alcohol Services

The services for the residents of Lambeth are mainly provided from their base in Lorraine Hewitt House. The service provides a full range of evidence based treatments for all types of substance misusers. Most referrals are self referrals or come via the criminal justice system. All those presenting are fully assessed and offered a full range of interventions including needle exchange and hepatitis screening and vaccination. Throughout their care service users are assessed for mental health problems and either offered evidence based treatments in house, referred to primary care or referred on to mental health services in SLaM.

Heroin users are treated in the opiate pathway and offered immediate assessment and opiate substitution treatment, usually methadone or buprenorphine. Then, mainly through a keyworker, they are provided with a series of interventions designed to promote engagement in the service including recovery planning and goal setting and a focus on preventing relapse. Those who have problems engaging are offered motivational interventions and contingency management. As service users move toward recovery they are offered support engaging with mutual aid (Narcotics Anonymous and SMART recovery) and support with housing and education and training.

Patients in the alcohol pathway are supported through detoxification in the community or as inpatients. They are prepared for detoxification by their key workers using individual and group work to ensure the best possible outcome. Many also require longer term rehabilitation which can be provided following assessment.



A growing group of users are those using "party drugs" who are seen at a weekly clinic which caters for their needs. Many



of them are from the LGBT community and experience multiple barriers attending other generic services. This clinic works closely with sexual health services where this client group often present themselves.

Lambeth services provide support for almost all GPs in Lambeth so they can manage heroin and alcohol users in their practices. This has enabled Lambeth to look after high volumes of substance misusers close to their local communities. The service is popular with local GPs.

The Harbour project in Brixton provide a group programme and other forms of psychological support.

Lambeth provides and hosts a range of innovative services including the lung health and sexual health project.

Lambeth services are a consortium of many providers, led by SLaM. Our largest partners are Blenheim and Addaction. The service was quoted as an example of best practice in the CMO annual report 2014.

## Wandsworth Community Drug and Alcohol Services (W-CDAS)

The services for the residents of Wandsworth are provided from premises in St Johns Hill. The service provides a full range of evidence based treatments for all types of substance misusers. Most referrals are self referrals or come via the

criminal justice system. All those presenting are fully assessed and offered a full range of interventions including hepatitis screening and vaccination. Throughout their care service users are assessed for mental health problems and either offered evidence based treatments in house, referred to primary care or referred on to mental health services at South West London and St Georges.

Heroin users are treated in the opiate pathway and offered immediate assessment and opiate substitution treatment, usually methadone or buprenorphine. Then, mainly through a keyworker, they are provided with a series of interventions designed to promote engagement in the service including recovery planning and goal setting and a focus on preventing relapse. Those who have problems engaging are offered motivational interventions. As service users move toward recovery they are offered support engaging with mutual aid (Narcotics Anonymous and SMART recovery) and support with housing an education and training.

Patients in the alcohol pathway are supported through detoxification in the community or as inpatients. They are prepared for detoxification by their key workers using individual and group work to ensure the best possible outcome. Many also require longer term rehabilitation which can be provided following assessment.

A growing group of users are those using "party drugs" who are seen at a weekly clinic "Chems" which caters for their needs. Many of them are from the LGBT community and

experience multiple barriers attending other generic services. This clinic works closely with sexual health services where this client group often present themselves.

Wandsworth services provide support for GPs in the borough so they can manage heroin and alcohol users in their practices. In Wandsworth the innovative primary care model to manage alcohol users "Fresh Start", started by a Wandsworth GP is highly popular with GPs.

## Beresford project

This project, based in Woolwich provides specialist services for the residents of Greenwich with alcohol and drug problems. We work in partnership with Change, Grow, Live (CGL). In Greenwich all new patients are first assessed by CGL then referred to us if according to locally defined criteria they are complex and require more intensive and skilled input. The service provides a comprehensive service for opiate users including a full range of opiate substitution interventions and psychosocial interventions. This includes physical health interventions and those for dual diagnosis. We also work closely with Oxleas NHS Foundation Trust for individuals who need the input of a community mental health team.

Alcohol users with complex physical and mental health needs are also seen at the project when they cannot be seen in primary care. They work with social care staff to ensure that those who need it are referred for inpatient detoxification and rehabilitation. The staff

at the Beresford work closely with GPs in the borough and have recently undertaken a project with them, examining benzodiazepine prescribing in the area.

The project also sees individuals who have problems with "party drugs" and need psychological interventions to help them reduce their use. Many of these individuals also need interventions for mental health problems.

## Signpost

Signpost, based in Erith provides services for the residents of Bexley. The service provides a full range of interventions for drug and alcohol users in the Borough. The service works in partnership with Blenheim who provide recovery and group interventions for service users who do not need intensive support either because their problems are less severe or because they are at the end of their episode of treatment.

Service users can refer themselves to Signpost and they then receive a comprehensive assessment of their needs. Alcohol users are provided with detoxification either in the community or after referral to inpatients. The patient will have a keyworker who will provide a range of physical interventions such as parenteral vitamins to prevent brain damage and a range of evidence based psychological interventions. The service works with alcohol users who do not want to stop drinking, intervening to reduce the harm from alcohol and also those with complex dual diagnosis issues.

Drug users are provided with physical interventions for hepatitis B and C. They are offered opiate substitution and a full range of psychosocial interventions aimed initially at encouraging them to engage in treatment, then to stabilise their drug use and finally to achieve full recovery when they are ready to do so. Like all our services Signpost sees

individuals using a range of substances including more recently an increase in those using prescription and over the counter drugs.

The service works with local GPs to provide services which have a primary care focus. Service users at Signpost achieve good outcomes and the service is valued by their community.

## Signpost Service – Providers of addiction services for the residents of Bexley



## Specialist outpatients

SLaM addictions consultants are experts in their field. The service sees a range of outpatient with complex problems when their local areas require a specialist assessment or period of treatment. This model enabled us to be the first service to develop interventions for GBL/GHB drug users when only small numbers were needing highly specialist input. A SLaM addiction consultant works in the practitioner health programme (PHP) and also provides clinical services for the Civil Aviation Authority (CAA).

## Liaison

SLaM addictions employs and supervises the King's College Hospital liaison nurse role, described in full under the alcohol pathway. We work closely with the Guy's & St Thomas' Trust alcohol care team and provide some supervision.

We are developing liaison services as part of implementing the KHP alcohol strategy. Our assertive outreach service is described in the alcohol section (page 71).

We are providing an enhanced liaison service for a local voluntary sector service which carries out inpatient detoxification and stabilisation for alcohol and drug users. SLaM medical and nursing staff are supporting Equinox staff and a local GP practice to provide interventions safely to an increasing complex treatment population.

## Needle Exchange Service (Bexley, Greenwich, Lambeth and Southwark)

South London and Maudsley NHS Foundation Trust (SLaM) Needle and Syringe Exchange Scheme provides injecting drug users access to sterile needles, syringes and other equipment and the safe disposal of used needles and syringes.

The service promotes health protection for intravenous drug users and reduces the risks of passing on infections to others. However, needle exchange is not just for people who inject heroin, crack or amphetamine. The service is also for those who use or are about to start using

- Steroids or other performance or image enhancing drugs (PIEDs)
- Psychoactive compounds, chemicals, plants or medicines
- Methamphetamine, ketamine or other novel psychoactive substances



Project based needle exchange staff provide advice and information on issues related to these substances. The SLAM Needle Exchange Scheme is a leading specialist provider of free hypodermic syringes, needles and other equipment for non-medical injections including licit and illicit substances.

Harm reduction is our primary, frontline response to reducing the potential harms associated with active drug use, particularly injecting drug use, including: blood borne viruses, overdose, bacterial infections, etc.

Harm reduction services such as needle and syringe exchanges play a part in referring people to appropriate drug treatment programmes and linking them with other health and social services.

One of the main reasons why harm reduction services are so effective in supporting people in this way is due to the core principles that sit at the very heart of the concept.

These include:

- It meets people where they are, not where we might like them to be;
- It is tailored to the needs of the individual;
- It is non-judgmental in its approach.

## Addictions Art Projects

The project at Lorraine Hewitt House accommodates service users in different stages of their treatment. This session takes place within a controlled clinical setting and works closely within the multidisciplinary team. The session is made to fit the individual needs and the relationship of these individuals within the group at any given time.



Service users can graduate to the Marina House after hours art studio which is used as an art space for settled service users moving on in their recovery. There is a group of regulars, as well as a committed volunteer. This works in different ways, as a place to engage in art on a weekly basis, as well as a platform for further projects within the community. Individuals in this group are encouraged to be responsible for the running of this session, and with time and support it changes the staff-client relationship, from support to partnership.



Addictions Art has exhibited at Tate Modern and other art events. Exhibiting work is an important part of the achievement that service users gain from producing art.



Fragment of a Life Brixton Village February 2010



Flight, Tate Modern 2015

## Research and innovation

### The Addiction Recovery Clinic (ARC)

This trial is a randomised controlled trial of personalised psychological interventions for patients enrolled in opioid agonist medication treatment who are not deriving clinical benefit (continued heroin or cocaine use). The ARC Trial is led by Professor John Marsden and Dr Luke Mitcheson at Lorraine Hewitt House and represents a partnership of clinical practitioners and researchers to assess the impact of this novel approach to personalising NHS care in the addictions field.

We have compiled a set of psychological change methods from empirically supported motivational, cognitive, behavioural, family and social network-based therapies. With this psychological 'toolkit', we work collaboratively with the patient over the course of treatment, selecting methods that are best suited to their individual needs, preferences and social resources. One of the core goals is to help the patient attain cognitive control over urges to use heroin and cocaine. Our assessment procedure includes measures of impulsiveness and craving (Barratt Impulsiveness Scale; a version of the Minnesota Cocaine Craving Scale, and also cognitive functioning (Montreal Cognitive Assessment; MoCA).

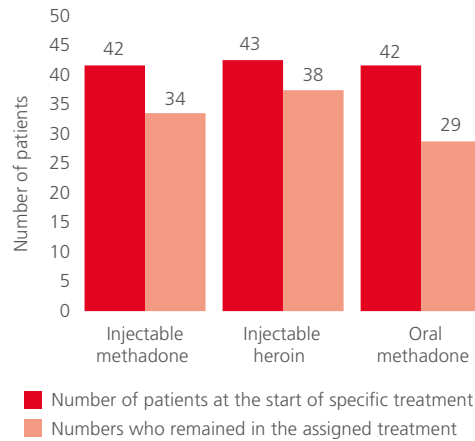
An early choice point for change methods is guided by the MoCA. For patients with no marked cognitive impairment, the therapy begins with a focus on recent drug using situations to explore links between triggers, emotions, thoughts, behaviours and consequences. The patient's scores on the impulsivity and craving measures inform their idiosyncratic formulation. In those patients with a clinically significant MoCA score, a voucher-based reinforcement may be more appropriate as the initial intervention (with abstinence, clinic attendance or recovery activities as the target).

