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NSW Health

Further evaluation of the Medically Supervised Injecting Centre during its extended Trial period (2007-2011)

Final report

14 September 2010 v1.1

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Disclaimer

Inherent limitations

This report has been prepared as outlined in Section 2.2. The services provided in connection with this engagement comprise an advisory engagement, which is not subject to assurance or other standards issued by the Australian Auditing and Assurance Standards Board and, consequently no opinions or conclusions intended to convey assurance have been expressed.

Reference to 'review' throughout this report has not been used in the context of a review in accordance with assurance and other standards issued by the Australian Auditing and Assurance Standards Board.

The findings in this report are based on a quantitative and qualitative study and the reported results reflect a perception of the Medically Supervised Injecting Centre but only to the extent of the data analysed and the sample surveyed, being the approved local service system representatives, and current and former clients of the Medically Supervised Injecting Centre, as described in Section 4. Any projection to the impact of the Medically Supervised Injecting Centre to the wider service system is subject to the level of bias in the method of data collection and third party data sources.

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by NSW Health and wider stakeholders consulted as part of the process.

KPMG have indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted within the report.

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The findings in this report have been formed on the above basis.

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Acknowledgments

KPMG wishes to acknowledge the contribution made by management and staff of MSIC and services interviewed in this evaluation who willingly gave their time and shared their knowledge and insights during the consultation process. Key local service system representatives were from government and non-government service providers including Ambulance Service of NSW, NSW Police Force, local Emergency Departments, public and private alcohol and drug services, mental health and other support services, including Kirketon Road Centre, Kobi Centre, Langton Centre, NEAMI, and the Wayside Chapel.

We would also like to thank the current and former MSIC clients who generously shared their experiences and perspectives on how services provided by MSIC have impacted on their lives.

Finally, we acknowledge the assistance provided by the NSW Department of Health and the Evaluation Steering Committee, comprising of NSW Police Force, Department of Justice and Attorney General, Department of Premier and Cabinet, NSW Expert Advisory Group on Drugs and Alcohol, the Medically Supervised Injecting Centre and NSW Health to support and guide the evaluation.

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Executive summary

The trial of the Medically Supervised Injecting Centre (MSIC) commenced in May 2001 ("Trial") with the start of the MSIC's operations in Kings Cross, Sydney. The NSW Government's stated objectives for the Trial are to decrease drug overdose deaths; provide a gateway to drug treatment and counselling; reduce problems associated with public injecting and discarded needles and/or syringes; and reduce the spread of disease such as HIV and Hepatitis C.

This evaluation builds on a number of previous independent evaluations and analyses commissioned by the NSW Government since the Trial began, which have concluded that the MSIC positively impacts on clients, has a high level of support from local residents and businesses, has not been shown to cause an increase in local crime or drug use and saves at least $658,000 per annum over providing similar health outcomes through other means in the health system.

The aim of the current evaluation is to consider the effectiveness and efficiency of the MSIC since the Trial was extended in June 2007, and to build on previous evaluations and their findings. The period for the current evaluation is June 2007 to April 2010.

MSIC clients - From service commencement in May 2001 to the end of April 2010, 12,050 injecting drug users had registered with the MSIC with a monthly average of 111 new clients registered. Over the last five years the trend in the number of new registrations per month has remained relatively stable with an average of 68 new registrations a month. Client statistics reflect that the MSIC has reached a socially marginalised and vulnerable population group of long-term injecting drug users – who have frequently had no previous interaction with any form of drug treatment. This is consistent with previous evaluation findings.

Visits - From service commencement in May 2001 to the end of April 2010, there were 609,177 visits to the MSIC (corresponding to 604,022 medically supervised injections) with an average of 5,641 visits per month. Since 2004, the number of visits to the MSIC has remained above or approximately 70,000 visits a year. While there has been some degree of variability in the number of visits over the nine year period, for the current evaluation period (June 2007 to April 2010) the trend has remained relatively stable, with a modest downwards trend.

The findings of this evaluation are consistent with and build on findings from previous evaluations in relation to the four objectives for the Trial:

- **Decreasing drug overdose deaths:** The MSIC provides a safe injecting environment and has a record of managing overdose events. Since opening, the MSIC has managed 3,426 overdose events with no deaths onsite. It is reasonable to assume that a proportion of these overdose-related events managed at the MSIC would have led to overdose injury or overdose death had they occurred in another location (public place or a private dwelling) that did not have accessible medical supervision and intervention. Analysis of external data sets suggests that the MSIC appeared to have a positive impact on reducing the average monthly

number of public opioid overdoses (resulting in ambulance attendances) in areas closest to its vicinity.

- **Providing a gateway to drug treatment and counselling:** The MSIC reaches a socially marginalised and vulnerable population group of long-term injecting drug users who have frequently (40%) had no previous interaction with any form of drug treatment or the wider service system. From service commencement in 2001, the MSIC provided 8,508 referrals to other services, nearly half of which were related to drug treatment (3,871). The more frequently a client visited the MSIC, the more likely they were to have accepted a referral to a drug treatment service. The rate of referral stabilised at a lower level in the last four years in comparison to the five years previous to that – most likely reflecting the stabilisation in the rate of new client registrations and the mix of MSIC clients attending the MSIC at particular frequencies (e.g. overall, more visits were attributed to frequent MSIC attenders, while a lower proportion were attributed to those that attend infrequently). During the evaluation period, the rate of uptake of drug treatment from these referrals has significantly increased compared with 2001-02 rates. Overall, evaluation findings indicate that the MSIC acts as a gateway for drug treatment.
- **Reduce problems with public injecting and discarded needles and/or syringes:** Findings from local community telephone surveys (repeated with a random sample of Kings Cross residents and business operators in 2000, 2002, 2005 and 2010) indicate that the proportion of residents who report having observed public injecting in the past month has halved since 2000 (prior to the commencement of the Trial). Of residents surveyed during 2010, 27% reported seeing public injecting in the past month compared to 55% in 2000. Similarly, the proportion of business owners who reported having observed public injecting in the past month has also declined sharply, reducing from 61% of respondents prior to the opening of the MSIC in 2000 to 22% in 2010.

  There has also been a steady decline in the proportion of residents who reported seeing publicly discarded syringes in the past month. This has declined from two-thirds of residents prior to the opening of the MSIC (66% in 2000) to 46% of respondents in 2010. There has been a similar decline amongst business respondents, from 80% of respondents in 2000 to 46% in 2010.

  Data on needle and syringe collections suggests that since the commencement of the MSIC services there has been a considerable reduction of the total number of needles and syringes collected in its vicinity during the period 2004 to 2009. Moreover, the greatest reduction has been in the areas immediately adjacent to the MSIC. Nearly all (92%) current clients of the MSIC interviewed reported that the MSIC had helped them reduce injecting in public places. Based on information analysed, since the commencement of the Trial in 2001, there has been reduced problems with public injecting and discarded needles and/or syringes.
- **Reducing the spread of diseases such as HIV and Hepatitis C:** A key component of the information and advice provided by the MSIC to clients (and supporting the MSIC protocols and practices) relates to the practice of injecting in a safer manner – including reducing the risk of spread of blood-borne viruses. Current

MSIC clients reported (from survey and interview) an increase in knowledge of the risk of spread of blood-borne viruses and described behavioural changes that reflect safer injecting practices to minimise this risk.

As noted, there has been a considerable reduction of the total number of needles and syringes collected in the vicinity of the MSIC in the last five years, and the greatest reduction has been in the areas immediately adjacent to the MSIC. This has implications for risks of spread of blood-borne viruses for injecting drug users (public injecting recognised as higher risk) and the general public in the MSIC vicinity, through reduced risk of needle stick injuries in public places and reduced associated risk of infection with a blood-borne virus.

A notable decline was observed in the number of Human Immunodeficiency Virus (HIV) and Hepatitis C infection notifications between 1999 and 2009 for people living in the Kings Cross area (postcodes 2010 and 2011). Whilst this was true of Hepatitis C infection notifications for the rest of NSW, in the case of HIV infection notifications a slight upward trend was observed for people residing in the rest of NSW over the same period. In the absence of substantial data from the period prior to the MSIC commencement, it is not possible however to attribute any change in infection notifications to the operation of the MSIC.

Conclusions - The findings of this evaluation are consistent with and build on findings from previous evaluations commissioned by the NSW Government. The MSIC provides a service for, and was utilised by a socially marginalised and vulnerable population group, many of whom had not previously accessed drug treatment or support services.

The MSIC provides a safe injecting environment and has a record of managing overdose events. Findings indicate that the MSIC provides a service that reduces the impact of overdose-related events and other health related consequences of injecting drug use for MSIC clients, and provides access to drug treatment with a high degree of uptake of referrals.

Since the commencement of the MSIC, data sources indicate that there has been a decline in the total number of discarded needle and syringes collected in the vicinity of the MSIC and reduced sightings of public injecting. Results from a random survey of local Kings Cross residents and business operators indicate that there is strong support for the MSIC that has trended upwards over time. There was also consistent support for the MSIC voiced by relevant local service system representatives during interview (including NSW Ambulance, local Emergency Departments, NSW Police, public and private alcohol and drug services and mental health services). Further, interviews conducted with current and former clients of the MSIC described the positive impact of the MSIC's services.

Foreword – structure of this report

This report is structured with two distinct parts – Part A and Part B. Part A presents the executive summary, a brief introduction to the evaluation, a summary of the methodology, and presents the key findings of the evaluation including findings against the four stated NSW Government objectives for the Trial:

- decrease drug overdose deaths
- provide a gateway to drug treatment and counselling
- reduce problems associated with public injecting and discarded needles and/or syringes
- reduce the spread of disease such as HIV and Hepatitis C[1].

Part B presents a detailed description of the evaluation methodology and analysis against the nine domains of the evaluation:

- **Evaluation Domain 1: to review client demographics** provides MSIC service usage and presents characteristics of people when they register to use the service, including demographics, health issues and alcohol and drug history.
- **Evaluation Domain 2: to review whether the systems, protocols and processes are appropriate for the client group** describes the MSIC processes and feedback from clients, staff and key local service system representatives.
- **Evaluation Domain 3: to monitor the level of demand for the MSIC** analyses MSIC data and provides client and key local service system representative feedback in relation to demand.
- **Evaluation Domain 4: to review whether the mix and level of services are appropriate in the context of the Government's objectives** describes service activity, drugs injected onsite, additional services provided onsite including referrals and discusses the MSIC's role as a 'gateway to drug treatment'. This section also describes the role of the MSIC within the local service system.
- **Evaluation Domain 5: to review the operation of protocols excluding clients or potential clients in certain circumstances** describes the rationale and processes for excluding individuals from using the MSIC and feedback from clients, staff and key local service system representatives.
- **Evaluation Domain 6: to review the effectiveness of the MSIC on clients' health and wellbeing** describes the extent to which the MSIC is accessing the intended client group, provides information on overdose events onsite, outcomes of referrals and self-reported impact on injecting practices.
- **Evaluation Domain 7: to review the effectiveness of the MSIC in relation to the local community in improving public amenity** provides relevant needle collection data and results from a survey of the local residents and businesses.

- **Evaluation Domain 8: to review relevant external factors and evidence** provides local and statewide information from NSW Ambulance, Emergency Department and death data.
- **Evaluation Domain 9: have there been any unintended consequences of the Trial** provides information collected through interviews with current and former MSIC clients, MSIC staff, relevant key local service system representatives and a survey of the local community.

Appendix D presents the evaluation domains and underlying questions sought to be addressed by the evaluation.

Part A

1 Introduction

The Trial of the Medically Supervised Injecting Centre (MSIC) commenced in May 2001 with the start of the MSIC's operations in Kings Cross, Sydney.

Arising from the 1999 NSW Drug Summit[2], the NSW Government agreed to trial one such facility in one location with this commitment given effect through the *Drug Summit Legislative Response Act 1999 (NSW)* (the Act).

The Act was originally passed by NSW Parliament in 1999 and has been extended four times. The most recent amendment was for a four year period to October 2011. In conducting the Trial, the NSW Government's express objectives were to:

- decrease drug overdose deaths
- provide a gateway to drug treatment and counselling
- reduce problems associated with public injecting and discarded needles and/or syringes
- reduce the spread of disease such as HIV and Hepatitis C[3].

The Drug Summit legislation amended the *Drugs Misuse and Trafficking Act 1985* to insert Part 2A into that Act and thereby established the statutory framework for the Trial. Responsible Authorities were also established to oversee the Trial's operation with these being the Director-General, NSW Health and the NSW Commissioner of Police with their roles and responsibilities also set out in Part 2A of the *Drug Misuse and Trafficking Act 1985*. In particular, the Responsible Authorities are the decision makers with regard to issuing of a licence to operate an injecting centre, with only one allowed at a time. The current and only license issued under the Act was issued by the Responsible Authorities to Uniting Care NSW/ACT for the MSIC at Kings Cross.

Background

The MSIC provides:

- a safe, clean, discreet environment, for injecting drug users to inject under the supervision and care of qualified health professionals (a medical director and registered nurses) to reduce morbidity and mortality associated with drug injection and overdose
- access to clean materials for drug use and access to safe disposal methods
- advice about unsafe injecting practices to avoid spread of disease and reduce the risk of overdose
- unique opportunities to successfully engage with a vulnerable and marginalised cohort of long term injecting drug users, many who have previously never sought treatment
- advice and referrals to support clients to engage with drug treatment services (such as methadone maintenance programs), and to health care and social services (such as accommodation) to support clients, particularly those most at risk.

Previous evaluations of the Medically Supervised Injecting Centre

Since the Trial commenced in 2001, the NSW Government has commissioned a series of independent evaluations and research to determine whether the MSIC and its services delivered against the NSW Government's objectives.

The previous work was conducted by:

- A consortium of National Centre in HIV Epidemiology and Clinical Research (NCHECR), University of New South Wales; School of Public Health and Community Medicine, University of New South Wales; National Drug and Alcohol Research Centre (NDARC), University of New South Wales; New South Wales Bureau of Crime Statistics and Research (BOCSAR); New South Wales Department of Health
- New South Wales Bureau of Crime Statistics and Research (BOCSAR)
- National Centre in HIV Epidemiology and Clinical Research (NCHECR), University of New South Wales
- SAHA International (an independent advisory firm).

Key findings from these independent evaluations and research include:

- MSIC is having positive impacts on its clients
- there is a high level of local support from Kings Cross residents and business operators
- there is no evidence that MSIC has led to an increase in local crime or drug use
- MSIC is cost effective and saves at least $658,000 per annum compared to providing similar health outcomes through other means in the health system
- MSIC has overall met the Government's objectives, and is effective in reducing the harms associated with injecting drug use.

Detailed references to the report arising from this commissioned work and their findings are presented in Appendix C.

About this evaluation

NSW Health commissioned this evaluation on behalf of the NSW Government via public request for tender (RFT No. DOH 09/01), Evaluation of the Medically Supervised Injecting Centre 2007 -2011. The tender was awarded to KPMG.

Evaluation aim

The aim of this evaluation is to consider the effectiveness and efficiency of the Medically Supervised Injection Centre (MSIC) since the Trial was extended in June 2007.

Evaluation objectives

This evaluation builds on previous evaluations with a particular focus on outcomes achieved for the clients of the MSIC.

The evaluation is based on the evaluation specifications developed by NSW Health to report against the NSW Government's stated objectives for the Trial, which are:

- decreasing overdose deaths
- providing a gateway to drug treatment
- reducing discarded needles and drug use in public places
- reducing the spread of diseases such as HIV and Hepatitis C.

Key areas for evaluation

This evaluation includes both process and results elements. The nine key areas for evaluation (or evaluation domains) are:

Process Evaluation

- To review client demographics.
- To review whether the systems, protocols and processes of the MSIC are appropriate for the client group.
- To monitor the level of demand for the MSIC.
- To review whether the mix and level of services are appropriate in the context of the Government's objectives.
- To review the operation of protocols excluding clients or potential clients in certain circumstances.

Results Evaluation

- To review the effectiveness of the MSIC on clients' health and wellbeing.
- To review the effectiveness of the MSIC in relation to the local community in improving public amenity.

- To review relevant external factors and evidence.
- To examine and identify if there are any other unintended results from the Trial.

These evaluation domains were also supported by a series of key questions that are set out at Appendix D. Section 5 to Section 13 describes the findings from the evaluation aligned to each of the nine evaluation domains.

Evaluation methodology and activities

This evaluation used a mixed method design for the collection of data and information. These methods comprised both qualitative and quantitative approaches in order to address both the requirements for process and outcomes evaluation, and to answer the range of questions the evaluation required. The evaluation drew on multiple sources of data to build a detailed and accurate understanding of the MSIC and its operation and impact. This includes analyses of existing information and data and collecting new quantitative and qualitative information through consultations and surveys.

In addition, interviews with current and former MSIC clients were invaluable in informing this evaluation from a client perspective. Four of the interviewees, two current clients 'Dave' and 'Penny' and two former clients 'Trevor' and 'Julie' (not their real names), are presented below to provide a face to the MSIC clientele and a context to the client perspectives presented through the report.

Dave is a long term injecting drug user and current client of the MSIC. He started injecting drugs when he was 24 years old and is now 46 years old. He began attending the MSIC in 2003. Dave works during the day as a labourer and typically injects at the MSIC each evening after work. He has also changed his injecting behaviour and has been referred to multiple services, including drug treatment. He says that the MSIC is *"a controlled safe environment and they can help with anything".*

Penny is a 20 year old Aboriginal woman and current client of the MSIC. She started injecting drugs when she was 18 years old. She was told about MSIC by a friend and has been attending the MSIC for the past two years, normally at least once a week. She stated she has improved her injecting practices and has been referred to multiple services, including drug treatment, through MSIC. She said that MSIC has helped her with many aspects of her life, such as regular health checkups. She says that '*it's not just about injecting, they are here to talk and they changed my life'.*

Trevor is a former client of the MSIC (2006-09). When he started using drugs, he was homeless and had recently found out he had Hepatitis C (a blood-borne virus). He wanted a clean, safe and supervised environment where he could inject and was typically attending the MSIC multiple times each day. Since attending MSIC, he said he has stopped sharing drug equipment. Trevor described a health promotion activity at the MSIC where staff shone UV lights onto various surfaces, highlighting bacteria and invisible amounts of blood as a wake-up call. MSIC assisted him to access drug treatment by organising (and brokering) a private drug treatment place for him for six months. He now has his own apartment, is receiving treatment for Hepatitis C and is in the process of starting a job where he will encourage other people with Hepatitis C

to be assessed for treatment. He no longer injects drug. He said *"MSIC saved my life, I wasn't on a good road and they supported me all the way"*.

Julie is a former client of the MSIC. She started attending the MSIC when it opened in 2001, saying it was not safe for her to use on the street because she got so intoxicated. Between 2001 and 2009, she injected multiple times each day at the MSIC. She has four children, who were all in care while she was injecting drugs. When she decided to stop injecting drugs, MSIC staff helped her access a range of services, including women's refuges and drug treatment, by providing her with information and making telephone calls for her. She and her husband have moved away from Kings Cross, are on methadone maintenance and have stopped injecting drugs. She says that *"if you need an out [from injecting drugs], MSIC can help you"*.

A detailed description of the methodology of this evaluation is set out in Part B of this report (Section 4) which comprises the detailed technical report against the evaluation domains described above.

2 Key findings against the Government's objectives for the Trial

This section of the report summarises the key evaluation findings against the NSW Government's four stated objectives.

The NSW Government's four stated objectives for the Trial are to:

- decrease drug overdose deaths
- provide a gateway to drug treatment and counselling
- reduce problems associated with public injecting and discarded needles and/or syringes
- reduce the spread of disease such as HIV and Hepatitis C[4].

A summary of MSIC clientele is presented before the NSW Government's four stated objectives are directly addressed.

MSIC clients

From service commencement in May 2001 to the end of April 2010, 12,050 injecting drug users registered with MSIC as clients with a monthly average of 111 new clients registered[5]. Over the last five years, the trend in the number of new registrations per month has remained relatively flat with an average of 68 new registrations a month (February/April quarter 2005-06 to May 2010). The proportions of clients in each MSIC visit frequency category have also stabilised during this period suggesting that the overall MSIC client cohort has stabilised. Notably, while representing the minority (7%) of the total clients registered, long-term frequent injecting drug users (>98 visits to MSIC a year) are the primary users of the MSIC service (accounting for 60% of all visits).

Most clients were male (74%) with an average age at registration of 33 years and had been injecting for an average of 13 years. At the time of registration, 70% were not employed, approximately 35% had completed only some secondary education, 16% of clients were in unstable accommodation, and 23% had been imprisoned in the previous 12 months. Forty six per cent of all new registrants reported at registration they had injected in a public place in the month prior, and 40% had never accessed any drug treatment. These client statistics reflect that the MSIC has reached a socially marginalised and vulnerable population group of long-term injecting drug users – who frequently had not previously had interaction with any drug treatment. This profile is consistent with previous evaluation findings.

Decrease drug overdose deaths

This section is divided into two, highlighting:

- the services that MSIC provides that aim to reduce the risk of overdose injury and overdose death of injecting drug use and associated findings
- external data sources that provide an indication of the change over time in the provision of services by mainstream health services that respond to overdoses, and overdose death data.

The circumstances leading to overdose (and subsequent involvement of ambulance, emergency department and deaths) are complex. There is a level of caution needed when drawing conclusions from interpretation of this data. These events are impacted by a range of factors, such as changes to the availability, purity and price of drugs. While external data can be useful sentinel indicators for the environment that the MSIC operates within, it is not possible to ascribe causality of any one factor to changes in these figures.

The role of MSIC in reducing the risk of overdose injury and overdose death

There are inherent risks of physical injury and potential overdose death associated with injecting of illicit drugs, where the nature of the substance to be injected is unknown. The MSIC reduces the risk of injury and overdose death of injecting drug use in a number of ways, by providing:

- **A clean, safe place to inject that is medically supervised, allowing earlier intervention to manage an overdose. This early intervention can prevent symptoms worsening and potentially reduce injury and/or death due to overdose**. It is recognised that medically unsupervised injecting has considerable risks of overdose injury and death that could be avoided with supervision and earlier medical intervention[6]. There have been 604,022 injections at the MSIC from service commencement on 6 May 2001 to 30 April 2010[7], which would otherwise not have been medically supervised.

  Public injecting (i.e. injecting in a street, park, public toilet or car) is recognised as a high risk practice for injecting drug user health[8] (including risk of overdose injury and overdose death). Nearly half of all new registrants (46%) reported that they had injected in a public place in the month prior to registration. Evaluation findings suggest there has been a decrease in public injecting since MSIC service commencement. Of current MSIC clients surveyed, 96% stated that since attending MSIC, they had reduced injecting in public. The majority of clients interviewed reported that during MSIC opening hours, they only inject at MSIC. Of clients interviewed who inject in other locations during MSIC opening hours, the most frequently reported location was in their own or at a friend's home. This is consistent with the location reported by clients on initial registration at the MSIC.

  From service commencement on 6 May 2001 to 30 April 2010, 3,426 drug overdoses have been successfully managed at the MSIC. There have been no overdose deaths at the MSIC. After a person has injected, MSIC protocols are for

the person to move to an after-care area where they are encouraged to wait until they are assessed as 'fit to proceed'. This practice minimises the likelihood of a person leaving the MSIC and experiencing an overdose as a result of the injection self-administered at the MSIC.

Early intervention in an overdose can reduce the level of intervention required and the harms caused by the overdose. Within a supervised injecting facility, it is possible to intervene very early in the course of an overdose-related event. This earlier intervention may negate the need for subsequent naloxone administration, thereby avoiding potential naloxone-precipitated withdrawal syndrome and increasing the opportunity for clinical monitoring post overdose[9]. This strategy may reduce the likelihood of the client using further opioids to overcome acute withdrawal symptoms induced by naloxone which may then lead to further risk of overdose. Heroin-related overdose requiring only oxygen was the most frequent type of adverse event, constituting 68% of total adverse events recorded between May 2001 and April 2010. Over the nine years of operation, ambulances have attended 27 times after receiving a call from MSIC staff to assist with managing complex overdoses.

It is reasonable to assume that a proportion of these overdoses at MSIC would have led to overdose injury or overdose death had the client not injected at the MSIC (in a medically supervised setting, allowing earlier medical intervention).

It is also highlighted that an economic evaluation of the MSIC was commissioned by the NSW Government as part of the Trial under the current extended Trial period, and was completed in 2008. The evaluation, which aimed to 'undertake a robust economic analysis of the Centre [ed. MSIC] to determine the costs and benefits in relation to the broader health budget in NSW as well as to any related government agencies and private enterprise' found that:

> *'even conservative estimates of the number of deaths which MSIC may prevent each year results in massive positive outcomes in economic terms for the current funding of the Centre [ed.MSIC]'*[10].

- **Education and advice to clients for managing the risks of drug overdose such as using in portions, not using alone, and how to identify the early signs of overdose and how to respond.** Over the nine years of service provision, MSIC staff have provided advice on safer injecting (including vein care) on 23,998 occasions to clients to manage the risks of drug overdose[11].

  The majority of clients surveyed reported that they had changed their behaviour and had positive outcomes from attending the MSIC.

  Of clients surveyed as part of this evaluation, 97% reported that since coming to the MSIC, they now inject more safely. Almost 80% of clients interviewed reported they had changed their behaviour to reduce the risk of overdoses and were able to identify early signs of an overdose in other people or themselves. In addition, nearly all clients interviewed stated they had seen someone overdose either in MSIC, outside the MSIC or both and were able to identify early signs of an overdose in other people and themselves. It was suggested by MSIC staff during interview that the event of clients witnessing another client overdose at MSIC

reinforces the inherent risks of injecting drug use in all settings, and the significantly greater risk of injecting in an unsupervised environment (i.e. not at MSIC). See Section 10.4 for further detailed description and analysis.

- ***A referral point to drug treatment.*** The role of MSIC as a gateway to drug treatment is highlighted in this section to reflect the impact of drug treatment services to lead to reduction and cessation of drug use and therefore reduce the risk of drug overdose. The findings of MSIC's role as a gateway to drug treatment are described in Section 3.2 below.
- ***A referral point to other services.*** The majority of clients interviewed reported that they had accessed other non-AOD services since they started using MSIC. Common service types accessed included general health, housing and other support services. It was suggested by MSIC staff during interview that accessing these services is likely to lead to better health, more stable housing arrangements and support services that, individually and in combination, support safer injecting and contribute to reduced likelihood of overdose injury and overdose deaths. See Section 8.4, and Section 8.5 for further detail.

External data sources that provide an indication of the change over time of mainstream health services that respond to overdoses-related events, and overdose death data

Previous evaluation findings describe, coincident with the opening of MSIC, a decline across New South Wales in events related to opioid overdoses that has been sustained, and was attributed to a reduction in heroin availability and subsequent changes in patterns of drug use[12]. There remains some discussion in the peer reviewed literature about whether this decrease was the start of a heroin 'drought', a peak period of a nationwide reduction in heroin availability[13], an event associated with significant decreases in opioid-related harms or the end of a period of unusually high supply, a heroin 'glut'[14], which reduced availability to a lower level of supply that has since been relatively consistent over the period of MSIC service provision 2001-10. This environmental context must be taken into account when considering external data sources.

Ambulance attendances at suspected opioid overdoses

From May 1995 to March 2010, there were 35,796 ambulance attendances at suspected opioid overdoses across NSW[15]. Just over half of these attendances (18,168) occurred during the operating hours of the MSIC, and of these 12% (2,110) were in the postcodes 2010 and 2011 (Kings Cross vicinity) and 88% (16,058) occurred elsewhere in NSW.

Just prior to the opening of the MSIC in May 2001 (January 1999 to April 2001), ambulance attendances at suspected opioid overdoses were on a downward trend in both NSW and the Kings Cross area (a reduction in nationwide heroin availability is likely to have contributed to this trend – as described above). Following the commencement of the MSIC, ambulance attendances for suspected overdoses have remained relatively constant, albeit with a degree of month to month variability.

Overall, a 44% decrease in the average monthly ambulance attendances at suspected opioid overdoses occurring during the hours of MSIC operation was observed in the Kings Cross area, following the commencement of the MSIC (May 2001 to March 2010), compared to the overall period prior to the MSIC commencement (May 1995 to April 2001). Notably, this decrease was greater than that observed for the rest of NSW (36%), and no difference between the reduction in average monthly ambulance attendances was observed between the Kings Cross area and the rest of NSW for attendances occurring outside of MSIC operating hours.

In order to gain a more detailed understanding of ambulance attendance trends in the MSIC vicinity, a comparison was undertaken between ambulance attendances in postcode 2010 and postcode 2011 occurring pre and post the commencement of MSIC. (MSIC is located in postcode 2011 and includes the King's Cross area. Postcode 2010 includes suburbs to the south of MSIC – See Appendix E).

The average monthly number of ambulance attendances in postcode 2010 for suspected opioid overdoses decreased by 5% from 5.9 in the period prior to the commencement of the MSIC (May 1995 to April 2010) to 5.6 in the period following the commencement of the MSIC (May 2001 to March 2010). However, a much more pronounced decrease was observed in postcode 2011, with a 64% decline from 10.2 in the period prior to the commencement of the MSIC (May 1995 to April 2010) to 3.6 in the period following the commencement of the MSIC (May 2001 to March 2010). This trend is consistent with that described in the previous evaluation in 2007[16], where a greater decline in the average monthly ambulance attendances (pre vs. post MSIC opening) was observed in postcode 2011 (the location of MSIC) compared to postcode 2010.

The Ambulance Service of NSW representative reported that opioid-related overdoses attended by the Ambulance Service of NSW in the local area tended to occur with irregular injectors who are not from the local area and not aware of the MSIC. This may include clients of sex workers and people who have just been released from prison. The perception of the Ambulance Service of NSW representative was that the Ambulance Service of NSW no longer tended to see local long term injecting drug users (i.e. typical MSIC clients) experiencing opioid-related overdoses.

In summary, since the opening of the MSIC, there has been a decrease in the average monthly ambulance attendances in NSW for suspected opioid overdoses. This decrease was more prominent within the Kings Cross area than for the rest of NSW, suggesting that the MSIC is having an impact on public opioid overdoses, at least within the Kings Cross area. Furthermore, within the Kings Cross area, a greater decline in average monthly ambulance attendances for suspected opioid overdoses was observed for areas closer to the MSIC (e.g. those in postcode 2011). This suggests that the MSIC may be having a greater impact on opioid overdoses that occur within closer vicinity than those that occur further away. These findings are consistent with previous evaluations.

Opioid poisoning presentations at Emergency Departments

During the period May 1997 to May 2010, a total of 13,008 presentations to Emergency Departments in NSW were related to opioid poisoning[17]. Of these, just

over half (6,552) were recorded as occurring during MSIC operating hours[18], and of these, 21% (1,392) were recorded at St. Vincent's Hospital or Sydney Hospital. The number of Emergency Department presentations for opioid poisoning during MSIC opening hours remained broadly consistent, with a slight upward trend, in the period following the commencement of the MSIC (May 2001 to May 2010). The number of presentations per month for St. Vincent's Hospital and Sydney Hospital ranged from one to 17 presentations, compared with eight to 48 for hospitals in the rest of NSW.

Overall, following the commencement of MSIC (April 2001 to May 2010), there was a 20% decrease in average monthly Emergency Department presentations to St. Vincent's Hospital and Sydney Hospital related to opioid poisoning that occurred during MSIC opening hours. This was however less pronounced than the decrease observed for hospitals in the rest of NSW (35%) for the same period.

The Head of St Vincent's Hospital and Sydney Hospitals' Emergency Departments observed that since MSIC opened, there has been a significant reduction in the presentations from long term injecting drug users at those two Emergency Departments. Further, the representative stated that the injecting drug users who now present at the Emergency Departments typically do not appear to be clients of either the MSIC or Kirketon Road Clinic.

In summary, there has been a decrease in the number of Emergency Department attendances to St. Vincent's Hospital and Sydney Hospital due to opioid-related poisoning. It is difficult to definitively attribute this solely to the activity of the MSIC. This is because the declines seen in average monthly Emergency Department presentations to St. Vincent's Hospital and Sydney Hospital were less than those observed for hospitals in the rest of NSW. In addition, while Emergency Department presentations to St. Vincent's Hospital and Sydney Hospital were used as proxy measures for opioid-related poisonings occurring within the Kings Cross area (as adopted by previous evaluations), it is possible that this measure does not capture all data as some cases may present at other Emergency Departments within the state. Finally, this data does not distinguish whether the opioid-related poisoning was specifically due to injecting drug use or another form of drug intake that may not be influenced by the MSIC by virtue of it being outside the scope of MSIC's service policies (e.g. where drugs are taken orally).

Drug related deaths

Table 3-1 below outlines total opioid-related deaths between July 1998 and June 2009 for the Kings Cross area and the rest of New South Wales. Of the 2,038 opioid-related deaths across NSW in this period, 239 (12%) occurred in postcodes 2010 and 2011 (the Kings Cross area). Total yearly drug deaths fluctuated considerably across the period in both Kings Cross and the rest of New South Wales; in both jurisdictions, they fell by close to half between the 2004-05 and 2005-06 financial years, before increasing in 2006-07, and again in 2007-08 and decreasing in 2008-09.

A decline in the average monthly opioid-related deaths from four in the period prior to the MSIC commencing (July 1998 to May 2001) to one in the period following MSIC

commencement (May 2001 to June 2009) was observed in the Kings Cross area, while a decline of 28 to eight was observed in the rest of NSW for the same time periods. This equates to an approximate 70% decline for both geographical areas.

The low absolute numbers of opioid-related deaths in the Kings Cross area, in addition to the fact that a similar reduction was observed for the rest of the state, makes it difficult to assess the impact that the MSIC has had on opioid-related deaths outside of the MSIC.

