

Productivity Commission – Inquiry into Mental Health

Submission – Penington Institute

About Penington Institute

Our mission

Penington Institute actively supports the adoption of approaches to drug use which promote safety and human dignity.

We address this complex issue with knowledge and compassion. Through our analysis, research, workforce education and public awareness activities, we help individuals and the wider community.

Our history

Launched in 2014, Penington Institute, a not for profit organisation, has grown out of the rich and vibrant work of one of its programs, Anex, and its 20 years' experience working with people and families directly affected by problematic drug use.

Penington Institute is inspired by and named in honour of Emeritus Professor David Penington AC, one of Australia's leading public intellectuals and health experts.

Our vision

Our vision is for communities that are safe, healthy and empowered to manage drug use.

Our understanding

Drug use trends, drug development and markets historically move faster than research and policy responses. With our outreach to the front line we are well-placed to know and understand the realities of how drugs are impacting communities – well before the published literature surfaces significant issues.

We combine our front-line knowledge and experience with our analysis of the evidence to help develop more practical research and policy, support services and public health campaigns. Our strong, diverse networks provide an excellent platform for building widespread support for effective initiatives.

Our activities:

We:

- Enhance awareness of the health, social and economic drivers of drug-related harm.
- Promote rational, integrated approaches to reduce the burden of death, disease and social problems related to problematic substance use.
- Build and share knowledge to empower individuals, families and the community to take charge of substance use issues.
- Better equip front-line workers to respond effectively to the needs of those with problematic drug use.

Our purpose is framed by our knowledge that we need to look at more effective, cost-efficient and compassionate ways to prevent and respond to problematic drug use in our community.

Introduction

Penington Institute welcomes the opportunity to make a submission to the Productivity Commission's Inquiry into the Social and Economic Benefits of Improving Mental Health.

Mental health comprises a complex set of psycho-emotional phenomena. Mental health, both positive and negative, is inextricably linked to other issues such as employment, economics, welfare, public health, education, housing and service availability. This makes mental health a challenging area for government intervention.

The Issues Paper issued by the Productivity Commission identifies substance use disorders as a possible area for consideration under the present Inquiry. Penington Institute strongly recommends that the Commission include substance use disorders in the scope of its inquiry. The crossover between drug use with mental health is an area inhabited by some of the most vulnerable people in Australia.

The mental health challenges that people who use drugs face are complex, often intractable and are inadequately addressed by service and support systems. What is most concerning is that the current mechanisms for controlling drugs in Australia are ineffective and as such, drug use and related harms are growing in Australia.

The latest wastewater analysis report estimates that Australians spent \$9.3 billion last year purchasing methamphetamine, cocaine, heroin and MDMA. Of this, methamphetamine — which has the clearest correlation to poor mental health outcomes for users — comprises 78% of money spent. Illicit drugs were estimated to have cost the Australian economy at \$8.2 billion in crime, lost productivity and healthcare costs in 2004. While this figure is more than ten years old, it provides some indication of the scale of costs to the economy, especially given the Australian drug market is estimated to have grown since then. In 2016, the annual cost of mental health to the economy was estimated at \$60 billion annually.

While the economic costs of drug use and mental health are important, it is the human toll that gives scale to the tragedy. *Australia's Annual Overdose Report 2018*, produced by Penington Institute, reveals that there were 2,177 drug-related deaths in Australia in 2016 compared to 1,262 in 2006 – a significant increase. This aggregates to more than 67,000 years of potential life lost to drug-related death in Australia in 2016. ⁴

2,866 Australians died of suicide in 2016. While there is some crossover in these figures — many suicides involve drugs— the dual-costs of mental health and drug use are clearly too high.

The overlap of drug misuse with mental health is complex and not easy to separate. The Victorian Auditor-General's recent report on access to mental health services noted that:

¹ Australian Criminal Intelligence Commission (2018) *National Wastewater Drug Monitoring Program – Report 6,* Commonwealth of Australia.

² Collins and Lapsely (2008) 'The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05', Commonwealth of Australia.

³ National Mental Health Commission (2016) 'Economics of mental Health in Australia', Australian Government.

⁴ Penington Institute (2018) *Australia's Annual Overdose Report 2018*, Penington Institute.

The demand for mental health care is growing, driven by multiple factors—including... legal and illegal drug use patterns.

However, even this fails to capture the complexity of the situation. It refers solely to demand for mental health services, and therefore only describes someone who is seeking help with their mental health. However, mental illness commonly goes undiagnosed and, due to the stigma associated with drug use and mental illness, many people experiencing mental distress and/or drug dependence issues do not seek help.

The overlap between drug misuse and mental health is not confined to acute episodes. Instead, drug use and mental health form part of a complex web of causality that can include inherited predisposition, poverty, experiences of trauma, lifestyle factors and cultural background.

The misuse of drugs has been shown to contribute to mental ill-health, however, in some instances drug use may be initiated as a means of managing psycho-emotional distress or an undiagnosed mental illness. ^{5,6}Fostering positive mental health and thereby minimising poor mental health or mental illness must begin well before clinical assistance is sought. We strongly encourage the Commission to look at how to foster positive mental health outcomes at the population level and to consider the mental health needs of some of the most vulnerable Australians: people who use drugs. .