The ARC Trial is now completed. Reports on the findings from the study are in progress. The study protocol can be accessed at: Marsden J, Stillwell G, Hellier J, Brown AM, Byford S, Kelleher M, Kelly J, Murphy C, Shearer J, Mitcheson L. Effectiveness of adjunctive, personalised psychosocial intervention for non-response to opioid agonist treatment: Study protocol for a pragmatic randomised controlled trial. *Contemp Clin Trials*. 2017; 53:36–43.

## Randomised Injectable Opiate Treatment Trial (RIOTT) clinic expertise guides set up of new clinic in Glasgow

Some heroin addicts persistently fail to benefit from conventional treatments. The study aimed to compare the effectiveness of supervised injectable treatment (with medicinal heroin (diamorphine or diacetylmorphine) or injectable methadone) versus optimised oral methadone for chronic heroin addiction.

The results showed that treatment with supervised injectable heroin leads to significantly lower use of street heroin than does supervised injectable methadone or optimised oral methadone. UK Government proposals for the positive response that can be achieved with heroin maintenance treatment (for previously unresponsive chronic heroin addicts) are currently being adopted in Glasgow.

**Figure 19 | RIOTT**

There are several similarities between the urges that individual experience to use illicit drugs and the cognitive symptoms of stress and compulsive anxiety disorders. There has recently been interest in targeting craving using memory reconsolidation techniques that share methods successfully used by cognitive therapists for post-traumatic stress disorder. Our goal is to use the results of the proposed small-scale pilot to inform and support the design of a formal study and its support by NIHR.

Measures collected for this pilot include craving assessments and also a range of physiological parameters including: heart rate variability and electrodermal activity.

## Cognitive control in cocaine dependence

There are no NICE-approved medication treatments for cocaine dependence and existing motivational and cognitive behavioural interventions have not been found to be sufficiently effective for routine use.

With grant support from the NIHR BRC, Professors John Marsden and John Strang, and Drs Luke Mitcheson and Tim Meynen are working on a pilot trial of a new approach to help patients gain control over urges to use cocaine. Patients attending Lorraine Hewitt House will attend the Wellcome Trust King's Clinical Research Facility (CRF), King's College Hospital.

## Introduction of Addictions Dimensions for Assessment and Personalised Treatment (ADAPT)

A new instrument, Addictions Dimensions for Assessment and Personalised Treatment (ADAPT), has been designed to help clinicians to ensure they provide the 'right treatment for the right patient'. This is a 14-item rating scale for clinicians who want a brief, multi-dimensional patient profile of addiction-related severity, health and social problem complexity and recovery strengths to tailor treatment for opioid and cocaine use disorder. More information on the development and use of the ADAPT can be found in the following article: Marsden J, Eastwood B, Ali R, Burkinshaw P, Chohan G, Copello A, Burn D, Kelleher M,



## 'Naloxone saves lives – developing and testing pre-provision of take-home naloxone'

Individuals involved in heroin use are at significant risk of overdose, with overdose deaths at a particularly high rate at identifiable times and places (e.g. after release from prison or after discharge from hospital). Naloxone is well-established as an injectable drug which is used in emergency medicine as an 'antidote' to overdose with heroin or other opiates/opioid drugs, and effectively reverses overdose within a matter of a few minutes of injection.

From the mid-1990s onwards, we have conceived and developed an approach of pre-provision of 'take-home naloxone' which may be given to heroin users themselves and/or to family members (e.g. parents or partner with whom the heroin user lives). Training in management of the overdose situation is given alongside the supply of the emergency naloxone dose, and we have conducted research studies on the acceptability of naloxone provision for both drug users themselves and for family members, as well as developing validated scales for measuring extent of competence achieved. In addition to prospective outcomes studies, we have also conducted randomised trials of the provision of training and also major study of naloxone provision at the point of release from prison as a method of reducing the high number of deaths that occur over the subsequent few weeks.

We have supported the development of new guidelines and also of new legislation to enable much wider provision of 'take-home naloxone', including a contribution to the new guidance from both United Nations and World Health Organization in 2014. We were also invited by the European Monitoring Centre on Drugs and Drug Addiction (EMCDDA) to develop a substantial 'Insights' Monograph on the evidence around 'take-home naloxone' which was published in 2016.

We are currently working with colleagues in Pharmaceutical Sciences to develop new improved forms of naloxone. We have already contributed to the development of a naloxone nasal spray (work subsequently taken forward by a pharmaceutical company which has recently obtained Food and Drugs Administration (FDA) approval in the US for the first official naloxone nasal spray), and we are currently working on the development of a new 'rapid-melt' buccal tablet of naloxone for emergency administration by family, friends or other non-medical members of society.

Mitcheson L, Taylor S, Wilson N, Whiteley C, Day E. Development of the Addiction Dimensions for Assessment and Personalised Treatment (ADAPT). *Drug Alcohol Depend.* 2014; 139:121–31.

### Small monetary incentives increase completion of hepatitis B (HBV) vaccination amongst people receiving heroin treatment

Injecting drug users are a major risk group for infection and transmission of hepatitis B (HBV) which can lead to liver cirrhosis, liver cancer and death. This is an important target population for the safe and highly effective HBV vaccination. In order to be fully protected against HBV individuals need to complete the full course of at least 3 vaccination injections. However, vaccination completion is poor among this group. A recent study by SLaM, King's College London, Imperial College London and University College London (funded by National Institute for Health Research (NIHR)) and published in *The Lancet* found that small financial incentives (supermarket vouchers) for receiving vaccinations greatly improved the completion of HBV vaccination programmes with nearly half of patients receiving incentives completing their three vaccinations compared with only 9% of patients who received no incentives. In addition, compliance with appointment date and time was increased making for greater clinic efficiency. The cost of delivering HBV vaccination with financial incentives (including staff costs, equipment,

vaccine) was estimated to be £157 per participant. Work undertaken alongside a trial by Sheffield University concluded that using financial incentives to improve the completion of hepatitis B vaccination in people injecting drugs entering community-based services is likely to be cost-effective when considering the health and social impact of prevented Hepatitis B infections in the UK.

### Do financial incentives increase patient benefit in UK drug treatment settings?

Despite the effectiveness of opiate substitution treatment (e.g. methadone) for heroin dependence, opiate substitution treatment suffers from high dropout due to many patients relapsing back into illicit drug use. Building on the strong evidence that using financial incentives can have a major positive effect in vaccine uptake, SLaM, King's College London, Imperial College London and University College London (and funded by National Institute for Health Research (NIHR)) have undertaken another study using financial incentives. This time to test whether the use of financial incentives can encourage better attendance at drug treatment services and abstinence from heroin, among individuals receiving opiate substitution treatment. The study has recruited more than 500 patients and has been conducted at 34 drug clinics around England. In addition to receiving usual opiate substitution treatment, individuals receive

a 12 week treatment programme in which they can receive financial incentives if they attend their clinic appointments on time and do not use heroin.

### Delivering incentives by mobile phone to encourage better adherence with supervised methadone consumption in pharmacies

Most people treated for heroin addiction are prescribed methadone which enables them to stop heroin use safely and avoid withdrawal and cravings. People starting on methadone take a daily dose under a pharmacist's supervision. If a patient misses their daily methadone they will experience opiate withdrawal and cravings which make them more likely to use heroin. If they miss methadone for three days, people lose their tolerance to the drug and risk overdose. Unfortunately many patients do miss their doses. Research suggests that small financial incentives can improve medication adherence. We have developed the technology to deliver text reminders and small financial incentives by mobile phone to remind and encourage adherence with supervised methadone at community pharmacies. Each time a patient attends their pharmacy for supervised consumption of methadone they will receive a text message praising them and earn a financial reward. We have piloted this at one SLaM drug clinic and two pharmacies

with very encouraging results. SLaM and King's College London are now planning a research study to test its effectiveness at more drug clinics and pharmacies.

### Preventing blood borne virus infection in people who inject drugs in the UK: the development and feasibility of psychosocial interventions

The research was conducted in London, York, Glasgow and North Wales and funded by the National Institute for Health Research. The project developed and tested the feasibility of delivering a psychosocial intervention to reduce blood borne virus risk behaviours among people who inject drugs. The 3-session (gender-specific) group intervention was developed by service users (including from Lambeth Service User Council and Aurora Project) alongside other experts. It was informed by a review of existing interventions both nationally and internationally and from the results of 60 in-depth interviews we conducted with people who were currently injecting drugs throughout the UK.

Staff from South London and Maudsley NHS Foundation Trust (SLaM) were members of the intervention development group [John Strang; Luke Mitcheson; Terry Shields] facilitated access to research participants attending SLaM substance use services for the in-depth

interviews and the feasibility trial (Blackfriars Community Drug and Alcohol Team, Lorraine Hewitt House, Wandsworth Community Drug and Alcohol Service, SLaM clinic within Graham House). Dr Emily Finch provided training on the intervention delivery in conjunction with a peer-educator. The intervention was delivered by two SLaM drugs workers [Martin Stefranek and Katarina Bohacova] at Lorraine Hewitt House and co-facilitated by two peer educators. Dr Finch was also the Chair of the Project Steering Group.

The feasibility trial randomised 100 people who inject drugs to the intervention group (n=53) or control group (n=47) who received an information leaflet. 30 participants were recruited to the feasibility trial from SLaM substance use treatment services. Attendance rates at the 3 sessions varied by gender and session. In London, 9 men and 7 women were allocated at random to receive the intervention group; 56%–67% of men and 29%–43% of women attended each session. End of intervention follow-up has been completed in London (82% of men and 77% of women followed-up) and one month post-intervention is underway. The findings were published in 2017.

## Men, substance use and relationships

This project was conducted in England (London and South East England) and Brazil (Sao Paulo). The English research was funded by the Economic and Social Research Council. The project: 1) reviewed current policy,

practice and care pathways for responding to intimate partner violence (IPV) perpetration in substance use treatment; 2) identified the barriers and facilitators to working with people who use substances and who perpetrate IPV; 3) determined the prevalence and explanations of intimate partner violence (IPV) perpetration by men receiving treatment for alcohol or drug use in community services; and developed a framework for working safely and effectively with men who perpetrate IPV in substance use treatment settings to define and clarify the key capabilities (i.e. knowledge, attitude and values, ethical practice, skills and reflection and professional development) for working with men who use substances (drugs and alcohol), and who perpetrate IPV.