Table 3-1: Opioid-related deaths

	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Total
Kings Cross	63 (13%)	42 (12%)	33 (11%)	10 (7%)	15 (10%)	26 (16%)	14 (10%)	7 (12%)	10 (12%)	13 (13%)	6 (9%)	239 (12%)
Rest of NSW	437 (87%)	303 (88%)	254 (89%)	136 (93%)	133 (90%)	134 (84%)	125 (90%)	52 (88%)	74 (88%)	90 (87%)	61 (91%)	1,799 (88%)
Total	**500**	**345**	**287**	**146**	**148**	**160**	**139**	**59**	**84**	**103**	**67**	**2,038**

Source: NSW Division of Analytical Laboratories (DAL)

Summary of key findings and conclusions

The services provided by MSIC reduce the likelihood of overdose injury and overdose death by those using the MSIC by providing:

- a clean, safe place to inject that is medically supervised
- education and advice to clients for managing the risks of drug use
- a referral point to drug treatment
- a referral point to other services.

Self-report information from surveys of current MSIC clients, in-depth interviews with current clients, and interviews with former clients suggests attending the MSIC has improved knowledge and behaviours and resulted in safer injecting practices and reduced public injection.

These findings are consistent with observations by key local service system representatives that since the commencement of MSIC, there has been an improvement in safer injecting knowledge and behaviour of MSIC clients that has led to a change to ambulance and emergency department clientele. Ambulance and emergency department services reported they rarely provide service to MSIC clients (i.e. long term injecting drug users from the local area), and people treated for opioid-related overdoses are usually not from the local area and are not aware of the MSIC, which as previously described is more likely to include clients of sex workers and people who have just been released from prison.

With respect to ambulance attendances at suspected opioid overdoses, there was a decrease in the average monthly attendance during MSIC opening hours following the commencement of the MSIC (May 2001). This was the case for ambulance attendances both within and outside the Kings Cross area (as defined by postcodes

2010 and 2011). However, the difference was more pronounced in the Kings Cross area. Furthermore, within the Kings Cross area, a greater decline in average monthly ambulance attendances for suspected opioid overdoses was observed for areas closer to the MSIC (e.g. those in postcode 2011). This suggests that the MSIC may be having a greater impact on opioid overdoses that occur within closer vicinity than those that occur further away. These findings are consistent with previous evaluations.

Average monthly Emergency Department presentations associated with opioid poisoning also decreased following the commencement of the MSIC. However, the decrease observed was less pronounced for hospitals in the Kings Cross area (St. Vincent's Hospital and Sydney Hospital) than was observed for all other hospitals in the rest of NSW, and a number of inherent data limitations makes it difficult to attribute any improvements solely to the operation of the MSIC.

Approximately 12% of all opioid related deaths in the period 1998-99 to 2008-09 were recorded in the Kings Cross area (postcodes 2010 and 2011). A decline in the average monthly opioid-related deaths was observed for the Kings Cross area following the MSIC commencement. However, the low absolute numbers of opioid-related deaths in the Kings Cross area, in addition to the fact that a similar reduction was observed for the rest of the state, makes it difficult to assess the impact that the MSIC has had on opioid related deaths outside of the MSIC.

In conclusion, based on the data analysed and information available, the MSIC had a positive impact on reducing the average monthly number of public opioid overdoses (resulting in ambulance attendances) in areas of NSW closest to its vicinity. There have also been decreases in opioid-related Emergency Department presentations and deaths in NSW since the commencement of MSIC. However, based on the external data available, it is difficult to directly infer the role of the MSIC in these improvements.

Provide a gateway to drug treatment

Drug treatment options

In New South Wales, there are a range of drug treatment options for people experiencing alcohol and drug problems. These include information provision, telephone counselling, self-help and support groups (e.g. Alcoholics/Narcotics Anonymous), psychosocial therapies, inpatient and home-based withdrawal, also known as detoxification (detox), pharmacotherapies (such as methadone or buprenorphine) and drug courts and diversion programs.

It is recognised however, that once people become dependent on opioids, as many of the MSIC clients are (frequently long-term opioid injecting drug users – on average injecting for 13 years), effective drug treatment options become more limited. As explained by the relevant NSW Health clinical guidelines:

> *'once established, opioid dependence is a chronic, relapsing condition, and most opioid users who attempt withdrawal rapidly lapse back into drug use. Methadone and buprenorphine maintenance are long-term treatments, and there is strong and consistent evidence that longer periods of treatment are associated with better outcomes'*[19].

The referral of clients is a key role of the MSIC and helps clients to create linkages with these services. Engaging the client at the right time for referral is important, and this is explored below.

The right time to refer

Key evidence in this field suggests that opioid-dependent people do not enter drug treatment immediately after they become dependent.[20] Research on injecting drug users accessing drug treatment indicates that the minimum time to drug treatment for NSW based clients is 3.3 years.[21]

The process of an injecting drug user moving from regular injecting towards drug treatment and cessation will often occur in small steps. It can be useful to consider this using a Stages of Change model[22] where people changing their behaviour move through four key stages: *precontemplation*, *contemplation*, *action* and *maintenance*.

This model of understanding and responding to each person's stage in behaviour change is also recommended for Australian GPs in relation to smoking cessation. The Smoking Cessation Guidelines for Australian General Practice recommend that GPs assess all patients according to these stages of change[23]. As a comparison point, cigarette cessation research shows that in the Australian smoking population, most smokers are either 'not ready' (precontemplating) quitting (37%) or 'unsure' about (contemplating) quitting (42%)[24].

In many ways, advice provided to GPs in relation to smoking cessation presented below illustrate the context for MSIC staff encouraging injecting drug users to enter drug treatment.

Figure 3-1: Smoking Cessation Guidelines for Australian General Practice

"Distinguish smokers thinking they should quit from readiness to quit. There are 80-90% of smokers who think they should quit, but only 20% are actually committed to quitting now.

The difficulty of quitting smoking, in the context of physical and psychosocial dependence, needs to be acknowledged.

All groups can be helped, but each group requires a different and targeted intervention with a different aim. Being patient-centred and non-judgmental is useful in all approaches.

Redefine success. Success is defined as movement through the model, not just quitting. Every time you help someone move one stage, you double his/her chance of success 2 years later. Change may be delayed and not apparent in the short term. Motivation to change can also change over short periods so windows of opportunities to assist can occur and flagging motivation can need to be 'shored up'.

Choosing an effective approach: more time is spent on those people most likely to benefit and most interested in getting some help. The clinician is also spared the frustration of failure in trying to help those who are "Not Ready" to quit and the risk of generating resistance is lessened. Interventions targeted to the stage of change are also more likely to be effective.

Relapse is a normal part of the quitting process. Most successful ex-smokers make 3 - 4 serious quit attempts before finally breaking their habit."[25]

It can be useful to consider the process an injecting drug user is likely to move through from regular injecting towards drug treatment and cessation when analysing the MSIC processes and services that support consideration of and accessing drug treatment. It is recognised that MSIC staff are well positioned to, over time, develop a strong therapeutic relationship with a client. As a result, MSIC staff can encourage and support the client to move through the stages of change from pre-contemplation, to contemplation, to action, at which point, clients can be referred to drug treatment. As evidence suggests, for some people, heroin addiction can be a lifelong condition, with the potential for relapse after long periods of abstinence,[26] MSIC staff may assist clients to transition through these stages multiple times.

It is recognised from drug treatment guidelines, that one of the principles supporting access to drug treatment for injecting drug users is that benefits relating to drug treatment are improved when *'programs are readily accessible, entry into treatment is prompt and retention in treatment is high''*[27]*.* The corollary of this principle is that when entry to drug treatment is delayed, commencement and retention in drug treatment is likely to be lower.

Timing is particularly important with people who are substance dependent as there is only a relatively short period of time after each injection before the person starts to experience symptoms of withdrawal from their most recent drug use, which can be alleviated either with drug treatment or further drug use.

The role of MSIC to provide a gateway to drug treatment

To consider the role of MSIC in providing a gateway to drug treatment, it is useful to describe the key mechanisms of the MSIC service model and processes that support and facilitate injecting drug users (MSIC clients) to access drug treatment. These are presented below.

- **The MSIC provides a unique point of initial contact and ongoing engagement with injecting drug users** – the MSIC service model is designed to remove real or perceived barriers for potential clients to access the service. This approach, sometimes described as providing a 'low threshold' to entry, is used to engage vulnerable client populations who may not feel able or comfortable accessing other services. This model supports MSIC to be an entry point to the rest of the service system (including drug treatment), particularly for vulnerable clients. Approximately 40% of all registered MSIC clients had not previously engaged with any form of support or drug treatment service prior to attending MSIC. This suggests the MSIC is providing a unique point of initial contact and ongoing engagement with some of the more vulnerable and marginalised people, allowing referral for drug treatment (on initial registration and on subsequent visits), as well as referral to other services.

  There was strong support from key local service system representatives about the role of the MSIC in providing an entry point to the rest of the service system for a population of very complex and vulnerable clients. For example, one service representative described a pathway for injecting drug users is that they initially access the MSIC, then access the services of Needle and Syringe Programs, then access drug treatment and progress to accessing primary healthcare services.

- **Referral to drug treatment on registration** – at registration, all potential clients undergo a comprehensive assessment (including previous drug use, physical and mental health, and accommodation status) and are offered information and assistance for all areas of concern, including referral to drug treatment.

- **Ongoing client engagement and referral opportunities** – during each visit, multiple staff engage with and provide useful, non-judgemental information and assistance to and genuinely show an interest in the general wellbeing of clients. This client engagement builds client trust in the service over time, supporting discussion of the client's needs for referral to drug treatment as well as referral to other services. Findings from the client survey reflect this process in practice, with the majority of surveyed clients agreeing with the statement: 'Since coming here, MSIC has helped me to understand my drug treatment options (counselling, detox, rehab, pharmacotherapies etc)' (84%)[28].

- **A dedicated Case Referral Coordinator to support referrals** – this onsite position supports MSIC clients to access drug treatment by linking them with appropriate private and public drug treatment places and conducting regular follow up with the service.

- **Brokerage funding and access to dedicated places in drug treatment** – brokerage funding allows the most vulnerable clients to access private drug treatment places (mostly on the same day people decide to commence drug

treatment) when there are waiting lists for public drug treatment places. NSW Health has provided MSIC clients access to dedicated local public drug treatment places with additional case management for six months (at the Langton Centre), reflecting the importance of ready access and prompt entry to drug treatment impacting on referral outcomes (as described in Section 3.2.2).

Referrals

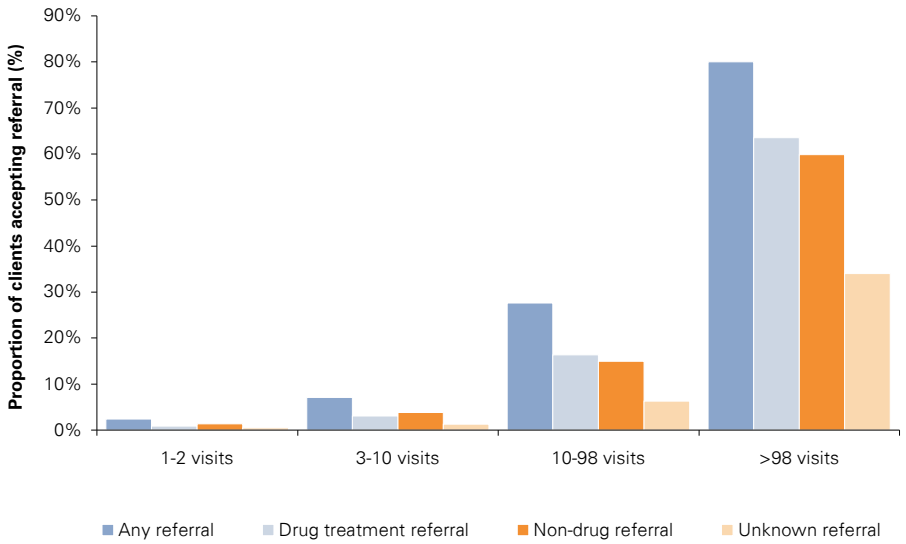
All clients are offered referral to drug treatment (and referral for assistance to a range of health and social services) as part of their initial registration – resulting in 12,050 offers of referral to drug treatment since the opening of MSIC.

Details of client referrals are recorded as referrals only when a client accepts them. In instances where there is no drug treatment position available, despite a referral being accepted by the client, these are recorded as services provided as opposed to referrals. Improved recording of this activity was introduced in 2008 in an attempt to provide a better breakdown of actual referral activity and highlight where referrals were initiated but not progressed as no suitable drug treatment place was available (i.e. timely access, location of drug treatment place, availability).

A total of 8,508 referrals were accepted by clients between May 2001 and April 2010. Of these, 3,871 were for drug dependence treatment (detoxification programs, counselling, drug treatment and rehabilitation), 2,278 were healthcare related (medical consultation, diagnostic testing, health education and mental health) and 2,359 were for social welfare and other services. Referrals for drug treatment represent 45.5% of all referrals provided to MSIC clients. By comparison, at NSW Needle Syringe Programs, referrals for drug treatment represent 20% of all referrals provided between 2005 and 2009[29]. It is important to note when making this comparison that, while MSIC and the NSP are broadly comparable in that they are low threshold services for injecting drug users, they do not provide an identical service model or the same range of services.

The more frequently a client visited the MSIC, the more likely they were to have accepted a referral to a drug treatment service. The same trend applies for referrals to all services. More specifically, 64% of frequent attenders (>98 total visits a given year) accepted a referral to drug treatment, whereas only 1% of infrequent attenders (1-2 total visits a year) accepted a referral to drug treatment. Similarly, 60% of frequent attenders (>98 total visits a year) accepted a non-drug treatment referral, compared to 1% of infrequent attenders (1-2 total visits in a year). These findings suggest that the low threshold service model employed by the MSIC, and associated referral processes, are successful in engaging with and supporting this particularly vulnerable group of frequent injecting drug users to move towards accepting referrals (many of whom have not previously had contact with the wider service system).

Figure 3-2: Proportion of clients accepting referrals by client visit frequency[30]



Source: Medically Supervised Injecting Centre (MSIC)

Table 3-2 the rate of referral to drug treatment per 1,000 visits has fluctuated from a high of 13.3 in 2001-02 to a low of 4.6 in 2009-10, with an average of 6.4 referrals per 1,000 visits over the nine year reporting period. For the first 5 years of operation (2001-02 to 2005-06), the rate of referral fluctuated from a high of 13.3 (2001-02) to a low of 5 (2003-04).

Rates of referral per 1,000 visits from 2006-07 onwards stabilised, with a range between 4.6 and 5.3 referrals per 1,000 visits (declining by less than one referral per 1,000 visits over the period). These findings are consistent with the trend for all referrals (including drug treatment, health care, and social welfare and other referrals).

Similarly, the rate of referral to drug treatment per 1,000 clients has fluctuated from a high of 158.8 in 2001-02 to a low of 111.4 in 2003-04, with an average of 141.2 referrals per 1,000 clients over the nine year reporting period. The referral rate was more stable from 2006-07 onwards than in previous years, albeit with a modest decline over the four year period.

The stabilisation of referral rates in the most recent four year period is likely to be due to the stabilisation of the overall mix of MSIC clients. This is highlighted by the fact that, in the initial five years of MSIC operation, the proportion of visits attributed to clients under different visit frequency categories varied, whereas in the last four years, these proportions have remained constant. Most notably, in the first five years of operation, the number of visits attributed to 'frequent' (>98 visits in a year) attenders ranged between 30% and 55%, whereas, in the last four years, this proportion has remained constant at around 60% of all visits (see Figure 8-4).

This period coincides with a period of stabilisation of two other key indicators; the annual rate of registration of new clients (see Figure 5-1) and the rate of acceptance of referrals to all other services (see Table 8-12). In combination, these factors reflect a more stable mix of clients, with the majority being long-term regular injecting drug users. See Section 8.5 for further detail.

In addition to accepted referrals, there are were instances were clients stated they wanted to proceed with a drug treatment referral but the referral was not completed as no appropriate drug treatment place was available (due to factors such as timely access, location of drug treatment place and availability).This highlights the urgency of access, where 'waiting lists' may be more appropriately assessed in terms of days, rather than weeks.

Prior to 2008, this attempted referral data was not consistently recorded. This prevented a clear view of when a client had agreed to commence drug treatment but the referral was not progressed. From 2008 onwards, MSIC collected information on attempted alcohol and drug treatment referrals, where a client had agreed to commence drug treatment but the referral was not progressed. This occurred 85 times in 2009 and 155 times in 2010, which is relatively high compared with actual referrals to pharmacotherapy drug treatment (175 in 2009, 189 in 2010). This suggests there may be opportunity to support additional referrals to drug treatment if access to suitable drug treatment places could be improved. Further investigation is required to understand the causes for not progressing referrals (e.g. availability and accessibility of certain types of drug treatment, or location access issues).

Further information on the role of MSIC as a gateway to drug treatment is described in Section 8.5.

Table 3-2: Drug dependence treatment referrals [31]

Referral type	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Pharmacotherapy treatment [32]	221 (52%)	192 (43%)	106 (26%)	159 (31%)	230 (38%)	148 (34%)	149 (40%)	175 (49%)	189 (59%)	1,569 (41%)
Detoxification program	79 (19%)	115 (25%)	116 (29%)	207 (41%)	259 (43%)	186 (43%)	129 (35%)	117 (33%)	84 (26%)	1,292 (33%)
Drug and alcohol counseling	91 (22%)	91 (20%)	104 (29%)	75 (15%)	64 (11%)	41 (9%)	46 (12%)	37 (10%)	27 (8%)	576 (15%)
Residential rehabilitation	28 (7%)	41 (9%)	56 (14%)	53 (10%)	42 (7%)	43 (10%)	33 (9%)	21 (6%)	17 (5%)	334 (9%)
Narcotics Anonymous/ self help		12 (3%)	18 (4%)	10 (2%)	9 (1%)	10 (2%)	4 (1%)	9 (3%)	5 (2%)	77 (2%)
Naltrexone maintenance	3 (1%)		1 (<1%)	3 (<1%)	2 (<1%)	5 (1%)	8 (2%)	1 (<1%)		23 (1%)
Total drug treatment referrals	***422***	***451***	***401***	***507***	***606***	***433***	***369***	***360***	***322***	***3,871***
Referral rate/1,000 visits	***13.3***	***7.9***	***5.0***	***7.4***	***8.4***	***5.3***	***5.1***	***4.8***	***4.6***	***6.4***
Referral rate/1,000 clients	***158.8***	***137.2***	***111.4***	***148.2***	***184.9***	***143.0***	***135.6***	***129.5***	***121.6***	***141.2***
Attempted drug and alcohol referrals [33]								85	155	

Source: Medically Supervised Injecting Centre(MSIC)

Outcomes of MSIC referrals

Findings for referral processes used during this current evaluation period reflect significantly increased uptake of drug treatment referrals compared to previous research for the period May 2001 to October 2002. This earlier research described 16% of MSIC clients who had a written referral to an alcohol and drug agency presented to that agency for an assessment for treatment[34].

Findings from this evaluation highlight that:

- In the period from February 2009 (when referral brokerage was re-established) to April 2010, there were 60 brokered referrals made to drug treatment from February 2009 to January 2010. Of the 60 brokered referrals, all (100%) commenced drug treatment and nearly two-thirds (63%) are still in drug treatment or have successfully completed drug treatment. Those who ceased drug treatment without completing it most commonly did so for financial reasons once the brokerage period finished.
- Since August 2009, there have been 28 referrals through the NSW Health funded Langton project (a service arrangement for the MSIC with a local public drug treatment service), with 22 people (78%) commencing drug treatment. The majority of those clients (n=15) continued drug treatment (at the Langton Centre, in the community or in prison)[35]. In addition, five clients had been in the program for more than six months and had been transferred to the general Langton Centre caseload for drug treatment.

These findings are of note as while there has been a stabilisation of referral rates at a lower level in this evaluation period, the uptake of these referrals has increased significantly (i.e. relatively fewer referrals provided with a more effective uptake).

Based on available data, the increased uptake of drug treatment referrals appeared to occur coincident with re-introduction of drug treatment brokerage, and the introduction of a formal referral pathway to the Langton Centre suggests there may be barriers to uptake of drug treatment that are addressed via these measures. As noted in the previous section, data collected from 2008 onwards describes instances when clients agreed to accept a referral but the referral was not progressed. This data suggests there remains a level of client interest in receiving a referral for drug treatment that is not currently met.

As part of investigating the factors contributing to referrals not being progressed, there may be merit in exploring opportunities to increase the availability of drug treatment at the time of decision by the client at MSIC (i.e. via brokerage and formal referral pathways to public drug treatment places) to increase the number of referrals. In addition, cost of drug treatment appears to be a significant barrier to continuing drug treatment when brokerage funding ceases. This suggests there may be merit in exploring opportunities to extend brokerage funding time, or supporting transition to alternative drug treatment options.

Challenges of referral to drug treatment

It is recognised that not all MSIC clients seek referral to drug treatment at any particular point in time.

As previously described, the stages of change theory can be useful in understanding the process people often go through when ceasing drug use. It is noted that in the written client survey conducted, there was a group of clients who identified they were not currently thinking about changing their drug use (10% of clients indicating that referrals to drug treatment 'does not apply to me'). (This is explored further in Section 8.5.)

As described in Section 3.2.2, it can take multiple attempts for a person to commence drug treatment to reduce their drug use. The availability of (and immediacy of access to) drug treatment places are key to people accessing drug treatment and reducing or ceasing their drug use. Findings from interviews with MSIC staff, key local service system representatives and MSIC clients suggest there is a perception held by many interviewed that immediacy of access to drug treatment services could be improved and that there are insufficient public drug treatment places available in the area. This may warrant further investigation by NSW Health.

Service representatives noted there will always be a tension between engaging current injecting drug users with highly complex needs and encouraging drug treatment without alienating people who are not yet ready to try drug treatment. The findings of the evaluation suggest that MSIC has been successful in managing this tension to effectively engage with injecting drug users, develop therapeutic relationships with clients, and support referral to drug treatment services (often over a multi-year period of time, and multiple referrals to drug treatment services).

Summary of key findings and conclusions

The MSIC is an entry point into the broader service system, including drug treatment, and provides multiple opportunities for people to access drug treatment. For many MSIC clients, attending MSIC was the first contact and referral point for any drug treatment or other support services. This highlights the unique position MSIC holds to engage with a marginalised and vulnerable segment of the population that previously have not been successfully reached.

Ceasing injecting drug use, as with ceasing use of other addictive substances (e.g. tobacco – cigarettes), requires an assessment of the person's readiness to change and recognition that movement towards wanting to stop using may take time and each step is a success. It is recognised that injecting drug users may access drug treatment multiple times before ceasing drug use on a more permanent basis. The MSIC is uniquely placed to engage with clients, identify and encourage a client's readiness to change, and to act in a timely manner to facilitate access to drug treatment services at the right time.

Overall, the more frequently a client visited the MSIC, the more likely they were to have accepted a referral to a drug treatment service. The same trend applies for referrals to all services. 64% of frequent attenders (>98 visits to MSIC in a given year) accepted at least one referral to drug treatment within the given year. This is

compared to approximately 2% of clients who attended only once or twice accepting referral to drug treatment in a given year. These findings demonstrates that the low threshold service model employed by the MSIC, and referral processes, is successful in engaging with and supporting this particularly vulnerable group of frequent injecting drug users to move towards accepting referrals (many of whom have not previously had contact with the wider service system).

The re-introduction of the Case Referral Coordinator role and supporting processes introduced during this evaluation (a formal pathway into dedicated public treatment places) have supported markedly increased access to drug treatment for MSIC clients.

The rate of referral stabilised at a lower level in the last four years than the earlier five years – most likely reflecting the stabilisation in the rate of new client registrations and stabilisation of the mix of clients by how frequently they attend the MSIC. During the evaluation period, the rate of uptake of drug treatment from these referrals has significantly increased compared with 2001-02 rates. Overall, evaluation findings indicate the MSIC acts as a gateway for drug treatment.

The MSIC provides multiple opportunities for MSIC staff to develop a therapeutic relationship with clients to engage them in considering behaviour change and to refer to drug treatment as appropriate. Clients feel they can ask for assistance and advice and that availability of places and financial considerations are stated to be barriers to drug treatment.

There may be merit in further increasing the availability of 'immediate' drug treatment at the time of decision by the client at MSIC (i.e. via brokerage and formal referral pathways to public drug treatment places to increase the number of referrals). In addition, cost of drug treatment appears to be a significant barrier to continuing drug treatment when brokerage funding ceases. This suggests there may be merit in exploring opportunities to extend brokerage funding time, or supporting transition to alternative drug treatment options.

Reduce problems associated with public injecting and discarded needles and/or syringes

As previously stated, one of the objectives of establishing the MSIC was to reduce the instances of people injecting in public spaces and subsequently disposing of equipment (particularly needles and syringes) inappropriately in public locations.

Drug use in public places

On registering, between 42% and 48% of all new MSIC registrants reported injecting in a public place. The places where new MSIC registrants injected in the month prior to registration included:

- on the street (30%)
- in a public toilet (19%)
- in a car (18%)
- in a squat (5%)
- at an illegal 'shooting room' (4%)[36].

It is reasonable to assume that at least a proportion of the 604,022 injections conducted at MSIC in the last 10 years would otherwise have occurred in public places.

The majority of surveyed clients (92%) agreed with the statement: Since coming here, MSIC has helped me to reduce injecting in public places. This aligns with other findings from the survey and interviews of current clients that suggested increased knowledge of the risks of injecting (including public injecting) and changed behaviour to minimise the likelihood of adverse events.

All key local service system representatives interviewed who were familiar with Kings Cross prior to the opening of the MSIC reported they observed less public injecting in Kings Cross since the opening of the MSIC.

The proportion of the local community who have seen someone injecting in the previous month has declined substantially over time with the proportion of local residents who report having seen public injecting in the previous month halving since MSIC opened (from 55% in 2000 to 27% in 2010). The proportion of business operators who have seen public injecting in the previous month has reduced from nearly two-thirds to about one-quarter (61% in 2002 to 22% in 2010).

Discarded needles and syringes

As described in further detail in Section 11, a primary health service in Kings Cross provides a needle clean up service which collects discarded needles and syringes in Eastern Sydney and Darlinghurst, Kings Cross and Woolloomooloo on weekdays (defined in eight sectors).

A designated worker collects any injecting equipment discarded in public locations identified as "hot spots", which are monitored and adjusted when patterns of public injecting change. The majority of hot spots are located within a 500 metre radius of the MSIC. The worker also responds to calls from the public to the NSW Needle Cleanup Hotline. Monthly counts of discarded needles and syringes collected by the service have been analysed for the years (May to April) 2003-04 to 2008-09 for each of the eight sectors around the MSIC.

Data collection for discarded needles and syringes

Overall, the data on discarded needles and syringes collected in the eight sectors indicates a decline in the total number of needles and syringes collected during the period reported from 2003-04 to 2008-09[37]. Specifically, the number of needles and syringes collected across all eight sectors more than halved from 28,231 in 2003-04 to 12,646 in 2008-09.

The largest reductions have typically occurred in the sectors that have borders within 500 metres of the MSIC (particularly Sectors 1, 3 and 4 – Darlinghurst, Woolloomooloo and Potts Point), consistent with client and key local service system representative comments that people prefer to inject in close proximity to where they have obtained their drugs. Sectors which are further away, such as Sector 2 (East Sydney), have not seen such pronounced downward trends in needle and syringe collection. Indeed, Sector 8 (Surry Hills), the furthermost sector, has seen an increase. The total number of needles and syringes collected in the more affluent Sector 5 (Elizabeth Bay) and Sector 6 (Rushcutter's Bay) have increased slightly, but absolute numbers in these sectors are considerably lower than in the other sectors.

Sector 7 (Kings Cross) saw the greatest total number of needles and syringes collected of all the sectors over the period from 2004-09 (28,056). This is not surprising, as the MSIC was intentionally located in Kings Cross as it had the highest prevalence of drug overdose deaths in the state (and Australia), and was associated with a disproportionate number of ambulance attendances for overdose[38]. The site was as close as practicable to the area with highest numbers of discarded needles and syringes, levels of public injecting and reported drug dealing in the period leading up to the MSIC commencement[39]. The number of needles and syringes collected in Sector 7 in 2008-09 was less than half collected in 2003-04 (2,840 needles and syringes collected in 2008-09 compared to 6,416 collected in 2003-04).

In summary, while there were fluctuations in the number of needles and syringes collected in each sector across the six year period of analysis (2003-04 to 2008-09), the data for most sectors indicate a general downward trend in the total number of needles and syringes collected. This was particularly so in sectors immediately adjacent to the MSIC. It should be noted however, that in the absence of comparison data for the period prior to the MSIC commencement, it is not possible to infer a correlation between the reduction observed and the operation of MSIC.

In addition, it is highlighted that the majority (81%) of surveyed clients agreed with the statement: Since coming here, MSIC has helped me to not leave injecting equipment in public.

During interviews with current and former clients, a number of clients discussed the significant change to the level of discarded equipment in the area since the MSIC opened.

There has been a steady decline over time in the proportion of surveyed local residents and business operators who had seen discarded equipment in the past month.

The proportion of local residents who have seen discarded equipment in the previous month has reduced substantially (66% in 2000 to 46% in 2010). There has been a sharper decline for business operators (80% in 2000 to 46% in 2010)

Finally, all key local service system representatives interviewed who were working in the Kings Cross area prior to the opening of the MSIC reported they noticed significantly fewer needles and syringes since the MSIC opened.

Summary of key findings and conclusions

Based on available data, since the commencement of MSIC there has been a decline in the level of public injecting observed by community and business operators, substantially fewer reports of seeing discarded equipment or public injecting. Data for needle and syringe collections suggests that since the commencement of MSIC services there has been a considerable reduction of the total number of needles and syringes collected in its vicinity in the period 2004 to 2009. Moreover, the greatest reduction has been in the areas immediately adjacent to the MSIC. Nearly all (92%) current clients interviewed reported that the MSIC had helped them reduce injecting in public places. Based on information analysed, since the commencement of the Trial in 2001, there has been reduced problems with public injecting and discarded needles and/or syringes.

Reducing the spread of diseases such as HIV and Hepatitis C

A vital component of the information and advice provided by MSIC to clients (and of MSIC's operational protocols and practices) relates to the practice of injecting in a safer manner, to reduce the risk of spread of blood-borne viruses such as HIV and Hepatitis C. This section specifically considers the elements of the MSIC services that directly relate to reducing the risk of spread of blood-borne viruses.

A range of equipment, information and advice is provided by MSIC staff to clients relating to the practice of injecting in a safer manner that focuses on reducing the risk of spread of blood-borne viruses including:

- providing an hygienic environment and clean equipment required for each injecting episode to every client
- conducting regular health promotion campaigns to encourage a culture of being 'blood-aware' at the MSIC (and also being 'blood-aware' if choosing to inject elsewhere)
- providing disposal facilities in each booth to discourage repeated use of any equipment
- modelling blood aware practices in the MSIC such as not sharing any equipment, including 'ancillary' items such as tourniquets or spoons (as part of equipment provided), which can have imperceptible traces of blood that can transmit blood-borne viruses.

This occurs in addition to practices that generally support good injecting practice, such as providing hand washing facilities, and encouraging hands and injection site to be clean before injecting. Clients are not allowed to move around once they have started injecting which minimises the potential of needle stick injury (and potential spread of blood-borne viruses as a consequence).

Information obtained from interviews, survey of current MSIC clients and interviews with former clients suggests an increase in knowledge of, and behaviour changes that reflect, safer injecting practices to minimise the risk of spread of blood-borne viruses.

- The majority of clients reported that they injected in a safer manner since becoming MSIC clients. Over half indicated that they had sought and received advice from a member of staff about injecting and this had been helpful. Interviewed clients reported receiving advice/information on how to prepare to inject more safely, how to use equipment properly to minimise risks and advice on complications.
- Interviewed current and former clients reported a number of approaches were adopted to support safer injecting. These included using clean equipment for single use, not sharing, using Needle Syringe Programs, swabbing and generally making sure that hands are clean before injecting.
- The majority of clients surveyed reported that they had changed their behaviour and had positive outcomes from attending the MSIC. Of note is that nearly all

reported that, since coming to the MSIC, they now inject more safely (97%) and have reduced injecting in public (92%).

As noted in Section 3.3 (and see Section 11), there has been a considerable reduction of the total number of needles and syringes collected in the vicinity of the MSIC in the period 2003-04 to 2008-09, and the greatest reduction has been in the areas immediately adjacent to the MSIC. This has implications for reducing the risk of spread of blood-borne viruses for the general public in the MSIC vicinity, in terms of the risk of needle stick injuries in public places – and the potential for spread of blood-borne viruses.

As previously suggested, the needle and syringe collection data described in this section may be considered a proxy for the level of public drug use in the areas of needle and syringe collection. On this basis, it is suggested that there has likely been an overall decline in the level of injecting drug use in public places (in the areas of needle and syringe collection). As noted earlier, this aligns with current MSIC client interviewed and surveys which indicated changes in behaviour and had reduced injecting in public (92% of surveyed clients). Public injecting is recognised as higher risk[40], and as such, a reduction in public injecting can be considered a reduction of risk of spread of blood-borne viruses (for those injecting drug users who previously injected in public).

Surveyed clients were very positive about the impact of the MSIC on their injecting practices.

- Surveyed clients were asked '*What do you think about the MSIC staff and services: advice from MSIC staff (vein care, safer injecting)*. The majority of clients reported this was very good (77%) or good (16%).
- The majority (92%) of surveyed clients agreed[41] with the statement: *Since coming here, MSIC has helped me to inject more safely (including reducing my risk of overdose).*

MSIC data – new registration blood-borne virus status

New registrants to the MSIC are asked to indicate whether they have ever been tested for blood-borne viruses, Hepatitis B, Hepatitis C and Human Immunodeficiency Virus (HIV), their infection status (if known) and the treatment history for such infections.

A small proportion (1-2%) of all new registrants between 2001-02 and 2009-10 indicated they had been tested as positive for a HIV infection, while 44-52% indicated they had been tested as positive for a Hepatitis C infection. The majority of new registrants (74-78%) indicated that they had never been infected with Hepatitis B.

Particularly with respect to Hepatitis C, this highlights the importance of engaging with this population group to minimise the spread of blood-borne viruses through supporting safer injecting practice and education, reducing discarded needles and as facilitating referrals to drug treatment and other support services.

