10 June 2015

Committee Secretary
Parliamentary Joint Committee on Law Enforcement
PO Box 6100
Parliament House
Canberra ACT 2600
Dear Sir/Madam,

Re: Submission to the Parliamentary Joint Committee on Law Enforcement inquiry into crystal methamphetamine

The Drug Policy Modelling Program (DPMP) aims to improve Australian alcohol and other drug policy. DPMP is at the cutting edge of international work in alcohol and other drug policy and has received its core funding from the Colonial Foundation Trust, a private Australian philanthropy. DPMP also attracts competitive research grants from the Australian Research Council and the National Health & Medical Research Council, among others. DPMP is part of the National Drug and Alcohol Research Centre (NDARC) at the University of New South Wales which is supported by funding from the Australian Government. DPMP collaborates with a wide range of stakeholders including government departments, treatment providers, drug consumer groups and peak bodies; and conducts commissioned research for governments across Australia.

We welcome the opportunity to provide our views to the Parliamentary Joint Committee on Law Enforcement. Our submission covers three of your specific issues of concern:

- the nature, prevalence and culture of methamphetamine use in Australia, including in indigenous, regional and non-English speaking communities;
- the role of Commonwealth law enforcement agencies in responding to the importation, manufacture, distribution and use of methamphetamine and its chemical precursors; and
- the involvement of organised crime including international organised crime and outlaw motorcycle gangs in methamphetamine related criminal activities.

Our submission also discusses other issues related to reducing the negative impact of crystal methamphetamine on Australian society.

We would like to start by reminding the Parliamentary Joint Committee on Law Enforcement that methamphetamine use is not a new phenomenon. Nor are concerns about “ice” or crystal methamphetamine new. There was also concern about an “ice epidemic” in 2006-2007 (Lancaster, Ritter, & Colebatch, 2014). During this period there was a significant increase in attention to the issue of methamphetamines by Australian media, policy makers and government (Hughes, 2015, May 5). There are strong similarities to this most recent period of concern (2013-2015). On both occasions there has been a tendency to frame crystal methamphetamine as a population-wide problem while policy responses should be shaped on a clear understanding of where community harms are concentrated (Lancaster et al., 2014).

Not only is harmful use and society's fear of methamphetamine not new but a range of possible policy responses have already been considered and are readily available. The previous period of concern led to a variety of recommendations from policy experts and policy makers who were drawn together in a range of consensus forming fora. A National Leadership Forum on "Ice" was convened in 2006, resulting in a range of resolutions by state and federal governments, which took into account research evidence, law enforcement, prevention, rehabilitation, manufacture and supply of methamphetamine and the potential for coordinated action at a national level (Ministerial Council on Drug Strategy Joint Communique, 2007). Subsequently, in January 2007 the Australian National Council on Drugs (ANCD) released a position paper with 22 recommendations aimed at responding to the methamphetamine situation in Australia. The position paper emphasised the need for a balanced and coordinated approach across all four 'pillars' of drug policy generally (law enforcement, harm reduction, treatment and prevention) but also noted the need for policy responses designed specifically for tackling methamphetamine issues (Australian National Council on Drugs 2007). The leadership Forum led also to the National Amphetamine-Type Stimulant Strategy 2008-2011 (Commonwealth of Australia, 2008). The report of the Parliamentary Joint Committee on the Australian Crime Commission (2007) made 18 recommendations on Amphetamines and Other Synthetic Drugs. Due to the nature of this Committee's duties, the focus was heavily upon law enforcement responses although a number of recommendations were also made with regard to prevention and harm reduction measures.

Drug and Alcohol Review published an editorial in 2007 stating "in light of the substantial media activity, community concern and governmental inquiries, you would be forgiven for thinking that we did not have any substantial evidence-base to address methamphetamine. This is not the case. Indeed Australia has contributed substantially to the evidence-base for methamphetamine responses" (Ritter, 2007, p. 227).

While some recommendations from the substantial work undertaken during this period were taken up, many other possible responses were not (Lancaster et al., 2014). Importantly, to our knowledge there was no evaluation of the effectiveness or otherwise of the National Amphetamine-Type Stimulant Strategy 2008-2011.

Since then, a body of knowledge contextualising this policy activity has accumulated, as well as subsequent research analysing trends in use and harms. It is this research we draw upon in this submission.

The nature, prevalence and culture of methamphetamine use in Australia, including in indigenous, regional and non-English speaking communities

The most recent annual estimate of the direct social costs of illicit drug dependence and harmful use in Australia is AU$8.2 billion. That estimate relates to 2004 -05. Although there were no estimates specific to methamphetamine, it was estimated that psychostimulants (including amphetamines, methamphetamine and cocaine) accounted for AU$3.4 million of gross hospital costs in that year (Collins & Lapsley, 2008).

In another estimate, Moore (2007) estimated three types of social costs of meth/amphetamine on an annual basis i) health costs = dependence, low birth weight, infectious diseases such as HIV/AIDS; ii) crime costs = property and violent crime e.g. burglary, robbery, theft, fraud, assault, criminal damage and sexual assault attributable to drugs; and iii) road accident costs. It is important to note that these estimates, based on best available data in 2003, are unlikely to reflect current realities. Further, Moore (2007) excluded other social costs, for example impairment of mental health, family breakdown, community decline and loss of productivity. At the time of this research, opiates were

the most costly illicit drug with social costs of $4,574 million annually; and methamphetamines were the next most costly at $3,731 million.