A Learning Alliance Steering Group of expert academics, practitioners, policy makers and service users was established at the initiation of the project to strengthen and support the exchange and dissemination of information, research, best practice and policy, and to determine how alcohol and drug services can best respond to IPV perpetration.

South London and Maudsley NHS Foundation Trust were members of these Learning Alliance groups (Emily Finch, Cheryl Kipping) that contributed to the development of the capacity Framework, provided sites for recruitment of men to the study (Southwark Community Drug and Alcohol Team, Beresford Project) and were interviewed about their current practice to identify barriers and facilitators to responding to IPV perpetration in their services.

### **Current practice**

Substance use treatment protocols and assessment guides used by three treatment providers in initial assessments found few specific questions concerning IPV perpetration although there were questions about victimisation and about general violence (outside the family). Interviews with substance use key workers and managers revealed that few staff 1) felt confident or that it was a legitimate part of their role to enquire about IPV perpetration in assessments/ongoing work; and 2) were aware of referral pathways for IPV perpetrators outside the criminal justice system. Training received had focused on safeguarding and services for IPV victims rather than perpetrators.

### **Interviews with men in substance use treatment**

77% of the 223 men interviewed had ever perpetrated any (emotional, physical and/or sexual) IPV. The majority of men also reported being victims of IPV (87%) and victims of childhood abuse (71%). Three explanations of IPV perpetration were distinguished among the 20 men interviewed in-depth who perpetrated IPV: 1) disputes with partners that escalated to IPV perpetration related to the acquisition and sharing of substances; 2) IPV perpetration and victimisation that is explained/excused by alcohol/drug intoxication; and 3) accounts where substance use did not feature or was incidental to IPV perpetration

(mainly sexual jealousy). In all types accounts of perpetrating IPV, stereotypical and prescriptive male/female roles provided a context for and made IPV perpetration explicable.

## **Research in focus**

### **Substance use: Community management of opioid overdose**

#### **World Health Organisation Report, 2014**

*Management of Substance Abuse unit of the WHO Department of Mental Health and Substance Abuse in collaboration with the WHO HIV Department, Guideline Development Group (GDG) members were: Robert Balster (Chair), Barbara Broers, Jane Buxton, Paul Dietze, Kirsten Horsburgh, Raka Jain, Nadeem Ullah Khan, Walter Kloeck, Emran M Razaghi, Hendry Robert Sawe, John Strang, and Oanh Thi Hai Khuat.*

Opioids are potent respiratory depressants, and overdose is a leading cause of death among people who use them. Worldwide, an estimated 69,000 people die from opioid overdose each year. The number of opioid overdoses has risen in recent years, in part due to the increased use of opioids in the management of chronic pain. In 2010, an estimated 16,651 people died from an overdose of prescription opioids in the United States of America alone.

Opioid overdose is treatable with naloxone, an opioid antagonist which rapidly reverses the effects of opioids. Death does not usually occur immediately, and in the majority of cases, overdoses are witnessed by a family member, peer or someone whose work brings them into contact with people who use opioids. Increased access to naloxone for people likely to witness an overdose could significantly reduce the high numbers of opioid overdose deaths. In recent years, a number of programmes around the world have shown that it is feasible to provide naloxone to people likely to witness an opioid overdose, in combination with training on the use of naloxone and the resuscitation of people experiencing opioid overdose, prompting calls for the widespread adoption of this approach. In 2012, the United Nations Economic and Social Council (ECOSOC) called upon the World Health Organization (WHO), in collaboration with the United Nations Office on Drugs and Crime (UNODC) to provide advice and guidance, based on scientific evidence, on preventing mortality from drug overdose, in particular opioid overdose.

While community management of opioid overdose with naloxone is expected to reduce the proportion of witnessed opioid overdoses which result in death, it does not address the underlying causes of opioid overdose. To further reduce the number of deaths due to opioid overdose other measures should be considered, such as:

- Monitoring opioid prescribing practices;
- Curbing inappropriate opioid prescribing;

- Curbing inappropriate over-the-counter sales of opioids;
- Increasing the rate of treatment of opioid dependence, including for those dependent on prescription opioids.

## Brief, personality-targeted coping skills interventions and survival as a non-drug user over a 2-year period during adolescence

### Archives of General Psychiatry, 2010

*Conrod, P.J., Castellanos-Ryan, N., Strang, J.*

Selective interventions targeting personality risk are showing promise in the prevention of problematic drinking behaviour, but their effect on illicit drug use has yet to be evaluated.

**Objective:** To investigate the efficacy of targeted coping skills interventions on illicit drug use in adolescents with personality risk factors for substance misuse.

**Design:** Randomized controlled trial.

**Setting:** Secondary schools in London, United Kingdom.

**Participants:** A total of 5302 students were screened to identify 2028 students aged 13 to 16 years with elevated scores on self-report measures of hopelessness, anxiety sensitivity,

impulsivity, and sensation seeking. Seven hundred thirty-two students provided parental consent to participate in this trial.

**Intervention:** Participants were randomly assigned to a control no-intervention condition or a 2-session group coping skills intervention targeting 1 of 4 personality profiles.

**Main Outcome Measures:** The trial was designed and powered to primarily evaluate the effect of the intervention on the onset, prevalence, and frequency of illicit drug use over a 2-year period.

**Results:** Intent-to-treat repeated-measures analyses on continuous measures of drug use revealed time X intervention effects on the number of drugs used ( $P < .01$ ) and drug use frequency ( $P < .05$ ), whereby the control group showed significant growth in the number of drugs used as well as more frequent drug use over the 2-year period relative to the intervention group. Survival analysis using logistic regression revealed that the intervention was associated with reduced odds of taking up the use of marijuana ( $\beta = -0.3$ ; robust SE=0.2;  $P = .09$ ; odds ratio=0.7; 95% confidence interval, 0.5–1.0), cocaine ( $\beta = -1.4$ ; robust SE=0.4;  $P < .001$ ; odds ratio = 0.2; 95% confidence interval, 0.1–0.5), and other drugs ( $\beta = -0.7$ ; robust SE=0.3;  $P = .03$ ; odds ratio=0.5; 95% confidence interval, 0.3–0.9) over the 24-month period.

**Conclusion:** This study extends the evidence that brief, personality-targeted interventions can prevent the onset and escalation of substance misuse in high-risk adolescents.

Supervised injectable heroin or injectable methadone versus optimised oral methadone as treatment for chronic heroin addicts in England after persistent failure in orthodox treatment (RIOTT): a randomised trial

**Lancet, 2010**

*Strang, J., Metrebian, N., Lintzeris, N., Potts, L., Carnwath, T., Mayet, S., Williams, H., Zador, D., Evers, R., Groshkova, T., Charles, V., Martin, A., Forzisi, L.*

**Background:** Some heroin addicts persistently fail to benefit from conventional treatments. We aimed to compare the effectiveness of supervised injectable treatment with medicinal heroin (diamorphine or diacetylmorphine) or supervised injectable methadone versus optimised oral methadone for chronic heroin addiction.

**Methods:** In this multisite, open-label, randomised controlled trial, we enrolled chronic heroin addicts who were receiving conventional oral treatment ( $\geq 6$  months), but continued to inject street heroin regularly ( $\geq 50\%$  of days in preceding 3 months). Randomisation by minimisation was used to assign patients to receive supervised injectable methadone, supervised injectable heroin, or optimised oral methadone. Treatment was provided

for 26 weeks in three supervised injecting clinics in England. Primary outcome was 50% or more of negative specimens for street heroin on weekly urinalysis during weeks 14–26. Primary analysis was by intention to treat; data were adjusted for centre, regular crack use at baseline, and treatment with optimised oral methadone at baseline. Percentages were calculated with Rubin's rules and were then used to estimate numbers of patients in the multiple imputed samples.

**Findings:** Of 301 patients screened, 127 were enrolled and randomly allocated to receive injectable methadone (n=42 patients), injectable heroin (n=43), or oral methadone (n=42); all patients were included in the primary analysis. At 26 weeks, 80% (n=101) patients remained in assigned treatment: 81% (n=34) on injectable methadone, 88% (n=38) on injectable heroin, and 69% (n=29) on oral methadone. Patients on injectable heroin were significantly more likely to have achieved the primary outcome (72% [n=31]) than were those on oral methadone (27% [n=11], OR 7.42, 95% CI 2.69–20.46,  $p<0.0001$ ; adjusted: 66% [n=28] vs 19% [n=8], 8.17, 2.88–23.16,  $p<0.0001$ ), with number needed to treat of 2.17 (95% CI 1.60–3.97). For injectable methadone (39% [n=16]; adjusted: 30% [n=14]) versus oral methadone, the difference was not significant (OR 1.74, 95% CI 0.66–4.60,  $p=0.264$ ; adjusted: 1.79, 0.67–4.82,  $p=0.249$ ). For injectable heroin versus injectable methadone, a significant difference was recorded (4.26, 1.63–11.14,  $p=0.003$ ; adjusted: 4.57, 1.71–12.19,  $p=0.002$ ), but the study was not powered for this comparison.

Differences were evident within the first 6 weeks of treatment.

**Interpretation:** Treatment with supervised injectable heroin leads to significantly lower use of street heroin than does supervised injectable methadone or optimised oral methadone. UK Government proposals should be rolled out to support the positive response that can be achieved with heroin maintenance treatment for previously unresponsive chronic heroin addicts.

## Use of contingency management incentives to improve completion of hepatitis B vaccination in people undergoing treatment for heroin dependence: A cluster randomised trial

### Lancet, 2014

Weaver, T., Metrebian, N., Hellier, J., Pilling, S., Charles, V., Little, N., Poovendran, D., Mitcheson, L., Ryan, F., Bowden-Jones, O., Dunn, J., Glasper, A., Finch, E., Strang, J.

**Background:** Poor adherence to treatment diminishes its individual and public health benefit. Financial incentives, provided on the condition of treatment attendance, could address this problem. Injecting drug users are a high-risk group for hepatitis B virus (HBV)



infection and transmission, but adherence to vaccination programmes is poor. We aimed to assess whether contingency management delivered in routine clinical practice increased the completion of HBV vaccination in individuals receiving opioid substitution therapy.