Drugs are a major factor contributing to Australia's ongoing challenges in responding effectively to mental health: people who use drugs are at greater risk of poor mental health outcomes, and risks are intensified for particularly marginalised sub-groups such as those who inject drugs or those with an experience of incarceration. Both poor mental health and problematic drug use contribute substantially to lost productivity and, in turn, are exacerbated by socio-economic issues like poverty and un- and underemployment.

The complex relationship between mental health and drug use has historically been inadequately recognised and addressed in Australia, and this is reflected in both treatment systems and funding models. This means that for people with co-occurring mental health and drug use issues, getting support and accessing treatment is often very difficult.

⁵ Harris and Edlund (2005) 'Self-medication of mental health problems: New evidence from a national survey', *Health Services Research*, vol. 40(1).

⁶ Leeies et al (2010) The use of alcohol and drugs to self-medicate symptoms of posttraumatic stress disorder', *Depression and Anxiety*, vol. 27(8).

⁷ Teeson (2014) 'Mental health and substance use: opportunities for innovative prevention and treatment', *Mental health Commission of New South Wales*:

https://nswmentalhealthcommission.com.au/sites/default/files/assets/File/NSW%20MHC%20Discussion%20document%20on%20comorbidity%20cover%20page.pdf

Drug use in Australia

The National Wastewater Monitoring Program is an initiative by the Australian government to analyse wastewater to determine population levels of drug usage. The latest report, in which 58 wastewater sites were monitored in August 2018, covered approximately 56% of the Australian population.

The latest report identified increased levels of cocaine, methamphetamine and fentanyl detected in 2018 compared to 2016, while levels of MDMA and oxycodone declined. The total weight of methamphetamine consumed nationally is estimated at 9,847 kilograms for 2018, up from 8,405 in 2016.

While precise values can be difficult to know, the wastewater report estimates the street cost the drugs consumed in Australia in 2018 to be:

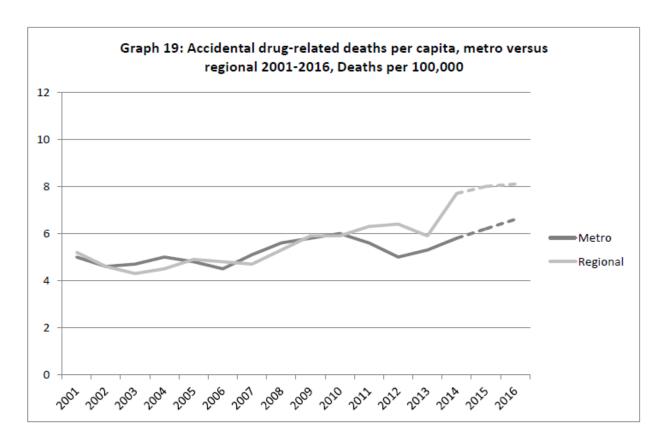
- \$7.3 billion on methamphetamine;
- \$1.5 billion on cocaine;
- \$114 million on MDMA; and
- \$375 million on heroin.8

Waste water analysis also revealed differences between rural and urban settings, with use of heroin and cocaine more concentrated in urban areas and use of methamphetamine, MDMA, cannabis, oxycodone and fentanyl more concentrated in rural areas.

As Penington Institute's *Australia's Annual Overdose Report 2018* reveals, the per capita rate of accidental overdose in regional Australia is growing at an accelerated rate compared to metropolitan areas.⁹

⁸ ACIC (2018).

⁹ Penington Institute (2018).



This trend suggests that regional Australia experiences a disproportionate burden of overall drug harms.

The *National Drug Strategy Household Survey 2016* confirms many of the findings of the wastewater analysis, including the widespread prevalence of drug consumption in Australia.¹⁰ The report estimates that 43% of Australians had used an illicit drug in their lifetime and 15.6% had used an illicit drug within the past 12 months. In regard to mental health the report states:

Drug use is a complex issue, and it is difficult to determine to what degree drug use causes mental health problems, and to what degree mental health problems give rise to drug use.

The survey found that the most commonly used drug in Australia in the past 12 months was cannabis, followed by the misuse of opioids. Cocaine use, while low compared to other drugs, is at its highest rate in 15 years. Methamphetamine was the predominant form of amphetamine used, increasing from 22% in 2010 to 57% in 2016.

This evidence suggests that drug use and its consequences (including impacts on mental health) are not effectively addressed by law-enforcement and supply reduction. Illicit drug markets are flexible and adaptive: if the supply of one type of drug is reduced significantly, this pushes people into using other, often more harmful drugs.

¹⁰ AIHW (2016) *National Drug Strategy Household Survey 2016: Detailed Findings*, Australian Institute of Health and Welfare.

The survey data also reveals that mental illness is a significant concern among people who use drugs: 'The proportion of people experiencing high or very high levels of psychological distress increased among recent illicit drug users between 2013 and 2016 —from 17.5% to 22%.'¹¹

Among those who had used drugs recently, diagnoses or treatment for mental illness ranged between 25% and 50% depending on drug type. 12

People who inject Drugs (PWID) are a particularly vulnerable sub-population of the larger population of people who use drugs. Injecting is associated with a range of poor outcomes for individuals, including poor physical health, unemployment, trauma, histories of homelessness and/or incarceration, stigma and discrimination, experiences of violence, poor mental health and social marginalisation.^{13,14}

Australia's approach to drugs

All Australian states and territories are party to the *National Drug Strategy* (NDS), which provides a national approach to drug use – broadly defined as including substances that have a legal status of licit (such as alcohol and tobacco), illicit or pharmaceutical.¹⁵

The NDS identifies the three pillars of minimising the harms associated with drugs and drug use:

- supply reduction,
- · demand reduction, and
- harm reduction.