Apart from the intricacies of allocating costs to the implications of harmful drug use, these costs depend crucially on estimates of the number of people who are recent users of the illicit drug in question and the number of those people who are dependent. The most recent epidemiological estimates for methamphetamine date back to the mid-2000s (Degenhardt et al., 2008) and are currently being updated by researchers at NDARC. Additionally, research at NDARC is currently underway to assess the number of hospital services and associated costs related to direct methamphetamine inpatient admissions in Australia and to estimate the number and associated costs for those receiving treatment for methamphetamine.

We reiterate the finding of the Parliament of Victoria: Law Reform, Drugs and Crime Prevention Committee (2014) (following their inquiry into the supply and use of methamphetamine) that both more appropriate data and rigorous analysis are needed to better understand patterns of use and harms, and the associated costs. Concerned that policy responses be targeted appropriately, they stressed that funding should be directed towards researchers to undertake this work and called for funding to enhance, and in some cases (such as the Drug Use Monitoring in Australia program) maintain, much needed data collections. This reiterates the National Amphetamine-Type Stimulant Strategy 2008-2011, which concluded that funding such research would enhance responses to ATS related problems (Commonwealth of Australia, 2008).

The Victorian inquiry pin-pointed the lack of data distinguishing between the use of the various types of methamphetamine and the harms associated with each type. It bemoaned the lack of "real-time" data and noted Dr Rebecca McKetin's expert opinion that the harms data (such as emergency department indicator data) may often be several years old and thus not be reflecting current prevalence. The Victorian inquiry suggests prioritising research on the clinical course of methamphetamine – the natural history and progression of methamphetamine use and establishing the links between prevalence and harms. We concur.

Evidence of increased harms includes increases in annual crystal methamphetamine-related ambulance attendances in Victoria (e.g. Lloyd et al., 2014). Australia-wide, the number of amphetamine related hospital separations are second highest to opioids among the four major illicit drug classes (amphetamine, cocaine, opioids and cannabis). Amphetamine related hospital separations include both methamphetamine and amphetamine related separations, but are probably dominated by methamphetamine related separations. Between 2009/10 and 2012/13 there has been an increase in the numbers of amphetamine–related hospital separations to 272 per million persons. As well there have been marked increases in treatment seeking. Between 2009/2010 and 2012/13 there was almost a doubling in the numbers of closed treatment episodes of treatment from specialist treatment agencies, where amphetamines was recorded as the drug of most concern. In proportion to all treatment episodes, the proportion rose from 7.2% to 14.3% over the same period. However, methamphetamine users tend to be poly-drug users. When all drugs of concern are considered the proportion of all closed treatment episodes where amphetamines was one of the drugs of concern increased from almost 20% in 2009/10 to 28% in 2012-13, which is not as extreme (AIHW 2014a).

What recent important research examining trends of price and purity (Scott et al., 2015) does tell us is that the "increased harms" in Victoria have been linked with

i) a substantial increase, between January 2009 and June 2013, in the purity of crystal methamphetamine (from 23% to 64%) and a smaller increase in the purity of powder methamphetamine (from 12% to 37%);

ii) substantial 60-70% reductions in the price per pure gram of both these products; and
iii) a marked increase in the variability in the purity of crystal methamphetamine sold at the retail level (in 2013 around 15% was less than 10% pure and 40-50% was greater than 80% pure).

As the authors of this important study explain, with no change to expenditure people can buy more methamphetamine, and their control over the amount of crystal methamphetamine consumed has been increasingly challenged by the variability in purity.

Although there have been significant shifts in the pattern of use, consistent with increased availability of higher purity crystal methamphetamine, we need to remember that at the population level, methamphetamine use is *not* wide spread. According to the 2013 National Drug Strategy Household Survey (NDSHS) (AIHW, 2014b), the prevalence of past year methamphetamine use in the general population stood at 2.1%. Importantly this survey did not show any evidence of an increase in population prevalence between 2010 and 2013.

The NDSHS shows however that there have been changes in patterns of use among this small group of people who use methamphetamine. Previously, powder was the most common form of methamphetamine used by people reporting past year use of methamphetamine. Between 2007 and 2013 the proportion of past year methamphetamine users who reported crystal as the main form of methamphetamine used doubled to 50.4%.This switch to crystal methamphetamine was accompanied by a significant increase in smoking as the main route of administration amongst regular users, from 20% to 40%. Of those same people, we also see an increase in the frequency of use between 2010 and 2013: with weekly or more use increasing from 9.3% to 15.5%. Even so, the proportion of past year users that use monthly or less remained constant at around 50% in both 2010 and 2013.