**Methods:** In our cluster randomised controlled trial, we enrolled participants at 12 National Health Service drug treatment services in the UK that provided opioid substitution therapy and nurse-led HBV vaccination with a super accelerated schedule (vaccination days 0, 7, and 21). Clusters were randomly allocated 1:1:1 to provide vaccination without incentive (treatment as usual), with fixed value contingency management (three £10 vouchers), or escalating value contingency management (£5, £10, and £15 vouchers). Both contingency management schedules rewarded on-time attendance at appointments. The primary outcome was completion of clinically appropriate HBV vaccination within 28 days. We also did sensitivity analyses that examined vaccination completion with full adherence to appointment times and within a 3 month window.

**Findings:** Between March 16, 2011, and April 26, 2012, we enrolled 210 eligible participants. Compared with six (9%) of 67 participants treated as usual, 35 (45%) of 78 participants in the fixed value contingency management group met the primary outcome measure (odds ratio 12.1, 95% CI 3.7–39.9;  $p < 0.0001$ ), as did 32 (49%) of 65 participants in the escalating value contingency management group (14.0, 4.2–46.2;  $p < 0.0001$ ).

These differences remained significant with sensitivity analyses.

**Interpretation:** Modest financial incentives delivered in routine clinical practice significantly improve adherence to, and completion of, HBV vaccination programmes in patients receiving opioid substitution therapy. Achievement of this improvement in routine clinical practice should now prompt actual implementation. Drug treatment providers should employ contingency management to promote adherence to vaccination programmes. The effectiveness of routine use of contingency management to achieve long-term behaviour change remains unknown.

“You’re all going to hate the word ‘recovery’ by the end of this”: Service users’ views of measuring addiction recovery

**Drugs: Education, Prevention and Policy, 2015**

*Neale, J., Tompkins, C., Wheeler, C., Finch, E., Marsden, J., Mitcheson, L., Rose, D., Wykes, T., Strang, J.*

**Aims:** To explore how service users’ views of measuring addiction recovery differ from those of service providers.

**Methods:** Five focus groups conducted in two English cities with (i) people currently using Class A drugs (n=6); (ii) people currently using alcohol (n=12); (iii) individuals in residential detoxification (n=12); (iv) individuals in residential rehabilitation (n=7); and (v) people who defined themselves as ex drug or alcohol users (n=7). Each focus group reviewed 76 measures of recovery previously identified by senior service providers.

**Findings:** Service users identified multiple problems with the 76 measures. Difficulties could be categorized as expecting the impossible of service users; the dangers of progress; the hidden benefits of negative outcomes; outcomes that negate the agency in recovery; contradictory measures; failure to recognise individual differences; entrenched vulnerabilities; the misattribution of feelings and behaviours; and inappropriate language.

**Conclusions:** Service users experience recovery as a process and personal journey that is often more about 'coping' than 'cure'. Involving service users in designing measures of recovery can lessen the likelihood that researchers develop assessment tools that use inappropriate, contradictory or objectionable outcomes, and ambiguous and unclear language. People who have experienced drug or alcohol problems can highlight important weaknesses in dominant recovery discourses.

## Heroin on trial: systematic review and meta-analysis of randomised trials of diamorphine-prescribing as treatment for refractory heroin addiction

**British Journal of Psychiatry, 2015**

*Strang, J., Groshkova, T., Uchtenhagen, A., Van Den Brink, W., Haasen, C., Schechter, M.T., Lintzeris, N., Bell, J., Pirona, A., Oviedo-Joekes, E., Simon, R., Metrebian, N.*

**Background:** Supervised injectable heroin (SIH) treatment has emerged over the past 15 years as an intensive treatment for entrenched heroin users who have not responded to standard treatments such as oral methadone maintenance treatment (MMT) or residential rehabilitation.

**Aims:** To synthesise published findings for treatment with SIH for refractory heroin-dependence through systematic review and meta-analysis, and to examine the political and scientific response to these findings.

**Method:** Randomised controlled trials (RCTs) of SIH treatment were identified through database searching, and random effects pooled efficacy was estimated for SIH treatment. Methodological quality was assessed according to criteria set out by the Cochrane Collaboration.

**Results:** Six RCTs met the inclusion criteria for analysis. Across the trials, SIH treatment

improved treatment outcome, i.e. greater reduction in the use of illicit 'street' heroin in patients receiving SIH treatment compared with control groups (most often receiving MMT).

**Conclusions:** SIH is found to be an effective way of treating heroin dependence refractory to standard treatment. SIH may be less safe than MMT and therefore requires more clinical attention to manage greater safety issues. This intensive intervention is for a patient population previously considered unresponsive to treatment. Inclusion of this low-volume, high-intensity treatment can now improve the impact of comprehensive healthcare provision.

## Proportion of patients in south London with first-episode psychosis attributable to use of high potency cannabis: A case-control study

### **The Lancet Psychiatry, 2015**

*Di Forti, M., Marconi, A., Carra, E., Fraietta, S., Trotta, A., Bonomo, M., Bianconi, F., Gardner-Sood, P., O'Connor, J., Russo, M., Stilo, S.A., Marques, T.R., Mondelli, V., Dazzan, P., Pariante, C., David, A.S., Gaughran, F., Atakan, Z., Iyegbe, C., Powell, J., Morgan, C., Lynskey, M., Murray, R.M.*

The risk of individuals having adverse effects from drug use (e.g., alcohol) generally depends

on the frequency of use and potency of the drug used. We aimed to investigate how frequent use of skunk-like (high-potency) cannabis in south London affected the association between cannabis and psychotic disorders.

**Methods:** We applied adjusted logistic regression models to data from patients aged 18–65 years presenting to South London and Maudsley NHS Foundation Trust with first-episode psychosis and population controls recruited from the same area of south London (UK) to estimate the effect of the frequency of use, and type of cannabis used on the risk of psychotic disorders. We then calculated the proportion of new cases of psychosis attributable to different types of cannabis use in south London.

**Findings:** Between May 1, 2005, and May 31, 2011, we obtained data from 410 patients with first-episode psychosis and 370 population controls. The risk of individuals having a psychotic disorder showed a roughly three-times increase in users of skunk-like cannabis compared with those who never used cannabis (adjusted odds ratio [OR] 2.92, 95% CI 1.52–3.45,  $p=0.001$ ). Use of skunk-like cannabis every day conferred the highest risk of psychotic disorders compared with no use of cannabis (adjusted OR 5.4, 95% CI 2.81–11.31,  $p=0.002$ ). The population attributable fraction of first-episode psychosis for skunk use for our geographical area was 24% (95% CI 17–31), possibly because of the high prevalence of use of high-potency cannabis (218 [53%] of 410 patients) in our study. Interpretation: The ready availability of high

potency cannabis in south London might have resulted in a greater proportion of first onset psychosis cases being attributed to cannabis use than in previous studies.

## Mobile phone ownership, usage and readiness to use by patients in drug treatment

### **Drug and Alcohol Dependence, 2015**

*Milward, J., Day, E., Wadsworth, E., Strang, J., Lynskey, M.*

**Background:** Mobile phone based interventions using text-messages and smartphone apps demonstrate promise for enhancing the treatment of substance use disorders. However, there is limited evidence on the availability of mobile phones among people in substance use treatment, as well as usage patterns, contact preferences and willingness to use phone functions such as geo-location for treatment purposes.

**Method:** A questionnaire was completed by 398 patients enrolled in four UK community drug treatment services. The majority (74%) reported being in treatment for heroin dependence, 9% for alcohol, 4% prescription drugs, 1% amphetamines, 1% club drugs and 1% cannabis. The remaining reported a combination of different drug categories.

**Results:** Eighty-three percent of patients reported owning a mobile phone; 57% of phones were smartphones and 72% of clients had a pay-as-you-go contract. Forty-six percent of phone owners changed their number in the previous year. Eighty-six percent were willing to be contacted by their treatment provider via mobile phone, although 46% thought the use of geo-location to be unacceptable.

**Conclusion:** Mobile phones are widely available among individuals receiving community drug treatment and should be considered as a viable contact method by service providers, particularly text-messaging. However, patients may not have access to sophisticated features such as smartphone apps, and, up to date records of contact numbers must be frequently maintained. Developers need to be sensitive to issues of privacy and invasiveness around geo-location tracking and frequency of contact.



Alcohol

# About the alcohol programme

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## Introduction

The Addictions CAG has pioneered improvements in the treatment of people with alcohol problems since the 1960s. Professor Griffith Edwards developed the concept of the alcohol dependence syndrome which became a key concept within international disease classification systems, carried out some of the earliest groundbreaking clinical trials of different treatment approaches, and promoted the development of innovative treatment services within the Maudsley Hospital, nationally and internationally. This work continues today broadening the field of interest from developing innovative treatments for people with alcohol dependence in the confines of mental health care, to primary care, emergency departments and acute hospitals, and criminal justice services. We are also increasingly developing and evaluating early intervention approaches which aim to alter the trajectory of harmful drinking before people develop serious health and social consequences.

Alcohol is now the third leading cause of disability in Europe and is the leading preventable cause of morbidity and mortality in working age males. This places a considerable burden across the NHS and wider society. Alcohol consumption has doubled in England in the last 60 years with a 5-fold increase in deaths from alcohol related diseases such as liver cirrhosis. 26% of the adult population in England consumes alcohol in a hazardous or harmful way. Alcohol related admissions to acute and mental health hospitals have doubled in the last 10 years in England and over 1.6 m adults were alcohol dependent, but only 6% accessed specialist alcohol treatment in 2007. While 50% of smokers receive advice



and help for smoking in primary care per annum, only 7% of hazardous or harmful drinkers receive a brief intervention (Brown et al., 2016). There is therefore a considerable gap between the need for alcohol interventions and what is actually implemented.

Our work is therefore focused on finding cost effective ways of reducing alcohol related harm, exploiting the latest technologies including digital media, and translating this into routine clinical practice through teaching, training, service development and advocacy at a local, national and international level.

Current service provision based on the treatment of acute episodes of illness and emphasising personal choice and motivation results in a small proportion of these patients engaging with alcohol treatment. Interventions are targeted at the population of alcohol dependent patients who are hard to engage in conventional treatment.

All our community services work with alcohol as well as drug users.

## Services

Our alcohol focused inpatient unit which closed in 2014 ran a successful programme for three years. It took alcohol users directly from A&E at King's College Hospital to provide immediate access for detoxification. The service started by accepting admissions from 8am until 8pm but later took them 24 hours per day. This enable a highly complex group of individuals to benefit from specialist alcohol treatment even though they had significant medical co-morbidity and had not been motivated enough to engage with community services.

The unit pioneered using rapid detoxification methods in order to make the most of the brief period of admission which the pilot allowed. Patients were able to experience

**Figure 20** | Number of clients transferred to the Acute Assessment Unit (AAU)



treatment – many for the first time and be engaged in longer term treatment for their alcohol problems.