HIV and Hepatitis C infections – comparison of Kings Cross vicinity and the rest of NSW

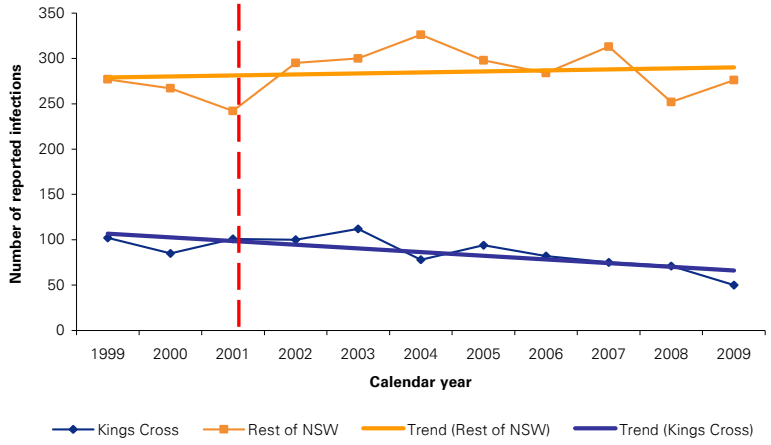
Data Collection and Analysis

Notifiable Diseases Data (NDD) was obtained from NSW Health for HIV and Hepatitis C infections by onset date[42] within postcodes 2010 and 2011 (the Kings Cross vicinity) and the rest of NSW in order to establish whether the opening of the MSIC in May 2001 has impacted on reported HIV or Hepatitis C infections in the Kings Cross area.

It should be noted that only those cases with laboratory evidence of infection notified to NSW Health under the *Public Health Act (1991)* are included in the following analyses. Whether persons with these infections are notified depends on their health care seeking behaviour, and the testing practices of the clinicians, which may vary across NSW. In addition, many Hepatitis C and HIV infections are asymptomatic and remain undiagnosed for long periods or are never diagnosed. Consequently, these data are unlikely to reflect the true incidence of these infections. Finally, for many cases, the time of acquisition of the infection is unknown, and therefore the notification data represents both acute and chronic infections.

As outlined in Figure 3-3, people living in the Kings Cross area (postcodes 2010 and 2011) accounted for 23% of all HIV infection notifications in NSW in the period from 1999 to 2009. A downward trend (blue trend line) in HIV infection notifications was observed for the Kings Cross area for the period between 2003 and 2009. This contrasts with a slight upward trend in the rest of NSW during the same period (orange trend line).

Figure 3-3: HIV infections 1999-09

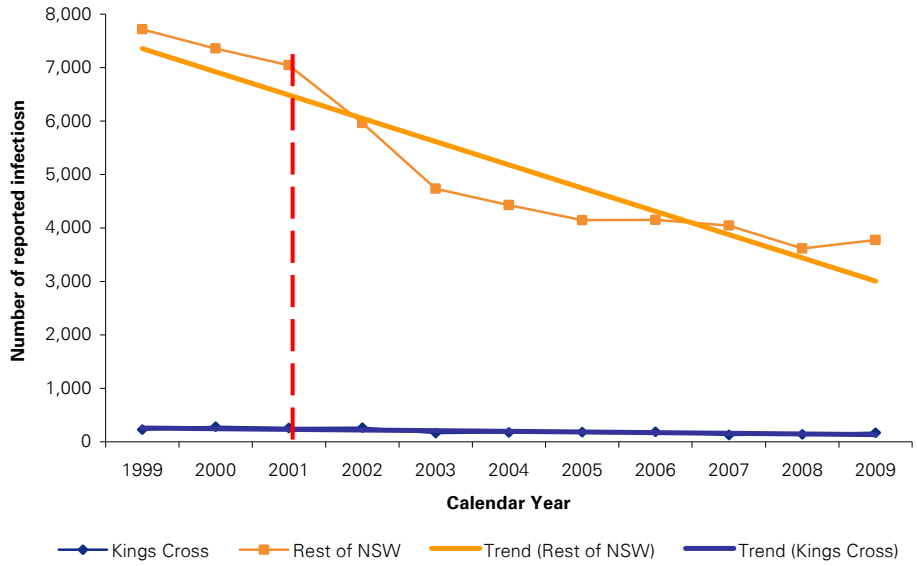


Source: NSW Health Epidemiology Branch

In terms of Hepatitis C infection notifications, people residing in the Kings Cross area (postcodes 2010 and 2011) accounted for a small proportion of the total notifications for NSW in the period from 1999 to 2009 (4% in total). As indicated in Figure 3-4, there was a pronounced downward trend (orange trend line) in total Hepatitis C infection notifications across the rest of NSW between 1999 (7,513) and 2009 (4,002). There

has also been a downward trend (blue trend line) in Hepatitis C infection notifications in the Kings Cross area (postcodes 2010 and 2011) (from 218 in 1999 to 173 in 2009). This represents overall decreases in the number of Hepatitis C infection notifications of 47% and 21% for the rest of NSW and the Kings Cross area, respectively.

Figure 3-4: Hepatitis C Infections 1999-09



Source: NSW Health Epidemiology Branch

Summary of key findings and conclusions

Overall, the data on Hepatitis C and HIV infection notifications indicates that there has been a downward trend in the notification of both types of disease in the Kings Cross area in the period from 1999 to 2009. In the case of HIV, this trend is in contrast to the slight upward trend in infection notifications in the rest of NSW, while with Hepatitis C, the trend is reflective of a downward trend in infection notifications across NSW.

In terms of links between the trends in infection notifications and the opening of the MSIC, it could be suggested that the opening of the MSIC has helped to reduce the incidence of HIV and Hepatitis C infection in the Kings Cross area. However, the limitations of the data (outlined above) should be carefully considered when interpreting these results.

Notably, in the case of HIV infection notifications, it is not possible to infer that the reduction in the Kings Cross area compared to the rest of NSW is due entirely to the opening of the MSIC, as the trend in reduced HIV infection notifications does not directly coincide with the opening of the MSIC. In addition, it is not possible to ascertain the cause of infection from the data provided (e.g. the infection may have been contracted through activities other than injecting drug use).

Part B

3 Evaluation methodology (data sources, assumptions and limitations)

This section describes the data used for this evaluation and outlines the limitations and general assumptions adopted for each source of data used. Where specific assumptions have been applied to individual analyses, these have been noted in the relevant section accompanying the analyses.

The evaluation aim, objectives and key areas of evaluation are described in Section 2.2. The key questions and evaluation domains that the evaluation sought to answer are presented in Appendix D.

The evaluation used a mixed method design for the collection of data and information. These methods comprised both qualitative and quantitative approaches in order to address both the requirements for process and outcomes evaluation, and to answer the range of questions the evaluation required. The evaluation drew on multiple sources of data to build a detailed and accurate understanding of the MSIC and its operation and impact. This includes analyses of existing information and data and collecting new quantitative and qualitative information through consultations and surveys.

In brief, activities conducted to inform the evaluation include the following:

- analyses of MSIC service activity data sourced from the MSIC database for the period May 2001-May 2010
- analyses of MSIC program documentation, such as policies and procedures
- analyses of existing third party external data sets including NSW Emergency Department Data Collection , NSW Ambulance Service Data, Division of Analytical Laboratories Data, NSW NSP Activity Data and the Kirketon Road Centre Needle Clean Up Service
- semi-structured group interviews with MSIC management (Medical Director, Clinical Services Manager, Office Managers)
- three semi-structured group interviews with MSIC operational staff
- semi-structured individual interviews with current MSIC clients (n=43), conducted at MSIC on three different weekdays and times to access a range of clients (Tuesday 10.30-3pm , Thursday 10.30- 6pm, Friday 2-10pm)
- semi-structured telephone interviews with former MSIC clients (n=6), advertised through multiple channels
- paper-based survey at the MSIC for completion by current clients (n=119), conducted onsite at MSIC for a two week period in February 2010
- targeted key local service system representative interviews with representatives from local agencies (n=10) (NSW Ambulance, NSW Police, local Emergency Departments, public and private alcohol and drug services, mental health and other

support services. A full list of local service representatives consulted can be found at Appendix A)

- a telephone survey of local businesses and residents was conducted with a random sample of residents and business operators in the Kings Cross area. There were 343 resident surveys completed (75.7% response rate) and 203 business surveys (84.2% response rate).The survey occurred between 21 June and 19 July 2010. This survey replicates previous random surveys of the same community in 2000, 2002 and 2005.
- An online survey was also conducted to provide other members of the Kings Cross community with an opportunity to provide their views to the evaluation between 7 April and 9 May 2010. The survey was advertised in The Wentworth Courier for four consecutive weeks.

The remainder of this section describes each data source used for this evaluation in further detail, and outlines the limitations and general assumptions adopted.

MSIC client and service database

MSIC database overview

The MSIC has a detailed client and service database. The MSIC staff enters into the database detailed client data once at first registration, and data on the clients' drug use, referrals and overdose-related events is entered at each subsequent attendance. Consistent with the service model which maintains a low threshold for access, the MSIC database reflects the core information collected for monitoring of service clients and activity. MSIC does not require clients to provide identification (e.g. driver's licence or Medicare card) to verify their identity, allowing clients to use pseudonyms if desired. The following table shows information entered into the database at registration and each attendance. This information was provided to KPMG in de-identified format.

It is noted that the MSIC also maintains a comprehensive medical history for each client as a separate hard copy file.

Collection point	Information
At registration:	**Client characteristics data** • **characteristics** (date of birth, sex, Aboriginal and Torres Strait Islander status, income, accommodations etc) **Client clinical data** • **health** (a comprehensive medical history including medical and psycho-social assessment is undertaken, including results of blood-borne virus (BBV) tests, treatment for BBV infections, mental health issues, allergies etc) • **drug treatment history** (attendances at Kirketon Road Clinic or

Collection point	Information
	K2, previous treatments including methadone, Buprenorphine, other detox or rehab, counselling and source of referrals etc)
	Client behavioural data • **injecting and drug use history** (age at first drug injection, last drug injected, frequency of injection, place where most commonly inject, propensity to share needles and with whom and how many people, any specific health issues from injecting, tobacco and alcohol use etc) • **overdose history** (age at first overdose (OD), frequency of OD, place of OD, drug used at OD, ambulance attendance, requirement for hospitalisation, treatment following last OD, witness to OD of other person, incarceration history).
At each attendance:	**Attendance data** • type of drug intended to be used at current visit • whether the client is accompanied • time since last use • last drug used • recent drug or alcohol use (within the last day) • adverse events (referred to as overdose-related events) • referral details.

General assumptions

The following assumptions were adopted in analysing the MSIC data presented in this report:

- the database provided to KPMG by the MSIC contains the most up-to-date data collected by the MSIC at the point of extraction
- the data dictionary (version 15 May 2009) for the MSIC client database (database version 1.10, software version 1.17.11) was superseded during the course of the evaluation by version 17 March 2010 (database version 1.12, software version 1.18.2). KPMG's analysis assumed that these two documents provide an accurate depiction of the structure and content of the MSIC client database during their respective dates of validity
- throughout the report, records were considered valid (depicted as 'n') if data for the given field matched a valid value as defined in the data dictionary.

General database limitations

The MSIC data presented in this report must be viewed within the context of the following limitations:

- The majority of the data analysed in this report was restricted to the date range: 1 May 2001 to 30 April 2010. However, some data sources were not available for this entire period and, in some cases, data earlier than 1 May 2001 is presented. Where this is the case, it has been noted in the text.
- The data collected in the MSIC database is self-reported by the client and may be subject to bias.
- The data for new registrants was used to determine trends in client characteristics over time. The limitation with this approach is that the trends may not be applicable to the total active client base as new registrants make up the minority of client attendances per month and year.
- Conversely, it is not possible to use data from the overall active client base to determine trends in client characteristics over time for some client characteristic data (i.e. income, accommodation status), client clinical data (health, drug treatment history) or client behavioural data (i.e. drug use and injecting history), as it may have changed since being recorded. As such, this 'historical' data may no longer reflect an accurate picture of the current client group.
- To the extent possible, a high-level 'reality check' has been performed on all data presented, comparing against previously published evaluation reports. The key limitation preventing a cross-comparison of the entire data sets is that previous evaluations have generally presented data at an aggregate level separating the pre-MSIC period from the post-MSIC period, whereas this evaluation has presented data primarily on a year on year basis to provide more detail on trend information.
- Overall, the majority of indicators/data presented in this evaluation mirror those presented in previous evaluations. However, it is also noted that due to changes in the availability and reporting of some data, it has not been possible in all cases to present data in a form that is directly comparable to previous evaluations. Where relevant, this has been noted in the text. Importantly, these differences do not have a material impact on the overall conclusions.

External data sources

General data notes

The following provide general notes regarding the external data analyses presented in this document:

- All data extracted from the MSIC database (see Section 4.1.1) has been presented according to the period between 1 May and 30 April of each respective year. The start date of this period corresponds to the commencement of operation of the MSIC and allows complete years of MSIC operation to be reported. Where possible, other data presented in this document are also presented according to

the same year period (1 May to 30 April) for comparability, however this has not been possible in all cases.

- Other data has been presented as follows:

Data analysis	Type	Date range presented
MSIC visits and Clients	Month on month	1 May 2001 – 30 April 2010 Referred to in figures as 'MSIC Year'
Needle and syringe collection	Yearly (1 May to 30 April)	1 May 2003 – 30 March 2010
Emergency Department presentations for opioid poisoning	Month on month	1 May 1997 – 30 April 2010
Ambulance attendances at suspected opioid overdoses	Month on month	1 May 1995 – 30 April 2010
Opioid-related deaths data	Yearly (financial years) (1 July – 30 June)	1 July 1998 – 30 June 2009
Notifiable diseases (HIV and Hepatitis C)	Yearly (calendar years) (1 January – 31 December)	1 January 1999 – 31 December 2009
NSW NSP Activity data set	Yearly (calendar years) (1 January – 31 December)	1 January 2005-31 December 2009

Ambulance attendances at suspected opioid overdoses

The nature of the data for ambulance attendances at suspected opioid overdoses were described in a previous evaluation in 2007 and are reprised with revision below.

Data was available from the NSW Ambulance Service on ambulance attendances at suspected opioid overdoses in NSW for the period from April 1998 to the end of March 2010. A suspected opioid overdose was defined as an ambulance attendance where the patient was administered the opioid antagonist naloxone (Narcan®).

The time of the ambulance booking was used to calculate the number of attendances that would have or did occur during MSIC opening hours prior to or following its establishment.

The operating hours outlined in Table 4-1 were used to determine if the attendances did or would have occurred during MSIC opening hours. Note that, for the period prior to the MSIC commencement (prior to May 2001), the current MSIC opening hours were adopted.

Table 4-1: Opening hours of MSIC by date range[43]

Start Date	Prior to 6-May-01[44]	6-May-01	2-Jul-01	18-Mar-02	18-May-02	17-Aug-02	28-Jan-03	1-Aug-09
End Date		1-Jul-01	17-Mar-02	17-May-02	16-Aug-02	27-Jan-03	31-Jul-09	To present
Sunday	9:30	12:00	12:00	12:00	12:00	10:00	11:00	9:30
	17:30	16:00	16:00	16:30	21:30	18:00	19:30	17:30
			18:00	18:00				
			21:30	21:30				
Monday	9:30	12:00	12:00	12:00	12:00	12:00	9:30	9:30
	21:30	16:00	16:00	16:30	16:30	16:30	22:00	21:30
			18:00	18:00	18:00	18:00		
			21:30	21:30	21:30	21:30		
Tuesday	9:30	12:00	12:00	12:00	12:00	12:00	9:30	9:30
	15:45	16:00	16:00	16:30	16:30	16:30	22:00	15:45
	18:00		18:00	18:00	18:00	18:00		18:00
	21:30		21:30	21:30	21:30	21:30		21:30
Wednesday	9:30	12:00	12:00	12:00	12:00	12:00	9:30	9:30
	21:30	16:00	16:00	16:00	16:00	16:00	16:45	21:30
			18:00	18:00	18:00	18:00	18:00	
			21:30	21:30	21:30	21:30	22:00	
Thursday	9:30	12:00	12:00	12:00	12:00	12:00	9:30	9:30
	21:30	16:00	16:00	16:30	16:30	16:30	22:00	21:30
			18:00	18:00	18:00	18:00		
			21:30	21:30	21:30	21:30		
Friday	9:30	12:00	12:00	12:00	12:00	12:00	9:30	9:30
	21:30	16:00	16:00	16:30	16:30	16:30	22:00	21:30
			18:00	18:00	18:00	18:00		
			21:30	21:30	21:30	21:30		
Saturday	9:30	12:00	12:00	12:00	12:00	10:00	11:00	9:30
	17:30	16:00	16:00	16:30	21:30	18:00	19:30	17:30
			18:00	18:00				
			21:30	21:30				

As in previous evaluation reports, the Kings Cross vicinity was broadly defined as the areas captured by postcodes 2010 and 2011 (includes Darlinghurst, East Sydney, Surry Hills, Elizabeth Bay, Kings Cross, Potts Points, Rushcutters Bay and Woolloomooloo). Ambulance attendances occurring in 2010 and 2011 were defined as occurring in the Kings Cross vicinity and the remaining attendances defined as occurring in the rest of NSW[45].

It should be noted that these data will:

- include a small number of patients who have not overdosed from using heroin or another opioid per se but who received naloxone (Narcan®) as empirical treatment to exclude this as a cause of decreased level of consciousness
- exclude actual heroin overdose cases where naloxone was not indicated or where the attending officers were not authorised to administer naloxone or where the patient declined naloxone. However, the reliability of these data as an indicator of the prevalence of non-fatal opioid-related overdose[46] and its correlation with trends in fatal overdoses has been established previously[47].

Opioid poisoning presentations at Emergency Departments

The nature of the data for opioid poisoning presentations at hospital Emergency Departments were described in a previous evaluation in 2007 and are reprised with revision below.

The hospitals St Vincent's Hospital and Sydney Hospital record presentations via the NSW Emergency Department Data Collection (EDDC), and opioid poisoning presentations are classified as International Classification of Diseases, 9th Revision (ICD-9) codes 965.0 to 965.09. These codes are: 965.0 opiates and related narcotics – 965.00 opium (alkaloids, unspecified; 965.01heroin, diacetylmorphine; 965.02 methadone; 965.09 other, codeine (methylmorphine), meperidine (pethidine), morphine.

The time of presentation was used to calculate the number of Emergency Department presentations that would have or did occur during MSIC opening hours prior to or following its establishment, as per the calculations for ambulance attendances detailed above[48].

It should be noted that a number of limitations exist for this data which should be considered when interpreting the associated analyses. Firstly, while emergency department presentations to St. Vincent's Hospital and Sydney Hospital may be used as proxy measures for opioid-related poisonings occurring within the Kings Cross area (as adopted by previous evaluations), it is possible that this measure does not capture all cases as some may present at other emergency departments within the state. Secondly, this data does not distinguish whether the opioid-related poisoning was specifically due to injecting drug use or another form of drug intake that may not be influenced by the MSIC by virtue of it being outside the scope of MSIC's service policies (e.g. where drugs are taken orally).

Opioid-related deaths

The nature of the data for drug related deaths were described in a previous evaluation in 2007 and are reprised with revision below.

Data on drug related deaths was obtained from the Division of Analytical Laboratories (DAL) which monitors drug and alcohol constituents found in blood and tissue samples of persons who died in drug-related circumstances. A death in the Kings Cross vicinity was defined as one where the death occurred in postcodes 2010 and 2011, with the remaining deaths defined as occurring in the rest of NSW. The available DAL data for the period from the 2004-05 financial year (July 2004-June 2005) to the 2008-09 financial year is used in these analyses.

An important limitation of the opioid-related death data to note is that the detection of drugs in blood and tissue samples of a deceased person does not always correlate with drugs being the cause of death. For example, the cause of death may be due to an injury sustained while under the influence of drugs or may be completely un-related to the use of drugs. In addition, the detection of drugs in such samples does not always relate to the injection of illicit drugs. The person may have died due to injury subsequent to taking a non-lethal therapeutic dose of an opioid (e.g. for routine pain relief).

Discarded needle and syringe collection

The Kirketon Road Centre (KRC), a primary health care service in Kings Cross, provides a Needle Clean Up service which collects discarded needles and syringes across eight defined sectors that approximate with the suburbs of Darlinghurst, East Sydney, Woolloomooloo, Potts Point, Elizabeth Bay, Rushcutters Bay, Kings Cross and Surry Hills. The service collects any injecting equipment discarded in these areas in public locations identified as "hot spots", which are monitored and adjusted when patterns of public injecting change. The majority of hot spots are located within a 500 metre radius of the MSIC. The service also responds to calls from the public to the NSW Needle Cleanup Hotline.

Monthly counts of discarded needles and syringes collected by the Kirketon Road Centre Needle Cleanup Team were provided for the period January 2004 to December 2009 for each of the eight sectors around the MSIC.

Needle Syringe Program

Information on public Needle and Syringe Program (NSP) activity is captured in the NSW NSP Activity data set. Data was provided for all NSW and for South East Sydney Illawarra Area Health Service for the period 2005-2009 for NSP services provided, referrals provided, needle clean up and disposal related activity and the total number of units of injecting equipment dispensed.

Surveys and interviews

Previous evaluations of MSIC included surveys or interviews of various stakeholders. Those stakeholders included local residents and businesses as well as existing clients of MSIC. This evaluation has replicated these surveys and their methods, using telephone based surveys of residents and businesses, and face to face interviews of clients. For this evaluation, we have supplemented those methods with an internet based survey of residents and businesses, as well as interviews with former MSIC clients. The details of sample selection, sizes and methods used are presented for each method and stakeholder group, in the following sections. Survey and interview questions are provided in the appendices.

As the response rate/sample sizes of the surveys/interviews conducted were too small to draw statistical data from, these data should be considered supporting qualitative data as opposed to a statistically representative sample of the respective target populations.

Key local service system representative interviews

External key local service system representatives were identified prior to and during the evaluation by KPMG and the Evaluation Steering Committee. These service representatives were senior representatives from NSW Ambulance, NSW Police, local Emergency Departments, public and private alcohol and drug services, mental health and other support services. These key local service system representatives were identified based on their organisation's role in the local service system and their position to comment on the role of and impact of MSIC to the service system and to their service clientele.

Email invitations were sent to identified key service representatives and interviews (in person or over the telephone) were organised.

Key service representatives were asked to consider trend information considered to date, describe the relationship between their service and the MSIC, their views on the MSIC, the impact they observed of the MSIC and any unintended consequences.

Interview schedules for key service representatives were developed by KPMG and endorsed by NSW Health and MSIC. As many of the key service representatives were employees of the NSW Government, ethics approval was obtained for key service representative interviews through the NSW Health Population and Health Services Research Human Research Ethics Committee. For people employed at the NSW Area Health Service level, research governance approval was also obtained from relevant Research Governance Offices.

In total, external key local service system representative interviews were conducted with 10 organisations, representing the critical organisations that work with MSIC and/or their clients. The information obtained from these interviews provided the evaluation with an understanding of the perspectives of key local services in the local service system in terms of MSIC's role and impact on the local service system.

Telephone survey with local residents and business operators

A telephone survey of local businesses and residents was conducted with a random sample of residents and business operators in the Kings Cross area

There were 343 resident surveys completed (75.7% response rate) and 203 business surveys (84.2% response rate). The survey occurred between 21 June and 19 July 2010.

Telephone surveys have been conducted of local residents and business operators in the previous evaluations (prior to MSIC opening in 2000, in 2002, 2005 and repeated for this evaluation). The survey explores local resident and business operator opinions regarding public injecting, discarded needles and syringes, and support for the MSIC.

To allow for longitudinal analyses of these data, the approach for the telephone survey was essentially identical to previous surveys, in terms of the sampling technique, sample sizes and questions asked since the initial survey conducted prior to the establishment of MSIC in 2000[49]. The survey was conducted by the Hunter Valley Research Foundation, which had conducted the telephone surveys for previous evaluations. All aspects of the survey was endorsed by NSW Health and MSIC and approved by the Human Research Ethics Committee at Uniting Care.

Based on the 2005 residents' sample and our residents' sample (306 and 343), we could detect a change of 5% in the rate of a frequently held (or conversely, rarely held) opinion in 63% of cases. So, moderate power to detect changes in opinions. In saying this, "frequently" held means 90% or more of respondents expressed that opinion and "rarely held" means 10% expressed that opinion. For the business surveys, again using the 2005 sample size and our sample size, the corresponding power to detect a 5% change is 42% - low to moderate.

Internet-based survey of local residents and business operators

In addition to the telephone-based survey, this evaluation trialled the use of an internet-based or online survey as an alternative method of survey to provide opportunity for other members of the public to comment on the MSIC. The survey ran between 7 April and 9 May 2010 and was advertised in the local newspaper, the Wentworth Courier, weekly for that period.

Survey questions used were the same as in previous years to allow for longitudinal analyses. This approach was endorsed by NSW Health and MSIC and approved by the Human Research Ethics Committee at Uniting Care.

There were 270 web-based surveys completed in this period. To note, as the survey was open to the general public, although advertised locally, it is not possible to verify the total number of people who completed the survey (e.g. if people completed the survey multiple times). The use of online surveys permitted interested members of the community to provide input into the evaluation, however as it is a self-selecting sample these data are not generalisable to the broader community.

Current MSIC client interviews

Current MSIC clients were interviewed at the MSIC to gain an in-depth, qualitative understanding of their experience of the MSIC.

Interview schedules were developed by KPMG to respond to the terms of reference for the evaluation, endorsed by NSW Health and MSIC and approved by the Human Research Ethics Committee at Uniting Care.

Current MSIC clients were invited to participate in a 33-question interview (semi-structured and categorical questions) that focussed on client use of the MSIC, feedback on the processes, opening hours and where they inject during and after these hours, impact on their behaviour relating to safer injecting and overdose, access to other services and their opinions of the MSIC (refer Appendix G for schedule).

Interviews were conducted in a counselling room at MSIC in the after care area (Stage 3) and were administered by evaluation team members experienced in qualitative research with injecting drug users. Clients were invited to participate only if clinical staff assessed them as having the capacity to consent (i.e. not intoxicated to the extent they had impaired decision making ability). Interviews took between 10 and 30 minutes and were conducted on three different weekdays and times to access a range of clients (Tuesday 10.30am - 3pm, Thursday 10.30am - 6pm, Friday 2-10pm).

Clients showed high interest in participating in the interviews, with more clients offering to participate than could be accommodated in the total time available. As a consequence of this demand and the variety in times and days that evaluators were on site, they were able to interview a broad and representative range of MSIC clients.

This provided flexibility in order to provide clients with the maximum opportunity to participate, recognising inherent challenges in recruiting this population. As a comparison, a recent cohort study conducted at the MSIC had approximately 11% response rate at three months follow-up.

While there may be some selection bias towards people choosing to participate in an interview (where people with stronger views, either positive or negative, choose to participate), research indicates motivation for injecting drug users to participate more commonly relates to their capacity to provide valid information about drug use, the potential to improve drug-related policies and practices and benefits to the community.[50]

Overall, 43 current MSIC clients participated in these semi-structured interviews with experienced KPMG research staff (28 in November 2009, 15 in June 2010). This provided the evaluation with detailed information from a client perspective, at two discrete time points, to complement the service activity data (see Section 4.1) and client surveys (see Section 4.3.5 and Section 4.3.6).

Current MSIC client surveys

The evaluation also included a short, self-administered survey of current MSIC clients to compare client views on key elements of the MSIC.

Current MSIC clients were invited to complete a self-administered survey (one double-sided A4 page with 19 Likert scale questions) on their views of MSIC staff and services, self-reported changes in behaviour due to the MSIC and overall satisfaction with the MSIC (the survey is presented in Appendix I).

The survey was developed by KPMG, to respond to the terms of reference for the evaluation. The survey was, endorsed by NSW Health and MSIC and approved by the Human Research Ethics Committee at Uniting Care.

The surveys were available in the aftercare area (Stage 3) of the MSIC and advertised using posters in the aftercare area. Clients placed completed surveys in a survey box which was provided to KPMG for analyses.

Over a two week period in February 2010, 119 surveys were completed by current MSIC clients and provided to KPMG for analysis. This provided the evaluation with information from a client perspective, from a larger number of clients who use the MSIC over the two week period that the survey was administered. As a comparison, a previous client cohort study[51] reported follow-up survey information on 190 MSIC clients. This 190 clients represented only 41% of clients initially surveyed, with 59% of the initial cohort being lost to follow-up. This highlights the difficulty associated with engaging with this group for the purposes of survey completion.

Former MSIC client interviews

Former MSIC clients were interviewed to understand their views of the MSIC, services they had received at the MSIC (or at services to which the MSIC had referred them) and their current situation.

Former MSIC clients were invited to participate in a 41-question interview, which was an extension of the current client interview, with additional questions about ceasing to use the MSIC, their current levels of drug use and engagement with services and to describe their life now since they stopped using at the MSIC (refer Appendix H for interview questions).

KPMG advertised through an advertisement[52] in *'User News'*, the quarterly publication of the NSW Users and Aids Association, as well as posters at local public prescribing facilities. A FREECALL telephone number was provided for people to contact KPMG to schedule an interview. Of note, all former clients who contacted KPMG did so because they had seen the advertisement in *User News.*

Former clients contacted KPMG to indicate their interest in being interviewed and were briefly screened. Ineligibility criteria were being a current client of the MSIC. In cases where KPMG assessed the person not fit or intoxicated, it was suggested to them that the interview be conducted a later date. Interviews were conducted over the telephone and took between 15 and 35 minutes.

Interview schedules were developed by KPMG, endorsed by NSW Health and MSIC and approved by the Human Research Ethics Committee at Uniting Care.

Six former clients participated in these interviews, which provided useful insights into individual experiences and perspectives from a former client perspective. It is recognised that this cohort is difficult to engage[53], as noted by non-response from recruitment strategies (other than those who had seen the advertisement in User News). Further, former clients may not wish to discuss their history of previous injecting drug use.

4 Evaluation domain 1: To review client demographics

Please note a detailed summary of the evaluation methodology including information on all data sources used in this evaluation, including assumptions and limitations are presented in Section 4.

This section presents findings relating to the demographics of the MSIC clients.

This section addresses the following evaluation questions:

- What are the demographics of current clients?
- What are the trends in relation to past client demographics?
- Do any trends suggest a change in the client group, e.g. with regard to age, other demographics and referral needs?
- Has the service (the MSIC) responded effectively to any changes in the demographics of its clients?
- Is there any external evidence that may suggest ongoing or future changes in the client demographics?

Summary of key findings

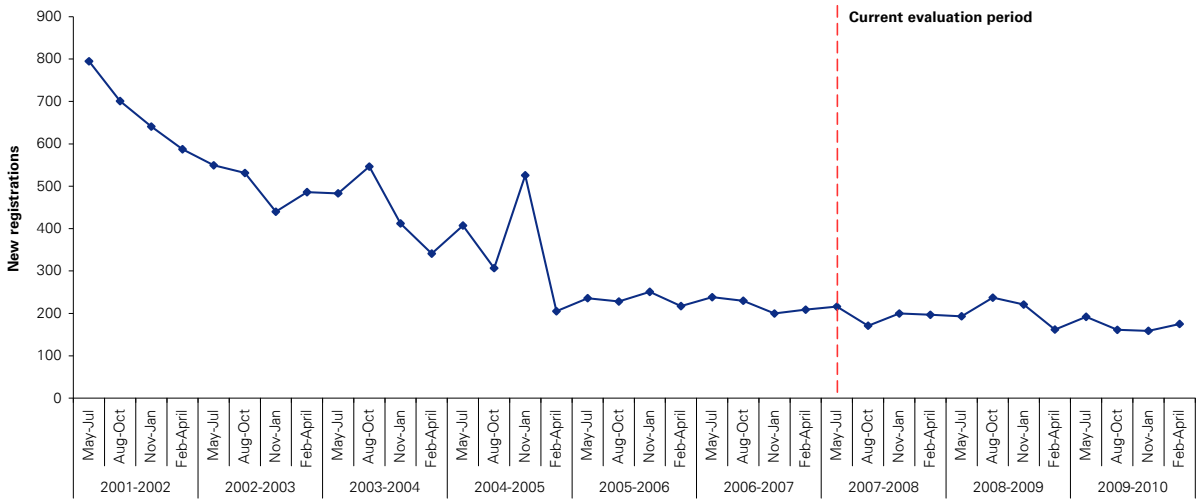
- Demand for the MSIC in terms of both new client registrants and total attendances have remained reasonably constant since the start of the current evaluation period (July 2007). New client registrations appeared to stabilise from February 2005 onwards (with a degree of month to month variation).
- The median age of new MSIC registrants has increased from 31 in 2001-02 to 34 in 2009-10, consistent with the most recent NSP survey results, which suggests the broader injecting drug user population is ageing (that is, fewer young people are commencing injecting).
- The ratio of males and females visiting the MSIC has remained constant at approximately 74% to 25% respectively, with transgender clients constituting approximately 1%.
- The majority of MSIC clients were heterosexual (~87%) (this was consistent between active clients and new registrants).
- The majority (~88%) of MSIC clients were not of Aboriginal and Torres Strait Islander descent, while approximately 10% identified as Aboriginal and Torres Strait Islander (this was consistent between active clients and new registrants).
- The average age of first injection for new registrants over all years of MSIC operation was 19.4 years of age.
- The main source of income was consistently (2001-10) reported as government entitlements (i.e. government benefits) by the majority (57%-72%) of new MSIC registrants, followed by full-time employment (16%-23%).
- Heroin was consistently (2001-09) reported by the majority of new MSIC registrants as the last and most common drug injected in the month prior to registration, this was followed by methamphetamines, although there have been fluctuations over time.
- The largest proportion (22%-29%) of new registrants reported injecting less than weekly, while the second largest proportion (20%-25%) reported injecting more than weekly, but not daily. The proportion of new registrants who reported injecting more than three times on most days has steadily declined from ~14% in 2001-02 to ~9% in 2008-09 before increasing back to ~14% in 2009-10.
- The service model has been broadly consistent since inception, although the MSIC has responded to new client needs as required. The re-introduction of a Case Referral Coordinator, brokerage funding (typically for private drug treatment) and a service arrangement for the MSIC with a local public drug treatment service (the NSW Health funded Langton project) has enabled the MSIC to provide additional support and drug treatment pathways to clients.
- The profile of MSIC clients is similar to other services working with complex populations in Kings Cross, although neither St Vincent's Emergency Department nor NSW Ambulance typically see MSIC clients. This suggests MSIC clients may not be experiencing the level of acute health concerns in contrast to injecting drug users not using the MSIC.
- The demographics of MSIC clients are seen as relatively stable, barring significant changes to the drug market.