However, the balancing of investment between these pillars that the strategy implies is not a reality.

Analysis from 2010 shows that harm reduction receives just 2.1% of total drug funding, with supply reduction activities such as law enforcement receiving over 66% while treatment and prevention (demand reduction) receive 21.3% and 9.2% respectively. While this analysis is some years old, there has not been a significant increase to harm reduction investment since.

Over the last decade, the number of national illicit drug seizures has increased by more than 85% and the weight of drugs seized in Australia has increased by approximately 130%. Data from the Illicit Drug Data Reports (produced by the Australian Criminal Intelligence Commission) shows steady growth in both the number and weight of annual seizures in the last five reporting years.¹⁶

¹¹ AIHW (2016): xi.

¹² AIHW (2016: 95.

¹³ Ahern et al (2007) 'Stigma, discrimination and the health of illicit drug users', *Drug and Alcohol Dependence*, vol. 88.

¹⁴ Galea and Vlahov (2002) 'Social determinants and rhe Health of Drug Users: Socioeconomic status, homelessness, and incarceration', *Public Health Reports*, vol. 117(1).

¹⁵ The Department of Health (2016) National Drug Strategy 2017-2026, Commonwealth of Australia.

¹⁶ Australian Criminal Intelligence Commission (2018) *Illicit Drug Report 2016-17*.

While these increases may appear to signal more effective methods of interdiction, it is readily acknowledged that increases in seizures actually indicate a growing drug market.¹⁷ Further, Australia has not seen correlative drops in the availability and use of illicit drugs to indicate current supply reduction efforts are effective.

One of the most significant challenges to effectively addressing the mental health consequences of drugs and drug use, is the criminalised social environment in which drug taking occurs. The criminalisation of illicit drugs has the effect of isolating people who use them by pushing drug taking activities and practices underground. This marginalises people who use drugs from supports, resources and services, making them more difficult to reach.

It is critical to understand that many of the harms associated with drugs are caused, or at the very least contextualised, by current regulatory responses to drugs. Contact with criminal drug markets and the criminal justice system are products of criminalisation and both negatively impact the wellbeing of people who use drugs. Effective responses for minimising the harms associated with drug use — treatment, prevention and harm reduction interventions — are often inhibited or undermined by law enforcement activities.

In short, addressing the relationship between drug use and mental health is made all the more difficult in an environment where drug use is responded to, first and foremost, as a matter for criminal justice. Reorienting Australia's response to drugs away from criminal justice toward more health and community focused responses would dramatically improve the well-being and mental health of people who use drugs.

Cannabis regulation

In recent years, several jurisdictions have moved toward the decriminalisation and even legalisation of cannabis. Portugal decriminalised the personal possession of all drugs in 2001, and several jurisdictions — Canada, Uruguay and several US states — have since legalised cannabis.

This global move toward regulating cannabis and its use through other means than the criminal justice system has been driven by a wealth of evidence on the harms of criminalisation contrasted against minimal evidence regarding the harms of cannabis use.

There are two primary benefits of legalised (and therefore, effectively regulated) cannabis markets. First, cannabis users are no longer inserted into the criminal justice system. In Australia, cannabis is the most widely used illicit drug and comprises the majority of drug arrests nationally.¹⁹

¹⁷ NSW Crime Commission (2018) *Annual Report 2017-2018*.

¹⁸ Maher and Dixon (1999) 'Policing and public health: law enforcement and harm minimisation in a street-level drug market', *British Journal of Criminology*, vol.39.

¹⁹ ACIC (2017) *Illicit Drug Data Report 2016-16*, Australian criminal Intelligence Commission.

The Victorian Parliamentary Budget Office has forecast a savings of \$348.9 million in the 2018-19 budget and up to \$1.5 billion by 2028-29 if illicit drugs were decriminalised and cannabis legalised and regulated. The savings would comprise revenue from cannabis and avoided enforcement-related expenses.²⁰

Second, regulated markets allow for quality control. Research has shown that the cannabis available in contexts where its use is criminalised contains extremely high levels of THC – the primary psychoactive component in cannabis. ²¹ In jurisdictions where cannabis production is regulated the cannabis produced contains lower levels of THC and higher levels of CBD – a secondary psychoactive compound with various medicinal properties.

While the exact nature of the relationship between cannabis consumption and poor mental illness is unknown, a relationship has been established. Whatever the relationship is, having a cannabis supply that is highly potent out of reach of quality control mechanisms is undesirable given this link.

Regulated cannabis markets allow for more effective means of controlling access (such as Canada's *Cannabis Act* and its provisions relating to underage access)²² and allow concentrations of THC to be determined by policy. The benefits of legalised cannabis for the harms associated with both mental illness and drug use are likely to be considerable.