From September 2014 to May 2015 a total of 132 clients were transferred to the Acute Assessment Unit. 57 of these were initiated by the Substance Misuse Liaison nurse, the rest being direct referrals out of hours to the AAU.

## Alcohol Related Frequent Attenders Project (ARFA) – Southwark Alcohol

This post was funded by Southwark to work with Frequent Attenders at King's College Hospital A&E for whom alcohol is a factor in their attendances. Additional funding was obtained from the Maudsley Charity to support the project and enable the use of volunteers.

Supervision and support was again provided by SLaM, with additional input from Professor Drummond of the Addictions CAG. The nurse provides assertive outreach to clients identified as frequent attenders with a Southwark connection and problematic or dependant alcohol use. Potential clients are flagged up when they attend A&E. The nurse had a small active case load, with further clients who were contacted when they re-attended A&E.

The project provided practical and emotional support for 17 people in Southwark who attend

King's Accident and Emergency Department frequently and who suffer from alcohol dependence or who are harmful drinkers.

The project aimed to reduce A&E attendance by addressing the deeper needs of the clients and was staffed by one nurse and six volunteers (including service users in recovery) who kept in close contact with drinkers whose health problems led them to repeated visits to A&E. These A&E visits were not solving the clients underlying problems, but were part of a repeating pattern and the team found they were able to break into the cycle by keeping in close touch with the client, accompanying them to appointments, addiction services and to social or recreational activities.

The average length of contact was 11 months and following the team's intervention 43% of the drinkers were abstinent after six months of starting the project and A&E attendance was reduced in 53% of the clients. The volunteers expenses and training were funded by a Maudsley Charity grant.

Following this pilot a much larger research grant has been awarded to Professor Colin Drummond and a much larger project is going to continue and expand the work with similar patient groups.

The pilot was an outstanding success with its innovative approach and a good example of the benefits that come from close work between clinical staff, volunteers, carers, third sector colleagues and researchers.



## King's Alcohol Liaison nurse

The number of referrals to the service has stayed constant over the last 3 years, but the complexity of those referred is increasing. Nurses on many of the wards now undertake assessment and brief advice, referring only those who are harmful or dependent drinkers, or those with complex drug use.

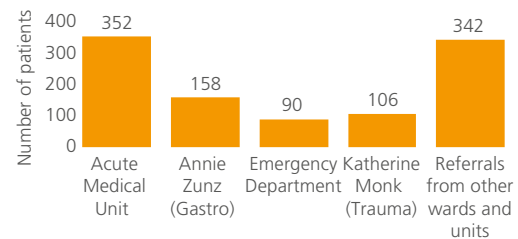
The substance misuse liaison service at King's College Hospital comprises one Band 7 nurse. The post is funded by the Trauma, Emergency and Acute Medicine CAG, however the service responds to requests throughout the Denmark Hill site. The hours covered are Mon–Fri, 9–5. Supervision, training, and cover for leave is provided by the SLaM Addictions CAG.

From September 2014 to September 2015 (13 months), the liaison service received more than a thousand referrals from wards throughout King's College Hospital. 700 of those referrals were for alcohol only using patients; 205 were for drugs only; and 118 were for poly-substance users (i.e. dependent users of both drugs and alcohol).

The service does not lead on the delivery of the brief interventions for harmful/hazardous drinkers, so the alcohol only referrals comprised of drinkers who are moderately to severely dependent, and require medical management of withdrawal symptoms. The drug users present using combinations of heroin, methadone,

buprenorphine, GBL, crystal methamphetamine, cocaine, crack cocaine, MDMA and mephodrone. The use of a single drug was rare.

**Figure 21 | Referral sources**



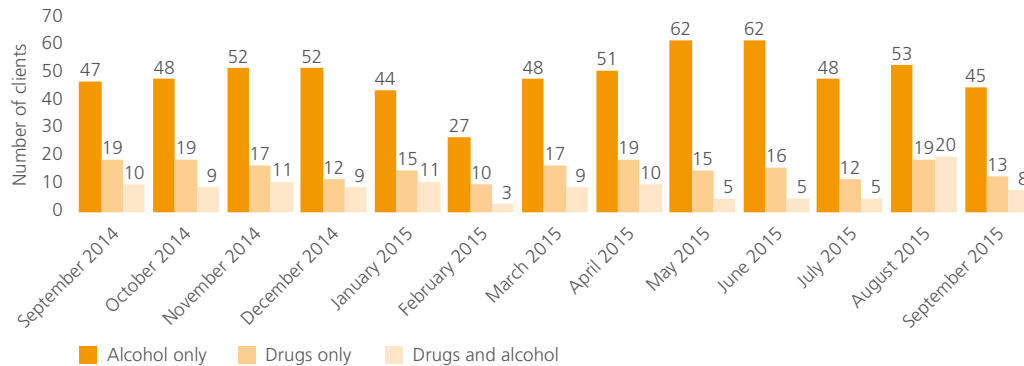
Note: The Acute Medical Unit (AMU) comprises Oliver ward, RD Lawrence ward, Clinical Decision Unit (A&E ward) and Medical Assessment Centre (MAC).

Referrals came from a total of 49 sources across the Denmark Hill site. It should also be noted that the occasional request for advice is received from the Princess Royal University Hospital (PRUH). The vast majority of patients referred are already in-patients requiring admission for other acute medical issues, or requiring admission due to severity of withdrawal phenomena, notably withdrawal seizure(s) and onset of delirium.

## Demonstrating our tripartite mission

Addiction researchers in the Alcohol Research Group work closely with clinicians across the 3 NHS trusts in King's Health Partners, and nationally with a large number of NHS and 3rd sector providers to develop, implement and

**Figure 22** | Number of referrals to the liaison service



evaluate innovative treatment and intervention approaches for people affected by alcohol misuse. In 2012 we led the development of the King's Health Partners Alcohol Strategy which engaged a wide range of clinicians, researchers and health service managers and local stakeholders, which aims to improve the care for KHP patients who misuse alcohol. With the support of Guy's and St Thomas' Charity we have been able to improve the management of patients with alcohol related problems through the development of shared clinical protocols, training programmes, implementing new service developments, and a substantial clinical research portfolio.

With the support of the Health Innovation Network and the South London Collaborations for Leadership in Applied Health Research and Care we have been increasingly expanding this work across South London and nationally. Health Education South London has provided funding

for us to develop short courses for clinicians on alcohol treatment, which has attracted clinicians from across South London.

The Alcohol Research Group within the Addictions CAG has attracted over £11 million of external research funding in the last 5 years. This includes large programmes of research on alcohol screening and brief interventions in health and social care settings, e-health interventions, assertive outreach for patients with alcohol dependence and complex health and social care needs, and pharmacy based interventions to improve alcohol relapse prevention medication adherence. We are part of large European research consortia which has studied the impact of public health policies on alcohol, and have contributed to the work of the World Health Organisation's Global Alcohol Strategy to Reduce Harmful Drinking.



In conjunction with Imperial College and Bristol University we have been awarded the first MRC funded national clinical research training programme in addiction (MARC) which aims to nurture the clinical addiction research leaders of tomorrow. We are part of a research consortium led by University College London which is conducting a rolling monthly national household survey of alcohol problems and treatment seeking (Alcohol Toolkit Survey), and we have recently completed a Department of Health funded national study of alcohol treatment capacity which has developed a practical tool for local authorities and commissioners across England to rationally plan treatment provision based on local needs. This work has informed the WHO alcohol treatment capacity international work.

We have chaired and contributed to several National Institute for Health and Care Excellence (NICE) guidelines on the treatment of alcohol use disorders. Professor Colin Drummond is the Chair of the Addictions Faculty of the Royal College of Psychiatrists and Chair of the Medical Council on Alcohol which aims to promote

alcohol education within the UK's medical schools. He is also a member of the Public Health England Alcohol Leadership Board which is advising on national alcohol policy and service development. We also contribute actively to the Royal College of Physicians Alcohol Health Alliance which carries out public health advocacy on a national level. Professor Colin Drummond is also a member of the WHO Expert Committee on Alcohol Problems and contributed to the Mental Health Gap Action Programme (mh-GAP) clinical guidelines which are being promoted world-wide, and is a board member and lead for clinical guidelines in the European Federation of Addiction Societies. We are also part of the UK Centre for Tobacco and Alcohol Studies (UKCTAS) contributing to training and research.

## Innovative models of care

### Development of the KHP alcohol strategy

One of the key performance measures of the KHP alcohol strategy has been on attracting new funding to develop alcohol research, training and clinical service development. Since its inception the strategy group has managed to attract several new grants to support these developments.

## Strategy development

### Implementation

An initial grant from Guy's and St Thomas' Charity of £249,000 was awarded to Drs Emily Finch and Beth Christian in 2013 to develop a programme of work to support implementation of the alcohol strategy. This allowed project work to bring together the relevant stakeholders from across KHP and the local community to develop the strategy, to pilot approaches for strategy roll out, and to develop a business case for improved alcohol clinical services and staff training.

### Service development

A business case for development of alcohol care teams across KHP was developed by a group led by Professor Colin Drummond and was taken to local NHS commissioners. A comprehensive 7 day alcohol care team was funded in 2014 by Guy's and St Thomas' NHS Foundation Trust with annual funding of £600,000. A similar service is proposed at King's College Hospital and SLaM.

### Alcohol assertive outreach team

As part of the KHP Alcohol Strategy the Guy's & St Thomas' charity has funded an Assertive Outreach Team (£1.3m). The service, which commenced in 2016 will build on the work of the Frequent Attenders Project and will work

across KHP. It will take individuals who have had three or more alcohol related admissions to any of the KHP hospitals and randomise them to either assertive outreach or to treatment as usual.

The treatment model will be based on providing service users with an intervention whether they demand it or not. It will focus on dealing with what the clients wants to deal with at the time. The service users will also be supported to enter treatment for their alcohol problems.

## Research and innovation

### Alcohol screening and brief interventions programme (SIPS projects)

- 1. The original SIPS programme**

The Screening and Intervention Programme for Sensible drinking (SIPS) involved three related research projects which were conducted simultaneously in a programme of research supported by a large multidisciplinary research team across multiple universities led by the alcohol research group at King's College London. Funded by the Department of Health for £4 million this programme aimed to identify the most effective and cost effective implementation approaches for alcohol screening in three settings across England, primary health care, emergency

departments, and probation services. The research tested the effectiveness of different kinds of screening approach and different intensities of alcohol intervention for hazardous and harmful drinkers. During the research we trained over 700 NHS and probation staff and screened over 10,000 patients. Nearly 2,500 patients were recruited to participate in 3 linked randomised controlled trials and followed up for 12 months. The research found overall significant reductions in drinking across settings, but no differences in outcome between interventions of different intensities. The main conclusion is that in typical clinical practice more intensive interventions confer no advantage over simple feedback and alcohol information. The SIPS programme findings informed the 2012 Government Alcohol Strategy in England, and national roll out is being promoted by Public Health England.