MSIC service delivery

New MSIC client registrations

Figure 5-1 below presents the total number of new MSIC client registrations per month, since its opening in May 2001. The vertical red dashed line represents the point at which the current evaluation period begins (June 2007). During the first six months of operation, the number of new client registrations per month were at the highest level of trend during the entire Trial period (range 190 – 319). After a period of stabilisation between 2002-03 and 2004-05, the number of new client registrations appeared to plateau beginning in the February/April quarter 2005-06 and stabilised at an average of 68 new registrations a month to April 2010. There remains a degree of month to month variation in new registrations, ranging from 49 to 99 between February 2005 and April 2010. Notably, the trend in the number of new registrations per month has remained relatively stable for the duration of the current evaluation period (June 2007-May 2010). This is broadly consistent with the previous evaluation findings in 2007[54].

Figure 5-1: MSIC registrations May 2001 to April 2010[55]



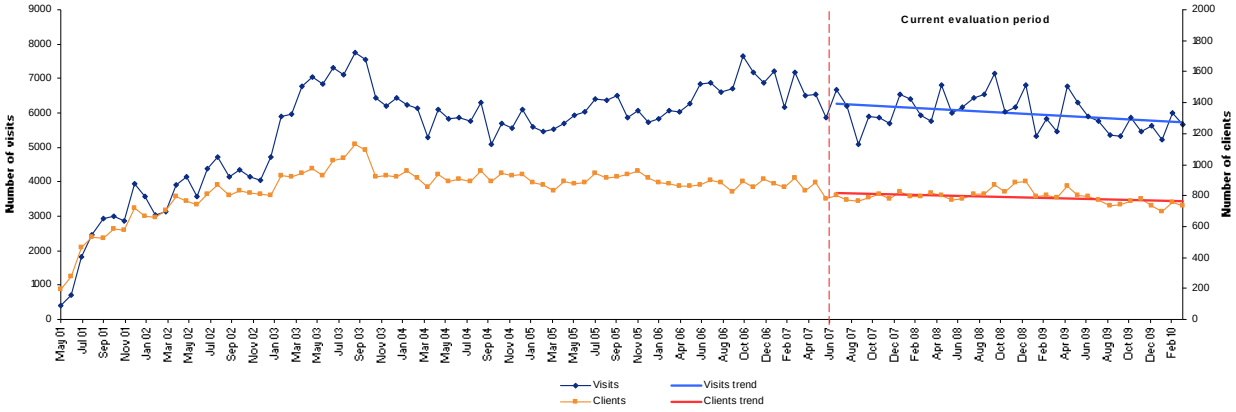
Source: Medically Supervised Injecting Centre (MSIC)

MSIC clients and visits

Figure 5-2 below presents the total number of visits (blue line) and individual clients (orange line) attending the MSIC per month. The number of individual clients attending the MSIC per month increased from the month of opening (May 2001 - 193 individual clients) to a peak at 1,128 in September 2003. Following this period, the number of individual clients attending the MSIC per month decreased to 922 in November 2003 and has remained relatively stable to April 2010, at an average of 850 and a range between 693 and 962.

The number of visits has followed a similar pattern, peaking in the same month (September 2003 – 7,749 visits), and declining in the following months to 5,120 in October 2004. The number of visits increased steadily from November 2004 (5,684) to a second peak in October 2006 (7,663). The number of visits per month between December 2006 and May 2010 exhibited a higher degree of variability (average of 6,110 visits per month, range between 5,093 and 7,212) than the number of individual clients seen per month. However, the trends for both visits (blue line) and clients (orange line) per month have stabilised at a steady rate, with a modest downwards trend, for the duration of the current evaluation period depicted below (June 2007 to April 2010). These findings are consistent with the previous evaluation in 2007[56].

Figure 5-2: MSIC number of visits and clients attending per month

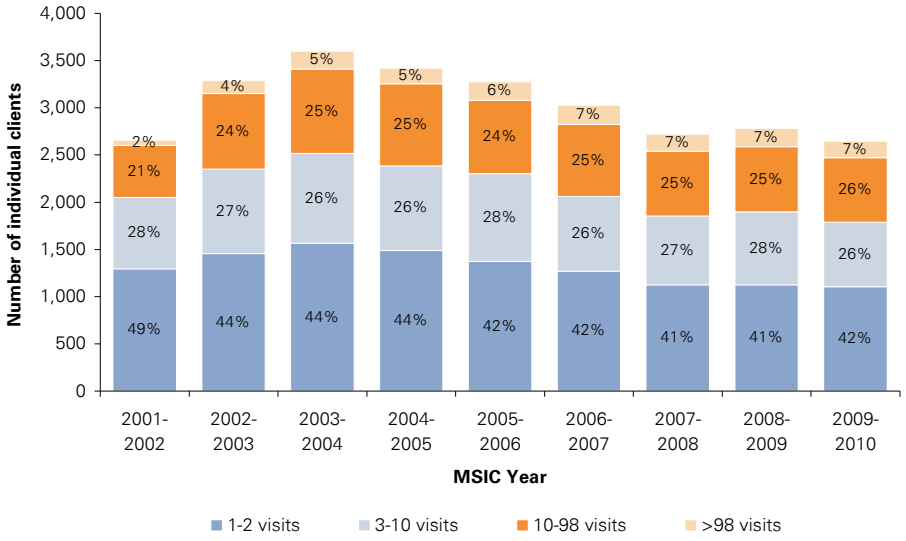


Source: Medically Supervised Injecting Centre (MSIC)

Frequency of client visits to MSIC

Figure 5-3 shows the number and proportion of clients visiting the MSIC each year according to the total number of visits within that year. The largest proportion (41-49%) of clients within a given year was those who had 1-2 visits within that year. There were almost equivalent proportions of clients who had 3-10 visits to the MSIC within a given year (26%-28%) as there were those who had 11-98 visits to the MSIC within a given year (21%-26%). A small proportion of clients (2-7%) visited the MSIC greater than 98 times in a year (ranging from 99-1,105 visits).

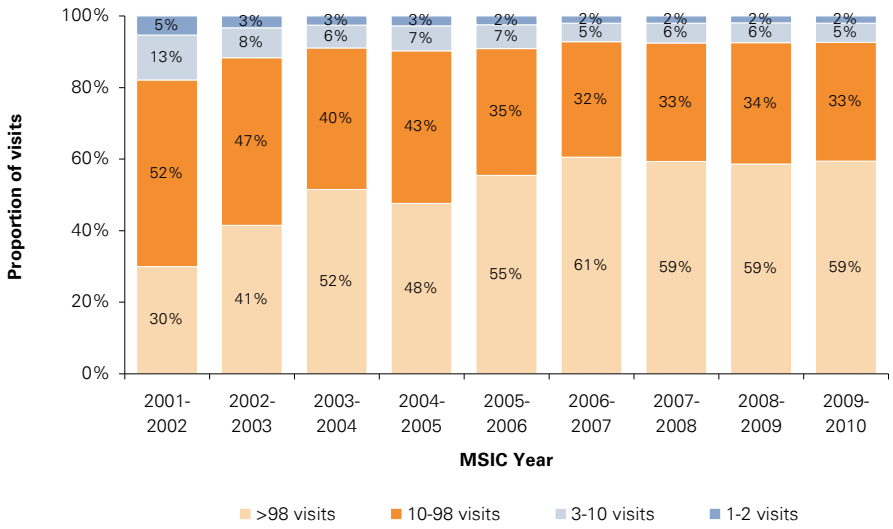
Figure 5-3: Frequency of client attendance at MSIC



Source: Medically Supervised Injecting Centre (MSIC)

Figure 5-4 presents the proportion of total visits associated with clients within each category of visit frequency. While clients who visit the MSIC more than 98 times within a given year constitute only 2-7% of total clients in a given year, they account for the largest proportion of total visits (30% - 59%). Clients who visit the MSIC 11-98 times in a given year account for 32%-52% of total visits, while those visiting MSIC either 3-10 or 1-2 times account for 5-13% and 2-5% of total visits respectively. This data is used in Section 8.5 to inform analysis of referrals by frequency of visit.

Figure 5-4: Proportion of visits by client visit frequency



Source: Medically Supervised Injecting Centre (MSIC)

Client characteristics

This section describes the characteristics of MSIC clients, and aims to address the following evaluation questions:

- What are the characteristics of current clients?
- What are the trends in relation to past client characteristics?
- Do any trends suggest a change in the client group, e.g. with regard to age, medical needs, referral needs?

The findings presented to answer these evaluation questions draw on MSIC client data. Specifically:

Demographics

- Age
- Gender
- Sexual preference
- Aboriginal and Torres Strait Islander status
- Language spoke at home
- Education level
- Income and accommodation
- Prison history

Clinical/behavioural data

- Health issues
- Alcohol and other drug use history
- Referral needs
- History of public injecting.

Demographics of new registrants

This section defines new MSIC registrants as those clients who are new to the MSIC within a given year. The analysis of registration data on new MSIC clients, which does not change over time, facilitates the identification of trends in new MSIC client demographics.

Total number of new client registrations

Table 5-1 below shows the total number of new client registrations per year. This provides context for the subsequent tables represented in this section.

Table 5-1: Yearly number of new registrations

Year (1 May - 30 April)	New Registrations
2001-02	2,724
2002-03	2,006
2003-04	1,782
2004-05	1,445
2005-06	932
2006-07	877
2007-08	784
2008-09	813
2009-10	687
Total	**12,050**

Source: Medically Supervised Injecting Centre (MSIC)

Age – new registrants

As shown in Table 5-2 below, both the average and median age of new registrants has increased over the period of MSIC operation. The average age of new registrants in 2001-02 was 31.1 years. This increased to 34.1 years of age in 2009-10.

Table 5-2: Age[57] of new registrants

Year (May – April)	Average age in years (range)	Valid records (n)
2001-02	31.1 (16-59)	2,724
2002-03	32.0 (17-67)	2,005
2003-04	32.1 (17-62)	1,782
2004-05	32.7 (17-70)	1,445
2005-06	32.8 (17-59)	932
2006-07	33.9 (18-62)	876
2007-08	34.4 (17-62)	777
2008-09	35.2 (18-62)	812
2009-10	34.1 (18-61)	687
Total	**32.6 (16-70)**	**12,040**

Source: Medically Supervised Injecting Centre (MSIC)

The data can be compared to similar cohorts, such as Needle and Syringe Program (NSP) users and respondents in the Illicit Drug Reporting System (IDRS), which outline the average age of an injecting drug user:

- The NSP survey found that the median age of an injecting drug user in 2008 was 36 years (range: 16-70). This has increased from a median age of 32 years in 2004 (range: 16-65)[58].
- The IDRS found the average age of an injecting drug user in 2008 was 36.7 years (range 17-62). This has increased from an average age in 2000 of 28.8 years (range: 14-64[59]).
- The 2007 evaluation of the MSIC found that the average age in years of the participants was 33 years[60].

This indicates that the injecting drug user population accessing the MSIC is ageing, and that this is consistent with other national data[61]. Overall, this may suggest that either fewer younger people are injecting drugs or that a greater proportion of older people are injecting drugs.

As discussed later in this report, the average age of initiation into injecting drug use has remained relatively constant at approximately 19 years. The fact that the average age of the injecting drug user population is increasing while the average age of first injection is remaining constant supports the notion that less younger people may be injecting drugs.

The data also indicates that MSIC clients have generally been injecting for many years prior to accessing the MSIC. This has implications for the uptake of drug treatment, as it is recognised that once people become dependent on opioids, effective drug treatment options become more limited. Drug treatment is explored further in Section 3.2, Section 8.5 and Section 10.5.

Gender and sexual preference – new registrants

Table 5-3 shows that the proportion of new registrants within each gender category remained reasonably consistent at between 71% and 77% male, between 23% and 28% female and less than 1% either identifying as transgender or not specifying their gender. This distribution is consistent with that presented in the previous evaluation in 2007[62].

Table 5-3: Gender of new registrants

Year (May – April)	Male	Female	Transgender or Not specified	Valid records (n)
2001-02	1,935 (71%)	768 (28%)	21 (<1%)	2,724
2002-03	1,538 (77%)	462 (23%)	6 (<1%)	2,006
2003-04	1,343 (75%)	434 (24%)	4 (<1%)	1,781
2004-05	1,066 (74%)	374 (26%)	5 (<1%)	1,445
2005-06	684 (73%)	247 (27%)	1 (<1%)	932
2006-07	660 (75%)	209 (24%)	6 (<1%)	875
2007-08	601 (77%)	175 (23%)	3 (<1%)	779
2008-09	606 (75%)	203 (25%)	3 (<1%)	812
2009-10	525 (76%)	161 (23%)	1 (<1%)	687
Total	**8,958 (74%)**	**3,033 (25%)**	**50 (<1%)**	**12,041**

Source: Medically Supervised Injecting Centre (MSIC)

Similarly, there was little change in the sexual preference of new registrants over time. Over the period of operation, between 84%-90% of new registrants were heterosexual, between 6%-11% were bisexual and 3%-5% were homosexual (Table 5-4). This distribution is broadly consistent with that presented in the previous evaluation in 2007[63], with the exception that Table 5-4 presents a higher proportion of new client registrants as being heterosexual (87%) compared to that found in the 2007 evaluation report (81%). This is likely due to slight differences in the data sets used for analysis, specifically, the 2007 evaluation report noted approximately 7% unspecified records, versus an overall proportion of 1% presented below.

Table 5-4: Sexual preference of new registrants

Year (May – April)	Heterosexual	Homosexual	Bisexual	Not specified	Valid records (n)
2001-02	2,161 (84%)	125 (5%)	278 (11%)		2,564
2002-03	1,620 (87%)	87 (5%)	145 (8%)		1,852
2003-04	1,445 (88%)	68 (4%)	122 (7%)		1,635
2004-05	1,181 (89%)	48 (4%)	95 (7%)		1,324
2005-06	749 (87%)	28 (3%)	56 (7%)	28 (3%)	861
2006-07	729 (85%)	31 (4%)	75 (9%)	25 (3%)	860
2007-08	683 (90%)	30 (4%)	44 (6%)	5 (<1%)	762
2008-09	694 (86%)	34 (4%)	74 (9%)	1 (<1%)	803
2009-10	606 (90%)	18 (3%)	41 (6%)	7 (1%)	672
Total	**9,868 (87%)**	**469 (4%)**	**930 (8%)**	**66 (1%)**	**11,333**

Source: Medically Supervised Injecting Centre (MSIC)

The gender and sexual preference of MSIC injecting drug users can be compared against the national data obtained in the NSP survey and IDRS.

The NSP survey found that the average proportion of males over the timeframe 2004-08 was 65% (range: 64-67), females 34.7% (range: 32-36), and transgender less than 1%[64]

The IRDS states that the average proportion of males over the timeframe 2000-08 was 65.4% (range: 64-68), but no specific reference was made to the proportion of females or transgender[65].

The data comparison indicates that there is a higher proportion of males amongst the MSIC clientele than the national average. The reasons for this are unclear, however the data are comparable to the 2007 evaluation of the MSIC, which noted an average male proportion of 74% and female 25%.

Comparing sexual preferences:

NSP data (on average over the period 2004-08) shows the proportion of heterosexuals amongst injecting drug users is 81.6% (range: 81-82%), bisexual 9% (range: 8-10), homosexual 5.4% (range: 4-6%)[66]

IRDS data shows the proportion of heterosexuals to be 87% (range: 86-89), bisexual 8.25%, (range: 7-9%), homosexual 3.25%,(range: 2-4%) The data was collected from 2005-08[67].

The previous evaluation of the MSIC in 2007 and the IRDS data is consistent with the current MSIC data, with the similar proportions of individuals by sexual preference reported. However, the NSP data demonstrates a marginally lower proportion of heterosexual individuals and higher proportions of homosexual and bisexual individuals. The reasons for this are unclear.

Aboriginal and Torres Strait Islander new registrants

The largest proportion of new registrants (85%-91%) were neither Aboriginal nor Torres Strait Islander, while 8%-13% of new registrants identified as being of Aboriginal and/or Torres Strait Islander descent. The remaining clients did not specify if they were of Aboriginal and/or Torres Strait Islander descent (Table 5-5). This distribution is broadly consistent with that presented in the previous evaluation in 2007[68].

Table 5-5: Aboriginal and Torres Strait Islander new registrants

Year (May – April)	Non Aboriginal and Torres Strait Islander	Aboriginal and Torres Strait Islander	Not specified	Valid records (n)
2001-02	2,379 (88%)	247 (9%)	83 (3%)	2,709
2002-03	1,788 (90%)	178 (9%)	18 (1%)	1,984
2003-04	1,554 (88%)	188 (11%)	17 (1%)	1,759
2004-05	1,196 (86%)	167 (12%)	34 (2%)	1,397
2005-06	782 (86%)	101 (11%)	30 (3%)	913
2006-07	767 (89%)	95 (11%)	2 (0%)	864
2007-08	696 (91%)	62 (8%)	4 (1%)	762
2008-09	734 (91%)	69 (9%)	1 (0%)	804
2009-10	570 (85%)	89 (13%)	10 (1%)	669
Total	**10,466 (88%)**	**1,196 (10%)**	**199 (2%)**	**11,861**

Source: Medically Supervised Injecting Centre (MSIC)

Comparative national data regarding injecting drug users can be utilised to compare the proportion of Aboriginal and/or Torres Strait Islander descent injecting drug users at MSIC.

The NSP data (from 2004-08) shows that the proportion of respondents not identifying as Aboriginal or Torres Strait Islander is 86.8% (range: 85-89%), those who do identify at 10% (range: 8-11%) and those not reported 3% (range: 2-4%)[69].

The IRDS shows an average of respondents identifying as Aboriginal and Torres Strait Islander at 12.67%, (range 11-15%, 2000-08). Those not identifying or not responding are not recorded.[70]

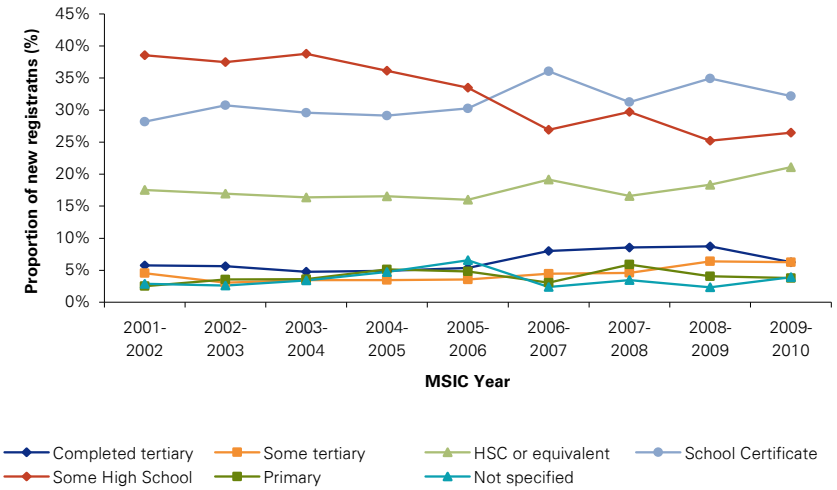
The previous evaluation of the MSIC completed in 2007 revealed 87% of respondents identifying as non-Aboriginal and Torres Strait Islander, 10% as Aboriginal and Torres Strait Islander, and 3% as not reported.

The data comparison would suggest that the proportion of MSIC clients identifying as Aboriginal and Torres Strait Islander is very similar to the national data. Of note, one key local service interview conducted with a private drug treatment provider in the Kings Cross area noted that it was 'very rare' to have Aboriginal and/or Torres Strait Islander background clients attend their drug treatment service.

Level of education – new registrants

As shown in Figure 5-5, the proportion of new registrants who had completed only some high school education was relatively consistent between 37%-39% from 2001-02 to 2003-04, then declined steadily from 2004-05 (36%) to 2009-10 (26%). This coincided with a trend toward increasing proportions of new registrants who had obtained a school certificate or completed secondary education (i.e. HSC or equivalent) without proceeding to tertiary education. An increasing proportion of new registrants (8% in 2003-04 to 15% in 2008-09) had undertaken or completed some tertiary education (e.g. university or other degree courses). This distribution is broadly consistent with that presented in the previous evaluation in 2007[71]. However, the 2007 evaluation report presented the information in fewer categories.

Figure 5-5: Level of education of new registrants



Year (May – April)	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,725**	**2,006**	**1,782**	**1,445**	**932**	**877**	**784**	**813**	**687**

Source: Medically Supervised Injecting Centre (MSIC)

The education levels of MSIC registrants can be compared to the national data, as reported in the ABS report "Education and Work", 2008[72].

In 2008, the ABS reports that approximately 31% of the population aged 15-64 report that their level of highest educational attainment is year 11 or below, with 20% achieving Year 12. The level of individuals achieving bachelor degrees or above increased over the last decade, from 14% in 1998 to 22% in 2008[73].

New MSIC registrants are demonstrating HSC completion at similar levels to the national data. Those who have completed some secondary education have shown signs of convergence to national levels (at around 31%), with 2008 data stating that new MSIC registrants now have a lower level of completion of some secondary education (with the qualification that this appears to be countered by increasing HSC completion rates). New MSIC registrants also demonstrate an increasing trend towards gaining tertiary qualifications with a 79% increase observed in the proportion of new registrants obtaining tertiary qualifications between 2003-08 (from a base level of 5%).

While not directly comparable, as a reference point, national data showed an increase of only 57% in the proportion of the general population completing tertiary qualifications between 1998 and 2008. It is possible that the greater tertiary education completion rates recorded for MSIC clients is reflective of the low base level of completion at the start of the recording period (5% of total MSIC clients vs. 20% of the general population).

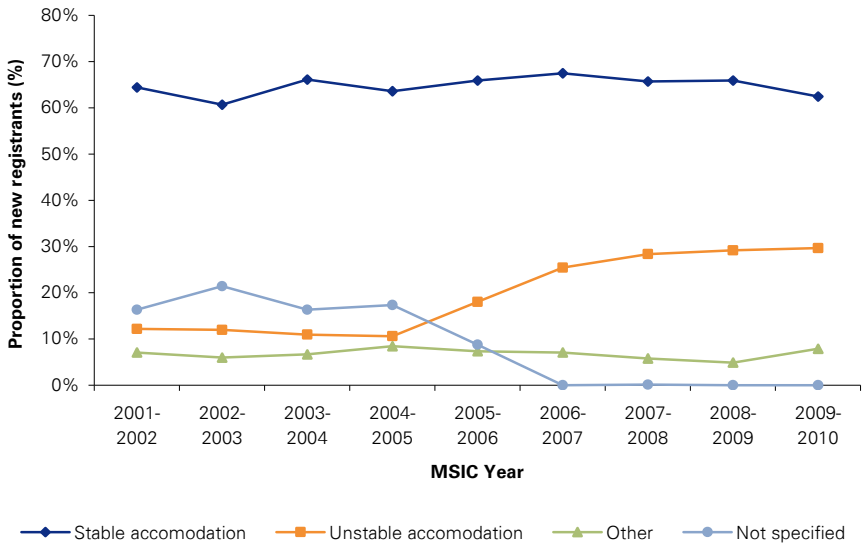
Type of accommodation – new registrants

Figure 5-6 shows the type of accommodation of new registrants. The majority (61%-67%) of new registrants were in some form of stable accommodation (own property, rental property or parent's property). An increasing proportion of new registrants (from 11% in 2004-05 to 30% in 2009-10) were recorded to be in unstable accommodation (boarding house or hostel, shelter/refuge, squat or street/homeless).

However, this increase coincided with a commensurate decrease in the number of 'not specified' records. This may indicate an improvement in the quality of recording as opposed to an actual increase in the proportion of new registrants in unstable accommodation. The proportion that were in 'other' accommodation types remained relatively constant at between 5%-8% between 2001-02 and 2009-10.

This distribution is broadly consistent with that presented in the previous evaluation in 2007[74].

Figure 5-6: Type of accommodation of new registrants



Year (May – April)	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,720**	**1,998**	**1,773**	**1,432**	**915**	**864**	**741**	**798**	**661**

Source: Medically Supervised Injecting Centre (MSIC)

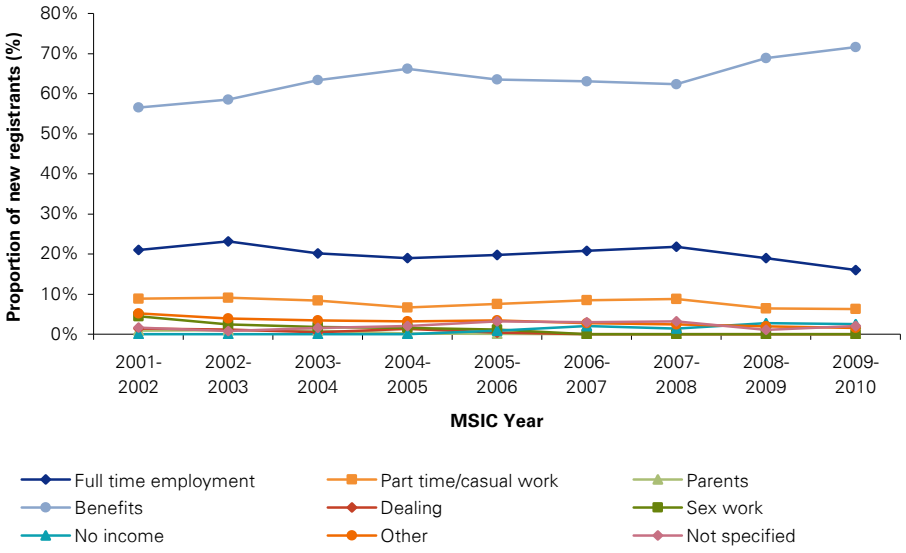
Comparison on the level of homelessness in NSW and the level of homelessness amongst MSIC clients can be made using the 2006 national census data. The Census outlines that the number of homeless people in NSW was reported as being 27,374[75], which, when compared to the total population of NSW from the same 2006 Census, amounts to 0.38% of the NSW population. The ABS does however indicate that the data collection methods are not sufficient to make homeless data 'as accurate as it could be'[76].

However, even allowing for error, the 30% of MSIC respondents in unstable accommodation (defined as relative and absolute homelessness for ABS and Census purposes[77]) in 2009-10 is significantly higher than the proportion of homeless people in the NSW general population.

Main source of income – new registrants

As shown in Figure 5-7, an increasing proportion (57%-72%) of new registrants listed government benefits as their main source of income (e.g. unemployment benefits or disability support pension) between 2001-02 and 2009-10. Between 2001-02 and 2009-10, an average of 30% of new registrants were in either part or full time employment. The remaining clients reported either having no income or either their parents, illegal activities, or 'other'.

Figure 5-7: Main source of income of new registrants



Year (May – April)	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,725**	**2,006**	**1,782**	**1,445**	**932**	**877**	**784**	**813**	**687**

Source: Medically Supervised Injecting Centre (MSIC)

To compare MSIC client income sources with the national data, the ABS report entitled "Income support amongst people of working age" 2010 is utilised[78].

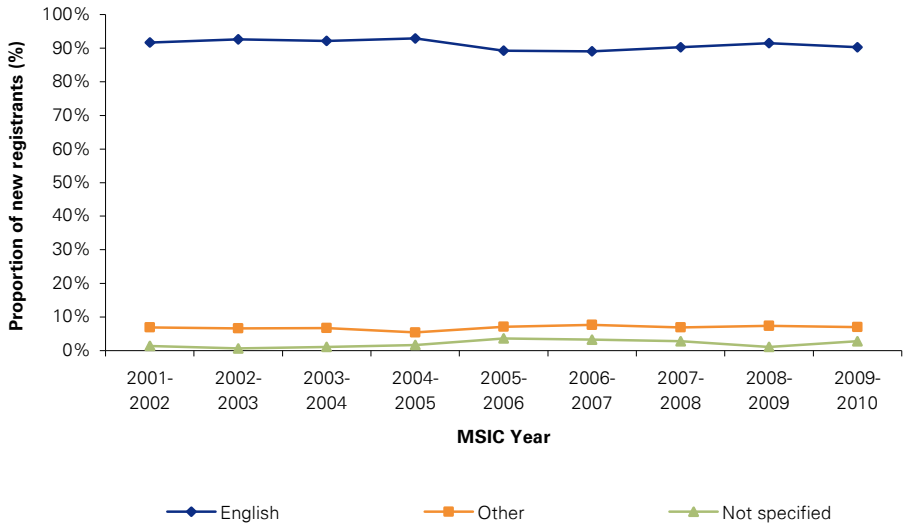
The ABS reports that 17% of working age people were on some form of income support in 2009 including, but not limited to, disability support (5.2%) and unemployment benefit (4.2%)[79].

MSIC clients are therefore receiving income support at significantly higher proportions than the working age population. The previous evaluation of the MSIC in 2007 also reinforces the findings of the current data relating to MSIC clients' income sources with 61% of respondents in 2007 receiving social security benefits[80].

Language spoken at home – new registrants

Approximately 91% (range 89%-93%) of new registrants spoke English at home, while 5%-8% spoke a language other than English (Figure 5-8).

Figure 5-8: Language spoken at home by new registrants



Year (May – April)	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,725**	**2,006**	**1,782**	**1,445**	**932**	**877**	**784**	**813**	**687**

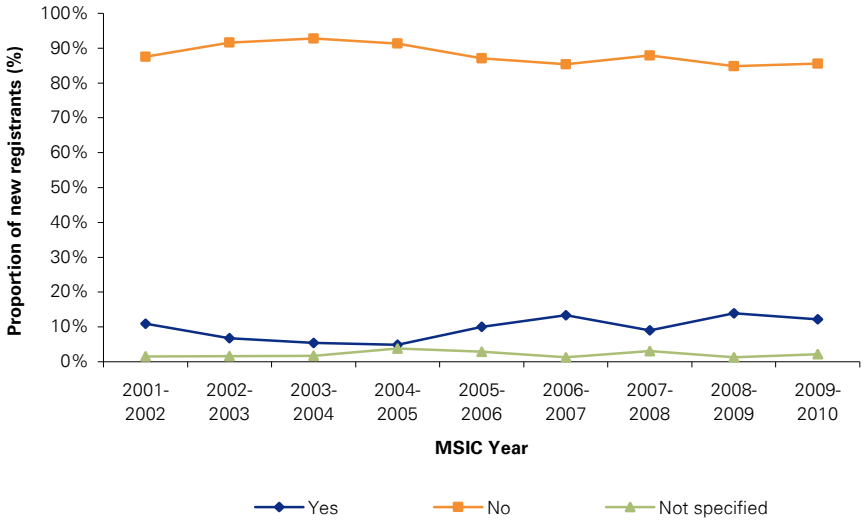
Source Medically Supervised Injecting Centre (MSIC)

This is consistent with the previous evaluation, which found that 92% of MSIC clients from 2001-07 spoke English at home and is somewhat higher than for NSP clients (85.4%) [81].

Sex work – new registrants

A small number of new registrants (5%-14%) reported being paid for sex during the month prior to registration (Figure 5-9), which may place them at greater risk of experiencing additional harms, particularly if this sex work is street-based, Of these, between 2001-02 and 2009-10, almost three-quarters (70%) were female, 26% were male and 3% were transgender or did not specify their gender (data not shown). This distribution is broadly consistent with that presented in the previous evaluation in 2007[82].

Figure 5-9: Sex work undertaken by new registrant



Year (May – April)	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,725**	**2,006**	**1,782**	**1,445**	**932**	**877**	**784**	**813**	**687**

Source: Medically Supervised Injecting Centre (MSIC)

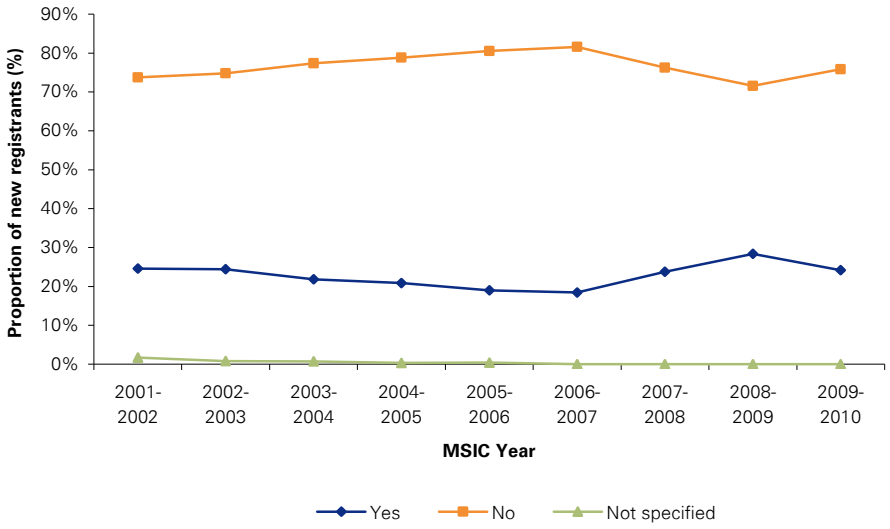
History of imprisonment

Figure 5-10 illustrates that a majority of new registrants (74%-82%) from 2001-02 to 2009-10 reported that they had not been in prison in the 12 months prior to registration. This distribution is broadly consistent with that presented in the previous evaluation in 2007[83].

However, a slight upward trend was observed between 2006-07 (18%) to 2009-10 (24%) in the proportion of new registrants who had been imprisoned in the last 12 months.

As a comparison, over the past five years, there has been a slight but steady increase in the proportion of people imprisoned in New South Wales (0.17% to 0.18%)[84].