Injecting drug use and quality of life

Research into the experiences of people who inject drugs has consistently found that they experience lower quality of life (QOL) than the general population.^{23,24} One study from Queensland that collected data on the age, gender, injecting patterns, current drug treatment status and hepatitis C status of clients of a Brisbane needle and syringe program, found that participants' quality of life was:

...significantly poorer compared to the Australian sample norms...[,] significantly poorer on all domains when compared to samples consisting of persons with chronic heart disease, prisoners and persons with spinal cord injuries... [and] significantly poorer... on most domains compared to persons with pain, neurological disease and stroke.²⁵

These findings clearly demonstrate the vulnerability of this population and their susceptibility to poor mental health outcomes. Also revealed is their clear need for facilitated and coordinated access to both

²⁰ Parliamentary Budget Office (2018) 'Decriminalise illicit drugs and legalise and regulate cannabis', Government of Victoria.

²¹ Swift et al (2012) 'Analysis of cannabis seizures in NSW, Australia: Cannabis potency and cannabinoid profile', *PLOS ONE*.

²² Cannabis Act, Parliament of Canada: https://laws-lois.justice.gc.ca/eng/acts/c-24.5/page-2.html#h-6

²³ Robinson (2006) 'Health perceptions and health-related quality of life of substance abusers: A review of the literature', *Journal of Addiction Nursing*, vol. 17.

²⁴ De Maeyer et al (2010) 'Quality of life among opiate-dependent individuals: A review of the literature', *International Journal of Drug Policy*, vol. 21.

²⁵ Fischer et al (2013) 'Quality of life pf people who inject drugs: characteristics and comparisons with other populations samples', *Quality of Life Research*, vol. 22(21).

mental health and drug treatment services, as well as other supports and resources to improve their wellbeing.

The poor quality of life experienced by people who inject drugs results from a complex interplay of factors, including the physical consequences of injecting, social marginalisation, stigma, mental illness, criminalisation and a lack of access to supports and services.

In many ways, stigma is at the heart of the intense marginalisation experienced by people who inject drugs. The stigma faced by this population is complex, pervasive and wide-ranging.²⁶ Experiences of stigma can contribute substantially to poor health and social outcomes.^{27, 28} When stigma becomes internalised, people come to hold a very negative self-conception, which can have terrible consequences for their mental health.²⁹

The impacts of stigma (including negative consequences for mental health) are not limited to the individual: families of people who use drugs also experience stigma and its consequences.³⁰

It is the combination and interaction of multiple factors that produce the stark gap in quality of life between people who inject drugs and the rest of the population. Demonstrably, people who inject drugs face challenges to quality of life that are complex, pervasive and oftentimes intractable. Poor mental health outcomes are situated within this broader set of barriers to good quality of life faced by this group.

Methamphetamine and mental health

Methamphetamine or 'ice' is a highly potent stimulant. The link between methamphetamine use and poor mental health outcomes is clearer than for other drugs.^{31, 32}

The *National Drug Strategy Household Survey 2016* found that people who had recently used methamphetamine, 57% said it was their 'main drug' in 2016, up from 22% in 2010. Further, rates of daily use among methamphetamine users have doubled since 2010. For people who had used methamphetamine recently, mental health diagnoses or treatment is 42%, a significant increase on 29% in 2010.

Wastewater analysis conducted in 2018 found an alarming increase in levels of methamphetamine detected.

²⁶ Room (2005) 'Stigma, social inequality and alcohol and drug use', *Drug and Alcohol review*, vol. 24(2).

²⁷ Gray (2010) 'Shame, labelling and stigma: challenges to counselling clients in alcohol and other drug settings' *Contemporary Drug Problems*, vol. 37(4).

²⁸ Bradstreet et al (2018) 'Internalised stigma in mental health: An investigation of the role of attachment style', *Psychiatry Research*, vol. 270.

²⁹ Buchman and Reiner (2009) 'Stigma and Addiction: Being and Becoming', American Journal of Bioethics, vol. 9(9).

³⁰ Commonwealth of Australia (2015) Final Report of National Ice Taskforce.

³¹ Sara et al (2018) 'Amphetamine availability predicts amphetamine-related mental health admissions: A time series analysis', *Australian and New Zealand Journal of Psychiatry*, vol. 52(11).

³² Darke (2008) 'Major physical and psychological harms of methamphetamine use', *Drug and Alcohol Review*, vol. 27(3).

The populations of people who are more likely to use methamphetamine often face additional risk-factors harms, such as:

- People in rural/remote areas are 2.5 times more likely to have tried methamphetamine than people living in major cities;
- Unemployed people were 3.1 times more likely to have used methamphetamine;
- And people that identified as homo- or bisexual were 5.8 times more likely to use ecstasy and methamphetamine.³³

Living in rural areas, being unemployed and identifying as gay or bisexual are all independent risk-factors for poor mental health. These groups (rural, unemployed, gay/bisexual) often face additional barriers to accessing health and support services. The lack of availability of treatment options for those suffering comorbid mental health and drug issues is particularly concerning in light of these figures.