**2. SIPS Junior programme**

Compared to extensive evidence on brief interventions in adults little was known about the effectiveness of this approach in adolescents. We secured a programme grant from the National Institute for Health Research to investigate the effectiveness and cost effectiveness of alcohol screening and brief interventions in 10–17 year olds. We carried out an initial study across 10 Emergency Departments (EDs) in England (including King's College Hospital

and St Thomas' Hospital) to establish the prevalence of alcohol use disorders in this age group and to validate short screening tools for use in busy EDs. This first study involved screening 5,000 adolescents through an iPad app developed as part of the programme with extensive patient and public involvement through collaboration with the British Youth Council. This work has already informed a Public Health England treatment pathway for alcohol misusing adolescents which has been nationally promoted. In the next phase we developed an innovative smartphone alcohol intervention app, again with extensive involvement of young people. We are now examining the effectiveness and cost effectiveness of the app, compared with conventional clinician delivered intervention and care as usual. We screened over 5,000 adolescents in 10 EDs and have over 1,600 participants randomised to the three treatment conditions. Follow up is close to completion.

**3. SIPS Junior High**

As an extension of this work we have secured a grant from the NIHR Public Health research programme to investigate the effectiveness of alcohol screening in the secondary school setting across 3 regions in England. This study is currently underway and involves interventions being delivered by learning mentors in secondary schools.

4. **The Collaboration for Leadership in Applied Health Research and Care (CLAHRC) South London electronic Brief Intervention Programme**

We have now begun to develop the e-health intervention approach as part of the CLAHRC South London alcohol research programme, this time targeted at 18–24 year olds who are known to have the highest prevalence of hazardous and harmful drinking but are seldom included in alcohol screening programmes. We have conducted extensive consultation with this target population in order to develop a bespoke smartphone app which more fully exploits the potential of smartphones and social networking. We aim to carry out a trial to investigate the effectiveness of these features over more conventional alcohol apps with recruitment of a population of 18–24 year olds through Facebook and Gumtree, beginning in Autumn 2016. We are also exploring the feasibility of testing the potential of smartphone interventions with KHP staff in collaboration with the occupational health departments.

5. **The Optimizing Delivery of Health Care Interventions (ODHIN) programme**

Although alcohol screening and brief intervention has an extensive evidence base, its uptake in typical practice is suboptimal. Our research shows that only 7% of heavy drinkers are currently asked about their drinking by their GP each year, compared to 50% of smokers. This European Commission funded study examined the

effectiveness of different implementation approaches in 120 primary care practices across 5 European countries (Catalonia in Spain, England, Netherlands, Poland, Sweden). The study included 750 primary care clinicians with a total of 180,000 adult patient consultations per month. We found that a combination of financial reimbursement and training and support of practitioners by specialists resulted in a 270% increase in SBI implementation. This has important implications for implementation across Europe.

## Assertive outreach for alcohol dependent patients with complex needs

1. **Assertive Community Treatment for Alcohol Dependence (ACTAD)**

The Assertive Community Treatment (ACT), a model of care based on assertive outreach, has been used for treating patients with severe mental illnesses and presents a promising avenue for engaging patients with primary alcohol dependence. We are therefore adopting this approach.

In a single blind exploratory randomised controlled trial, a total of 90 alcohol dependent participants are recruited from community addiction services. After completing a baseline assessment, they are assigned to one of two conditions: (1) ACT plus care as usual, or (2) care

as usual. Those allocated to the ACT plus care as usual receive the same treatment that is routinely provided by services, plus a trained key worker who provides ACT. ACT comprises intensive and assertive contact at least once a week, over 50% of contacts in the participant's home or local community, and with comprehensive case management across social and health care, for a period of one year. All participants are followed up at 6 months and 12 months to assess outcome post randomisation.

The primary outcome measures are alcohol consumption: mean drinks per drinking day and percentage of days abstinent measured by the Time Line Follow Back interview. Secondary outcome measures include severity of alcohol dependence, alcohol related problems, motivation to change, social network involvement, quality of life, therapeutic relationship and service use. Other outcome variables are treatment engagement including completion of assessment, detoxification and aftercare.

We have found that it is possible to implement ACT in NHS addiction services and that it is acceptable to both staff and patients. We have also found greater reductions in alcohol consumption in patients receiving ACT compared to care as usual as well as reduced unplanned NHS services use, both in terms of ED visits and inpatient bed days, along with improvements in engagement with addiction services.

## 2. **CLAHRC Assertive Outreach Trial in alcohol related frequent attenders**

Our research has shown that a relatively small number of patients who are frequently admitted to hospital with an alcohol related condition account for a large proportion of all alcohol related admissions. A qualitative research project with this population funded by Alcohol Research UK and led by Dr Joanne Neale, found that they often had complex multimorbidities, severe alcohol dependence and complex social needs. Only a small proportion of this group had received support from specialist alcohol services and mostly they did not regard alcohol as the most important problem for them to address. Through funding from the CLAHRC South London and the Guy's and St Thomas' Charity we have been able to set up a randomised controlled trial of assertive outreach treatment (AOT) for alcohol related frequent attenders across King's Health Partners. The clinical AOT team, which is based within the South London and Maudsley Trust, is engaging with complex patients across Lambeth and Southwark mostly in their own homes or local communities. The aim of the study is to evaluate the effectiveness and cost effectiveness of this assertive intervention compared to care as usual in a group of 200 participants. This will be the first trial of this approach in this population.

## Pharmacist support and contingency management in improving alcohol relapse prevention medication adherence

While medications that aim to prevent relapse in detoxified alcohol dependent patients have an extensive evidence base, our research shows that adherence with medications in this group is generally poor. This study aims to use psychosocial interventions to improve adherence to a relapse prevention medication, acamprosate, and is supported by the NIHR Health Technology Assessment programme and is funded for 4 years with £2 million. Led by the Alcohol Research Group, the study has centres across London and the South East, West Midlands and Yorkshire and Humberside. We are collaborating with Lloyds Pharmacy and Merck which manufactures acamprosate to deliver the project through community pharmacies. We are investigating whether the addition of pharmacist support through a technique called Medication Management, will improve adherence to acamprosate taken over 6 months or more following detoxification. Additionally we are investigating the use of small financial incentives to increase adherence. This latter technique known as contingency management has been shown to be highly effective in improving adherence to other treatments such as hepatitis B vaccination in injecting drug misusers.

## MRC MARC Clinical Research Training Programme

We have secured £1.9 million of research funding from the Medical Research Council to provide a clinical doctoral training programme in addiction research for 6 medical trainees. The programme is being provided in partnership with Imperial College and Bristol University and will take place over the next 6 years. This will fund 1–3 PhD fellowships for UK based clinicians of any medical background, particularly psychiatry, public health, primary care and potentially clinical psychologists. The programme will include training, mentorship, research seminars and an annual summer school.

In 2015 a grant of £227,000 was awarded to Dr Emily Finch to develop alcohol short courses to address the training needs of a wide range of health professionals across KHP and South London. This was launched in October 2015.



## Research in focus

### Effectiveness of screening and brief alcohol intervention in primary care (SIPS trial): Pragmatic cluster randomised controlled trial

**BMJ, 2013**

*Kaner, E., Bland, M., Cassidy, P., Coulton, S., Dale, V., Deluca, P., Gilvarry, E., Godfrey, C., Heather, N., Myles, J., Newbury-Birch, D., Oyefeso, A., Parrott, S., Perryman, K., Phillips, T., Shepherd, J., Drummond, C.*

**Objective:** To evaluate the effectiveness of different brief intervention strategies at reducing hazardous or harmful drinking in primary care. The hypothesis was that more intensive intervention would result in a greater reduction in hazardous or harmful drinking.

**Design:** Pragmatic cluster randomised controlled trial.

**Setting:** Primary care practices in the north east and south east of England and in London.

**Participants:** 3,562 patients aged 18 or more routinely presenting in primary care, of whom 2,991 (84.0%) were eligible to enter the trial: 900 (30.1%) screened positive for hazardous or harmful drinking and 756 (84.0%)

received a brief intervention. The sample was predominantly male (62%) and white (92%), and 34% were current smokers.

**Interventions:** Practices were randomised to three interventions, each of which built on the previous one: a patient information leaflet control group, five minutes of structured brief advice, and 20 minutes of brief lifestyle counselling. Delivery of the patient leaflet and brief advice occurred directly after screening and brief lifestyle counselling in a subsequent consultation.

**Main outcome measures:** The primary outcome was patients' self-reported hazardous or harmful drinking status as measured by the alcohol use disorders identification test (AUDIT) at six months. A negative AUDIT result (score <8) indicated non-hazardous or non-harmful drinking. Secondary outcomes were a negative AUDIT result at 12 months, experience of alcohol related problems (alcohol problems questionnaire), health utility (EQ-5D), service utilisation, and patients' motivation to change drinking behaviour (readiness to change) as measured by a modified readiness ruler.

**Results:** Patient follow-up rates were 83% at six months (n=644) and 79% at 12 months (n=617). At both time points an intention to treat analysis found no significant differences in AUDIT negative status between the three interventions. Compared with the patient information leaflet group, the odds ratio of having a negative AUDIT result for brief advice was 0.85 (95% confidence interval 0.52 to 1.39)

and for brief lifestyle counselling was 0.78 (0.48 to 1.25). A per protocol analysis confirmed these findings.

**Conclusions:** All patients received simple feedback on their screening outcome. Beyond this input, however, evidence that brief advice or brief lifestyle counselling provided important additional benefit in reducing hazardous or harmful drinking compared with the patient information leaflet was lacking.

## Withdrawal-associated increases and decreases in functional neural connectivity associated with altered emotional regulation in alcoholism

### Neuropsychopharmacology, 2012

*O'Daly, O.G., Trick, L., Scaife, J., Marshall, J., Ball, D., Phillips, M.L., Williams, S.S.C., Stephens, D.N., Duka, T.*

Alcoholic patients who have undergone multiple detoxifications/relapses show altered processing of emotional signals. We performed functional magnetic resonance imaging during performance of implicit and explicit versions of a task in which subjects were presented with morphs of fearful facial emotional expressions. Participants were abstaining, multiply detoxified (MDTx; n=12) or singly detoxified patients (SDTx; n=17), and social drinker controls (n=31).