Figure 5-10: Proportion of new registrants who had been imprisoned in the last 12 months



Year (May – April)	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,721**	**1,998**	**1,761**	**1,430**	**915**	**826**	**568**	**651**	**588**

Source: Medically Supervised Injecting Centre (MSIC)

Health issues for new registrants

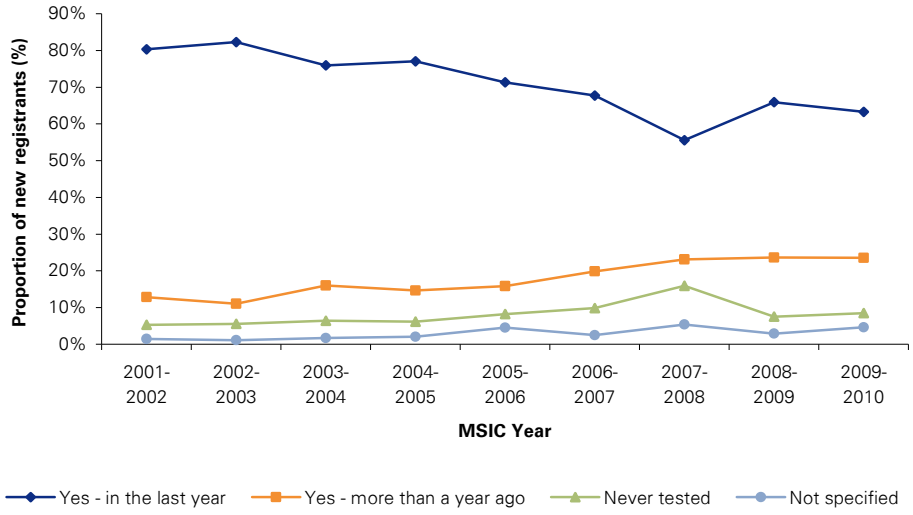
Blood-borne viruses

Blood-borne viruses are those that may be transmitted from person to person through physical contact with infected blood. This section presents information on the testing, test result status and treatment history of new client registrants with respect to the blood-borne viruses Human Immunodeficiency Virus (HIV), Hepatitis C Virus (HCV) and Hepatitis B virus (HBV). In the case of HBV, it also presents the immunisation status of new registrants.

HIV testing and treatment – new registrants

Figure 5-11 below presents the HIV testing status of new registrants. The overall proportion of new registrants who reported having been tested for the presence of a HIV infection has declined since the opening of the MSIC (from 93% of new registrants in 2001-02 to 87% in 2009-10). The majority of these were tested in the year prior to registration (ranging from 56% (2007-08) to 82% (2002-03) of new registrants, while the remaining were tested more than a year prior to registration (ranging from 11% (2002-03) to 23% (2008-09 and 2009-10)). A relatively small proportion of new registrants (ranging from 5% (2001-02) to 16% (2007-08)) had never been tested for HIV.

Figure 5-11: HIV testing status of new registrants



Year (May – April)	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,724**	**2,006**	**1,782**	**1,445**	**932**	**875**	**784**	**813**	**687**

Source: Medically Supervised Injecting Centre (MSIC)

Table 5-6 below presents the number and proportion of new registrants testing positive for a HIV infection (of those who were tested). The proportion of new registrants who tested positive for HIV has declined over time from 2% in 2001-02 to 1% in 2009-10. It should be noted that the number of new registrants who reported a positive HIV test result has also declined from 56 in 2001-02 to three in 2009-10. This proportion is broadly consistent with the data presented in the previous evaluation in 2007[85]. It should be noted however, that the proportions presented in the 2007 evaluation report relate to all new registrants, as opposed to only those who had been tested for HIV (as per Table 5-6). In addition, due to the low absolute number of new registrants testing positive for HIV, and the long asymptomatic period for the disease, it is difficult to establish a causal link between the decrease in HIV rates and any impact of the MSIC.

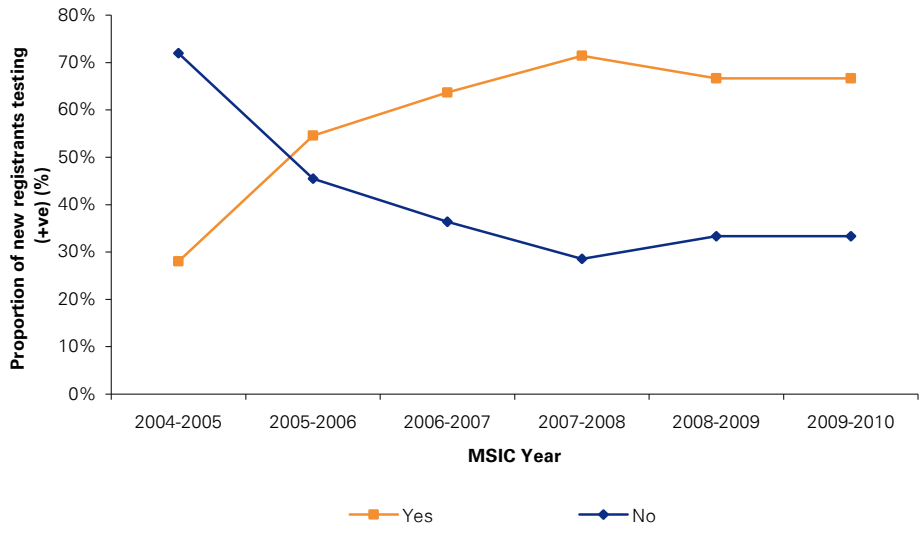
Table 5-6: Proportion of new registrants testing HIV positive (of those tested)

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Proportion HIV positive (of those tested)	56 (2%)	42 (2%)	30 (2%)	25 (2%)	11 (1%)	11 (1%)	7 (1%)	9 (1%)	3 (1%)
Total valid records	**2,540**	**1,872**	**1,638**	**1,326**	**813**	**767**	**617**	**728**	**597**

Source: Medically Supervised Injecting Centre (MSIC)

Figure 5-12 below shows that the proportion of new registrants being treated for HIV infection following a positive HIV test result has increased over time from 28% in 2004-05 (the first year of recording of this data) to 67% in 2009-10. Caution should be applied when interpreting this data however given the low number of new registrants who have tested positive for HIV.

Figure 5-12: Treatment status of new registrants (of those testing positive for HIV)



	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**25**	**11**	**11**	**7**	**9**	**3**

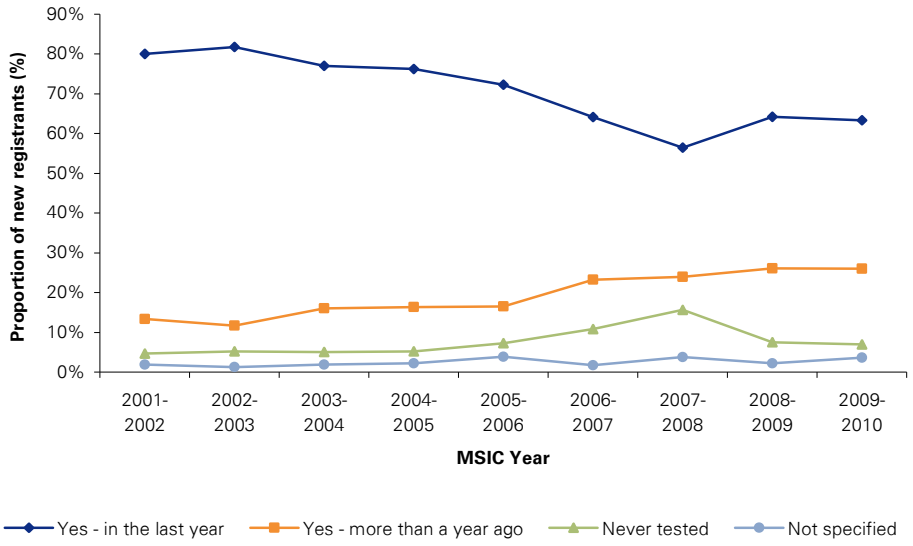
Source: Medically Supervised Injecting Centre (MSIC)

HCV testing and treatment – new registrants

Figure 5-13 below presents the HCV testing status of new registrants. The overall proportion of new registrants who reported having been tested for the presence of a HCV infection has declined marginally since the opening of the MSIC (from a peak 93% of new registrants in 2001-02 to 89% in 2009-10).

The majority of these were tested in the year prior to registration (ranging from 57% (2007-08) to 82% (2002-03) of new registrants, while the remaining were tested more than a year prior to registration (ranging from 12% (2002-03) to 26% (2008-09 and 2009-10)). A consistently small proportion of new registrants (ranging from 5% (between 2001-02 and 2004-05) to 16% (2007-08)) had never been tested for HCV.

Figure 5-13: HCV testing status of new registrants



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,724**	**2,006**	**1,782**	**1,445**	**930**	**876**	**784**	**813**	**687**

Source: Medically Supervised Injecting Centre (MSIC)

Table 5-7 below presents the number and proportion of new registrants testing positive for a HCV infection (of those who were tested). The proportion of new registrants who tested positive for HCV has declined over time from 51% in 2001-02 to 44% in 2009-10. It should be noted that the number of new registrants who reported a positive HCV test result has also declined from 1,309 in 2001-02 to 271 in 2009-10. This proportion is broadly consistent (albeit slightly higher than) with that presented in the previous evaluation in 2007[86]. It should be noted however, that the proportions presented in the 2007 evaluation report relate to all total new registrants, as opposed to only those who had been tested for HCV (as per Table 5-7).

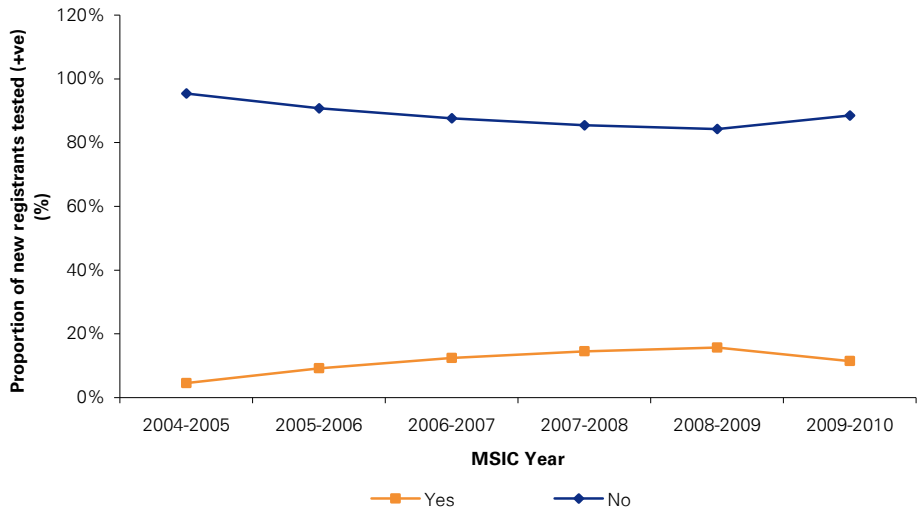
Table 5-7: Proportion of new registrants testing positive for HCV (of those tested)

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Proportion HCV positive (of those tested)	1,309 (51%)	981 (52%)	833 (50%)	663 (50%)	370 (45%)	355 (46%)	269 (43%)	350 (48%)	271 (44%)
Total valid records	**2,545**	**1,876**	**1,658**	**1,338**	**826**	**766**	**631**	**734**	**614**

Source: Medically Supervised Injecting Centre (MSIC)

Figure 5-14 below shows that the proportion of new registrants being treated for HCV infection following a positive HCV test result has increased over time from 5% in 2004-05 (the first year of recording of this data) to 11% in 2009-10.

Figure 5-14: Treatment status of new registrants (of those testing positive for HCV)



Source: Medically Supervised Injecting Centre (MSIC)

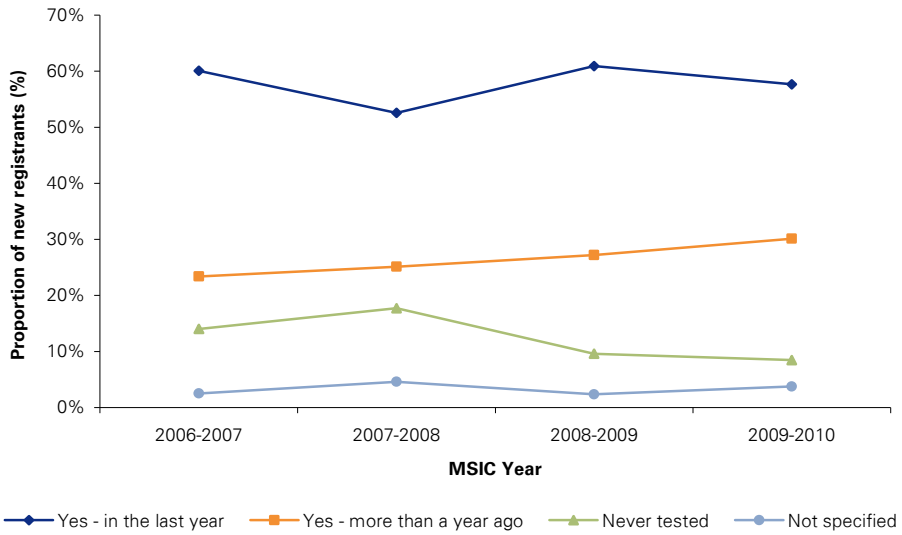
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**633**	**336**	**311**	**230**	**295**	**240**

HBV testing, treatment and immunisation status – new registrants

The recording of the HBV testing status of new registrants was introduced in 2005. Figure 5-15 presents the HBV testing status for new registrants between 2006-07 and 2009-10.

The majority (88%) of new registrants in 2009-10 had been tested for HBV. Of these, most had been tested in the year prior to registration (61% of new registrants) while the remaining (27% of new registrants) had been tested more than a year prior to registration. A small proportion (8% to 14%) of new registrants from 2006-07 to 2009-10 had never been tested for HBV.

Figure 5-15: HBV testing status of new registrants



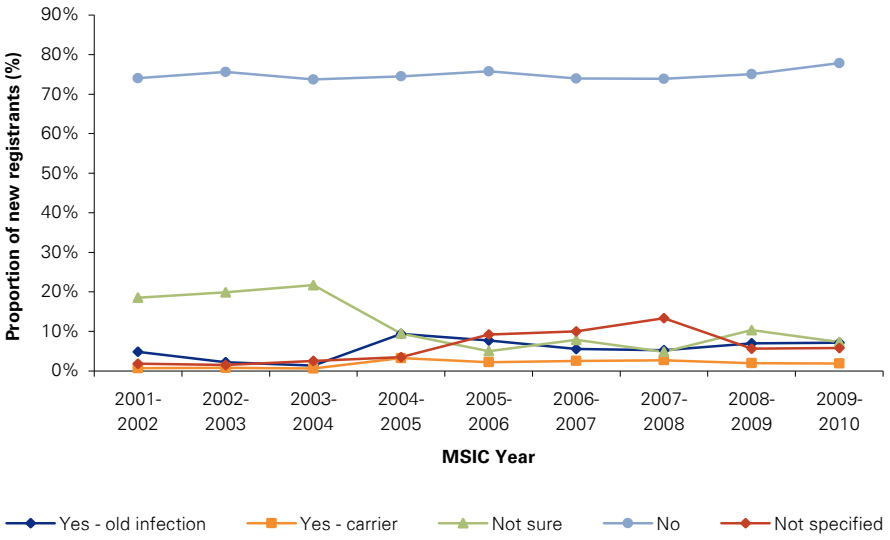
	2006-07	2007-08	2008-09	2009-10
Total valid records	**876**	**784**	**813**	**687**

Source: Medically Supervised Injecting Centre (MSIC)

Figure 5-16 shows that the majority of new registrants either had never been infected with HBV (ranging from 74% to 78% for the years 2001-02 to 2009-10) or were not sure if they had been infected with HBV (ranging from 5% (2005-06 and 2007-08) to 22% (2003-04)).

A small proportion of new registrants reported either being previously infected or a carrier of HBV (ranging from 2% (2003-04) to 12% (2004-05)).

Figure 5-16: Proportion of new registrants who have ever been infected with HBV

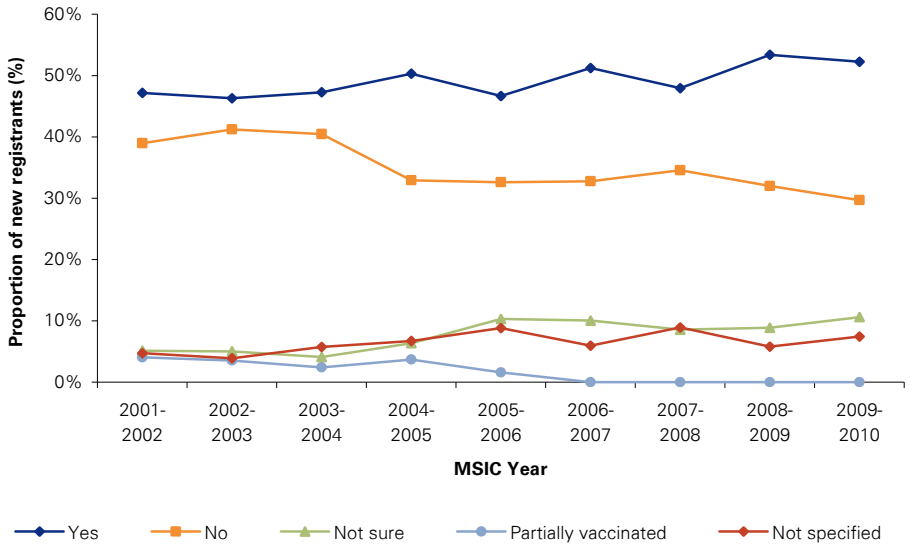


	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,724**	**2,006**	**1,782**	**1,445**	**932**	**876**	**784**	**813**	**687**

Source: Medically Supervised Injecting Centre (MSIC)

Figure 5-17 shows the HBV immunisation status of new registrants. Across all years analysed, a higher proportion of new registrants had been fully vaccinated (ranging from 46% (2002-03) to 53% (2008-09)) than had not been vaccinated (ranging from 29% (2009-10) to 43% (2002)). A small proportion (0%-4%) of new registrants between 2001-02 and 2009-10 reported being partially vaccinated against HBV.

Figure 5-17: HBV immunisation status of new registrants



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,724**	**2,006**	**1,782**	**1,445**	**932**	**876**	**784**	**813**	**687**

Source: Medically Supervised Injecting Centre (MSIC)

Summary of blood-borne virus data

The relatively higher proportion of new registrants who tested positive for a Hepatitis C infection, compared to HIV and Hepatitis B, likely reflects differences between the epidemiology of the three viruses. There are two primary modes by which injecting drug users may become infected by these viruses. Firstly, through the sharing of used needles or other injecting equipment and, secondly, through contact with infected bodily fluids via sexual contact.

Notably, Hepatitis C virus is able to remain viable (i.e. retain the ability to successfully infect another person) outside the body (e.g. on a needle or other injecting equipment) for a longer period than HIV or Hepatitis B. This increases the potential for transmission of the virus through the sharing of needles and other injecting equipment and may therefore explain the higher rates of Hepatitis C in injecting drug users.

The rates of Hepatitis C, HIV and Hepatitis B infection recorded for MSIC clients is consistent with the rates found in previous studies[87]. However, it is difficult to assess the impact that the MSIC has had, if any, on the rates of infection of these viruses.

Mental health problems

On registration, new clients are asked to provide information about mental health problems. This section presents data on new registrants reporting mental health

issues, their access to health professionals and the treatment of their mental health issues.

It should be noted that additional questions relating to a client's mental health were introduced in late 2008. This includes asking if a client has seen any health professional (not just a psychiatrist) about mental health problems, and formally offering a mental health referral. The following tables refer to full year data for 2009-10 only.

Table 5-8 illustrates the incidence of new registrants being referred or admitted to hospital for a psychiatric assessment. Since the MSIC's inception in 2001-02, the rate of referral or admission has remained relatively steady, ranging from a low of 9% of new registrants in 2006-07 to a high of 21% in 2008-09.

Table 5-8: Reported referrals or admission to hospital for a psychiatric assessment

Year (May – April)	Yes	No	Valid records (n)
2001-02	404 (15%)	2,320 (85%)	2,724
2002-03	260 (13%)	1,746 (87%)	2,006
2003-04	279 (16%)	1,503 (84%)	1,782
2004-05	223 (15%)	1,222 (85%)	1,445
2005-06	150 (16%)	782 (84%)	932
2006-07	75 (9%)	801 (91%)	876
2007-08	112 (14%)	672 (86%)	784
2008-09	170 (21%)	643 (79%)	813
2009-10	116 (17%)	571 (83%)	687
Total	**1,789 (15%)**	**10,260 (85%)**	**12,049**

Source: Medically Supervised Injecting Centre (MSIC)

Table 5-9 below shows that that the majority (82%) of new registrants in 2009-10 who reported previously being referred or admitted to hospital for a psychiatric assessment also reported previously seeing a health professional for mental health problems.

Table 5-9: Reported seeing health professional (of those reporting referrals or admission to hospital for a psychiatric assessment)

Seen health professional	2009-10
Yes	95 (82%)
No	21 (18%)
Total valid records	**116**

Source: Medically Supervised Injecting Centre (MSIC)

Table 5-10 shows that the majority (77%) of new registrants in 2009-10 who reported being referred or admitted to hospital for a psychiatric assessment and seeing a health

professional about mental health problems, reported taking medication for a mental illness.

Table 5-10: Reported medication for mental illness (of those reporting mental health problems and previously seeing a health professional)

Taking medication	2009-10
Yes	73 (77%)
No	22 (23%)
Total valid records	**95**

Source: Medically Supervised Injecting Centre (MSIC)

Table 5-11 shows that between 9% (2006-07) and 14% (2008-09) of new registrants reported deliberately harming themselves.

Table 5-11: Reported deliberate self harm

Year (May – April)	Yes	No	Total valid records (n)
2001-02	344 (13%)	2,380 (87%)	2,724
2002-03	216 (11%)	1,790 (89%)	2,006
2003-04	251 (14%)	1,531 (86%)	1,782
2004-05	166 (11%)	1,279 (89%)	1,445
2005-06	104 (11%)	828 (89%)	932
2006-07	75 (9%)	801 (91%)	876
2007-08	77 (10%)	707 (90%)	784
2008-09	113 (14%)	700 (86%)	813
2009-10	86 (13%)	601 (87%)	687
Total	**1,432 (12%)**	**10,617 (88%)**	**12,049**

Source: Medically Supervised Injecting Centre (MSIC)

Table 5-12 shows that the majority (80%) of new registrants in 2009-10 who reported deliberately harming themselves also reported previously seeing a health professional about mental health problems.

Table 5-12: Reported previously seeing health professional (of those reporting deliberate self harm)

Seen health professional	2009-10
Yes	69 (80%)
No	17 (20%)
Total valid records	**86**

Source: Medically Supervised Injecting Centre (MSIC)

Table 5-13 shows that the majority (70%) of new registrants in 2009-10 who reported deliberate self harm and previously seeing a health professional for mental health problems also reported taking medication for a mental illness.

Table 5-13: Reported medication for mental illness (of those reporting self harm and previously seeing a health professional)

Taking medication	2009-10
Yes	48 (70%)
No	21 (30%)
Total valid records	**69**

Source: Medically Supervised Injecting Centre (MSIC)

Client alcohol and other drug use history at initial registration[88]

Please note that the following section relates to information collected from the client at initial registration. The information reflects client behaviour prior to engagement with the MSIC. Drug use by clients on site at the MSIC is described in Section 8.3.

Age of first drug injection – new registrants

The average age of first injection for new registrants over all years of MSIC operation was 19.4 years of age (Table 5-14). The age at first injection ranged from nine years[89] to 63 years overall. This proportion is broadly consistent with the data presented in the previous evaluation in 2007[90].

Table 5-14: Age of new registrants at first drug injection

Year	Average age in years of first injection (range)	Valid records (n)
2001-02	19.2 (9-50)	2,660
2002-03	19.2 (9-54)	1,942
2003-04	19.4 (10-61)	1,731
2004-05	19.3 (9-60)	1,400
2005-06	19.2 (9-50)	841
2006-07	19.5 (9-63)	803
2007-08	19.9 (9-52)	730
2008-09	20.1 (9-55)	774
2009-10	19.8 (9-58)	654
Total	**19.4 (9-63)**	**11,535**

Source: Medically Supervised Injecting Centre (MSIC)

The data presented above regarding age of new MSIC registrants at first injection can be compared to similar cohorts of injecting drug users in the NSP, IDRS and National Household Survey (NDSHS). The age of first injection for new users is recorded as follows:

- NSP - median18 years (2004-08), with overall range of 5-60[91]
- IDRS - 19 years (2008)[92]
- NDSHS – average of 21.1 years, (range: 20.2 – 21.7) from 2001, 2004 and 2007[93].

It should be noted that all data sources demonstrated minimal to no age changes over time.

From the comparative data, it can be concluded that MSIC clients have a similar age when injecting drugs for the first time, with a note that the NDSHS is consistently higher than the other data sources.

It should also be noted that the Australian Treatment Outcome Study (ATOS) found that the average age at which NSW participants became regular heroin users was slightly older (20.5 years).[94]

Last drug injected – new registrants

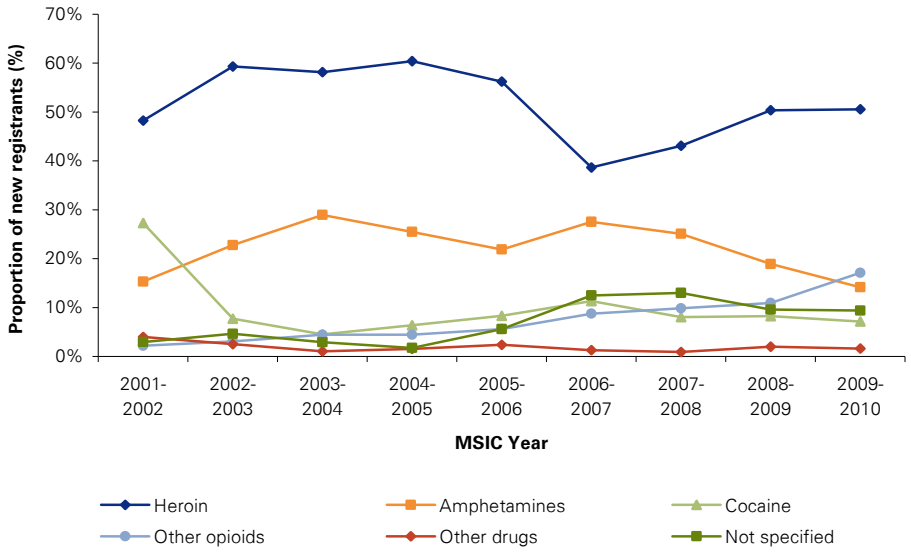
Figure 5-18 shows the last drug injected by new registrants. Heroin was consistently (2001-09) reported by the largest proportion of new registrants as the last drug they injected. Between 2001-02 and 2005-06, this proportion increased from 48% to 56%, before a notable drop in 2006-07 (to 39%). While maintaining at 43% for 2007-08, the proportion of new registrants reporting heroin as the last drug they injected increased again between 2008-09 (50%) and 2009-10 (51%).

Methamphetamines were consistently reported by the second largest proportion of new registrants as the last drug they injected (with the exception of 2001-02, where this was cocaine, and 2009-10, where this was other opioids). This proportion almost doubled between 2001-02 (15%) and 2003-04 (29%). However, between 2004-05 and 2008-09, it remained relatively constant (ranging between 19% to 28%) before decreasing to 14% for 2009-10.

The proportion of new registrants who reported last injecting cocaine has declined from 2001-02 (27%) to a low of 5% in 2003-04, before increasing to between 6% and 11% for the next six years. An increasing trend in new registrants reporting last injecting another opioid was observed between 2001-02 (2%) and 2009-10 (17%), while the remaining clients either did not specify or report last injecting other drugs.

These trends and distributions are broadly consistent with the latest Needle and Syringe Program (NSP) survey[95].

Figure 5-18: Last drug injected by new registrants



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,722**	**1,998**	**1,764**	**1,432**	**914**	**867**	**761**	**804**	**672**

Source: Medically Supervised Injecting Centre (MSIC)

Type of drug most often injected – new registrants

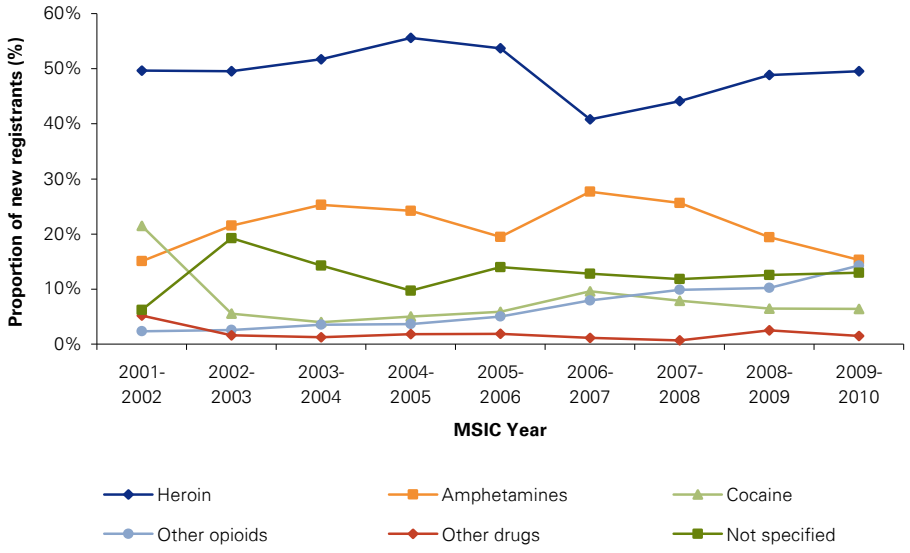
Figure 5-19 presents the type of drug most often injected by clients in the month prior to registration. These proportions are consistent with those reported by new registrants as the last drug they injected. Notably, the largest proportion of new registrants reported most frequently injecting heroin (41%-56%), and 15%-28% reported most frequently injecting methamphetamines.

The proportions reporting most frequently injecting cocaine were 21% and 6% in 2001-02 and 2002-03 respectively, while usage of this drug was lower in the following seven years (between 4%-10%).

Similar trends were also observed in the proportion of new registrants reporting other opioids as the most frequently injected drug (increasing from 2% in 2001-02 to 14% in 2009-10).

These distributions are broadly consistent with the data presented in the previous evaluation in 2007[96].

Figure 5-19: Type of drug injected most often by the new registrant in the month prior to registration



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,722**	**1,998**	**1,764**	**1,432**	**914**	**867**	**761**	**804**	**672**

Source: Medically Supervised Injecting Centre (MSIC)

Frequency of injection – new registrants

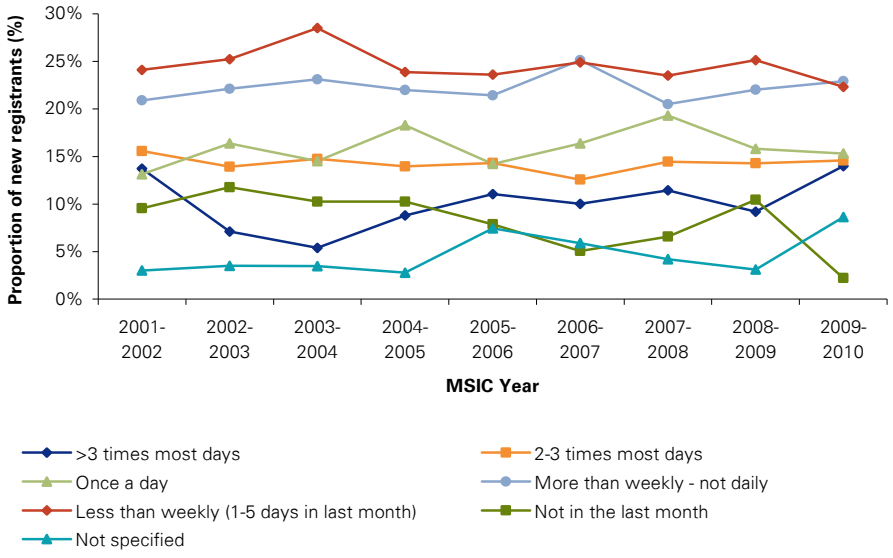
Figure 5-20 depicts the frequency of injection that new registrants reported for the month prior to registration. Frequency of injection can be influenced by the half-life of the drug injected, that is, longer lasting drugs require fewer injections.

The proportion of new registrants who reported injecting more than three times on most days has increased steadily from 5% in 2003-04 to 14% in 2009-10. The proportions who reported injecting either more than weekly (but not daily) and less than weekly have remained relatively constant since 2001-02, ranging from 20%-25% and 22%-29%, respectively.

Similarly, the proportion of new registrants who reported injecting 2-3 times on most days has remained relatively constant, ranging from 13%-16%. The proportion of new registrants who reported not injecting in the month prior to registering has declined from 10% in 2001-02 to 2% in 2009-10.

These distributions are broadly consistent with the data presented in the previous evaluation in 2007[97]. However, the 2007 evaluation report presented the information in fewer categories.