But not all sectors of the population are equally represented in the NDSHS and some sub-populations, including homeless people and incarcerated people, are not represented at all. In sentinel surveys, intended to remedy this lack of representation, we find that while the prevalence of past 6 month methamphetamine use in people living in capital cities who inject drugs (IDRS) or regularly use ecstasy (EDRS) has been steadily declining since the early to mid-2000s, there was a significant increase in the proportion of recent users who inject drugs reporting the use of the crystal form between 2013 and 2014 (and a corresponding decline in the use of powder and base forms). While this switch towards crystal (or ice) was not observed in the EDRS sample it was also observed in a sentinel group of gay and homosexually active men: in the year to 2014 in Sydney (Hull et al., 2014); and over the four years to 2014 in Melbourne (Lee, Mao, von Doussa et al., 2014); and Queensland (Lee, Mao, Atkinson et al., 2014).

Unpublished analyses of the Global Drug Survey (GDS), run in November and December 2014, tell us that of the 448 persons who reported used methamphetamine, the most commonly used form over the last 12 months was methamphetamine/crystal/ice (51%). Within this group, two thirds (66%) reported use 10 or less times in the past year. There were, however, some clear differences between crystal methamphetamine and speed/base users: while 95% of speed/base users reported use 50 or less times in the past 12 months, only 75% of crystal methamphetamine users reported use 50 or less times, with 14% of crystal methamphetamine users reporting use over 100 times (compared with only 3% of speed/base users). These patterns of use are not inconsistent with the patterns reported in the general population NDSHS data. Furthermore, 69% of the respondents who used crystal methamphetamine most often smoked it and 17% injected it.

Although the GDS is a self-report survey, and not necessarily a representative sample, it provides useful information on the length of periods of use it is of interest because sustained periods of use are associated with harms. Participants were asked to estimate the maximum number of days in a row that they had taken methamphetamine. The median number was 2 days (range 0-31; inter quartile range 1-4). Crystal methamphetamine users were more likely to report a longer number of days of continuous use (median 3; inter quartile range 2-6) compared with speed/base users (median 2, inter quartile range 1-3). At the extreme end, 7% of crystal methamphetamine users reported maximum continuous days of use at 31 days compared with 1% of speed/base users.

Thus for a small subset of the people who have used methamphetamine in the past year, methamphetamine use is proving to be problematic. Those problems may be centred in sub-sets of the population, but the data does not currently exist to explore this issue; nor are there data available to tell us what proportion of past year methamphetamine use is harmful. From the data presented here, in line with the Victorian Inquiry, we conclude that the scale of "the problem" is unknown.

While the picture is far from clear, there is some preliminary evidence to suggest that at least some people who are experiencing methamphetamine related harms are accessing health and treatment services, and that help is being sought.

Annual episodes of treatment for amphetamine related problems provided by government funded specialist treatment providers more than doubled in the four years to 2012/13. Over that time frame there was also an increase in the proportion of people associated with those treatment episodes reporting that smoking was their chosen route of administration, relative to injecting. In 2009-10 60% reported injecting and 19% smoking/inhaling while in 2012-13 those figures were 45% and 37% respectively.

This increase in treatment provision suggests that people are recognising the harms and seeking treatment. Yet there is evidence that there is insufficient treatment with wait lists reported in the ACT, for example (ATODA, 2015), as we discuss below. The Victorian government has recognized the need to invest of treatment, injecting $18 million into AOD treatment in its recent "Ice" Action Plan (State government of Victoria, 2015). The ACT government has also increased its investment in treatment (ACT Government, 2015).

Analysis of the GDS also found that 40% of the 448 people who had used methamphetamine in the last 12 months reported that they would like to use less methamphetamine over the next 12 months. Crystal methamphetamine users were significantly more likely to state that they wanted to use less than other methamphetamine users (who used either powder or base) (55% versus 23%). Findings like this suggest that methamphetamine users and crystal methamphetamine users in particular are aware of the harms of continued use and wanting to take action to reduce their use.

The role of Commonwealth law enforcement agencies in responding to the importation, manufacture, distribution and use of methamphetamine and its chemical precursors

Australian governments spend an estimated $1.7 billion on responding to illicit drugs every year. The majority of government expenditure is directed at policing and criminal justice system responses to drug offenders (64%) (Ritter, McLeod, & Shanahan, 2013). However, criminal justice and law enforcement remains the domain for which there is the least amount of evidence for 'what works' (Ritter, Lancaster, Grech, & Reuter, 2011). This problem is not unique to Australia (Babor et al., 2010). But it means that far fewer funds are directed at the areas where there is strong evidence of what works: namely, treatment and harm reduction.

More specifically, in regards to ATS, Australian policing agencies have increasingly recognised that supply reduction alone cannot reduce problems associated with ATS. For example, in their submission to the Victorian Parliamentary Inquiry into Ice, the Victoria Police stated that:

> "*there is a need for a coordinated whole of government response to ATS issues. Solutions to most of the problems are outside the scope of police intervention alone. Collaboration between law enforcement, health, justice and education agencies is needed to ensure that all Victorian government programs addressing ATS issues are aligned"* (Victoria Police, 2013, p. 22).

Moreover at the 2015 Australasian Drug Strategy Conference (March 2015) police commissioners from every state echoed this sentiment, stating that "they cannot arrest their way out of the problem" and that there is a need to put much greater emphasis upon prevention and treatment of ATS (ADASC, 2015).