Alcoholic patients were less able than controls to recognize fearful expressions, and showed lower activation in prefrontal areas, including orbitofrontal cortex and insula, which mediate emotional processing.

The decrease in activation was greater in MDTx patients who also showed decreased connectivity between insula and prefrontal areas, and between amygdala and globus pallidus. In the explicit condition, the strength of connectivity between insula and areas involved in regulation of emotion (inferior frontal cortex and frontal pole) was negatively correlated with both the number of detoxifications and dependency (measured by the severity of alcohol dependency (SADQ) and control over drinking score (Impaired Control questionnaire, (ICQ))).

In contrast, increased connectivity was found between insula and the colliculus neuronal cluster, and between amygdala and stria terminalis bed nucleus. In the implicit condition, number of detoxifications and ICQ score correlated positively with connectivity between amygdala and prefrontal cortical areas involved in attentional and executive processes. Repeated episodes of detoxification from alcohol are associated with altered function both in fear perception pathways and in cortical modulation of emotions. Such changes may confer increased sensitivity to emotional stress and impaired social competence, contributing to relapse.

## The evolution and treatment of Korsakoff's syndrome out of sight, out of mind?

### Neuropsychology Review, 2012

*Thomson, A.D., Guerrini, I., Marshall, E.J.*

Wernicke's Encephalopathy is an acute neuro-psychiatric condition caused by an insufficient supply of thiamine (Vitamin B1) to the brain. If undiagnosed or inadequately treated, it is likely to proceed to Korsakoff's Syndrome. Wernicke's Encephalopathy can result from dietary deficiency alone and this form is usually successfully treated, with little chance of Korsakoff's Syndrome supervening. On the other hand, thiamine deficiency associated with alcohol misuse/dependence may require up to 1 gram of thiamine IV in the first 24 hours to be treated successfully. The reasons for this difference in treatment will be discussed. Thiamine diphosphate acts as a co-factor for a number of thiamine-dependent enzymes. Thiamine deficiency leads to a reduction in the activity of these enzymes, and this leads to alterations in mitochondrial activity, impairment of oxidative metabolism, decreased energy status and eventually selective neuronal death. The damage caused by the combination of thiamine deficiency and alcohol metabolism probably interferes with adequate

thiamine transport at a number of sites in the body, including the blood-brain barrier, as well as causing damage to the apoenzymes which then require higher concentrations of thiamine to work normally.

The accumulated damage is likely to render the use of oral thiamine therapeutically inadequate since the body is unable to produce high enough concentrations of thiamine in the blood to traverse the blood-brain barrier. Some individuals are probably genetically predisposed to develop Wernicke's. Long before individuals with alcohol misuse or dependence develop Wernicke's Encephalopathy the neurons and other cells of the body are functioning sub-optimally because of the inadequate supply of thiamine and the neurotoxic effect of alcohol. This relative deficiency initiates a series of pathological changes which accumulate and further interfere with the supply of thiamine and its utilisation at a time when the requirements are increased.

The best treatment for Korsakoff's Syndrome is timely recognition of Wernicke's Encephalopathy and appropriate intervention and prevention.

## Alcohol screening and brief intervention for adolescents: The how, what and where of reducing alcohol consumption and related harm among young people

### **Alcohol and Alcoholism, 2014**

*Patton, R., Deluca, P., Kaner, E., Newbury-Birch, D., Phillips, T., Drummond, C.*

**Aim:** The aim of the study was to explore the evidence base on alcohol screening and brief intervention for adolescents to determine age appropriate screening tools, effective brief interventions and appropriate locations to undertake these activities.

**Methods:** A review of existing reviews (2003–2013) and a systematic review of recent research not included in earlier reviews.

**Results:** The CRAFFT and AUDIT tools are recommended for identification of 'at risk' adolescents. Motivational interventions delivered over one or more sessions and based in health care or educational settings are effective at reducing levels of consumption and alcohol-related harm.

**Conclusion:** Further research to develop age appropriate screening tools needs to be undertaken. Screening and brief intervention activity should be undertaken in settings where young people are likely to present; further

assessment at such venues as paediatric emergency departments, sexual health clinics and youth offending teams should be evaluated. The use of electronic (web/smart-phone based) screening and intervention shows promise and should also be the focus of future research.

## Adolescent alcohol use: Risks and consequences

### **Alcohol and Alcoholism, 2014**

*Marshall, E.J.*

**Aims:** The aim of the study was to summarize results of recent epidemiological research on adolescent alcohol use and its consequences, to outline the risk factors for drinking in adolescents and to consider effective treatment and preventative interventions.

**Methods:** A literature review of relevant studies on adolescent alcohol use.

**Results:** Alcohol use and other risk-taking behaviours such as smoking, substance use and risky sexual behaviour emerge in adolescence and tend to cluster together. Heavy alcohol consumption in late adolescence appears to persist into adulthood and is associated with alcohol problems, including dependence, premature death and diminished work capacity. Early identification of adolescent risk factors may be helpful in preventing and/or attenuating risk.

# Education and training across the CAG

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## Key achievements

- Functioning education and training structure. Training plan and underpinning strategy in place.
- New MSc in Addictions studies commenced in 2013/14 with 13 full time students. In the first year the course scored highly for student satisfaction on the national PTES survey, including an overall approval rating of 93%.
- The Understanding Drugs and Addiction MOOC was delivered on the FutureLearn Platform and 11,620 enrolled in the course. Over 97% of learners rated the course as very good/excellent.
- Award of HESL grant (250K) to deliver short courses in alcohol.
- Trust CPD programme delivered focusing on multidisciplinary workforce skills needed to improve outcomes of treatment and manage physical health problems in substance users.

- Series of eight workshops in substance abuse delivered in Qatar to the treatment and recovery centre there in partnership with Maudsley International.

## MSc in Addictions Studies

The MSc in Addiction Studies was launched in 2013/2014, and recruited 13 fulltime students. The course offers advanced graduate education in the addictions, focusing upon recent advances in the conceptualisation of drug use and addiction, and its effective prevention and treatment. Throughout the programme, theoretical advances and evidence are positioned within policy development and treatment contexts. Emphasis is placed upon facilitating the transfer of knowledge and skills to the workplace or individual career aspirations.

The programme covers a broad range of topics related to addiction science and treatment, from neurobiological and psychosocial mechanisms to clinical aspects and psychosocial consequences. The programme includes

practical experience in clinical, policy and research settings. Teaching staff include world leading addictions researchers and senior clinicians. Theoretical advances and best practice in addiction science is presented within the prevention, treatment, workforce development, programme management and policy contexts. Individual learning contracts are developed with each student, to ensure a student-centred learning experience. A variety of learning methods are used, including lectures, seminars, tutorials, journal clubs, clinical placements and self-directed study. Learning is supported by online e-learning platforms. It is offered as a 1-year full-time course.

In the first year the course scored highly for student satisfaction, including an overall approval rating of 93%. Four students graduated with Distinction, and 6 with Merit. For its second year, the number of applications increased, and at the time of publication, 19 students have enrolled.

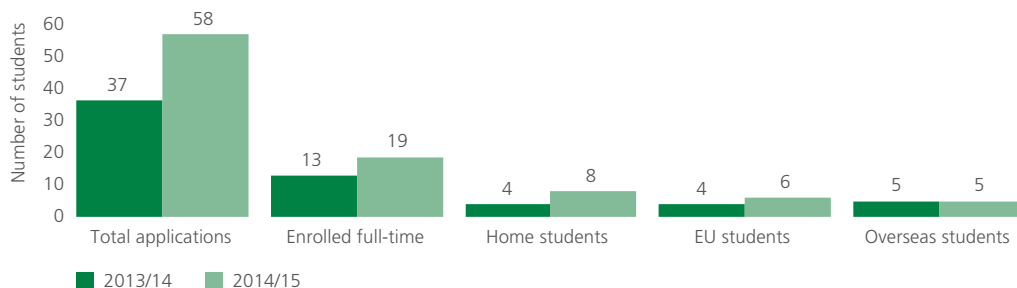
We also deliver a module of the MSc In Addiction Sciences Contemporary Advances in Evidence Based Policy, Practice, and the Alcohol module: Alcohol Problems, Policy and Practice, in conjunction with the UKCTAS.

### **MSc in International Addictions Studies (IPAS – Distance Education)**

The MSc International Programme in Addiction Studies is a unique postgraduate programme delivered entirely online. The programme is available to students from all countries. The programme can be completed in 12 months (full-time study) or 24 months (part-time study).

The programme is jointly offered by the academic staff of the University of Adelaide, Virginia Commonwealth University and King's College London. The course aims to develop professionals who are fully prepared to assume leadership roles in the addictions field throughout the world.

**Figure 23** | Number of MSc students in Addictions studies



The programme provides students with an advanced educational experience covering the scientific basis of addiction, comparative epidemiology, evidence-based interventions (including pharmacological, psychosocial and public health approaches), research methodology and addictions policy. Lecturers include the world's leading authorities in each of these subject areas, while course/module directors are faculty members of the three participating universities.

The course continues to record high student satisfaction ratings, rising from 92% in 2012/13 to 93% in 2013/14. The Programme was formally and externally reviewed in 2013 and rated highly. Commendable aspects of the course included: "World leaders in the field author online lectures/webcasts; Excellent and very comprehensive student feedback. The end of module reports are an example of best practice; Skills acquired on the programme

are transferable; Exemplary dedication from the programme team on what is a very demanding programme to run".

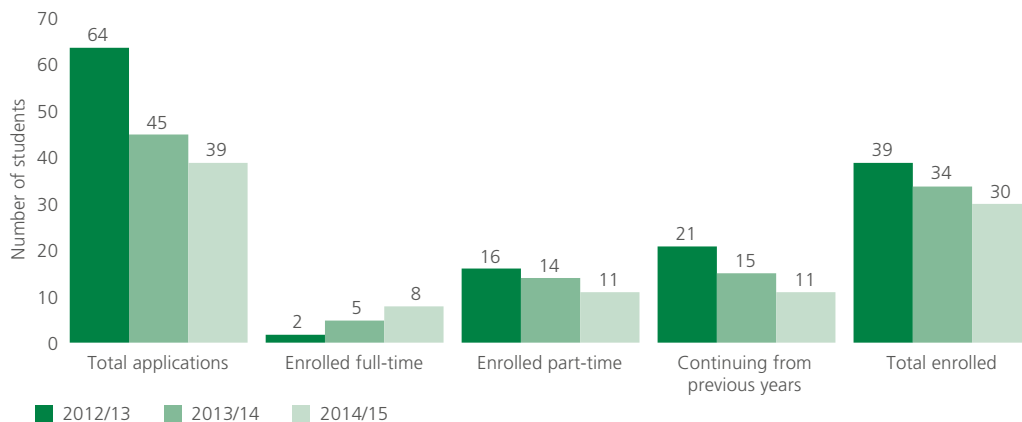
### Addictions massive online open course (MOOC)

In February 2014, the Institute of Psychiatry (IoP) at King's College London launched its first online learning course with FutureLearn, 'Understanding Drugs and Addiction'. Lead academic developing and presenting this course was Dr Kyle Dyer.