Figure 5-20: Frequency of drug injection in the month prior to registration



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**2,722**	**1,998**	**1,764**	**1,432**	**914**	**867**	**761**	**804**	**672**

Source: Medically Supervised Injecting Centre (MSIC)

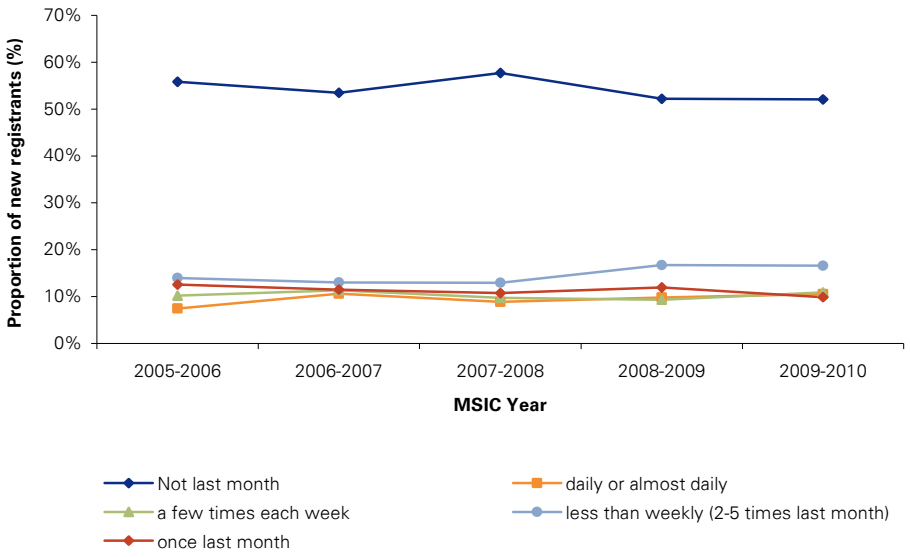
Frequency of injecting - public place

Figure 5-21 below shows that between 52% and 58% of new registrants reported that they had not injected in a public place in the month prior to interview (of those recorded). Of the nearly 50% of people who did report injecting in public in the preceding month, the frequency of this public injecting varied from once (10%-13%) to 'daily or almost daily' (7%-11%).

While 13%-17% of new registrants reported injecting 2-5 times in a public place in the month prior to registration, new registrants who reported injecting 'a few times each week' in a public place ranged from 9%-11%.

These distributions are broadly consistent with the data presented in the previous evaluation in 2007[98]. However, the 2007 evaluation report presented the information in fewer categories.

Figure 5-21: Frequency of drug injecting in a public place[99]



	2005-06	2005-07	2007-08	2008-09	2009-10
Total valid records	**215**	**774**	**688**	**705**	**578**

Source: Medically Supervised Injecting Centre (MSIC)

Table 5-15 below provides details on the location of where new registrants were likely to inject. The place that new registrants were most likely to inject was at home (61% of all new registrants (2001-09)). The next places that new registrants were most likely to inject were a friend's place or on the street (both at 30% of all new registrants (2001-09)).

Table 5-15: Number and proportion of new registrants injecting drugs at different locations[100]

Place of injection	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Number and (%) of total new registrants
Home	1,643 (60%)	1,227 (61%)	1,084 (61%)	946 (66%)	456 (50%)	533 (61%)	463 (61%)	477 (59%)	410 (61%)	7,239 (61%)
Street	1,108 (41%)	616 (31%)	469 (27%)	390 (27%)	173 (19%)	233 (27%)	186 (24%)	229 (28%)	203 (30%)	3,607 (30%)
Friend's place	913 (34%)	566 (28%)	495 (28%)	417 (29%)	188 (21%)	267 (31%)	249 (33%)	230 (29%)	226 (34%)	3,551 (30%)
Public toilet	716 (26%)	333 (17%)	267 (15%)	252 (18%)	110 (12%)	138 (16%)	111 (15%)	165 (21%)	130 (19%)	2,222 (19%)
Car	676 (25%)	336 (17%)	290 (16%)	243 (17%)	115 (13%)	154 (18%)	110 (14%)	148 (18%)	118 (18%)	2,190 (18%)
Dealer	316 (12%)	204 (10%)	155 (9%)	140 (10%)	52 (6%)	89 (10%)	89 (12%)	68 (8%)	83 (12%)	1,196 (10%)
Squat	217 (8%)	89 (4%)	73 (4%)	57 (4%)	16 (2%)	31 (4%)	27 (4%)	50 (6%)	36 (5%)	596 (5%)
Shooting Room	302 (11%)	59 (3%)	46 (3%)	30 (2%)	10 (1%)	22 (3%)	15 (2%)	18 (2%)	11 (2%)	513 (4%)
Other	94 (3%)	58 (3%)	41 (2%)	29 (2%)	28 (3%)	26 (3%)	9 (1%)	18 (2%)	22 (3%)	325 (3%)

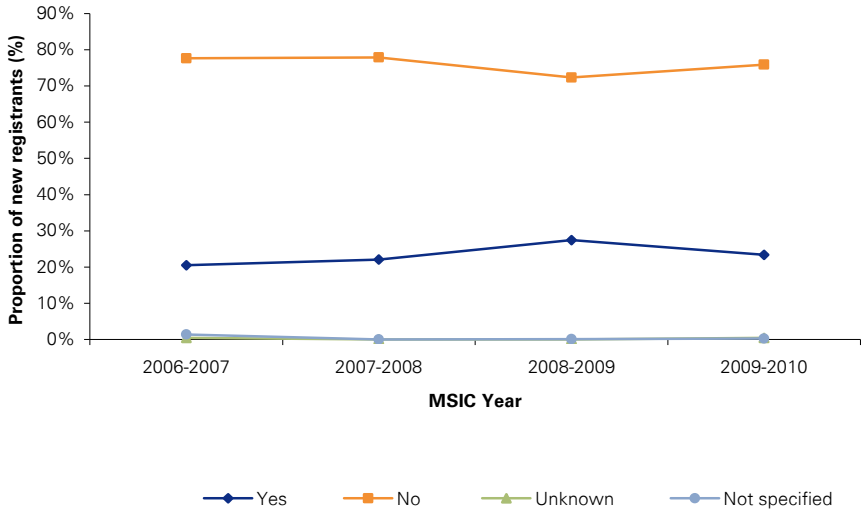
Source: Medically Supervised Injecting Centre (MSIC)

Drug equipment sharing behaviour

This section provides information on the likelihood of new registrants sharing drug equipment with other people.

Figure 5-22 shows the proportion of new registrants who reported ever using a needle or syringe after it had been used by someone else. Between 2006-07 and 2009-10, most new registrants (72% (2008-09) to 78% (2006-07)) reported never having used a needle or syringe after it had been used by someone else. However, 21% (2006-07) to 27% (2008-09) of new registrants did report previously using a needle or syringe after it had been used by someone else.

Figure 5-22: Proportion of new registrants who have ever shared a needle or syringe [101]



	2006-07	2007-08	2008-09	2009-10
Total valid records	**867**	**761**	**804**	**672**

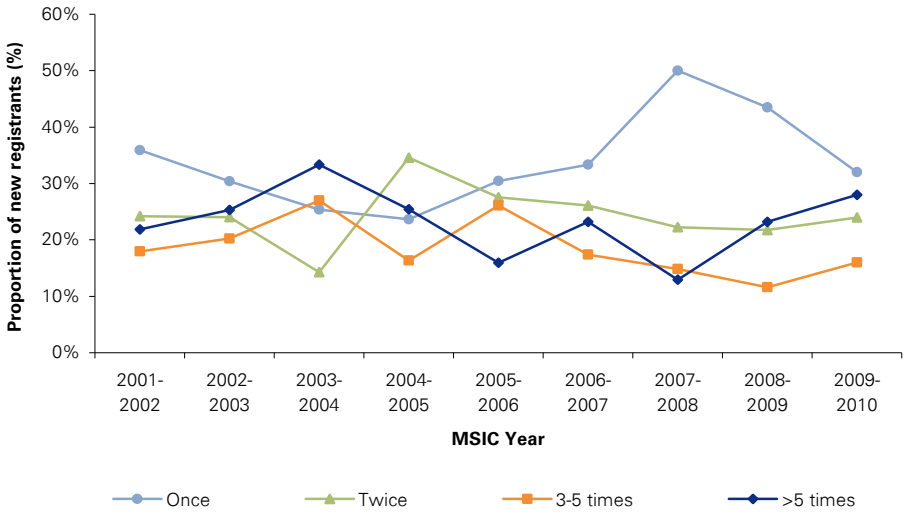
Source: Medically Supervised Injecting Centre (MSIC)

Figure 5-23 presents the number of times in the month prior to registration that new registrants reported sharing a needle or syringe after it had been used by someone else (of those who reported sharing with one or more persons).

A small proportion (5% (2001-02) to 8% (2009-10)) of total new registrants reported that they had shared a needle or syringe with at least one other person (after it had been used) in the month prior to registration. Of this group, the proportion that reported that they had shared a needle or syringe once in the month prior to registration declined from 33% in 2001-02 to 21% in 2004-05 before increasing again to 50% by 2007-08. This proportion decreased again to 31% in 2009-10.

Similarly, of those who reported sharing a needle or syringe with at least one person in the month prior to registration, 20% in 2001-02 reported sharing more than five times, compared to 27% in 2009-10.

Figure 5-23: Number of times registrants shared a needle or syringe in the month prior to registration[102]



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**128**	**79**	**63**	**55**	**69**	**69**	**54**	**69**	**50**

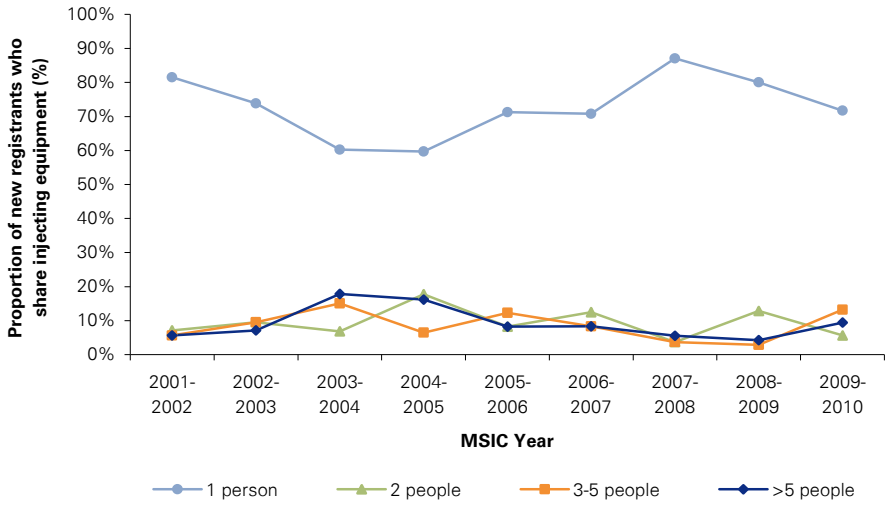
Source: Medically Supervised Injecting Centre (MSIC)

Figure 5-24 presents the number of people in the month prior to registration that new registrants reported sharing a needle or syringe with (of those new registrants who reported sharing with one or more persons). A small proportion (5% (2001-02) to 8% (2009-10)) of total new registrants reported that they had shared a needle or syringe with at least one other person (after it had been used) in the month prior to registration.

Of this group, the majority reported sharing a needle or syringe with only one other person (ranging from 60% (2003-04 and 2004-05) to 87% (2007-08)), and the proportion who reported sharing with more than one person made up between 13% (2007-08) to 40% (2003-05).

Notably, the proportion of registrants who reported sharing with more than one person made up only a small proportion (1%-2%) of the total new registrants.

Figure 5-24: Number of people shared drug equipment with in the last month



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Total valid records	**141**	**84**	**73**	**62**	**73**	**72**	**54**	**70**	**53**

Source: Medically Supervised Injecting Centre (MSIC)

Table 5-16 shows that of the new registrants who reported sharing a needle or syringe with one or more persons in the month prior to registration (5-8% of total new registrants), most shared needles or syringes with regular sex partners (ranging from 27% (2004-05) to 57% (2008-09) of new registrants) or a close friend (ranging from 22% (2005-06) to 48% (2004-05) of new registrants).

***Table 5-16: People who new registrants shared a needle or syringe with*[103]**

Person shared with	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Total
Regular sex partner	75 (53%)	38 (45%)	42 (58%)	17 (27%)	31 (42%)	38 (53%)	27 (50%)	40 (57%)	20 (38%)	328 (48%)
Casual sex partner	5 (4%)	3 (4%)	5 (7%)	5 (8%)	2 (3%)	6 (8%)	3 (6%)	1 (1%)		30 (4%)
Close friend	40 (28%)	26 (31%)	22 (30%)	30 (48%)	16 (22%)	27 (38%)	16 (30%)	19 (27%)	20 (38%)	216 (32%)
Acquaintance	20 (14%)	15 (18%)	19 (26%)	13 (21%)	18 (25%)	10 (14%)	6 (11%)	11 (16%)	8 (15%)	120 (18%)
Other people	8 (6%)	3 (4%)	2 (3%)	2 (3%)	1 (1%)					16 (2%)

Source: Medically Supervised Injecting Centre (MSIC)

Table 5-17 shows the type of drug equipment that new registrants had shared in the month prior to registration (of those who reported sharing with one or more persons in the month prior to registration - 5-8% of total new registrants). The item of drug equipment that new registrants most commonly reported sharing in the month prior to registration was a spoon (between 51% (2008-09) and 68% (2003-04) of new registrants).

Water, filters and drug solutions were all shared by new registrants in the month prior to their registration to similar extents (46%-57% of new registrants). Tourniquets were reported as being shared to a lesser extent in the month prior to registration (34%).

***Table 5-17: Type of drug equipment shared*[104]**

Equipment shared	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Total
Spoon	91 (65%)	51 (61%)	50 (68%)	39 (63%)	29 (40%)	44 (61%)	33 (61%)	36 (51%)	35 (66%)	408 (60%)
Water	81 (57%)	47 (56%)	44 (60%)	33 (53%)	25 (34%)	34 (47%)	27 (50%)	32 (46%)	27 (51%)	350 (51%)
Filter	70 (50%)	43 (51%)	39 (53%)	31 (50%)	22 (30%)	36 (50%)	23 (43%)	32 (46%)	26 (49%)	322 (57%)
Drug solution	70 (50%)	39 (46%)	38 (52%)	26 (42%)	24 (33%)	34 (47%)	22 (41%)	34 (49%)	24 (45%)	311 (46%)
Tourniquet	48 (34%)	39 (46%)	37 (51%)	23 (37%)	18 (25%)	20 (28%)	17 (31%)	17 (24%)	15 (28%)	234 (34%)

Source: Medically Supervised Injecting Centre (MSIC)

Service response to any changes in the demographics of its clients

Service responses were discussed during interviews with MSIC management and staff (health education officers, nurses and a Case Referral Coordinator, with 1-8 years experience).

Key themes are presented below:

- **Consistent service model** - both MSIC management and staff indicate the service model has been broadly consistent since inception.
- **Responsive to changes in drug use -** MSIC responded to the increased risk of injecting related injury associated with increased use of brown heroin by providing additional, more appropriate, injecting equipment.

There have been three important components to the model which have increased the ability to respond to client needs during this evaluation period:

- Employment of a **Case Referral Coordinator** has supported the referral process, which has increased their links with local services as well as coordinating health promotion activities and the ability to link in with local, national and international health promotion events.
- **Brokerage funding** assists MSIC to address client needs, such as funding drug treatment, typically in the private sector, where there are no local public places suitably available (i.e. suitable location and preference for same day/ next day availability). Brokerage is arranged by the Case Referral Coordinator and negotiated with the client. There is a limit on the number of times clients can receive brokerage funding.
- In addition, in response to difficulties in accessing public drug treatment places for MSIC clients, NSW Health funded additional places at a local public alcohol and drug treatment service, the Langton Centre, so MSIC could refer one or two clients each week for priority access and additional case management for drug treatment (up to 20 clients at any one time). This is referred to as the NSW Health funded Langton evaluation.

These are discussed in more detail in Section 8.4 and Section 8.5.

Key local service perspectives on current and future client demographics

Local service system representatives were presented with a brief overview of common client characteristics from the MSIC service activity data and asked "*is this consistent with your view of the injecting drug user population in the Kings Cross area?"*

The brief overview provided to service representatives key was: '*Our analyses of MSIC data suggests that client characteristics of the MSIC are typically aged in their mid 30's, about ¾ male, mostly heterosexual and about 11% report indigenous background. They have an average age of first injection at 18 years. Heroin is the most common drug used. About one quarter are injecting less than weekly and another quarter injecting less than daily. Is this consistent with your view of the injecting drug user population in the Kings Cross area?'*

The findings suggest the MSIC cohort is the same as or similar to other services targeting people with complex needs in the Kings Cross area, for example:

- Wayside Chapel, a community services centre for the 'most disadvantaged' of the Kings Cross community area[105], reported that the MSIC client profile described was the same for people who attend their service.
- Similarly, St Vincent's Alcohol and Drug Services noted that the MSIC is *'principally for a subset of extremely disadvantaged people who won't engage with any other intervention'.*
- The Kirketon Road Centre, a local service that targets at risk young people, sex workers and injecting drug users and provides medical, counselling and social welfare services[106], reported that almost all of their clients attend the MSIC and about half of the MSIC clients attend the KRC. Regular users of the MSIC and the KRC include a core group of injecting drug users with complex needs, such as homelessness.
- NEAMI[107], a mental health rehabilitation and support provider, reported that this was broadly the same population that they work with, although they noted many people whose drug of choice was heroin were currently injecting prescription opioid instead as, at time of interview, they were more accessible and cheaper than heroin.
- The Langton Centre, a local public alcohol and drug treatment service, reported that there were similarities between MSIC clients and people receiving drug treatment at the Langton Centre, although MSIC clients were generally younger, more vulnerable and with more complex needs than their clients. They also noted that there were other drug using populations in the area who were not using either service, including people injecting methamphetamines ('ice'), ingestion of pills such as 'ecstasy', or snorting cocaine.

However, it is important to note the findings from local service interviews with NSW Ambulance or St Vincent's Emergency Department:

- NSW Ambulance reported that when they respond to injecting drug users, these are typically irregular users (such as people who have injected while a client of a sex worker) or people who do not know about the MSIC (such as people who have just been released from prison)
- St Vincent's Emergency Department reported that prior to the MSIC opening, there was a high demand for the Emergency Department by injecting drug users, with a lot of presentations for complications such as sepsis [blood poisoning] and infected injecting sites. However, since the opening of the MSIC, they report reduced numbers of injecting drug users presenting to the Emergency Department, which they attribute to the introduction of the MSIC to the local service system, and working with other service providers (such as the Kirketon Road Centre.

Finally, as previously stated, the MSIC appears to have a higher level of Aboriginal and Torres Strait Islander clients than some other services. One private methadone clinic interviewed stating it was fairly rare to have Aboriginal clients in their service. This suggests that the MSIC is engaging quite effectively with Aboriginal injecting drug users.

Overall it appears that the profile of the MSIC clients is generally similar to the broader injecting drug user population seen by other local services. From a low threshold access perspective, this is encouraging as it suggests that there are no systemic barriers to access for any particular subgroup of injecting drug users, although it is noted that some people (those leaving prison, injecting 'ice' or using drugs while clients of sex workers) may not be aware or interested in accessing the service.

Anticipated changes in the client demographics

The demographics of clients are seen by local service system representatives as relatively stable. All local service system representatives noted changes in drug supply impact on patterns of drug use in the area. In turn, this impacts on the characteristics of those who use the MSIC. For example, service representatives provided examples of an increase in injecting episodes when people were using the shorter-acting crystal methamphetamine during periods where heroin was more difficult to obtain.

5 Evaluation domain 2: To review whether the systems, protocols and processes of the MSIC are appropriate for the client group

To review the systems, protocols and processes of the MSIC, the evaluation will consider the following questions:

- What are the client views on the MSIC's systems, protocols and processes?
- What are the staff views on the MSIC's systems, protocols and processes?
- Are the systems, protocols and processes subject to regular review and what are the findings of or action arising from those reviews?

To answer this evaluation domain, the evaluation will be informed by interviews with clients and former clients of the MSIC, interviews with staff of the MSIC and further review of the MSIC program documentation.

Summary of key findings

The MSIC is guided by internal management protocols. These are supplemented by 50 policy and procedure documents.

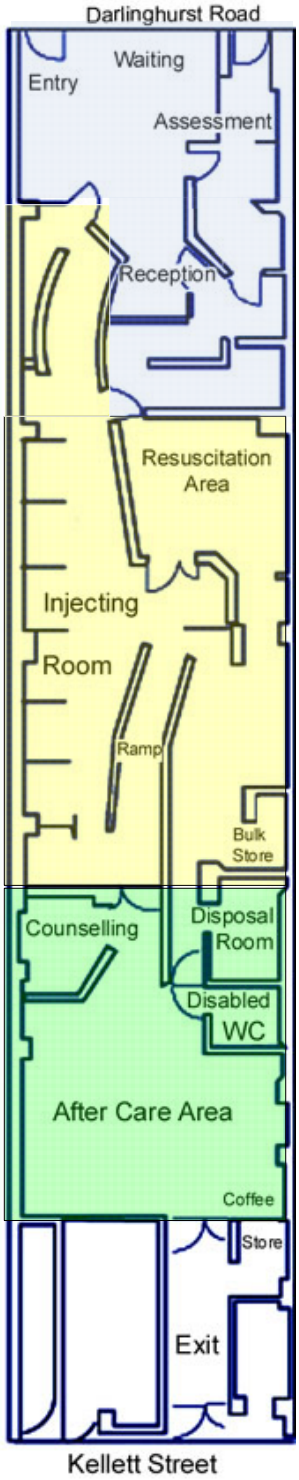
- Interviewed clients were able to accurately describe the processes at the MSIC and indicated that these worked well.
- Surveyed clients were very positive about the appearance and cleanliness of the MSIC.
- Staff and management reported that the systems, protocols and processes are central to the success of the MSIC service. Due to significant pre-planning of the service before it opened, there have been no major policy or operational changes
- There is evidence of ongoing review of the systems, protocols and processes in relation to client and other needs.

Overview of systems, protocols and processes of the MSIC

The MSIC has three distinct areas as shown in Figure 6-1, which comprise:

- Stage 1: a Client Reception area with an adjoining Client Assessment Room
- Stage 2: a clinically supervised Injecting Room
- Stage 3: an After Care Area.

Figure 6-1: MSIC floor plan [108]



Stage 1: Client reception + Client assessment room

Stage 2: Clinically supervised injecting room (including resuscitation area)

Stage 3: After care area

Source: Medically Supervised Injecting Centre (MSIC)

Internal management protocols

As previously specified, the MSIC is a trial and operates under an amendment of the *Drug Misuse and Trafficking Act 1985*. Under the amended legislation in relation to the MSIC, a license to operate the trial service 'cannot be issued unless the responsible authorities are of the opinion that satisfactory internal management protocols for the centre [ed. MSIC] have been finalised….'[109]

The internal management protocols are a 16 page document which details the agreed approach for the MSIC in relation to all aspects of operation. This includes the service model, range of services to be provided, operating hours, staffing and security (guard and systems). Details are provided for activities that can or may occur in each stage of the MSIC (reception/injecting room and after care).

For example, listed protocols for client reception include steps to assess new clients, MSIC eligibility criteria, steps to assess age, previous injecting drug use, clients obviously or known to be pregnant or accompanied by children and assessing intoxication. There are protocols on ineligible clients, new client registration, client anonymity, the MSIC client code of conduct, client consent, registration and assessment of existing MSIC clients and responding to client incidents.

The internal management protocols document was developed prior to the establishment of the MSIC by an Expert Panel and endorsed by the Responsible Authorities, the Director General of Health and Commissioner of Police. These were strengthened in 2008 and endorsed in late 2009 by the Director General of Health and Commissioner of Police.

Policy and procedure documentation

The internal management protocols are supplemented by 50 clinical policies and procedure documents that were also created on or since the opening of the MSIC. The policy and procedures documents were created by the senior internal clinical management staff in roles such as the Medical Director, Clinical Services Manager and the Nursing Unit Manager.

These include the following:

- Clinical and floor management protocols address events such as client registration, notification of child at risk, floor management, vein care, infection prevention and control, blood/body fluids and needlestick injury exposure, cocaine and methamphetamine toxicity, delirium protocol, guidelines for suicidal behaviour, medical record release and confidentiality.
- Security and occupational health and safety protocols address issues such as security systems, aggression management, response to critical incidents and after hours incident management.
- Human resources-related protocols address recruitment, initial training program, code of professional conduct, employees' responsibility, clinical supervision and student and health worker placement.

- Miscellaneous protocols have been developed in relation to media and public information, cab charge, management of complaints and client complaints and concern form. There is also a verbal complaints flowchart outlining the process for complaints including documentation and (where appropriate) review of policy/practice/procedure, staff counselling/education or referral to an external agency.
- There is also a four-sided booklet for clients that outlines guidelines and rules for using the MSIC, including opening hours, exclusion criteria, registration, injecting room practices, drug overdoses, legal matters, behaviour and complaint processes and contact details.

Client perspectives on the MSIC staff and services

Of the current clients who completed a short self-administered survey (n=119), when asked '*What do you think about the MSIC staff and service, in relation to appearance and cleanliness of the MSIC?', 76% reported it was 'very good' and 16% reported it was 'good'.*

The current (n=43) and former (n=6) MSIC clients who participated in semi-structured interviews as part of this evaluation were also asked to comment on the systems, protocols and policies.

When asked whether the way the MSIC works is fair, all interviewees who addressed the question answered 'yes'[110] (28 of 28 responses).

They were also asked a semi-structured question [with prompts as required as shown in square brackets]: *'Tell me about what happens when you come here? [In the entry area, injecting area and after care area?]'*

All clients interviewed, (both former and current), were able to clearly and accurately describe the staged process and indicated that they felt the system worked well.

Key steps and benefits are outlined below:

- **Screening –** the majority of clients talked about the process of giving their password to staff in Stage 1 and answering questions, for example whether they had used [injected] today and whether they had consumed any alcohol.
- **Friendly staff** – many clients stated that they liked being greeted by name by staff when they arrived at the MSIC: *"Staff know me and I like that - they always say hello and ask how you're doing".*
- **Attention to general wellbeing of clients** – a number of clients who were on medication (e.g. for psychiatric conditions) said staff asked them whether they had taken their medication for the day and if not, why not.
- **Clear processes** – clients understood and accepted rules, e.g. injecting in individual booths (unless clients arrive in pairs) or not talking or sharing anything between the booths.
- **Hygienic** – one client commented positively that the booths were *'always spotless'*.

- **Non-judgmental access to equipment** – clients spoke about the availability of injecting equipment as needed, with some further stating that '*they never judge me or ask questions about things'.*
- **Access to advice and information** – clients reported multiple opportunities to obtain advice and information when required.
- **After care area (Stage 3) provides a safe place to wait** – nearly all clients understood that they should remain in Stage 3 for approximately 15 minutes, '*even if you feel fine and you just want to be in and out'.* Most clients commented that they liked being able to sit down for a bit, have a coffee and relax.
- **Monitoring post-injection** – clients valued staff presence as it '*allows you to be monitored for a bit - sometimes it doesn't always hit you straight away so it's good to be able to sit for a while'.* A common observation was that staff '*keep an eye'* on everyone: '*staff never seem to be watching you, but as soon as something's wrong, they're there like a shot, sometimes before anyone else has noticed anything at all'.*
- **Opportunity to seek assistance** – the general consensus was that support, advice and assistance with referrals were available to those who asked for it: '*If you need help with some issues it's very clear that staff are available if you want, but they don't push it- it's got to be led by us'.*

Individual clients recommended the following changes to the service model::

- **Streamlined process for known clients** - '*The staff know me so why do they have to ask for my password and ask me all these questions every time?'*
- **Access to a toilet** - '*It would be good to have a toilet in Stage 1. I know why they don't, because of security, but sometimes it can be a problem, particularly if you've got to wait.'*
- **Allowing clients to wait inside prior to clinical opening times** - *I think they should at least open the doors on time, even if they're not ready to start. At least then we could wait inside, off the street'.*

The MSIC management and staff were asked to comment on these three areas for improvement identified by clients, and these comments are described in Section 6.4 below.

Management and staff perspectives

Key themes reported during management and staff interviews on systems, protocols and policies were as follows:

- **Low threshold service model** – this recognises that this client group may have significant hesitations in accessing services and that typical clinical expectations (such as use of appointments, structured clinical services, even requirements about 'appropriate' language or behaviour) may act as real or perceived barriers to access and are to be removed/reduced wherever practical. This approach is seen as highly beneficial, and staff report this approach has had the result of increasing access to marginalised people who do not access other services, particularly Aboriginal and Torres Strait Islander clients who commonly do not attend any other mainstream services aside from the MSIC.
- **Well-planned service** - due to significant pre-planning of the MSIC before it opened, there have been no major policy or operational changes, only minor modifications to respond to emerging issues. Reported strengths included the ease with which clients and staff used the MSIC, suggesting a well-designed and implemented service which has been replicated by the international services, such as *InSite* in Vancouver, Canada. A detailed data collection system was established prior to the MSIC opening which provides much of the data provided in this and previous evaluations.
- **Supported by high quality processes and protocols** – staff indicated that they believed that the MSIC had policies and procedures of a very high standard. The MSIC procedures were seen to play a significant role in promoting positive outcomes in terms of client safety and health by reinforcing good hygiene practice as well as the provision of a safe and clean environment.
- **Consistent staff application of the MSIC policies and procedures** - staff attribute the success of the processes to the manner in which they are consistently applied and also to the determination of staff to behave in a respectful and courteous manner towards clients. This 'modelling' serves to affect client behaviour. Staff suggest this attitude has done much to promote an acceptance of the MSIC rules and regulations among the client population. This attitude has also engendered a relationship between staff and clients of mutual trust and respect as clients see that staff are non-judgemental and consistently apply the MSIC policies and procedures.
- **Client knowledge and respect of rules and responsibilities** - staff interviewed remarked that clients are generally aware of, and comply with, the MSIC protocol and procedure. Staff commented that many clients can now recite the MSIC's rules of behaviour - evidence that the MSIC has been successful in creating a broad awareness of its 'client rules'. Perhaps more importantly than awareness of processes however, is the fact that clients on the whole seem to genuinely *respect* these processes and recognise the importance that compliance of these processes plays in contributing to a safe and effective service. This attitude has been evidenced by staff noticing that clients have adopted a form of self-regulation and a culture of 'positive peer pressure' within the MSIC that serves to rein in

aggressive or disruptive behaviour from their peers. When certain clients are not complying with processes or protocol (i.e. being disruptive etc.), it is not uncommon for them to be reprimanded by their peers for not acting responsibly. Older users in particular are often seen attempting to inculcate their younger peers with an attitude of respect towards both staff and the MSIC more generally.

- **Ability to de-escalate situations** - staff interviewed reported that the culture of respect described above has also enhanced staff's ability to manage and de-escalate potentially explosive and dangerous situations, while positive peer pressure has also pre-empted incipient disturbance or violence. Staff noted that both the MSIC processes and its culture of respect have been effectively embedded and this has resulted in an environment largely free from violence and disruptive behaviour. Anecdotally, staff suggested there has been a decline in the incidence of violent and disruptive episodes since the MSIC's inception.
- **Constraints** were predominantly related to the building configuration, such as lack of natural light. However, staff and management recognised that access to a building in the location was more important than these elements.

MSIC were also asked to comment on the three areas for improvement identified by clients (streamlining the process, access to a toilet and allowing clients to wait inside before the MSIC officially opens – as described in Section 6.3):

- Screening process allows for engagement with clients, assessment of intoxication, recent use, risk of overdose (and ability to better respond in the event of an overdose). The MSIC staff include a number of part-time and casual staff and not all clients are known to all staff.
- Toilet facilities are not available in Area 1 due to resourcing constraints (insufficient staff to manage the toilet, physical limitations), risk of unsupervised injecting and dealing in the facility and a need to be able to observe clients in Stage 1.
- There is a required level of staffing included in the internal management protocols. Opening the MSIC with a reduced staffing profile therefore breaches the MSIC legislation. In the event there are sufficient staff, including a security guard, up to 13 clients are allowed into Stage 1 to commence registration.

Review processes

The policies and procedures were developed by clinical staff at the MSIC, were reviewed by a clinical policy advisory committee prior to the opening of the MSIC in 2001 and are reviewed regularly as well on an as needed basis by clinical staff and the expert advisory panel.

In addition to this review process, it is noted that there is also evidence of protocols being created or amended due to changes in the demographics of clients and client needs. For example, Policy 1.4: Delirium Protocol and Flowchart was developed in collaboration with relevant local health services in response to 'increasing problems associated with excessive cocaine use in the Kings Cross in the early 2000s and the need for a coordinated approach from relevant services…' (MSIC, 2001).

6 Evaluation domain 3: To monitor the level of demand for the MSIC

To review the level of demand for the MSIC, the evaluation will consider the following questions:

- What is the number of client visits per day averaged over a month? What are the short and long-term trends in service usage?
- Based on trend information, what predictions can be made about the future demand for the service?

This section is informed by the MSIC client database, information collected through interviews with MSIC staff and local service system representatives.

It is noted that monitoring demand for the MSIC is a legislative requirement. In relation to 'reviews of licence', the Act states *'the responsible authorities must arrange for the review of the economic viability of a licensed injecting centre if they are satisfied that the service activity level of the centre has dropped below 75 per cent of the service activity level prescribed by the regulations'*[111].

Summary of key findings

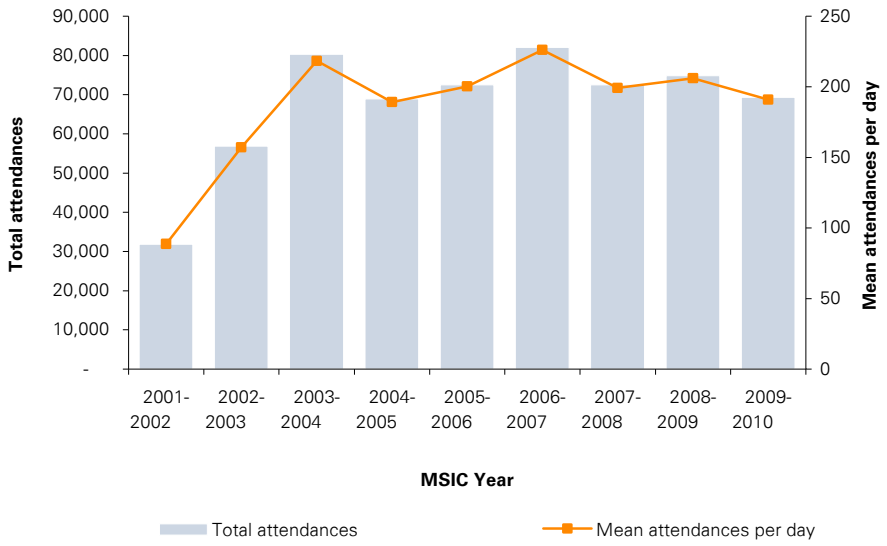
- After an initial period of growth between 2001 and 2003, the total attendances by year and average attendances per day have remained relatively consistent since 2004 (70,642 and 78,963 attendances per year and an average of between 193.54 and 218.13 attendances per day).
- After an initial period of growth between 2001 and 2003, the average number of attendances by day of week have remained relatively constant. Thursday and Friday had the highest activity followed by (in descending order) Tuesday, Monday, Wednesday, Saturday and Sunday.
- MSIC staff and management report no discernible change in the demand (or demographics) of people using the MSIC. External local service system representatives indicated demand was likely to remain stable, although it could be impacted by increasing the opening hours of the MSIC, significant changes in the drug market, increased drug treatment options and availability and changes in the local area.