Drug treatment and mental health services

Accessing drug treatment or mental health services can be difficult in Australia, especially for vulnerable populations. A recent review of an Australia-wide program for accessing Medicare funded psychological services in Australia found the program:

had failed to address key service gaps and socio-demographic challenges, particularly affecting people living in regional and rural areas... Gaps clearly remain for those with more severe or enduring disorders... [including] comorbid substance use.³⁴

A 2014 review of alcohol and drug treatment in Australia revealed that demand for drug treatment far outstripped supply. The report estimated that while approximately 200,000 people received treatment in any one year, the number of people seeking treatment yet being unable to access it was estimated to be between 200,000 and 500,000.³⁵

Other research describes the problem of disconnected and poorly coordinated services as systemic and commonplace. A 2010 report on housing, mental health and drug treatment services identified a multitude of ongoing barriers to effective integrated care arrangements for people whose mental illness is contextualised by additional morbidities such as drug misuse, homelessness or both.³⁶

Many mental health services require prospective patients to have completed detoxification prior to accessing the service, preventing those unable to achieve this from accessing mental health services. On the other hand, some drug treatment services are ill-equipped to recognise and respond effectively to co-occurring mental health problems. The gaps that exist in the intersection of drug treatment and mental

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³³ AIHW (2016).

³⁴ Rosenberg and Hickie (2019) 'The runaway giant: ten years of the Better Access program', *The Medical Journal of Australia*.

³⁵ Ritter et al (2014) *New Horizons: The review of alcohol and other drug treatment services in Australia*, Drug Policy Modelling program, University of New South Wales.

³⁶ Flatau et al (2010) 'The integration of homelessness, mental health and drug and alcohol services in Australia', Australians Housing and Urban Research Institute.

health services mean that many people experiencing comorbid drug and mental health issues are unable to access treatments that effectively address their needs.

Additional investment in prevention, treatment and harm reduction is sorely needed to address the harms associated with comorbid drug use and mental illness.

Hepatitis C and people who inject drugs

Around 80 per cent of people who acquire hepatitis C do so by sharing injecting equipment, with new infections occurring almost exclusively among people who inject drugs.

Hepatitis C is more common in people with mental illness than it is in the general population. While it is challenging to accurately measure the exact proportion of people with mental health issues in Australia who have hepatitis C rates are estimated to be between 3% and 42% among people in Australian psychiatric hospitals,³⁷ compared to just 1% population-wide. As many as half of people living with hepatitis C live with depression. Due to the close link to drug use, there is considerable stigma and shame associated with hepatitis C.

Until very recently (2016), access to hepatitis C antiviral therapy was not available to populations with mental health and substance use disorders, due primarily to the contraindications to treatment.

The introduction of direct-acting antiviral therapy for hepatitis C has profoundly changed the hepatitis C treatment landscape by providing an alternative to old interferon-based treatments to see cure rates at 98%. Recent evidence shows the safe use of DAA therapy in hepatitis C treatment for patients with preexisting mental health illness. 38

Despite more than 30,000 Australians starting hepatitis C treatment in 2016 alone, there is concern that people living with mental illness are missing out. Many of these people will be people who currently inject drugs or have done in the past.

With the Commonwealth having invested over \$1 billion to subsidise these highly effective treatments to everyone over the age of 18,³⁹ Australia has an opportunity to significantly reduce the burden of disease presented by this virus. Curing hepatitis C can have multiple health benefits, including mental health benefits.

³⁷ Grenville, C., Brener L., Treloar C. (2013) Knowledge and attitudes towards hepatitis C and injecting drug use among mental-health support workers of a community managed organisation. Australian Health Review 37, 654-659

³⁸ Sackey B. et al, (2018) Evaluating psychiatric outcomes associated with direct-acting antiviral treatment in veterans with hepatitis C infection *Mental Health Clinician*, May; 8(3): 116–121.

³⁹ Commonwealth of Australia (2015), "Turnbull Government Invests over \$1 billion to Cure HEP C", http://www.health.gov.au/internet/ministers/publishing.nsf/Content/health-mediarel-yr2015-ley154.htm, accessed 10 January 2017.

Harm reduction

The term 'harm reduction' refers to a wide range of policies and programs aimed at reducing the adverse health, social and economic consequences of the use of legal and illegal psychoactive substances. These often target priority populations, such as people who inject drugs (PWID) or people who are incarcerated.

Harm reduction activities range from education, overdose prevention initiatives, peer inclusion and engagement, needle and syringe programs, some types of drug treatment, drug diversion, and programs that empower communities to respond to drug use in ways that are evidence-based, meaningful for those involved, and maintain dignity and respect.

While many harm reduction activities such as needle and syringe programs and medically supervised injecting centres are focused at the acute end of drug use, many have a preventative focus and seek to build community resilience and other protective factors to minimise the risks and harms of drugs and drug use.

Harm reduction initiatives are often collaborative efforts focused on continuity of care and wrap-around service provision. Examples include 'prison through-care' programs that support the broad health, social and housing needs of recently released prisoners. These programs, such as one operating in Scotland, engaged prisoners prior to the release with pre-release counselling and developing strategies for managing their integration back into community.⁴⁰ The programs then continue to support clients following their release from prison by facilitating access to health and social services.

The US state of Pennsylvania has a suite of harm reduction programs aimed at reducing drug-related harms. These include reducing the amount of unused prescription drugs available by providing community disposal points; the integration of drug recovery experts at emergency departments to ensure patients with drug dependence issues are discharged with a recovery plan in place; and an Overdose Taskforce that developed a rapid response mechanism to coordinate law enforcement and emergency medical services in responding to overdose events.⁴¹

The Exponents' ARRIVE program is the longest running harm reduction program in the United States. Exponents, a harm reduction service, runs programs for people who currently use drugs, education programs such as high school equivalency classes, and training programs focused on re-entering the workforce. The service is low-threshold, meaning clients are not required to be in recovery to enter access the service.