We echo their sentiments and now outline areas in which attention should be focused

Treatment

Treatment has long been recognised as being the cost effective approach for managing drug dependence (NIDA, 2007). The Australian Department of Health '*Treatment approaches for users of methamphetamine: a practical guide for frontline workers*' (2008) recommended that "numerous high-quality studies have suggested that psychosocial treatments, especially cognitive behaviour therapy (CBT), should be a standard intervention in methamphetamine treatment" (Jenner & Lee, 2008, p. 2). Yet improved treatment approaches are needed, and the investment in their development recommended during the 2006/07 period of concern has not yet been made.

In a review of the literature on treatment interventions for amphetamine-group substances, the authors concluded that there were no effective pharmaceutical treatments and that high intensity behavioural interventions were moderately effective in reducing use (Colfax et al., 2010). Questions remain as to which interventions are most effective, for whom and for how long.

The only longitudinal study of the impact of treatment on methamphetamine use in Australia found that, despite its short term reduction of use, expensive community-based drug residential rehabilitation has no long term effect and detoxification alone does not work (McKetin et al., 2012). An economic evaluation conducted alongside found that outpatient counselling is a cost-effective treatment option for methamphetamine abuse and dependence in Australia (Ciketic et al., 2014).

Although international observational studies have suggested positive outcomes from substitution treatment for amphetamine dependence (see Shearer et al., 2001 for a discussion), clinical research has remained limited (Shearer & Gowing, 2004). A number of small pilot studies have been conducted in Australia with results of one substitution treatment study recommending further rigorous research (Shearer et al., 2001). A subsequent randomised, double-blinded, placebo-controlled trial in South Australia found sustained release dexamphetamine to be a safe and efficacious treatment, with the dexamphetamine group indicating decreases in use and longer retention in treatment than the placebo group (Longo et al., 2009).

Motivated by evidence that computer and web-based interventions have a small effect in reducing consumption of cannabis, a self-guided web-based intervention for ATS was recently piloted. Although it did not reduce ATS use, the 6-month evaluation showed that it had the ability to engage with some pockets of the difficult to reach ATS users (Tait et al., 2014; 2015).

Australian estimates suggest that only 16% of nondependent and approximately 30% of dependent methamphetamine users surveyed in 2004 received any treatment for their drug use in the previous year (McKetin and Kelly, 2007; Wallace et al., 2009).

Not everyone who uses methamphetamine (or any drug) becomes dependent and dependence itself is not always associated with harmful consequences (King et al., 2013). Nor is everyone using methamphetamine at predefined 'harmful' levels likely to benefit from or require formal treatment. Yet there is some gap between the need for treatment and use of treatment, for reasons including demand for treatment outstripping supply, lack of access, stigma, cost and lack of awareness. There are a number of significant issues to take into account:

- The DPMP review of AOD treatment services in 2014 showed that the major health funder of AOD treatment (be it provided by GPs, in hospitals or through specialist AOD treatment agencies) in Australia is the state and territory governments (51%), followed by the Commonwealth government (31%) and private funding (18%). A higher proportion of expenditure is allocated to AOD treatment programs outside hospitals, consistent with community-focused models of care for AOD treatment. Thus, the state/territory contributions (outside the hospital system) are the mainstay of the expenditure items (Ritter et al., 2015).
- Recent Senate estimates proceedings indicate that there will be substantial cuts to substance misuse services, including alcohol and other drug treatment programs (Commonwealth of Australia, 2015).
- ATODA, the peak agency representing and supporting the Alcohol Tobacco and Other Drug sector in the ACT, report that increased demand for treatment "has had an unsustainable impact on non-government specialist drug treatment services" (ATODA, 2015: 4). ATODA explained that over the five years to 2014, despite the substantial increase in episodes of treatment services provide by the NGO sector, ACT government funding had not increased beyond indexation. As a consequence waiting lists could be up to 3 months long. In response the ACT government recently announced an $800,000 increase (around 5%) in drug treatment funding (ACT Government, 2015).
- In response to unmet demand in their state, the 2015 Victorian response increased funding for specialist drug treatment services and workforce development ($18 million) and NSPs ($1.8 million) (State Government of Victoria, 2015).
- It is well recognised that stigmatisation is a barrier to seeking treatment. People who use drugs are very likely to experience stigma and discrimination, including within health services (Lloyd, 2013; Treloar & Rhodes, 2009; Anti-Discrimination Board of NSW, 2001; AIVL, 2011). Research shows that experiences and anticipation of stigma and discrimination are barriers to engagement with prevention, testing, treatment and other health services, and can have a significant negative impact on psychological and physiological health beyond that attributable to foregoing the treatment needed (Pascoe & Smart Richman, 2009). It can profoundly affect the way that people who inject drugs think about themselves, and their capacity to participate as full citizens (Lancaster, Santana, Madden, & Ritter, 2014).
- Often those in need of treatment do not feel that the treatment they require is available. DPMP research in collaboration with AIVL has demonstrated that people who use drugs are keenly interested in and highly supportive of treatment interventions. In this research, people who used drugs expressed hope that more treatment options could be provided to meet their community's needs: "We need more treatment options. So whatever treatment there is, bring it on so people have a range of choice" (Tania, Canberra, Focus Group 1; quoted in Lancaster, Santana, Madden, & Ritter, 2014).