Current demand

Figure 7-1 below shows the total number and average attendances per day for each year. In the initial three years of the MSIC operation (2001-02 to 2003-04), the number of total attendances and the average number of attendances per day increased, before declining slightly in 2004-05 and remaining relatively constant since, ranging between 69,302 and 78,963 attendances per year and an average of between 191 and 226

attendances per day (between 2005-06 and 2009-10). The increase in attendance volumes between 2002-03 and 2003-04 may in part be explained by the MSIC increasing its operating hours from ~55.5 hours a week to ~78.25 hours a week.

Figure 7-1: Average attendances by day and total attendances at the MSIC by year

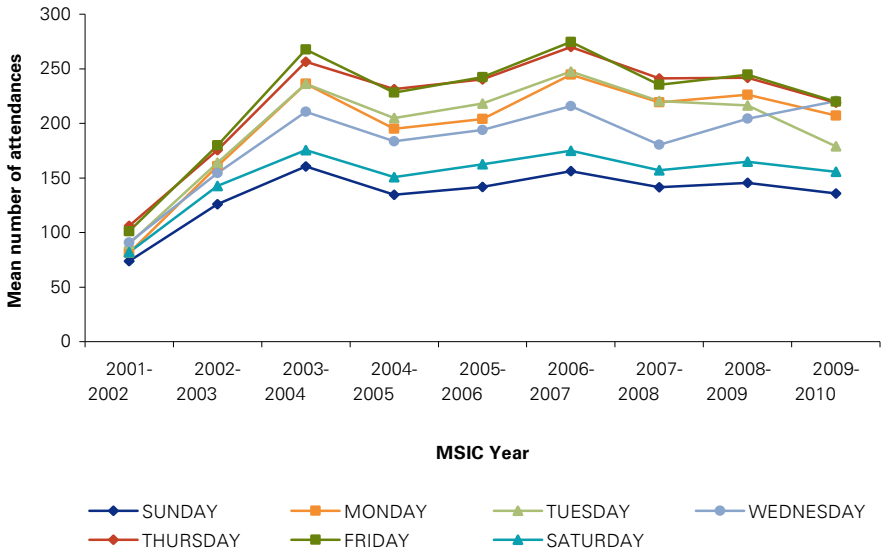


Source: Medically Supervised Injecting Centre (MSIC)

Figure 7-2 shows the average number of attendances per day, by day of week for each year of operation. Similar to the total number of attendances, the average attendances by day of week increased between 2001-02 and 2003-04, declined slightly in 2004-05 and have remained relatively constant since.

Unsurprisingly, as the operating hours of the MSIC are shorter, the average number of attendances on Saturdays and Sundays were the lowest of all days at between 151-175 and 135-156 average attendances respectively (from 2004-05 to 2009-10). Thursdays and Fridays had the highest (and almost identical) average number of attendances at between 219-270 and 220-245 from 2004-05 to 2009-10. Tuesday, Monday and Wednesday had successively lower average attendance rates than Thursday and Friday with ranges of 179-247, 195-245 and 180-220, respectively between 2004-05 and 2009-10.

Figure 7-2: Average number of attendances by day of week



Source: Medically Supervised Injecting Centre (MSIC)

In summary, following an initial period of growth in attendances at the MSIC (2001-02 to 2003-04), the average number of attendances by day of week has remained relatively constant since 2004-05. These data suggests a consistent demand for the MSIC.

Staff feedback and local service local perspectives relating to demand

Management and staff interviews reported that they had not observed a discernible change in demand or the demographics of clients in their time working at the MSIC. These trends were also presented to local service system representatives for validation.

Overall, the MSIC was seen as responding to a need that had remained relatively stable over time and demand was likely to remain constant for the foreseeable future.

However, factors identified by local service system representatives as having the potential to impact on demand included significant changes in the following:

- **opening hours of the MSIC** – additional hours likely to increase the number of people accessing the MSIC
- **drug market** – whilst there are frequent changes in the availability, price, quality and properties of frequently injected drugs, significant changes to any of these may impact on the demand for the MSIC
- **drug treatment options and availability** – for example, the introduction of buprenorphine to the range of substitution pharmacotherapies available was reported by one local service representative as providing more options for drug

treatment, which may increase the number of people taking up drug treatment and therefore reduce overall use of the MSIC

- **other local changes in the area** - the ongoing gentrification of Kings Cross was reported to have potential impact on the drug market in the area, which may impact on the demand for the MSIC in the future.

7 Evaluation domain 4: To review whether the mix and level of services are appropriate in the context of the Government's objectives

To review the mix and level of services that are appropriate in the context of the Government's objectives, the evaluation considered the following questions:

- What are the trends in service activity level?
- What are the trends in types of drug injected?
- What are the trends in utilisation of different components of the MSIC services, e.g. supervised injecting, medical treatment, referral services?
- Are the days/hours of the MSIC's operation appropriate?
- What are the trends in referral of clients to drug treatment, primary health care, mental health and social welfare services? What is the basis of any such trends including arising from MSIC practices?

This section is informed by review of the MSIC client database, interviews with MSIC staff, interviews and surveys with MSIC clients, and interviews with local service system representatives.

Please note that Section 3 provides a summary of the evaluation findings directly addressing the NSW Government's four stated objectives.

Summary of key findings

- There were 609,177 visits to the MSIC from service commencement in May 2001 to 30 April 2010, with relatively stable demand of approximately 70,000 visits annually for the evaluation period (2007-2010).
- The proportion of visits for heroin injection remained relatively constant between 2006-07 and 2009-10 at 34-40%. The proportion of visits for injection of other opioids has increased significantly and constituted 53% of injections in 2009-10.
- After a steady decline to a low of 1,867 additional services (e.g. advice on safer injecting and other health advice, first aid and wound management and accommodation services) provided in 2007-08, provision of these services has increased to 3,130 in 2009-10.
- The largest proportions of additional services provided between 2001-10 were for: advice for safer injecting including vein care, drug and alcohol treatment advice, wound dressing and accommodation services. The relative proportion of provision of these services would suggest that the MSIC provides an appropriate mix of services for the client cohort.
- Surveyed clients reported that they are generally happy with the availability of information about other services provided by MSIC staff.
- There is significant 'pre-referral' activity, where the MSIC staff provide information

and advice about drug treatment to encourage clients to move from 'precontemplating' or 'contemplating' drug treatment to choosing to seek a referral.

- There are also a number of attempted referrals (85 in 2008-09 and 155 in 2009-10, where the MSIC staff made or facilitated telephone calls but were not successful in securing a drug treatment place, often because of lack of timely and/or suitable service availability.
- Overall, the more frequently a client visited the MSIC, the more likely they were to have accepted a referral to another service. 68% of frequent attenders (>98 visits in a given year) accepted a referral within the given year while approximately 2% of clients that visited 1-2 times in a given year accepted a referral.
- Overall, between 2001-02 to 2005-06 the rate of drug treatment referrals fluctuated from a high of 13.3 (2001-02) to a low of 5 (2003-04). Rates of referral per 1,000 visits from 2006-07 onwards stabilised, with a range between 4.6 and 5.3 referrals per 1,000 visits (declining by less than 1 referral per 1,000 visits over the period). These findings are consistent with the trend for all referrals (including drug treatment, health care, and social welfare and other referrals). This occurred over the same period that there was a stabilisation of the rate of new registrants, and the profile of frequency of attendance by clients.
- By comparison, for NSW Needle Syringe Programs, referrals for drug treatment represent 20% of all referrals
- Local service system representatives and MSIC management have reported that there have been challenges with obtaining local public drug treatment places in a timely manner due to waiting lists, thereby losing the 'window of opportunity' to assist someone move into drug treatment.
- The uptake of brokered referrals to drug treatment and through the NSW Health funded Langton project (a service arrangement for the MSIC with a local public drug treatment service) have been very strong.
- Medical consultation (including dental) and health education were the most common types of healthcare referrals made by MSIC staff. Of social welfare referrals, the largest proportion were made for social welfare assistance.
- The majority of clients interviewed reported that the MSIC's opening hours were generally suitable for them. The majority of interviewed clients indicated that during the MSIC opening hours, they only inject at the MSIC. However most (19 of the 23 clients interviewed reported that they injected outside of opening hours. Most commonly reported injecting in their own or at a friend's home, although public injecting was still reported.
- Clients stated their use of the MSIC is related to safety, hygiene, access to resuscitation and, to some extent, proximity to residence or where the client obtained their drugs.
- There is strong support by the local service system for services provided by the MSIC as having a clear specialist role within the broader service system and as an entry point to other services.

- Overall, based on the information analysed, the mix and level of services appear to be appropriate in the context of the NSW Government's objectives. Detailed analysis of findings to each of the NSW Government's four objectives is presented in Section 3.

Service activity

Clients who enter the MSIC have the details of that attendance recorded in Stage 1.

For the purposes of this report, the following definitions are used to describe service activity:

- **'Check-in':** the process where registered clients provide their details and other relevant information to a staff member in Stage 1 and are assessed as suitable to access the site.
- **Visits:** all registered clients who 'check-in' to access the site for injecting are regarded as having an individual **visit**. This is recorded during Stage 1.
- **Occasions of additional service:** during a visit, some clients may receive additional services (other than medically supervised injection) from the MSIC (e.g. blood-borne virus information). Irrespective of the number of individual services provided, this section presents these instances as an **occasion of additional service**[112].
- **Total additional services:** describes all individual services provided within occasions of additional service.

Visits

Table 8-1 below outlines the number of visits to the MSIC recorded by year. As reflected in Section 0, after an initial period of growth in the number of visits between 2001-02 (31,287 visits) and 2003-04 (80,331 visits), the number of visits to the MSIC has remained above or approximately 70,000 visits a year. A total of 609,177 visits to the MSIC have been recorded since commencement of operation (to 30 April 2010).

Table 8-1: Number of visits to the MSIC

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Total visits	**31,827**	**56,876**	**80,331**	**68,880**	**72,520**	**82,085**	**72,504**	**74,852**	**69,302**	**609,177**

Source: Medically Supervised Injecting Centre (MSIC)

Drugs injected onsite

Figure 8-1 below illustrates the annual proportion of visits for injection of particular types of drugs. Heroin was the most frequently injected drug over the period 2001-02 to 2005-06, with between 76% (2003-04) and 59% (2005-06) of visits involving heroin

injection. The proportion of visits for heroin injection remained relatively constant between 2006-07 and 2009-10 (34-40%).

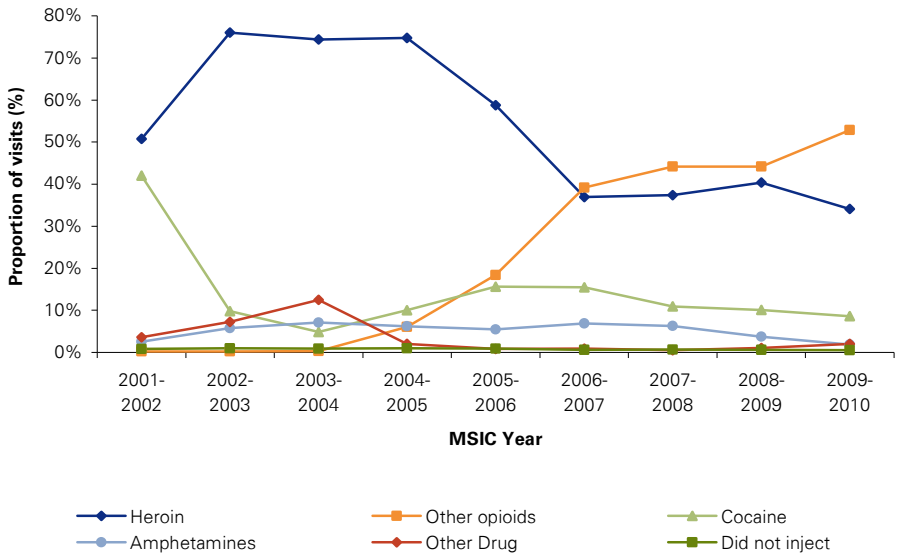
In 2001-02, 42% of injecting visits were for cocaine. However, the proportion of visits for cocaine injection decreased significantly in 2002-03 (10%) and again in 2003-04 (5%). Between 2004-05 and 2006-07, the proportion of injecting visits for cocaine increased again to between 10% and 16%. Between 2007-08 and 2009-10, the proportion of visits for cocaine injection remained relatively constant at between 9% and 11%.

While represented in less than 1% of injecting visits between 2001-02 and 2003-04, other opioids have constituted an increasing proportion of visits from 2004-05 (6%), exceeding the proportion of visits for heroin in 2006-07 (39% vs. 37%). The proportion of visits for other opioids[113] trended upwards between 2007-08 (44%) and 2009-10 (53%).

The proportion of visits for amphetamine injection has remained consistently low, at between 2%-7%, between 2001-02 and 2009-10.

These distributions are broadly consistent with the data presented in the previous evaluation in 2007[114].

Figure 8-1: Type of drug injected[115]



	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Total visits	**31,427**	**56,333**	**79,524**	**68,235**	**71,896**	**81,137**	**72,295**	**74,347**	**68,828**	**604,022**

Source: Medically Supervised Injecting Centre (MSIC)

Additional services

Occasions of additional service activity

Table 8-2 below illustrates the annual number of occasions the MSIC provided additional services (other than medically supervised injecting) by year (1 May to 30 April).

Additional services include:

- Advice and education on safer injecting practices and drug and alcohol treatment
- General health advice (e.g. sexual health and women's health advice)
- General medical services (e.g. first aid and wound treatments)
- Social services (e.g. assistance with accommodation, legal issues and crisis counselling)
- Provision of referral options, assessment and other information.

The occasions of additional service usage peaked in 2002-03, with 8,303 occasions of additional service being recorded. Provision of additional services has appeared to steadily decline since its 2002-03 peak, with 1,667 occasions being recorded in 2007-08. However, in 2008-09 and 2009-10, additional service usage increased (2,392 and 2,737, respectively).

Table 8-2: Number of visits in which at least one additional service was provided

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Total valid records	**8,109**	**8,303**	**8,196**	**5,060**	**3,487**	**2,492**	**1,667**	**2,392**	**2,737**	**42,443**

Source: Medically Supervised Injecting Centre (MSIC)

Total additional services delivered

Table 8-3 below shows the total annual number of additional services provided across all MSIC visits. The number of additional services provided peaked in 2002-03 at 10,681 and declined steadily to a low of 1,867 services in 2007-08. Additional services provided subsequently increased to 3,130 in 2009-10.

Table 8-3: Total number of additional services delivered

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Total valid records	**10,435**	**10,681**	**10,047**	**6,135**	**4,082**	**2,904**	**1,867**	**2,767**	**3,130**	**52,048**

Source: Medically Supervised Injecting Centre (MSIC)

Recording of additional services

The way that additional services were recorded changed during the current evaluation period. Prior to 16 October 2008, additional services were categorised by the type of service provided (e.g. MSIC core, general medical and psycho-social). From 17 October 2008, additional services were categorised according to the service activity undertaken (e.g. information provision, telephone calls, other medical).

The reason for the change was to capture more detail associated with referral activity and to allow better description of the range of activities undertaken associated with referrals.

From 17 October 2008, staff recorded when they provide information and explore referral options with clients, including if a referral is not accepted or possible. Potential reasons for this occurring include delay of accessing services and the referral not being accepted by the client (e.g. service not available same day or next day, or location not preferred). This discussion is important to record as it highlights when MSIC staff provided assistance to clients in moving from the pre contemplation and contemplation stage into action stage, and is more likely to lead to a successful subsequent referral (at a later time).

The data for provision of additional services for the two data ranges (and differing method to recording additional services) are displayed separately in the sections below.

2001-02 to 2008-09 (to 16 Oct 2008)

As shown in Table 8-4, the raw number of additional services provided has declined from 10,434 (2001-02) to 1,858 (2007-08)[116]. Similarly, the rate of additional services provided per 1,000 MSIC visits has declined almost 90% from 327.8 (2001-02) to 35.1 (2008-09). This may be reflective of the overall stabilisation of the MSIC population in terms of attendance frequency over time. For example, as shown in Figure 8-4, the proportion of all visits attributed to frequent MSIC attenders (those who visit the MSIC >98 times a year) has increased over time from 30% in 2001-02 to the majority (59%) in 2009-10. This increase coincides with the decrease in the rate of additional services provided per 1,000 visits.

As it is reasonable to assume that these clients do not receive additional services at every visit but attend frequently, this may explain the decrease in the rate of additional services recorded per 1,000 visits. In short, there appears to be an inversely proportional relationship between the proportion of visits attributed to frequent attenders and the rate of additional services provided per 1,000 visits.

Table 8-4: Additional services provided: 2001-08

	2001 02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09[117]	Total
Total services	**10,434**	**10,681**	**10,047**	**6,135**	**4,082**	**2,904**	**1,858**	**1,255**	**47,396**
Total visits	**31,827**	**56,876**	**80,331**	**68,880**	**72,520**	**82,085**	**72,504**	**35,769**	**500,792**
Rate of services/ 1000 visits	**327.8**	**187.8**	**125.1**	**89.1**	**56.3**	**35.4**	**25.6**	**35.1**	**94.6**

Source: Medically Supervised Injecting Centre (MSIC)

The tables below (Table 8-5, Table 8-6 and Table 8-7) provide detail on the additional services provided between 2001-02 and 2008-09.

Table 8-5: MSIC Core services provided: 2001-08

Service type	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09[118]	Total
Safer injecting/vein care advice	5,220 (77%)	5,307 (62%)	5,718 (69%)	2,965 (62%)	1,526 (52%)	795 (44%)	622 (59%)	378 (49%)	22,531 (64%)
Drug and alcohol treatment advice	906 (13%)	2,136 (25%)	1,889 (23%)	1,267 (27%)	976 (33%)	682 (37%)			7,856 (22%)
Other health education	266 (4%)	783 (9%)	550 (7%)	429 (9%)	407 (14%)	189 (10%)			2,624 (8%)
Counseling/Information/Assessment						85 (5%)	301 (28%)	287 (37%)	673 (2%)
Well woman advice	263 (4%)	226 (3%)	69 (1%)	38 (1%)	23 (1%)	17 (1%)			636 (2%)
Assessment for drug treatment						22 (1%)	78 (7%)	107 (14%)	207 (1%)
Sexual health advice	65 (1%)	38 (<1%)	24 (<1%)	23 (<1%)	21 (1%)	5 (<1%)			176 (1%)
Other unspecified - MSIC Core	34 (1%)	38 (<1%)	51 (1%)	35 (1%)	7 (<1%)	27 (1%)	56 (5%)		248 (1%)
Total MSIC Core services	***6,754***	***8,528***	***8,301***	***4,757***	***2,960***	***1,822***	***1,057***	***772***	***34,951***
Additional services/ 1,000 visits	***212.2***	***149.9***	***103.3***	***69.1***	***40.8***	***22.2***	***14.6***	***21.6***	**69.8**

Source: Medically Supervised Injecting Centre (MSIC)

Table 8-6: General medical services provided: 2001-08

Service type	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09[119]	Total
Wound dressing/tissue trauma	254 (26%)	255 (37%)	139 (29%)	204 (45%)	112 (35%)	105 (32%)	90 (31%)	52 (28%)	1,211 (33%)
Skin disorder (e.g. abscess rash)	137 (14%)	113 (16%)	97 (21%)	60 (13%)	32 (10%)	42 (13%)	41 (14%)	32 (17%)	554 (15%)
Other unspecified - Gen Med	60 (6%)	46 (7%)	31 (7%)	42 (9%)	22 (7%)	33 (10%)	32 (11%)		266 (7%)
Women's health advice	42 (4%)	27 (4%)	14 (3%)	14 (3%)	6 (2%)	7 (2%)	5 (2%)	5 (3%)	120 (3%)
Sexual health information	58 (6%)	7 (1%)	8 (2%)	1 (<1%)	4 (1%)	8 (2%)	5 (2%)	3 (2%)	94 (3%)
Asthma/Chest infection	13 (1%)	11 (2%)	13 (3%)	6 (1%)	5 (2%)	8 (2%)	12 (4%)	10 (5%)	78 (2%)
Other medical	424 (43%)	228 (33%)	171 (36%)	122 (27%)	137 (43%)	123 (38%)	107 (37%)	82 (45%)	1,394 (38%)
Total general medical	***988***	***687***	***473***	***449***	***318***	***326***	***293***	***183***	***3,717***
Additional services/ 1,000 visits	***31.0***	***12.1***	***5.9***	***6.5***	***4.4***	***4.0***	***4.0***	***5.1***	***7.4***

Source: Medically Supervised Injecting Centre (MSIC)

Table 8-7: Psycho-social services provided: 2001-08

Service type	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09[120]	Total
Accommodation	210 (8%)	255 (17%)	343 (27%)	254 (27%)	214 (27%)	213 (28%)	140 (28%)	103 (34%)	1,732 (20%)
Crisis Counseling	152 (6%)	109 (7%)	101 (8%)	72 (8%)	84 (10%)	76 (10%)	44 (9%)	36 (12%)	674 (8%)
Legal Issues	210 (8%)	138 (9%)	107 (8%)	81 (9%)	51 (6%)	41 (5%)	26 (5%)	13 (4%)	667 (8%)
Finances	32 (1%)	23 (2%)	37 (3%)	28 (3%)	13 (2%)	10 (1%)	4 (1%)	12 (4%)	159 (2%)
Other unspecified - Psych	102 (4%)	73 (5%)	36 (3%)	55 (6%)	49 (6%)	38 (5%)	20 (4%)		373 (4%)
Other Counseling	1,635 (61%)	694 (47%)	447 (35%)	284 (31%)	239 (30%)	191 (25%)	125 (25%)	104 (35%)	3,719 (43%)
Other	351 (13%)	174 (12%)	202 (16%)	155 (17%)	154 (19%)	187 (25%)	149 (29%)	32 (11%)	1,404 (16%)
Total psycho-social	***2,692***	***1,466***	***1,273***	***929***	***804***	***756***	***508***	***300***	***8,728***
Additional services/1,000 visits	***84.6***	***25.8***	***15.8***	***13.5***	***11.1***	***9.2***	***7.0***	***8.4***	**17.4**

Source: Medically Supervised Injecting Centre (MSIC)

In summary, the largest proportions of additional services provided between 2001-02 to 16 October 2008 were for: advice on safer injecting including vein care, drug and alcohol treatment advice, wound dressing/tissue trauma and accommodation services.

2008-09 (from 17th Oct 2008) to 2009-10

As noted on page 116, from 17 October 2008, additional services provided were categorised by the service activity undertaken. As shown in Table 8-8, the rate of additional services provided increased from 38.6 per 1,000 MSIC visits in 2008-09 to 45.2 in 2009-10[121].

Table 8-8: Additional services provided: 2008-10

	2008-09[122]	2009-10	Total
Total services	**1,510**	**3,130**	**4,640**
Total visits	**39,083**	**69,302**	**108,385**
Additional services/ 1000 visits	**38.6**	**45.2**	**42.8**

Source: Medically Supervised Injecting Centre (MSIC)

The tables below (Table 8-9, Table 8-10 and Table 8-11) provide detail on the additional services provided between 2008-09[123] and 2009-10.

Table 8-9 provides the detail on the provision of information, assessment or referral options to clients. This information reflects activities undertaken that have not led to the acceptance of a referral by the client. However, in the context of the Stages of Change model described previously, this 'pre-referral' activity can be seen as addressing the needs of clients who are still unsure about change (in the language of the model, in pre-contemplation or contemplation stages). This activity is essential in supporting behaviour change, particularly with a group who have not previously had contact with drug treatment services.

Table 8-9: Information, assessment, referral options provided: 2008-10

Service type	2008-09[124]	2009-10	Total
Safer injecting advice (including overdose risk advice)	248 (29%)	675 (32%)	923 (31%)
Drug and alcohol treatment	223 (26%)	397 19%)	620 (21%)
Vein care advice	137 (16%)	407 (19%)	544 (18%)
Other medical issues	52 (6%)	137 (6%)	189 (6%)
Other, please specify	57 (7%)	127 (6%)	184 (6%)
Other Counseling	55 (6%)	112 (5%)	167 (6%)
Mental health	19 (2%)	45 (2%)	64 (2%)
Blood-borne viruses	11 (1%)	47 (2%)	58 (2%)
Social security/employment	26 (3%)	32 (1%)	58 (2%)
Nutrition	3 (0%)	47 (2%)	50 (2%)
Sexual health/reproductive health	10 (1%)	39 (2%)	49 (2%)
Legal Issues	8 (1%)	36 (2%)	44 (1%)
Crisis Counseling	5 (1%)	38 (2%)	43 (1%)
Total Information/Assessment/ Referral options discussed	***854***	***2,139***	***2,993***
Additional services/1,000 visits	**23.9**	**54.7**	**27.61**

Source: Medically Supervised Injecting Centre (MSIC)

Table 8-10 below provides information on telephone calls made or facilitated where the client had agreed to seek a referral but there may not have been a successful outcome of that referral. In other words, the client was ready to consider making a change but a subsequent barrier meant this was not possible. Reasons for not achieving a successful referral may include lack of service availability, or delay of days or weeks to access a service, the client declining to proceed or other changed circumstances.

Table 8-10: Telephone calls made or facilitated: 2008-10

Service Type	2008-09[125]	2009-10	Total
Drug and alcohol treatment	102 (30%)	170 (32%)	272 (31%)
Accommodation/housing	99 (29%)	138 (26%)	237 (27%)
Legal Issues	29 (8%)	46 (9%)	75 (9%)
Transport - including Mission Beat	23 (7%)	29 (5%)	52 (6%)
Shower/Food/Laundry or other practical assistance	14 (4%)	18 (3%)	32 (4%)
Intoxicated Persons Unit	15 (4%)	7 (1%)	22 (3%)
Probation and Parole	8 (2%)	12 (2%)	20 (2%)
Other	55 (16%)	113 (21%)	168 (19%)
Total telephone calls made or facilitated	***345***	***533***	***878***
Additional services/1,000 visits	**9.6**	**13.6**	**8.1**

Source: Medically Supervised Injecting Centre (MSIC)

Table 8-11: Other practical health/medical services provided: 2008-10

Service Type	2008-09[126]	2009-10	Total
Wound dressing	103 (33%)	122 (27%)	225 (29%)
Medication provided	32 (10%)	115 (25%)	147 (19%)
First aid treatment	44 (14%)	85 (19%)	129 (17%)
Other	132 (42%)	136 (30%)	268 (35%)
Total other practical health/medical services provided	***311***	***458***	***769***
Additional services/1,000 visits	**8.7**	**11.7**	**7.1**

Source: Medically Supervised Injecting Centre (MSIC)

Surveyed clients were asked *'What do you think about the MSIC staff and services: availability of information about other services?'* The majority of clients reported this was very good (68%) or good (20%).

In summary, consistent with the additional services provided between 2001-02 to 16 October 2008, the largest proportions of additional services provided between 17 October 2008 and 30 April 2010 were for: advice for safer injecting including vein care, drug and alcohol treatment advice, wound dressing and accommodation services.

The relative proportion of provision of these services would suggest that the MSIC provides an appropriate mix of services for the client cohort.

Client referrals

All clients are offered referral during their initial registration. Client referrals are recorded at each stage in the MSIC - during Stage 1 (Waiting Room and Assessment Area), Stage 2 (the Injecting Room) or Stage 3 (the After Care Area). Referrals may also be provided to clients offsite once they have left the premises. Details of referrals are recorded as formal referrals only when a client accepts them. For example, if staff encourage a client to seek further assistance/treatment and the client does not accept the offer of referral, this is not recorded as a referral. However, in this instance, and where the client has accepted a referral but no service/treatment place is available, the activity may be recorded as an additional service (as described in Section 8.4 above).

Total number of client referrals

Client referrals may be made to three broad types of services: drug treatment, health care and social welfare services. Each of these types of referrals is described in further detail in the following sections.

At an overall level, the total number of referrals increased from 946 in 2001-02 to a peak of 1,260 in 2004-05, before declining to a low of 648 in 2009-10. Table 8-12 shows the number of client referrals and rate of referral per 1,000 visits per year (May-April). The rate of referral per 1,000 visits has declined from a peak of 29.7 in 2001-02 to 9.4 in 2009-10. It is important to note that the rate of referral per 1,000 visits has stabilised from 2006-07 onwards (compared to the variation in rates for the period 2001-02 to 2005-06), with a range from 9.4 to 11 referrals per 1,000 visits. The initial high rates may reflect a response to unmet need as injecting drug users who have not previously been in contact with other services were supported to engage with other services.

Similarly, there has been a decline and relative stabilisation in the rate of referral per 1,000 clients from a peak of 355.9 in 2001-02 to 244.8 in 2009-10, with a range from 244.8 to 294.3 referrals per 1,000 clients from 2006-07 to 2009-10.

The stabilisation in the rates of referral are consistent with the trends in proportion of visits by client visit frequency and the proportion of clients accepting referrals by client visit frequency. This relationship is explored further in Section 8.5.1.

Table 8-12: Client referrals by year (May – April)

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Total
Total referrals	**946**	**971**	**1,022**	**1,260**	**1,221**	**860**	**801**	**779**	**648**	**8,508**
Total visits	**31,827**	**56,876**	**80,331**	**68,880**	**72,520**	**82,085**	**72,504**	**74,852**	**69,302**	**609,177**
Total clients	**2,658**	**3,286**	**3,599**	**3,421**	**3,278**	**3,029**	**2,722**	**2,780**	**2,647**	**27,420**
Rate of referral/ 1,000 visits	**29.7**	**17.1**	**12.7**	**18.3**	**16.8**	**10.5**	**11.0**	**10.4**	**9.4**	**14.0**
Rate of referral/ 1,000 clients	**355.9**	**295.5**	**284.0**	**368.3**	**372.5**	**283.9**	**294.3**	**280.2**	**244.8**	**310.3**

Source: Medically Supervised Injecting Centre (MSIC)

A gateway to drug treatment?

The referral of clients is a key role of the MSIC and helps clients to create linkages with other services, such as drug and alcohol treatment and healthcare services. Different client cohorts react to coercion in varying ways and there is growing consensus of the importance, separate from the application of any social controls or pressures, of fostering and supporting autonomous motivation for achieving positive outcomes[127].

In order for MSIC (or other service providers) to support access to services, it is important that referrals occur at the right point in time. Prochaska and DiClemente have identified that individuals with addictive behaviours go through four key stages:

- **Pre-contemplation:** During this stage, clients are most resistant to efforts to help them change, and individuals process less information about their problems, spend less time and energy re-evaluating themselves, are less likely to be open with significant others and experience fewer emotional reactions to the negative aspects of their problems.
- **Contemplation:** Clients in this stage are observed to be most open to consciousness-raising interventions and are much more likely to use educational interventions. During this phase, clients are increasingly more aware of the nature of their problems and are able to assess changes to their sense of self. For example, clients may ask themselves questions such as 'What if I fail to change?' and 'If all of my friends are in the same situation, will I risk rejection if I give up?'
- **Action**: This stage is particularly stressful and is likely to involve opportunities for experiencing coercion, guilt, failure and the limits of personal freedom. As such, the existence of supportive relationships is important. Throughout this stage, clients should be acting from a sense of self-liberation and belief that they have the autonomy to change their lives. In order to get through this stage, clients need to

maintain effective behavioural processes, such as stimulus control and contingency management.

- **Maintenance:** Success in this stage builds on each of the processes that has come before and requires preparation to help clients to openly assess the conditions under which they are likely to relapse. This preparation needs to involve an assessment of the alternatives they have for coping with these conditions without resorting to self-defeating responses.

Stages of change in other situations

This model of understanding and responding to each person's stage is also recommended for Australian GPs in relation to smoking cessation. The Commonwealth Guidelines on smoking cessation recommend that GPs assess all patients as to their *'readiness to change'.*

Cigarette cessation research shows that in the Australian smoking population, most smokers are either 'not ready' (pre-contemplating), quitting (37%) or 'unsure' (contemplating) about quitting (42%).

Challenges associated with providing a gateway to drug treatment for injecting drug users are echoed in advice given to GPs by the Australian Commonwealth Government on smoking cessation that applies to the staff at the MSIC.

Figure 8-2: Smoking Cessation Guidelines for Australian General Practice excerpt

"Distinguish smokers thinking they should quit from readiness to quit. There are 80-90% of smokers who think they should quit, but only 20% are actually committed to quitting now.

The difficulty of quitting smoking, in the context of physical and psychosocial dependence, needs to be acknowledged.

All groups can be helped, but each group requires a different and targeted intervention with a different aim. Being patient-centred and non-judgmental is useful in all approaches.

Redefine success. Success is defined as movement through the model, not just quitting. Every time you help someone move one stage, you double his/her chance of success 2 years later. Change may be delayed and not apparent in the short term. Motivation to change can also change over short periods so windows of opportunities to assist can occur and flagging motivation can need to be 'shored up'.

Choosing an effective approach: more time is spent on those people most likely to benefit and most interested in getting some help. The clinician is also spared the frustration of failure in trying to help those who are "Not Ready" to quit and the risk of generating resistance is lessened. Interventions targeted to the stage of change are also more likely to be effective.