The central premise of the ARRIVE program is to offer a range of services within the context of a supportive and inclusive community. In doing so, social connectedness is fostered, which functions as a major protective factor for a range of morbidities, including substance misuse and mental illness.

Unfortunately, harm reduction is a neglected component of Australia's investment in drug responses.

⁴⁰ Penington Institute (2017) *Not Just Naloxone*, Penington Institute.

⁴¹ Penington Institute (2017).

Supply reduction efforts such as law enforcement receive more than two-thirds of drug funding. This is despite research showing law enforcement activities can negatively impact people who use drugs (i.e. by entering them into the criminal justice system) and hamper the effectiveness of harm reduction initiatives.⁴²

In contrast, the effectiveness of many harm reduction initiatives, such as Needle and Syringe Programs⁴³ and Take-Home Naloxone (THN)⁴⁴ programs are well-supported by evidence. Such initiatives have been shown to reduce the harms of drug use to the people who use drugs (including poor mental health and low productivity). Harm reduction programs also have flow-on benefits for the broader community, such as reduced healthcare costs, reduced drug-related crime and reduced drug use among their client base.⁴⁵

While harm reduction interventions primarily address the harms of drug use, the principles underpinning it are relevant to mental health as well. Poor mental health is included in the ambit of harms that may be avoided or reduced through effective harm reduction interventions. An increased emphasis on harm reduction in Australia's drug response is likely to have flow-on benefits for Australia's mental health and productivity.

Needle and Syringe Programs

Needle and syringe programs have been set up with the core responsibilities of:

- Preventing the transmission of blood-borne viruses by dispensing sterile injecting equipment, and
- Encouraging safer injecting practices.

At their best, needle and syringe programs also connect their clients with the support they need – including drug treatment, mental health and housing services. They are often their clients' only regular service touchpoint. As injecting drug use is associated with higher levels of drug dependence, ⁴⁶ needle and syringe programs represent a unique opportunity to address the complex interactions of drug use, poor mental health and physical health, socioeconomic exclusion and crime.

Needle and syringe programs do not just provide sterile injecting equipment. They also provide crucial education, information resources and social contact for clients; and are an opportunity for clients to have

⁴² Boucher et al (2017) 'Expanding conceptualisations of harm reduction: results from a qualitative community-based participatory research study with people who inject drugs', *Harm Reduction Journal*, vol. 14(18).

⁴³ Commonwealth Department of Health and Aging (2002) 'Return on investment in needle and syringe programs in Australia', *Commonwealth of Australia*:

http://www.ffdlr.org.au/campaigns/docs/ROI%20on%20NSP%20Summary.pdf

⁴⁴ Penington Institute (2017) *Not Just Naloxone: Insights into emerging models to reduce drug harms:*http://www.penington.org.au/wp-content/uploads/2017/08/Not-just-naloxone-insights-into-emerging-models-to-reduce-drug-harms.pdf

⁴⁵ Penington Institute (2017).

⁴⁶ Novak et al (2011), "Comparing Injection and Non-Injection Routes of Administration for Heroin, Methamphetamine, and Cocaine Uses in the United States", *Journal of Addictive Diseases*, 30:248–257, 2011.

their most pressing and immediate concerns met. When program staff are unable to meet a client's needs, they can refer them on or link them into a service that can.

The receipt of education and information in a positive, non-judgemental environment has a range of benefits, including improved mental health and wellbeing. Needle and syringe programs increase the capacity of their clients to look after themselves, and provide opportunities to have other needs met, such as immunisation or getting screened for blood-borne viruses.

The Australian Needle and Syringe Program has been an extremely effective means of reducing a range of harms associated with injecting drug use. In 2002, the national program was conservatively estimated to have saved the Australian economy \$8 billion in avoided healthcare costs since its implementation in the late 1980s.⁴⁷ Over the 2000 - 2009 period, needle and syringe programs are calculated to have prevented 32,050 new HIV infections and 96,667 hepatitis C infections, averting healthcare costs of up to 1.28 billion.⁴⁸ This was based on an investment of \$243 million over the same period.

Needle and syringe programs are the frontline in Australia's fight against hepatitis C and are a critical point of access for people with hepatitis C to learn about and receive new highly effective treatments. These new treatments offer the hope of cure without the terrible side effects that came with older treatments. However, the number of people accessing treatments has plateaued: currently, only 15% of those living with chronic hepatitis C having received the new treatments. It is estimated that there are 170,000 people living with chronic hepatitis C in Australia who are not accessing treatment.⁴⁹

While needle and syringe programs are a crucial part of Australia's harm reduction infrastructure, needle and syringe program staff are also at-risk of poor mental health outcomes. Their work is challenging, often thankless, and many are poorly remunerated. Poor mental health or burn-out can severely impact program staffs' capacity to do their job effectively, and this can have negative flow-on effects to their clients.

Despite the needle and syringe program delivering a range of positive outcomes for both clients and the broader Australian community, the program remains under-funded.

Regional areas are often poorly serviced which makes it difficult for people to access sterile equipment and other services. Further, not all needle and syringe programs are able to provide a full range of services; many secondary programs only supply a limited range of sterile equipment and are unable to offer further supports or resources.