Pathways into treatment
As with other substances there are multiple pathways into to treatment:

- People who use methamphetamine most commonly visit GPs for support and GPs are a common source of referral to drug treatment (Quinn et al., 2013). This would argue for increased training for GPs. Once referred by GPs, the specialist drug service type most commony used was one-on-one counselling rather than residential rehabilitation.
- Targeted interventions for non-injectors (i.e. those not accessing NSPs) and those with limited social and professional support networks are also needed. There is emerging evidence that web-based interventions could be used to engage with some in the hard-to-reach groups (Tait et al., 2015).
- Research shows that people who smoke methamphetamine are less likely to seek treatment than those who inject (Kelly et al., 2005; Quinn et al., 2013). As Quinn et al., (2013) posit, this may reflect the fact that more services are directed towards people who inject drugs (such as NSPs) and as such there may be more services which can facilitate access to treatment. This being a possibility, Quinn et al. argue that their findings support calls from other researchers to provide smoking equipment through NSPs (not only to encourage harm reduction alternatives to injecting) but to potentially improve treatment providers' contact with methamphetamine smokers (Degenhardt et al., 2010; Leonard et al., 2008).
- Police drug diversion schemes provide a specific but underutilised role in encouraging people to undergo treatement. Drug diversion refers to strategies that refer detected offenders at the point of police detection to assessment and treatment (Hughes & Ritter, 2008). Victoria Police have reported that in recent years, consistent with the rise in ATS use, they have been increasing their police diversion for ATS users. For example the number of diversions increased from 468 in 2010-11 to 673 in 2011-2012 to 882 in 2012-13 (Victoria Police, 2013, p. 21). However, there remain gaps and opportunities to better utilise police diversion for ATS across Australia. First, police diversion for ATS users is not available in all states and territories. For example, there is no option for police to divert into treatment those detected with a small quantity of ATS in NSW (Hughes & Ritter, 2008). Second, in states where police diversion is available there is a clear opportunity to expand use of such programs. For example Victoria Police have called for increased resourcing so that police can refer more people and they can be more rapidly assessed and provide with treatment. In addition they have called for the removal of eligibility criteria that they know prevent ATS users being diverted e.g. trigger offences such as property and family violence offences (Victoria Police, 2013, p. 26).

Harm reduction
In this next section we discuss several harm reduction strategies. Each has its origins in addressing the harms related to other substances (or drug use more generally) but has particular relevance for methamphetamine.

Limit stigmatisation of methamphetamine use
As we discussed under the section on treatment, the stigma associated with methamphetamine use can inhibit people from identifying as a person who uses methamphetamine and, where that use has become harmful, identifying as a person who may need treatment. Below we set out the expansive body of international research evidence for the ineffectiveness of mass media campaigns. Here we express our concern that these campaigns may also produce stigmatising attitudes which may prevent people from seeking help through harm reduction and drug treatment services.

We also suggest that the portrayal of methamphetamine-induced psychosis in the recently released campaign may also serve to stigmatise people who experience mental health issues and psychosis more broadly.

Peer education

Given the hypothesis that the harms associated with methamphetamine use are being fuelled by the purity; both the high purity seen in many of the seizures and the high variability (Scott et al., 2015), we suggest that the Taskforce consider funding peer education. This is one avenue for communicating harm reduction messages within groups of people who are already using methamphetamine. Peer education is commonly used across many areas of public health (Parkin & McKeganey, 2000). At its most basic level, peer education is "learning from one's peers" (AIVL, 2006) and this can take a number of forms: spontaneous informal peer education; intentional informal peer education; or formal peer education.

Research in the drugs field has shown that peer education has been effective for mobilising change within communities of people who inject drugs to respond to HIV in America (Friedman, 1993) and also within drug using communities in the UK (Power et al., 1995). While formal peer education within communities of people who use drugs began in response to HIV, the principles can also be readily applied to other harm reduction interventions, where individuals and communities require information to reduce drug-related harms. Peer education approaches have been shown to be effective for reaching people who may not be reached through other avenues (and, as such, can be used in such a way to link them with mainstream services) (AIVL, 2006). Peers may be regarded as more credible and trustworthy sources of information as they 'speak the same language' which is important for communication in situations where people may feel stigmatised (AIVL, 2006). Moreover, accumulated research evidence demonstrates that peer education and outreach interventions are effective for reaching people who use drugs who are not currently engaging with treatment (WHO, 2004) and is regarded as cost effective due to the use of volunteers (UNAIDS, 1999).

Appropriately funded through Australia's network of drug user organisations, needle and syringe programs, and other community based organisations and services, peer education and outreach interventions could be effectively deployed to provide information and education to people using methamphetamine. It seems that the most important factor in implementing effective peer education interventions is first adequately identifying the population groups who may be experiencing harms, or who may be at risk of future harm. At present, there is insufficient knowledge about the concentration of methamphetamine-related within particular groups, and what the variability of harms may be. As we explained earlier, further investment in research and indicator data is needed to answer these questions.