### The course attracted 11,620 learners

- of whom 53% (n=6090) engaged in the course (Learners);
- 86% of these completed at least one step (Active Learners);

**Figure 24 |** Number of MSc students in International Addictions studies (IPAS – Distance Education)



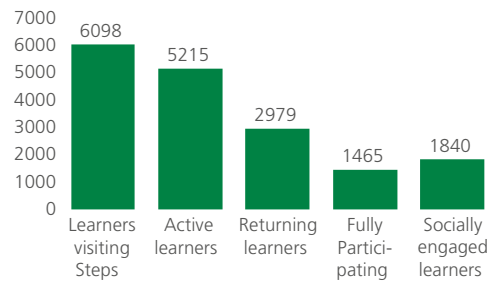
- 49% completed steps in more than one week (Returning Learners);
- and 24% (1459) completed the majority of steps across the six weeks including all tests (Fully Participating Learners);
- The demographic characteristics of the learners reflected the diversity of people affected by or responding to addiction in the community. Approximately 44% of learners were employed in the health and social care sector, with 34% working in the addictions field.

**The course received very positive feedback from learners:**

- 97% rated the course as excellent or good. Learners rated the educator as engaging, and the level, length and content of the course as appropriate;
- The Overview lectures, Video Lectures, Personal Story, and Research Showcases all rated well among the learners;
- 245 Statements of Participation were purchased by learners, which is reportedly the most sold by a Future Learn course to date;
- Approximately 90% of learners stated that they wished to pursue their interest in this topic;
- 66% intend to undertake another online course in addictions;

- 40% intend to undertake CPD, while 14% intend to seek higher education (3%UG, 11% PGT).

**Figure 25 |** Number of students and active learners February 2014



Unique visitors: 16,358; Enrolled learners: 11,620

**Addiction Biology Module**

This 30 credit optional module is offered to postgraduate students enrolled in the MSc in Addiction Studies and MSc in Neuroscience. It explores advanced biological approaches to addiction including psychopharmacology, neuroimaging and pharmacogenetics. Students are educated on the molecular interactions of addictive drugs with molecular targets in the brain, the neurochemical systems of the brain in which these drugs work and how system activity changes after chronic administration.

Associated neuroanatomy and the main pathological features of morphological changes associated with addiction are detailed. Students are able to describe the major methods in animal and human research to identify genes



and epigenetic processes that are involved in addiction, and understand how environmental and pathogenic influences during development affect the risk and development of addiction.

Students are provided with the opportunity to learn the theoretical basis, methods of analysis, and the types and practical applications of magnetic resonance imaging (MRI) – structural, functional, diffusion tensor imaging, genetic fMRI, and other functional imaging methods, e.g., PET and SPECT, and their application in addiction research. Additional material covers how drugs of addiction interfere with neuronal communication, neuronal plasticity and the cellular and molecular mechanisms of learning and memory, especially in the mammalian brain.

This material is provided in the context of translational and clinical perspectives of addiction neuroscience, such that students are able to understand how preclinical research can lead to improvements of clinical treatment of addiction. Students completing this module are well equipped to make an informed career choice, either in further postgraduate education (e.g. PhD) or employment related to addictions. Enrolments on this module continue to rise.

### **CPD – Nurse Training**

Addictions CAG has an annual CPD programme which addresses the learning needs of clinical team members and administrators.

To identify learning needs, this programme looks at:

- National and local policy development
- Developing scientific/clinical evidence
- Commercial and market changes
- Requirements of service user/family and carer groups
- Requirements of commissioners
- Staff members' career stages
- Staff experience levels
- Staff members' prior training
- Practice needs highlighted from monitoring incidents and complaints.

The current CPD programme covers:

- Optimising opiate substitution treatment
- Recognising deteriorating physical health
- Post Traumatic Stress Disorder (PTSD) for psychologists
- Post Traumatic Stress Disorder (PTSD) awareness for key-workers
- Palliative care
- Using Patient Group Directives for take home naloxone, pabrinex and viral hepatitis vaccines
- Team leaders' development programme

- Writing effective fact finders (incident reports)
- Medical devices training for drugs workers
- Issuing naloxone for drugs workers

Individual teams all have their own team in-house training sessions (either weekly or ad hoc) covering identified needs, examples include Sexual violence – a talk by Rape Crisis (Beresford Project); Opiate treatment update/revision (Lorraine Hewitt House); Diabetes management (AAU); Mental Health Act revision (AAU).

Nurses are required to undertake competency assessments every three years. In some teams drugs workers undertake modified versions of the competency assessments. These cover the following areas and are carried out by team leaders or delegated assessors:

- Medicine management
- Medical devices
- Professional standards and behaviour
- Patient observation and engagement
- Motivational interviewing and relapse prevention (psycho-social interventions)

### **Tobacco dependence treatment in mental health settings training pathway**

The implementation of any new policy and treatment pathway requires a competent and engaged workforce; the Addictions CAG have developed a new tobacco dependence training

pathway to support the implementation of the SLaM Smoke-free policy.

We have created a bespoke e-learning course specifically for mental health professionals. All frontline staff are encouraged to complete the 2 hour online course. The course is also marketed nationally to other mental health Trusts. The aim of the course is to raise awareness of the scope of the problem of tobacco addiction in mental health and addiction settings and make the case that treating tobacco dependence is everyone's business.

Since 2012, approximately 1400 staff in SLaM have completed this training, with a significant increase in knowledge between pre and post training. Since July 2014, an additional 140 inpatient staff have completed a 3 day classroom based training to deliver intensive stop smoking support or support for temporary abstinence. The evaluation of training has demonstrated positive outcomes with regards to knowledge, attitudes and confidence.



# Staff engagement and patient care

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## Effects on patient care

Studies have shown that satisfaction levels among hospital staff are closely linked to the quality of healthcare provided. A study carried out at Imperial College London found that hospitals in England with lower mortality rates were more likely to have members of staff satisfied with the quality of care they provide. They demonstrated that staff satisfaction is correlated with organizational performance.

Associations between various aspects of staff wellbeing and patient experience have been reported, mostly at whole-hospital or systems level. For example, the national staff and patient surveys have been compared with various patient outcomes.

Analysis of the staff and patient experience surveys indicate seven staff variables that are linked to good staff-reported experience.

These are:

- a good local team/work group climate;
- high levels of co-worker support;
- good job satisfaction;
- a good organisational climate;
- perceived organisational support;
- low emotional exhaustion; and
- supervisor support.

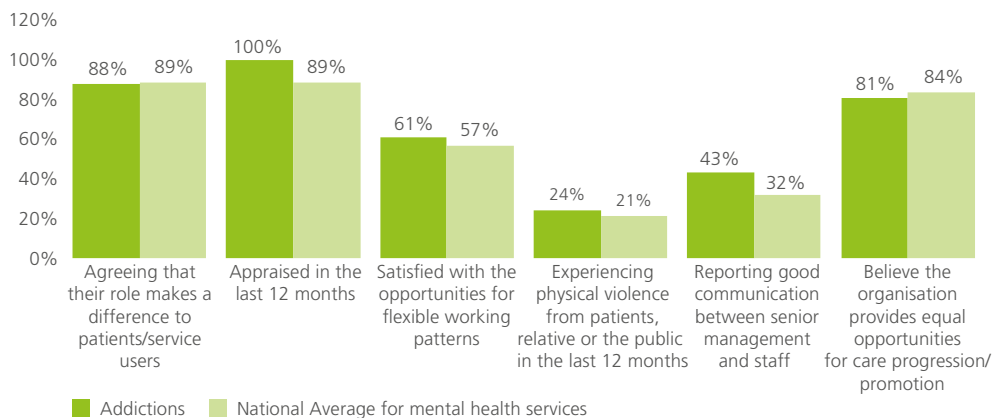
Below are some of the key findings, in relation to the above seven variables, from the National Staff Survey from 2013. The graphs compare the results for the Addictions CAG within the South London and Maudsley with the national average for other mental health/learning disability Trusts.

**Figure 26** | Scores from 1 to 5 for a selection of questions taken from the national staff survey 2015



Note: Questions into scores. For each of these scale summary scores, the minimum score is always 1 and the maximum score is 5

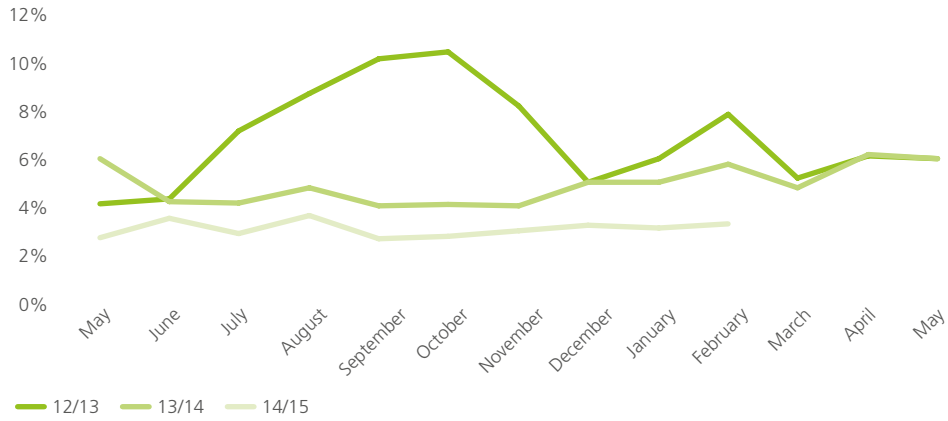
**Figure 27** | Percentage scores for a further selection of questions taken from the national staff survey 2015



Note: Percentage scores, i.e. percentage of staff giving a particular response to one, or a series of, survey question

**Staff sickness rates in the Addictions CAG:**

**Figure 28 |** Trend in staff sickness rates over the last 3 years



Staff sickness rates showing much lower levels than the previous 2 years.

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