⁴⁸ Department of Health (2009) 'Return on investment 2: evaluating the cost-effectiveness of needle and syringe programs in Australia,' Government of Australia:

http://www.health.gov.au/internet/main/publishing.nsf/Content/A407CF4FECBDC715CA257BF0001F98B2/\$File/retexe.pdf

⁴⁷ Commonwealth Department of Health and Aging (2002).

⁴⁹ Kirby Institute (2018) 'HIV, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report 2018', The Kirby Institute: https://kirby.unsw.edu.au/sites/default/files/kirby/report/KI_Annual_Surveillance-Report-2018.pdf#page=82

The national needle and syringe program is a crucial component of Australia's ongoing response to drugs and the mental health of some of the most vulnerable people in Australia. It is imperative that the needle and syringe program is adequately funded to increase its effectiveness and ensure its ongoing operation.

Education

Education is an effective means of preventing and reducing drug harms including negative consequences for mental health, provided the education is evidence-based, non-judgemental and delivered through effective and accessible means. Education can be delivered in a variety of settings but needs to be tailored to the needs of specific audiences. For example, in schools education is likely to focus on prevention whereas other settings provide important opportunities for education that is harm reduction focused.

Needle and syringe programs can be effective means of delivering education and informational resources to people who inject drugs. However, due to a range of factors such as a lack of funding and untrained staff, the educational potential of the needle and syringe program is rarely realised.

Large, well-funded programs located in metropolitan areas are equipped to deliver a full range of services by specially trained staff (harm reduction workers). However, this is not the majority of NSPs. Many operate out of local pharmacies without specialist training, and so cannot provide the specialised service that many clients need. These are missed opportunities for effective intervention.

A Case Study - Educational online resource for young people at risk of ice use, their friends and their families

In 2016, in response to the growing problem of crystal methamphetamine (ice) in Victoria, Penington Institute developed an educational online resource for young people at risk of ice use, their friends and their families – *Understand Ice* (www.understandice.org.au). At that time there were no online resources for young people that provided calm, evidence-based information.

Young people have embraced digital mediums and social media, engaging with these extensively in all aspects of their lives. Many use this medium to access information about drugs — as evidenced by numerous online 'drug forums' where people exchange information and experiences.

Understand Ice provides accessible, straightforward information about ice and its effects on a person's health and life. The resource and the education program are evidence-based and non-judgemental. Evidence suggests that 'scare campaigns' tend to be ineffective and may (further) stigmatise people who use drugs.

The site's information is easy-to-understand and highlights practical actions including links to health services. It aims to help reduce the fear and anxiety for families and friends.

The resource is structured around four sections, each tailored to a specific target audience (young people or their friends or family:

- The facts about ice (the forms it comes in, its effects, how it is used, problems with more frequent use)
- Ice and health (the potential impacts of ice on a person's mental and physical health)

- Ice and life (the potential impacts of ice on a person's work and study)
- What can I do? (links and help lines plus information about how and when to talk to a young person about their ice use)

The aim of *Understand Ice* was to contribute to the reduction of adverse consequences of ice use among young people aged 19-24 years by:

- 1. Encouraging young people to consider the impact that their ice use was having on them and help them manage the impacts of their use.
- 2. Giving young people support and advice on things they could do if they recognised that their ice use was becoming a problem.
- 3. Providing harm reduction information that gave people the information and knowledge with which to reduce the harms of their ice use, in the event they choose to continue to use.
- 4. Linking them in with information, advice and referral if they wanted to take action about their ice

Over two years, Penington Institute ran an extensive education campaign across regional and rural Victoria and metropolitan Melbourne to promote the Understand Ice resource, using the latest social media promotional tools and advertising as well as more traditional channels such as media relations activities and print advertising.

Penington Institute originally aimed to encourage 10,000 unique visitors to the *Understand Ice* resource during the whole project. As at 30 June 2018 (the end of the campaign's phase 3) the campaign had attracted more than 52,000 people (unique visitors) to the resource, demonstrating the need for such a resource.

Other education-based interventions include training people to respond to opioid overdose with naloxone. Reports from Take-Home Naloxone programs operating both in Australia and internationally have shown that clients trained in naloxone feel empowered about their drug use, are more likely to respond in the event of witnessing an overdose and report an improved sense of wellbeing.⁵⁰

Other areas in which education is important is among people engaged in the non-medical use of medications. Often such people are not aware their medication is addictive, that they have developed a dependence, and that this places them at increased risk of multiple harms including for their mental health.

There are many opportunities for education-based intervention focused on preventing and reducing the harms associated with drug use. However, the continuing funneling of resources into ineffective and at times harmful responses to drug use not only diverts resources away from education interventions but can also actively inhibit their effectiveness. These harm reduction- and prevention-focused interventions improve the wellbeing of clients by empowering clients to take better care of themselves, access available services and have positive interactions with others.

⁵⁰ Holloway, et al (2016) 'Non-fatal overdose among opiate users in Wales: A national survey', *Journal of Substance Use*, vol. 21(5).

Pharmacotherapy for Opioid Dependence

Pharmacotherapy (also known as 'opioid substitution therapy') is a highly effective form of drug treatment for people experiencing opioid dependence. While Pharmacotherapy is a form of drug treatment, it is also an effective harm reduction intervention.

Pharmacotherapy involves the provision of slow-acting synthetic opioids (usually methadone or buprenorphine) to people with an opioid dependence. This assists clients to stabilise their drug use and helps them to lead a normal life. Receiving Pharmacotherapy is associated with reduced drug use; increased capacity to engage in education, training and employment activities; reduced likelihood of drug-related criminal offending; and other positive outcomes.^{51, 52}

These benefits are likely to contribute to better mental health outcomes for Pharmacotherapy patients.