Expand NSPs to reduce the harms associated with injecting

Although not all people who use methamphetamine inject, a substantial proportion do. As such, blood borne virus (BBV) prevention should form part of harm reduction strategy to address methamphetamine-related harms. Access to sterile injecting equipment has been identified as central to the public health objective of reducing rates of new BBV transmissions (World Health Organization, 2004, 2012). In Australia, sterile injecting equipment is distributed for free through publically funded, fixed and mobile NSP sites, as well as through emergency departments, automated dispensing machines (which sometimes require payment by consumers), community health programs, and community-based pharmacies (Australian Government, 2010). While needle and syringe distribution efforts have been shown to effectively control rates of HIV transmission among people who inject drugs in Australia, this coverage has been found to be inadequate for controlling HCV infections (Kwon, Iversen, Maher, Law, & Wilson, 2009). Kwon et al. (2009, p.467)

have argued that distribution of sterile injecting equipment 'is limited by supply rather than demand and that increased coverage is possible'. They estimate that needle and syringe distribution needs to *double* in order to reduce annual incidence of HCV infections by 50% (Kwon, et al., 2009). Although there is a range of ways to increase provision of sterile injecting equipment, here we would like to highlight one: removing legislative barriers to peer distribution of sterile injecting equipment.

More nuanced portrayal of the relationship between methamphetamine use and psychosis
The relationship between illicit drug use (cannabis and psychostimulants specifically) and psychosis is complex and multi-directional. The causal relationship between methamphetamine use and psychosis is supported by evidence that people who use methamphetamine are at increased risk of psychosis (e.g. McKetin et al., 2006; McKetin et al., 2010; Lichlyter et al., 2011) and there is evidence of a dose response between use and psychosis (e.g. McKetin et al., 2006; McKetin et al., 2013; Lechner et al., 2013). Even so, psychosis is not an inevitable outcome of methamphetamine use. For example, an Australian study of people who had used methamphetamine at least monthly in the past year found that while 13% of the sample screened positive for psychosis in the past year, 87% screened negative (McKetin et al., 2006). Recall that the majority of NDSHS respondents use methamphetamine less than monthly.

Furthermore, research has identified other equally, if not more important, risk factors for psychosis among people who use methamphetamine. Indeed there are some in the literature concerned that methamphetamine use (in its relationship with psychosis) may be a marker of people with vulnerabilities, such as pre-existing psychosis, a predisposition for psychosis and homelessness (Rognoli et al., 2013). These authors point out the need to undertake longitudinal studies on non-clinical cohorts that measure historical and acute risk factors for psychosis. Researchers at NDARC are currently undertaking a study using longitudinal NSW mental health service administrative data to explore the relationship between substance use disorders and psychosis. This study will, amongst other things, inform our understanding of pathways into methamphetamine related psychosis warranting hospitalisation.

Policy and health promotion should be mindful of the nuances of the relationships between methamphetamine use and psychosis to avoid stigmatisation and marginalisation of both people using methamphetamine and those with mental health diagnoses. Policy and health promotion should also avoid portraying all methamphetamine users as irrational and out-of-control.

The involvement of organised crime including international organised crime and outlaw motorcycle gangs in methamphetamine related criminal activities

Drug trafficking is frequently argued to be *the* leading contributor to serious and organised crime, which according to EUROPOL is criminal activity involving two or more people where the crime is serious enough to warrant sanctions of at least four years imprisonment and where the purpose is, directly or indirectly, to obtain a financial or other material benefit (Europol, 2013). Organisations such as the United Nations Office on Drugs and Crime have estimated that drug trafficking is responsible for 20%-85% of the proceeds from organised crime; with the next biggest contributors being counterfeiting and human smuggling (Global Financial Integrity, 2011; United Nations Office on Drugs and Crime, 2010, 2011). This is equally true in Australia where "the illicit drug market is the most profitable of the organised crime markets in Australia, and the principal source of profit for organised crime groups" (Australian Crime Commission, 2013a).

In recent years there has been increasing attention drawn to the link between organised crime and methamphetamine trafficking specifically. For example, according to the most recent Australian Crime Commission (ACC) report on Organised Crime in Australia:

> *There is significant organised crime involvement in the importation, manufacture and supply of methylamphetamine in Australia. Many of these groups are involved in a range of other activities in addition to methylamphetamine (see the case study on page 39). More than 60 per cent of entities on the National Criminal Target List are involved in the methylamphetamine and/or precursor markets, and of these more than 80 per cent are also involved in other drug markets. Because there are a number of routes of synthesis requiring a range of precursor chemicals, groups involved in methylamphetamine production can adapt quickly to changes in precursor availability or regulatory controls* (Australian Crime Commission, 2015, p. 38*).*

However, statements such as this have the potential to mislead the reader. In the EUROPOL, the Australian Federal Police and the Australian Crime Commission definitions of organised crime almost all drug trafficking will be classified as organised crime. For example, the Australian Crime Commission Act 2002 (Commonwealth, 2002) defines serious and organised crime as crimes involving two or more offenders, substantial planning and organisation, sophisticated methods and techniques and crimes that are generally committed in conjunction with other, similar crimes that are punishable by imprisonment for a period of 3 years or more. As such collaboration between two drug trafficking groups, even at the retail level, may fall under this definition.

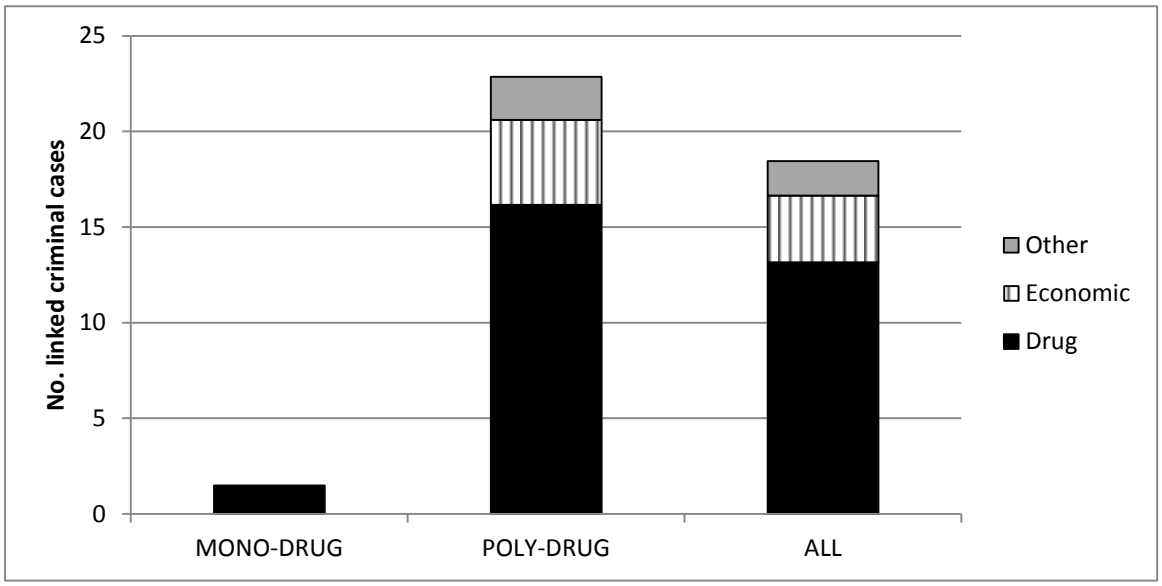
In our opinion the more important question for Australian governments is: how much serious drug trafficking is linked to *other* forms of serious criminal activity? For example, international and national law enforcement agencies have linked drug trafficking to numerous crimes including terrorism, human trafficking, people smuggling, child sex offences, firearms trading, extortion, public sector corruption, superannuation fraud, credit card fraud, environmental crime, and cigarette smuggling (Australian Crime Commission, 2013b, 2015; Europol, 2013; National Drug Intelligence Center, 2012; UNODC, 2011, 2013). However, systematic academic analyses of the nature and extent of links between drug trafficking and other forms of organised crime is rare both in Australia and internationally. The limited literature suggests that the links may be over-stated (see for example Hutchinson & O'Malley, 2007; Rubin, Pardal, McGee, & Culley, 2013).

DPMP recently completed the first systematic analysis of poly-drug and poly-crime trafficking in Australia using unpublished Australian Federal Police (AFP) data, in research funded by the National Drug Law Enforcement Research Fund (NDLERF) (Hughes, Chalmers, Bright, & McFadden, in press). This study analysed 20 drug trafficking cases involving importation of commercial quantities of drugs at the Australian border and traced all other criminal investigations connected to each drug trafficking case, by offenders or suspects in the original drug case over the period 1991 to 2013 (22 years). The links included any type of Commonwealth crime, but for reasons of security they were grouped into three categories: drug (import, export, and trafficking); economic (fraud, money laundering, counterfeit currency, transnational economic crime); and other crime (human trafficking, people smuggling, terrorism, child pornography, importation of firearms). This was the first time this type of analysis has been done, at least in the public domain, and was designed to include all known criminal alliances of the original case members, including alliances with other drug importers and money launderers. It is important to note that this research was not specific to methamphetamine: but 14/20 (70%) of the drug traffickers considered were involved in trafficking of methamphetamine.

The analyses of these data indicated that drug traffickers were likely to be involved in other drug crime but much less likely to be involved in other forms of criminal activity. For example, each drug trafficking case was connected to an average of 18.5 other criminal cases; of which 13 were drug cases, 3.5 were economic cases, and 1.8 were other criminal cases. Equally importantly, our analyses indicated that organised crime involvement was likely to be concentrated amongst a sub-set of drug

trafficking cases, namely those that are involved in poly-drug trafficking (trade in multiple illicit drug types). For example, as shown in Figure 1, traffickers involved in trade of only one drug type (mono-drug traffickers) were involved in an average of only 1.5 criminal incidents, all pertaining to drug crime. But poly-drug traffickers were involved in an average of 23 criminal incidents. They were also associated with more diverse criminal portfolios, involving drug, economic and other types of crime.

Figure 1: Number of links to other criminal cases by type (drug, economic or other crime), amongst mono-drug traffickers, poly-drug traffickers and all drug traffickers



Source: Adapted from Hughes, Chalmers, Bright, & McFadden, in press.

This poses the question of how large a problem this may be? The DPMP project examined the scale and trends in poly-drug trafficking involving commercial importation at the Australian borders and estimated that only about 5-35% of all commercial weight seizures at the Australian border could be connected to poly-drug trafficking (Hughes et al., in press). This means that the majority of these commercial weight seizures are associated with mono-drug trafficking (65-95%); who as noted above have little or no known involvement in other types of serious criminal activity.