Unfortunately, there are multiple barriers to accessing Pharmacotherapy in Australia: On a snapshot day in 2017, almost 50,000 people across Australia received Pharmacotherapy at approximately 2,700 dosing sites. However, there are an estimated 40,000 people who are eligible for Pharmacotherapy but not currently accessing the treatment.⁵³ Barriers for patients wanting to access Pharmacotherapy include a lack of accessible dosing points, difficulty in finding a GP to prescribe it, travel and cost. These can severely jeopardise outcomes for patients receiving Pharmacotherapy.⁵⁴

Patients receiving Pharmacotherapy for opioid dependence pay a dispensing fee for each dose. Since patients often receive their medication every day, the cost of accessing Pharmacotherapy can be over \$70 per week. Given that people receiving Pharmacotherapy often have limited incomes, dispensing fees form a significant barrier to treatment adherence. Further, research has shown that some Pharmacotherapy patients resort to property crime as a means of paying dispensing fees.

Cost becomes a significant barrier to Pharmacotherapy adherence, as clients may not be able to afford daily dispensing fees, especially if attending the dispensing locations requires them to travel. Reducing the cost of Pharmacotherapy treatment for patients will increases its accessibility and the benefits of treatment for patients.

⁵¹ Amato et al (2005) 'An overview of systematic reviews of the effectiveness of opiate maintenance therapies: available evidence to inform clinical practice and research', *Journal of Substance Abuse treatment*, vol. 28.

⁵² Mattick et al (2009) 'Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence', *The Cochrane Collaboration*: http://researchonline.lshtm.ac.uk/5044/1/5044.pdf

⁵³ Harm Reduction Australia (2018) *National MATOD Summit Report*:

https://www.harmreductionaustralia.org.au/wp-content/uploads/2018/07/National-MATOD-Summit-Report-2018.pdf

⁵⁴ Penington Institute (2015) 'Chronic Unfairness: Equal treatment for addiction medicines': http://www.penington.org.au/wp-content/uploads/2015/04/Chronic-Unfairness-Penington-Institute.pdf

⁵⁵ Chalmers and Ritter (2012) 'Subsidising patient dispensing fees: The cost of injecting equity into the opioid pharmacotherapy maintenance system', *Drug and Alcohol Review*, vol. 31(7).

⁵⁶ Rowe (2007) 'A raw deal? Impact on the health of consumers relative to the cost of pharmacotherapy', *Salvation Army research and Advocacy Unit*.

Conclusion

People are misusing prescription painkillers, heroin and other drugs including synthetic cannabinoids and opioids unlike any previous time in history. Drug overdoses, both fatal and non-fatal, will continue to increase, deeply affecting individuals, families and communities. In the United States of America, the White House Council of Economic Advisers estimated the costs of drug misuse to be half a trillion dollars in 2015.⁵⁷

These costs run deep and reveal the complexity of this problem and foreshadow the scope of the challenge ahead by illustrating that harms associated with drug misuse and from overdose is about much more than drugs or health. It is about risk, morality, poverty, inequality, gender, need, prosperity, mental health and community connectedness. If it has not already done so, this growing epidemic has the potential to profoundly affect all aspects of all societies.

Australia needs to produce similar cost estimates if we are to respond effectively to these growing trends. Harm reduction efforts must be a part of this. As Victoria's former Police Commissioner, Ken Lay, said about drug use: 'It isn't an issue you can arrest your way out of.' 58

Harm reduction measures are an effective means of reducing the negative harms and financial costs associated with drug use. Effective harm reduction reduces the burden of drug criminalisation upon individual users and improves the lives of already vulnerable and marginalised groups of people who use drugs. By providing specialised services designed to be accessible and non-judgemental, harm reduction services reduce the experience and consequences of stigma for clients.

Effectively implemented harm reduction responds to co-occurring and entwined issues, such as mental illness and drugs, especially for hard-to-reach and socially marginalised groups. A rebalancing of the drug investment in Australia would result in improved mental health (and other) outcomes for people who use drugs. This can be achieved without sacrificing the important role of law enforcement in Australia's ongoing response to drug harms.

Mental health cannot be addressed in isolation: it is bound up in other things, and often it is the most marginalised and vulnerable who suffer the most. Improving investment in services that cater to people who use drugs and that prioritise treating them with dignity and respect is crucial for improving the mental health outcomes for this vulnerable cohort, and the wider Australian community. This will have significant and ongoing benefits for Australia, including increased levels of economic participation and productivity.

⁵⁷ The Council of Economic Advisors (2017) 'the underestimated cost of the opioid crisis', *Executive office of the President of the United States*:

https://www.whitehouse.gov/sites/whitehouse.gov/files/images/The%20Underestimated%20Cost%20of%20the%20Opioid%20Crisis.pdf

⁵⁸ Dmytryschak (2017) "We probably weren't brave enough on injecting rooms," says Victoria's former police chief Ken Lay', 22 July 2017, *The Age*: https://www.theage.com.au/national/victoria/we-probably-werent-brave-enough-on-injecting-rooms-says-victorias-former-police-chief-ken-lay-20170722-gxgn84.html