There is a clear need for more research into this issue. However, this first academic assessment suggests that most drug trafficking involving commercial importation at the Australian borders is unlikely to have links to other forms of serious crime or organised crime in particular.

Other issues related to reducing the negative impact of crystal methamphetamine on Australian society

Mass media and public awareness campaigns are a common tool used by governments to inform the public about the harms associated with illicit drugs. Indeed, we note that the Australian Government has recently announced that it will spend $9 million on a six-week campaign related to methamphetamine (Conifer, 2015). However, a large body of international research shows that mass media campaigns have *no effect* on drug use behaviour, and moreover, iatrogenic effects have been shown in some studies. Hence they are by no means cost effective.

A systematic review of the effectiveness of mass media campaigns (in this review termed ‘anti-illicit drug public service announcements’) by Werb et al. (2011) identified and examined seven randomised trials and four observational studies from Australia and internationally. Their analyses of

these evaluations concluded that there was limited evidence to support the use of mass media campaigns for illicit drug prevention. Specifically:

- No trial demonstrated any significant benefits;
- No studies reported any long term effectiveness of mass media campaigns;
- Overall mass media campaigns had a limited impact on the intention to use illicit drugs or on illicit drug use amongst the target population. In one example of the more common negative findings, evaluation of the 'Montana Meth Project' found that the graphic advertising campaign to deter methamphetamine use amongst young people was ineffective (compared to an unexposed control comparison (Anderson, 2010);
- Importantly, two randomised controlled trials in the systematic review found evidence that public service announcements actually *increased* intention to use drugs. Werb et al. (2011) argued that this is because mass media campaigns increase the perception that drug use is widespread, which may lead to a greater likelihood of initiation of drug use.

Despite the ubiquity of mass media campaigns as an intervention, there remains limited research which examines the relationship between mass media campaigns and actual alcohol or drug use behaviour. The USA Government Accountability Office commissioned a review of the national youth anti-drug media campaign. The evaluation found that the youth anti-drug campaign had *no* impact on youth drug use either during the entire period of the campaign (1998 to 2004), or between 2002 and 2004 when it was focussed on cannabis. The evidence was judged credible; as a result the Government Accountability Office recommended limiting budget appropriations for such campaigns in the future (United States Government Accountability Office, 2006).

In a detailed examination of the relationship between anti-drug television advertising exposure and drug-related behaviour among young people specifically, Terry-McElrath and colleagues (2011) found a complex set of relationships. The expected reduction in drug use following greater exposure to anti-drug advertisements only occurred for certain age groups, with certain drug types and with certain advertisement taglines. In contrast for middle school children and cannabis use, there were no significant relationships; and, for high schools students, exposure (with a particular tagline) was associated with *increased* cannabis and other illicit drug use. This study demonstrates the sensitivity of mass campaigns, and the possibility of iatrogenic effects must be considered.

Given that mass media campaigns have been demonstrated to be ineffective and may carry the risk of negative effects (that is iatrogenic effects, increased initiation to drug use, and changing perceptions about the social norms of using a particular drug) we suggest that the Australian Government approach the use of mass media campaigns with extreme caution as they may not deter people from drug use, and perversely increase negative stigmatisation of both those who use drugs and those who have mental illness. Research has shown that mass media representations of mental health service users which emphasise violence, dangerousness and criminality are inappropriate representations and do much to increase stigma, ostracism, harassment and victimisation of these individuals by the public (Cutcliffe & Hannigan, 2001).

In preference to scare campaigns, communications campaigns that target specific at-risk groups, via community-based organisations, that point to the fact that treatment can work, and how to access treatment, and minimise harms would be a more efficient use of resources as has been done in the highly effective Ending HIV Campaign (ACON, 2015). We suggest that careful analysis and exploration needs to be undertaken to find the best approaches to raising awareness around crystal methamphetamines problems that will carry credibility to the target sub-populations.

Conclusion

We reiterate the fact that in general; law enforcement activities have not been demonstrated to be cost effective whereas treatment and harm reduction have been. Our view is that the government should commit funding in a sustained fashion; it is clearly evident that crisis-driven one-off funding allocations do not work. There are clear messages for targeted infusions of Commonwealth funding in the recommendations made through the consultative process of information and advice gathering during the 2006-07 methamphetamine "crisis" as well as in subsequent consultations and research. We suggest that governments be informed by the recommendations of the last ATS strategy and the last National Drug Strategy. If evaluations of these strategies have been conducted, the findings have not yet been made public; hence they cannot inform our input. However the evidence is clear that treatment and harm reduction strategies are cost effective.

DPMP are particularly concerned by recent Senate estimates proceedings heralding substantial funding cuts to substance misuse services (including research and treatment) Commonwealth of Australia, 2015). Particularly given the timing of these cuts, during a period of heightened attention to methamphetamine, this raises serious concerns about the Federal Government's commitment to a comprehensive, national response to the impacts of methamphetamine use.

Finally, it is important to remember that drug markets have demonstrated their responsiveness to change and policy makers ought to be wary about the potential impact of focusing attention on only one drug. We encourage a co-ordinated, holistic, evidence-based approach to alcohol and other drug policies in Australia.

Sincerely,
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On behalf of the Drug Policy Modelling Program, National Drug and Alcohol Research Centre
UNSW Australia

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