Relapse is a normal part of the quitting process. Most successful ex-smokers make 3 - 4 serious quit attempts before finally breaking their habit."[128]

Application to opioid-dependent clients

Rather than providing referrals in the pre-contemplation stage, when they are less likely to be acted on (and potentially damaging the therapeutic relationship and future openness to contemplating change), MSIC staff have a role in supporting clients through this phase to minimise risks to their safety and wellbeing. This support aims to help clients to move through the 'pre-contemplation' phase and to access services when they are ready.

Key evidence in this field suggests that opioid-dependent people do not enter treatment immediately after they become dependent[129]. For example, NSW data suggests the minimum time from dependence to drug treatment for injecting drug users is 3.3 years.

It has also been noted that, for some people, heroin addiction can be a lifelong condition, with the potential for relapse after long periods of abstinence[130]. As such, people may come into contact with services such as the MSIC and drug and alcohol treatment services at multiple times in their life.

Referral processes supporting a gateway to drug treatment

The MSIC offers a gateway to drug treatment through the following key mechanisms:

- the service model is 'low threshold' which means all possible barriers are removed to encourage potential clients to use the service
- at registration, all potential clients undergo a comprehensive assessment (including previous drug use, physical and mental health, and accommodation status) and are offered information and assistance for all areas of concern, including drug treatment
- during each visit, staff provide useful, non-judgemental information and assistance, and pay attention to the general wellbeing of clients on each occasion, which builds client trust over time
- after a person has injected, they move to an after-care area where they wait until they are assessed as 'fit to proceed' outside, where staff can engage with them about their immediate needs and service options, including drug treatment.

As described further in this section, the MSIC employ a dedicated Case Referral Coordinator to support referrals to drug treatment. There is access to brokerage funding that allows the most vulnerable clients to access private drug treatment places, and there is a service arrangement for the MSIC with a local public drug treatment service (the NSW Health funded Langton project) which provides the MSIC with a formal referral process for MSIC clients to access dedicated public drug treatment places with additional case management for six months.

Finally, it is important to reiterate that injecting drug use is a chronic and relapsing condition and that, while drug treatment is effective in significantly reducing levels of drug use (and providing other benefits, such as improved health outcomes and increased stability in a person's life), people receiving drug treatment may still, on occasion, continue to inject. Retaining an open-door policy for clients who have been

referred to drug treatment and who are using occasionally or starting to relapse is a strength of the MSIC, both in terms of supporting safer injecting, as well as providing the client with opportunities to be supported to try drug treatment again.

Referrals to public drug and alcohol treatment

Between 2001-02 to 2009-10, a total of 3,871 MSIC clients accepted a referral to drug treatment. These are in addition to pre-referral and unsuccessful referrals described in the previous section. Table 8-13 shows the proportions of accepted drug and alcohol referrals by type. An increasing number (26% in 2003-04 to 52% in 2009-10) of referrals were for pharmacotherapy drug treatment (methadone or buprenorphine), and 19% (2001-02) 43% (2005-07) were for a detoxification program. Eight to 29% of drug dependence treatment referrals were for drug and alcohol counselling and between 5% and 14% were for residential rehabilitation. The remaining drug and alcohol referrals were for Narcotics Anonymous/self help or naltrexone maintenance treatment.

As presented in Table 8-13, between 2001-02 to 2005-06 the rate of referral fluctuated from a high of 13.3 (2001-02) to a low of 5 (2003-04). Rates of referral per 1,000 visits from 2006-07 onwards stabilised, with a range between 4.6 and 5.3 referrals per 1,000 visits (declining by less than one referral per 1,000 visits over the period). These findings are consistent with the trend for all referrals (including drug treatment, health care, and social welfare and other referrals).

Similarly, the rate of referral to drug treatment per 1,000 clients has fluctuated from a high of 158.8 in 2001-02 to a low of 111.4 in 2003-04, with an average of 141.2 referrals per 1,000 clients over the nine year reporting period. The referral rate was more stable from 2006-07 onwards than in previous years, albeit with a modest decline over the four year period.

The stabilisation of referral rates in the most recent four year period is likely due to the stabilisation of the overall mix of MSIC clients. This is highlighted by the fact that, in the initial five years of the MSIC operation, the proportion of visits attributed to clients under different visit frequency categories varied, whereas in the last four years, these proportions have remained constant. Most notably, in the first five years of operation the number of visits attributed to 'frequent' (>98 visits in a year) attenders ranged between 30% and 55%, whereas, in the last four years, this proportion has remained constant at around 60% of all visits (see Figure 8-4).

This period also coincides with the stabilisation of two other key indicators: the annual rate of registration of new clients (see Figure 5-1) and the rate of acceptance of referrals to all other services (see Table 8-12). In combination, these factors reflect a more stable mix of clients, with the majority of visits being attributed to long-term, regular injecting drug users.

It should be noted that in addition to referrals that were accepted by the client and formally recorded as such, from 2008 onwards, further detail was recorded regarding additional services in the form of telephone calls made or facilitated (i.e. referrals) on behalf of the client. This included a number related to drug and alcohol treatment in which a referral was accepted by the client, but no drug treatment place could be provided to the client. These can be considered 'attempted referrals', and provide a

proxy measure of unmet demand for drug and alcohol treatment services. There were 85 and 155 attempted referrals in 2008-09 and 2009-10, respectively.

Table 8-13: Drug dependence treatment referrals

Referral type	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Total
Pharmacotherapy treatment[131]	221 (52%)	192 (43%)	106 (26%)	159 (31%)	230 (38%)	148 (34%)	149 (40%)	175 (49%)	189 (59%)	1,569 (41%)
Detoxification program	79 (19%)	115 (25%)	116 (29%)	207 (41%)	259 (43%)	186 (43%)	129 (35%)	117 (33%)	84 (26%)	1,292 (33%)
Drug and alcohol counseling	91 (22%)	91 (20%)	104 (29%)	75 (15%)	64 (11%)	41 (9%)	46 (12%)	37 (10%)	27 (8%)	576 (15%)
Residential rehabilitation	28 (7%)	41 (9%)	56 (14%)	53 (10%)	42 (7%)	43 (10%)	33 (9%)	21 (6%)	17 (5%)	334 (9%)
Narcotics Anonymous/self help		12 (3%)	18 (4%)	10 (2%)	9 (1%)	10 (2%)	4 (1%)	9 (3%)	5 (2%)	77 (2%)
Naltrexone maintenance	3 (1%)		1 (<1%)	3 (<1%)	2 (<1%)	5 (1%)	8 (2%)	1 (<1%)		23 (1%)
Total drug treatment referrals	***422***	***451***	***401***	***507***	***606***	***433***	***369***	***360***	***322***	***3,871***
Referral rate/1,000 visits	***13.3***	***7.9***	***5.0***	***7.4***	***8.4***	***5.3***	***5.1***	***4.8***	***4.6***	***6.4***
Referral rate/1,000 clients	***158.8***	***137.2***	***111.4***	***148.2***	***184.9***	***143.0***	***135.6***	***129.5***	***121.6***	***141.2***
Attempted drug and alcohol referrals[132]								85	155	

Source: Medically Supervised Injecting Centre (MSIC)

Referrals to brokered drug and alcohol treatment

In addition to referrals to local public drug treatment services described on the previous page, the MSIC also provided brokered referrals.

There have historically been challenges in obtaining local public drug treatment places in a timely manner due to waiting lists, thereby losing the short and critical *'window of opportunity'* to assist someone move into drug treatment. These services also restricted access to people who were resident in the local area, which precluded people of no fixed address.

In recognition of the importance of providing people with access to drug treatment when they decide they wanted to change, a Case Referral Coordinator role was introduced within the MSIC and one-off funding provided by NSW Health for the MSIC to purchase private drug treatment places to MSIC clients who would otherwise be unable to access drug treatment services.

Drug treatment brokerage is coordinated by the Case Referral Coordinator (CRC). The typical process for drug treatment brokerage is:

- the CRC orients all new staff at the MSIC about the option for brokered drug treatment and processes of referring to the CRC
- MSIC staff identify individuals who have indicated an interest in drug treatment and refer them to the CRC
- the CRC spends time on the floor of the MSIC
- the CRC assesses the person for brokerage, including identifying the most appropriate service, which is typically a private alcohol and drug clinic
- the CRC organises for the client to attend the private clinic, which is usually on the same day as they have indicated they wish to commence drug treatment
- the client is put on an initial 28 day period of drug treatment so the CRC can assess how they are progressing in this period, this may be extended for up to three months
- while the person is accessing private drug treatment, the CRC seeks public drug treatment options for longer-term drug treatment.

Brokerage supported almost 6% of referrals in drug treatment in 2009[133]. In the period from February 2009 to April 2010, 60 brokered referrals were made by the MSIC for drug treatment (43 in 2009, 17 in 2010). This includes two individuals who received brokerage drug treatment twice.

All clients who received a brokered referral commenced drug treatment. The majority of individuals (92%) who received brokered drug treatment and were referred for drug treatment received maintenance dosing regimes in privately operated clinics[134]. Three clients undertook short-term, medicated detoxification. Two further clients were supported to access rehabilitation services through brokerage.[135]

Of the 60 individuals who were referred for brokered drug treatment[136], nearly two-thirds (63%) have had successful outcomes from the referral:

- 20 continued with drug treatment, under continuing brokerage (10), through self funded means (8) or were provided a short period of financial support to continue treatment (2)15 were transferred to the NSW Health funded places reserved for MSIC clients at the Langton Centre
- 2 completed short term detoxification programs funded through brokerage
- 1 attended and completed residential rehabilitation.

External factors appear to have impacted on drug treatment for 16 individuals:

- 8 ceased for financial reasons once the brokerage period finished
- 3 relocated interstate, with 3 other individuals leaving the Kings Cross area (one temporarily)
- 2 were imprisoned.

A relatively small proportion of individuals are recorded as withdrawing or being discharged from drug treatment:

- 2 individuals withdrew from the program
- 2 did not attend regularly and were discharged
- 1 attended a residential rehabilitation centre for six weeks prior to self-discharging
- 1 decided not to pursue brokered treatment further.

Referrals to dedicated places at a local public drug treatment service

Recognising the importance of timely access to the uptake of drug treatment, NSW Health also provided additional funds to a local alcohol and drug treatment facility to facilitate access to dedicated places for MSIC clients (referred to as the NSW Health funded Langton project).

The evaluation is coordinated by a dedicated registered nurse case manager who works closely with the MSIC Case Referral Coordinator. Prescribing is conducted by a medical practitioner who also practices at the Langton Centre, MSIC and the Kirketon Road Centre. Information sharing is supported between the MSIC and the Langton Centre by clients signing a release of information form. Potential geographical barriers to access are removed as MSIC clients are not required to reside within the Area Health Service (as is usually the case).

This model includes:

- up to 2 new assessments per week for MSIC clients for a total case load of 20 clients for maintenance drug treatment
- up to 1 detox referral each week for MSIC clients
- assertive follow-up if people do not attend and the place is held available for 14 days
- clients remaining in drug treatment for more than 6 months are transferred to the general caseload of maintenance clients at the Langton Centre.

Data provided by the Langton Centre show that, for the period since inception (August 2009) to May 2010, there were 28 clients referred to the maintenance drug treatment program, of whom:

- 6 did not commence drug treatment
- 7 did not complete drug treatment
- 2 went to prison and continued drug treatment

- 1 transferred to another community provider

At the time of analyses, there were 12 clients in drug treatment at the Langton Centre:

- 3 had been attending for less than three months
- 9 had been attending for three to six months

In addition, 5 clients had been in the program for more than 6 months and had been transferred to the general Langton Centre caseload[137].

Impact of new referral mechanisms on uptake of drug treatment

Findings for referral processes used during this current evaluation period indicate significantly increased uptake of drug treatment referrals compared to previous research for the period May 2001 to October 2002. This earlier research showed that 16% of MSIC clients who had a written referral to an alcohol and drug agency presented to that agency for an assessment for drug treatment[138].

In contrast, the new referral mechanisms suggest 100% uptake of brokered referrals to private drug treatment and 78% to public treatment at the Langton Centre.

Surveyed clients were asked *'What do you think about the MSIC staff and services: referrals to drug treatment services from MSIC staff'?* The majority reported this was very good (62%) or good (19%). 10% reported this did not apply to them.

Drug and alcohol counselling was the most common type of drug and alcohol support accessed by interviewees since they started at the MSIC (25 of 35 interviewees), with opioid replacement therapies the second most commonly accessed service (19 of 35 interviewees).

Healthcare referrals

As shown in Table 14-1, the largest proportion of healthcare referrals was for medical consultation (including dental) (59%-78%), while the second largest proportion was for health education (3%-33%). Between 4% and 24% of healthcare referrals were for blood-borne virus/sexually transmitted disease testing. Recording of referrals to Mental Health Services commenced in 2008 and the proportion of referrals for Mental Health Services decreased marginally from 8% to 7% of total healthcare referrals between 2008-09 and 2009-10. However, given the low absolute numbers of mental health referrals, this decline is not considered significant.

Table 8-14: Healthcare referrals

Referral type	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Medical consultation[139]	177 (71%)	196 (78%)	196 (59%)	232 (59%)	163 (64%)	114 (64%)	144 (71%)	130 (68%)	109 (66%)	1,461 (64%)
Health education	42 (17%)	47 (19%)	127 (33%)	131 (33%)	130 (32%)	56 (32%)	36 (18%)	13 (7%)	5 (3%)	587 (26%)
Blood-borne virus/ Sexually transmitted infection Testing	29 (12%)	9 (4%)	16 (8%)	32 (8%)	16 (4%)	7 (4%)	23 (11%)	32 (17%)	39 (24%)	203 (9%)
Mental Health Services[140]								16 (8%)	11 (7%)	27 (1%)
Total healthcare referrals	***248***	***252***	***339***	***395***	***309***	***177***	***203***	***191***	***164***	***2,278***
Referral rate/1,000 visits	***7.8***	***4.4***	***4.2***	***5.7***	***4.3***	***2.2***	***2.8***	***2.6***	***2.4***	***4***
Referral rate/1,000 clients	***93.3***	***76.7***	***94.2***	***115.5***	***94.3***	***58.4***	***74.6***	***68.7***	***62.0***	***83***

Source: Medically Supervised Injecting Centre (MSIC)

Surveyed clients were asked *'What do you think about the MSIC staff and services: referrals to general health services from the MSIC staff'?.* The majority reported this was very good (77%) or good (16%).

Of the interviewees who had accessed other health and support services since coming to the MSIC, the most common type of service accessed was General Health (25 of 40 responses).

Social welfare referrals

The largest proportion of social welfare referrals was for social welfare assistance (19% to 67%). The recording of referrals to accommodation, legal or welfare services commenced in 2009. In 2009-10, referrals to accommodation services constituted 15% of total social welfare referrals, while referrals to legal or welfare services made up 2% and 1%, respectively. Between 33% and 62% of social welfare referrals were for services 'other' than those specifically listed.

Table 8-15: Social welfare and other referrals[141]

Referral type	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Total
Social welfare assistance	118 (43%)	163 (61%)	189 (67%)	199 (56%)	151 (60%)	99 (40%)	115 (50%)	105 (46%)	31 (19%)	1,170 (50%)
Accommodation*									25 (15%)	25 (1%)
Legal*									4 (2%)	4 (<1%)
Welfare*									2 (1%)	2 (<1%)
Other	158 (57%)	105 (39%)	93 (33%)	159 (44%)	155 (40%)	151 (60%)	114 (50%)	123 (54%)	100 (62%)	1,158 (49%)
Total social welfare referrals	***276***	***268***	***282***	***358***	***306***	***250***	***229***	***228***	***162***	***2,359***
Referral rate/ 1,000 visits	***8.7***	***4.7***	***3.5***	***5.2***	***4.2***	***3.0***	***3.2***	***3.0***	***2.3***	***3.9***
Referral rate/ 1,000 clients	***103.8***	***81.6***	***78.4***	***104.6***	***93.3***	***82.5***	***84.1***	***82.0***	***61.2***	***86.0***

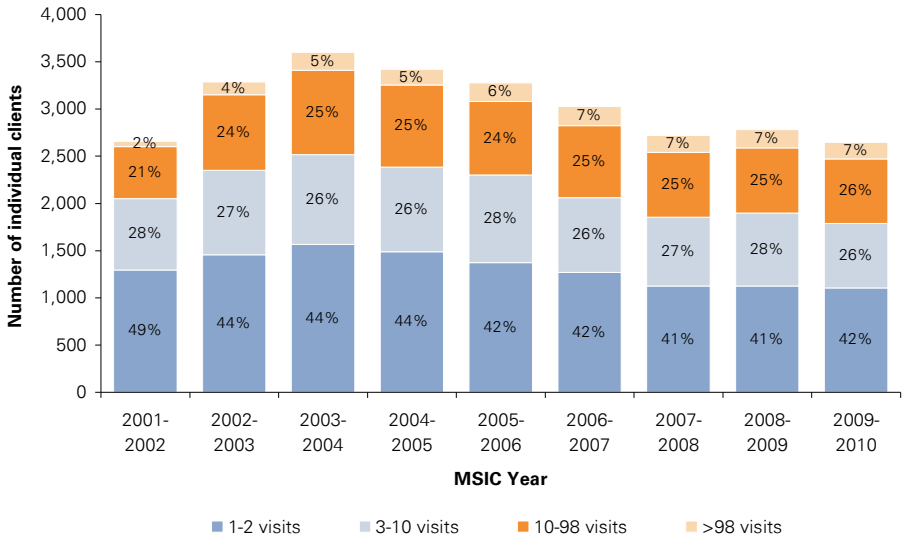
Source: Medically Supervised Injecting Centre (MSIC)

Referrals for frequent MSIC attenders

An analysis was undertaken to determine whether the proportion of frequent attenders to the MSIC who accepted referrals was similar to that of less frequent attenders. The analysis presented in Section 4.1.3 for frequency of client attendance at the MSIC and proportion of visits by client visit frequency is repeated in this section for context to the analysis conducted for referrals for frequent MSIC attenders.

Figure 8-3 shows the number and proportion of clients visiting the MSIC each year according to the total number of visits within that year. The largest proportion (41-49%) of clients within a given year was those who had 1-2 visits within that year. There were almost equivalent proportions of clients who had 3-10 visits to the MSIC within a given year (26%-28%) as there were those who had 11-98 visits to the MSIC within a given year (21%-26%). A small proportion of clients (2-7%) visited the MSIC greater than 98 times in a year (ranging from 99-1,105 visits).

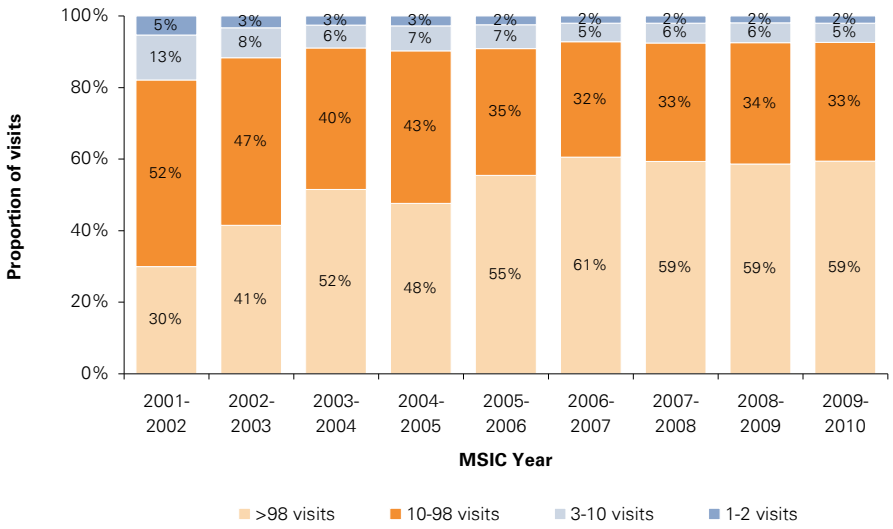
Figure 8-3: Frequency of client attendance at the MSIC



Source: Medically Supervised Injecting Centre (MSIC)

Figure 8-4 presents the proportion of total visits associated with clients within each category of visit frequency. While clients who visit the MSIC more than 98 times within a given year constitute only 2-7% of total clients in a given year, they account for the largest proportion of total visits (30% - 59%). Clients who visit the MSIC 11-98 times in a given year account for 32%-52% of total visits, while those visiting the MSIC either 3-10 or 1-2 times account for 5-13% and 2-5% of total visits respectively.

Figure 8-4: Proportion of visits by client visit frequency



Source: Medically Supervised Injecting Centre (MSIC)

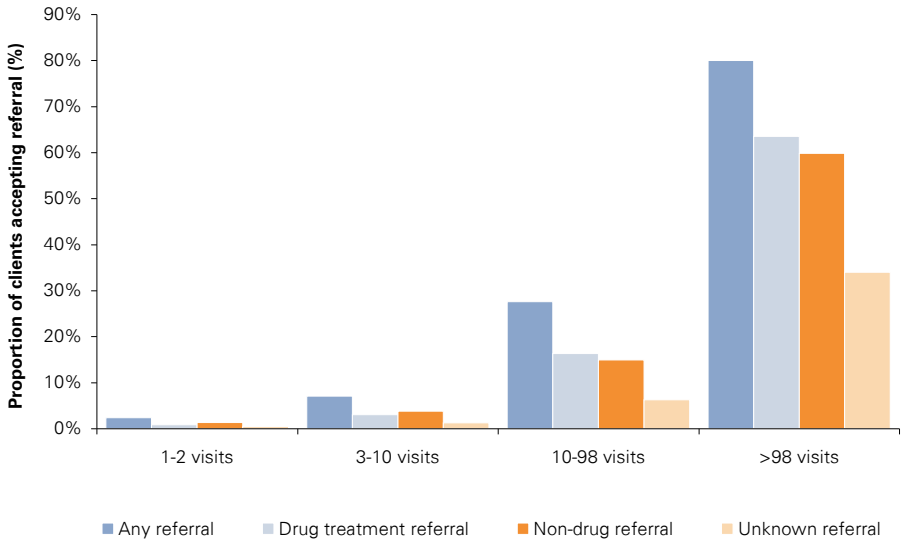
Figure 8-5 presents the number and proportion of clients, according to frequency of visit, that were recorded as having accepted at least one referral (for any purpose), at least one referral for drug treatment, at least one non-drug treatment referral or at least one referral for an unknown reason. It should be noted that these categories were considered mutually-exclusive and a client may have accepted a referral in one or more categories.

Overall, the more frequently a client visited the MSIC, the more likely they were to have accepted a referral to another service. Notably, approximately 2% of clients that had visited 1-2 times accepted a referral, approximately 7% of clients that visited 3-10 times accepted a referral, this increased to 28% of clients that visited 10-98 times and 80% of frequent attenders (>98 total visits) had accepted at least one referral.

More specifically, 64% of frequent attenders (>98 total visits) accepted a referral to drug treatment, whereas only 1% of infrequent attenders (1-2 total visits) accepted a referral to drug treatment. Similarly, 60% of frequent attenders (>98 total visits) accepted a non-drug treatment referral, compared to 1% of infrequent attenders (1-2 total visits).

These findings demonstrate that the low threshold service model employed by the MSIC, and referral processes, is successful in engaging with and supporting this particularly vulnerable group of frequent injecting drug users to move towards accepting referrals (many of whom have not previously had contact with the wider service system).

Figure 8-5: Proportion of clients accepting referrals by client visit frequency



Source: Medically Supervised Injecting Centre (MSIC)

Client survey findings – stages of change and accepted referral for drug treatment

It is also noted that in the written client survey conducted, there was a group of clients who identified they were not currently thinking about changing their drug use (10% of clients indicating that referrals to drug treatment 'does not apply to me'), a group who stated they were seeking to manage their drug use themselves (74%) and a group who reported MSIC had 'helped me start drug treatment' (57%). It is important to note that these groups are not exclusive, and suggests a higher proportion of clients accepting referrals than described in the activity data. In part this can be explained by the fact that people may make multiple attempts of trying to reduce and cease their drug use. It is also reflects that the survey sample mostly likely included a large proportion of MSIC clients who frequently attend the MSIC (i.e. they frequent the MSIC regularly and therefore are more likely to be in attendance and complete the survey during the evaluation period than clients who attend the MSIC on a less frequent basis). As described in Figure 8.5, more frequent attenders are more likely to have accepted a referral.

Comparison of referrals provided by NSW Needle Syringe Program

For comparison, Table 8-16 below shows the total number of NSP services and referrals provided in NSW overall and in SESIAHS for the period of 2005-2009. It is important to note when making this comparison that, while the MSIC and the NSP are broadly comparable in that they are low threshold services for injecting drug users, they do not provide an identical service model or the same range of services.

The number of services and referrals are presented as a proportion of all activity listed in that period. More than two thirds of recorded activity relates to NSPs dispensing equipment and/or education resources. About a quarter of services recorded relate to verbal discussions onsite (education, health promotion, advice and counselling). Referrals to other services are relatively uncommon. About one per cent of recorded activities related to referrals to a drug and alcohol service.

Table 8-16: Services and referrals provided by NSW Needle Syringe Program (2005-09)

	NSW total	NSW %	SESIAHS total	SESIAHS %
Type of NSP service provided to clients				
Dispensing equipment &/or education resources	966,792	68.27%	203,837	68.74%
Verbal education/health promotion	216,439	15.28%	49,265	16.61%
Verbal advice/Counselling	107,594	7.60%	26,728	9.01%
Hepatitis A/B vaccination	4,004	0.28%	59	0.02%
Hepatitis C screening	1,705	0.12%	101	0.03%
Clinical treatment	8,789	0.62%	684	0.23%
Overdose management	2,788	0.20%	154	0.05%
Other	48,199	3.40%	3,370	1.14%
Number of referrals provided by NSP Services				
Primary NSP outlet	13,151	0.93%	3,631	1.22%
AOD service provided by AHS	9,807	0.69%	2,609	0.88%
Other Health Service	6,263	0.44%	1,165	0.39%
Sexual Health Service	6,086	0.43%	937	0.32%
Other Non-Health Service	5,633	0.40%	616	0.21%
Medical Practitioner	5,535	0.39%	1,046	0.35%
AOD service provided by NGO or other non-AHS	3,788	0.27%	712	0.24%
Hepatitis Clinic	3,261	0.23%	338	0.11%
Mental Health Service	2,183	0.15%	479	0.16%
Accommodation Service	1,930	0.14%	443	0.15%
Legal Service	1,785	0.13%	259	0.09%
Family and Child Protection Service	375	0.03%	121	0.04%
Total services and referrals provided	**1,416,107**	**100.00%**	**29,6554**	**100.00%**

Source: NSW Needle and Syringe Program

Opening hours

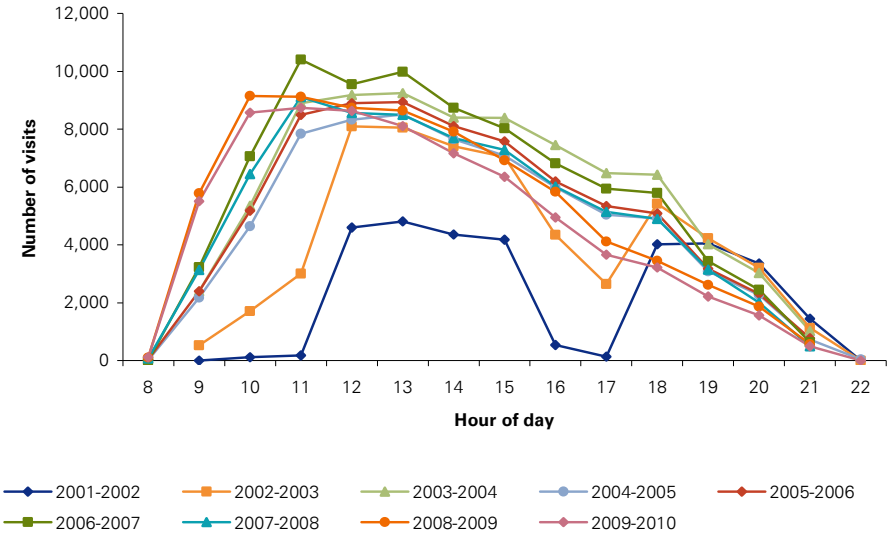
The current MSIC opening hours are shown in Table 8-17. When the MSIC opened, these hours were based on analyses of ambulance call-out data, with peak frequencies during the day and after midday to 6pm. The service remains open for 30 minutes after the front doors are closed to allow clients to complete their use of the service. Please note, on Tuesdays the MSIC is closed for two hours to permit staff meetings to occur.

Table 8-17: Current MSIC opening hours

Days of week	Opening hours	Doors close
Monday	9.30am	9.30pm
Tuesday	9.30am	3.45pm, reopen for 6-9.30pm
Wednesday	9.30am	9.30pm
Thursday	9.30am	9.30pm
Friday	9.30am	9.30pm
Saturday	9.30am	5.30pm
Sunday	9.30am	5.30pm

Figure 8-6 below illustrates the hours of the day in which the MSIC was frequented. During the initial two years of operation (2001-02 to 2002-03), the majority of visits occurred between 12:00 and 15:00, with a low between 16:00 and 17:00 and a second period of activity between 18:00 and 20:00 before a decline in the number of visits toward 22:00. Since 2003-04, this pattern has shifted somewhat with frequency of visits generally peaking during the midday hours from 11:00-13:00, and a tendency to decline steadily after this period to the time of service closing.

Figure 8-6: Number of visits recorded across the MSIC opening hours[142]



Source: Medically Supervised Injecting Centre (MSIC)

Client perspectives on opening hours, rationale for injecting at the MSIC and factors impacting on use of the MSIC.

Clients were asked six questions about the MSIC opening hours and their injecting practices:

- *'When is the MSIC open?'*
- *'If you could change the opening hours, would you? To what? Why?'*
- *'Do you inject in other locations than the MSIC when the MSIC is open? Where? Why?'*
- *'Do you inject when the MSIC is closed (i.e. after hours)? If so, where do you do it?'*

In relation to opening hours, interviewed clients primarily reported that the current hours were suitable for them, with key themes presented below:

- **Appropriate opening hours** - the majority of clients interviewed reported that these opening hours were generally suitable for them[143].
- **Preference for earlier times** - a number suggested an earlier start time (ranging from 6.30am-8am).
- **Preference for later times** - a number of clients commented that they thought the MSIC should be open longer at weekends for '*casual users and people who are partying who come into the area on the weekends'*.

- **24 hour access -** three clients interviewed felt that the MSIC should be open 24 hours, as one client commented "'*I'd prefer earlier and later [opening]. I use [inject] 24/7'*

In relation to location of injecting during the MSIC opening hours, the majority of clients interviewed reported that during the MSIC opening hours, they only inject at the MSIC. Of clients interviewed who inject in other locations during the MSIC opening hours, the most frequently reported location was in their own or at a friend's home. Public injecting was occasionally reported.

The reasons given by those reporting that they only inject at the MSIC said that it was primarily driven by:

- **Safety**
- **Hygiene**
- **Access to resuscitation**, as required: *'it's safer, cleaner and nurses are here to resuscitate you if you need it'*
- **Lack of private space** – e.g. not being able to inject at home
- **Not wishing to carry needles**
- **Responsible disposals:** '*because I know they will dispose of the fits safely.'*

Those reporting that they inject at the MSIC and home say that these are the *'only safe places'.*

For clients who do not always inject at the MSIC during opening hours, the two key factors are proximity and urgency/extent of withdrawal.

- **Proximity to the MSIC** – is an important driver for access for the majority of clients. From interview, clients who lived in Kings Cross generally stated that they always used the MSIC when it was open. Clients who did not live in the Kings Cross area commonly said they came to the MSIC if they were in the area but otherwise injected in other locations. These clients frequently followed up their comments by suggesting that there should be more injecting clinics in different locations.
- **Urgency -** One client reported travelling for up to 30 minutes to the MSIC to inject unless they were *'sick'* [withdrawing from a substance] and needed to inject more urgently. In those instances, this client reported injecting in public toilets, parks or on the street.

In relation to location of injecting outside of the MSIC opening hours, most clients interviewed (19 of 23 clients) reported that they injected outside of opening hours. Most commonly reported injecting in their own or at a friend's home, although public injecting was still reported.

How does the MSIC work within the local service system?

All external local service system representatives were asked about services provided by the MSIC, given the local service system they operate within.

There was strong support from local service system representatives for the mix and level of the MSIC's services in terms of their appropriateness in the local area. As expected, the ability for people to be able to undertake supervised injecting is unique to the MSIC. The MSIC is seen as a low threshold service, which can encourage people to use this service, even if they are not yet ready to use other services.

Local service representatives consider that the model allows trust to be developed between client and staff, particularly in the Aftercare area (Stage 3) where staff can build a relationship with client, which can lead to discussions about other needs and referrals.

The MSIC was seen as having 'very good referral mechanisms', providing referrals and access to drug treatment, strengthened by the case referral coordinator role. Further, it is seen as having a holistic approach where referrals address the needs of the clients as evidenced by referrals received by the mental health service interviewed.

Finally, the MSIC is seen as having a clear specialist role within the broader system. Local service representatives were clear that the MSIC complemented, rather than duplicated work conducted by other agencies in the area, which extends to taking a collaborative approach, particularly on some *'really tricky cases'* in relation to shared clients with unsafe injecting practices and complex needs.

The key challenges raised for the MSIC have been discussed previously in this report and focus on the real or perceived lack of drug treatment services available, which limits the ability of the MSIC to support people to move into drug treatment, and the tension between encouraging referral whilst supporting people to access the service. Finally, the Trial status of the MSIC was described as a barrier to effective service planning and delivery within the broader service system – including drug treatment. It was suggested that clarity as to the ongoing status of the MSIC would aid further integration with the broader drug treatment and public health system, provide more stability and opportunities for other services wishing to work more closely with the MSIC.

Trends in overdose and health of clients

Findings related to trends in overdose and health of clients are reported in Section 10.

8 Evaluation domain 5: To review the operation of protocols excluding clients or potential clients in certain circumstances

To review the operation of protocols excluding clients or potential clients in certain circumstances, the evaluation considered the following questions:

- How many clients have been excluded and why? What trends are there in the reasons for exclusion?
- What processes occur when a client is to be or has been excluded, e.g. referral, medical care, security/ police intervention etc?

This section is informed by review of the MSIC client database, MSIC documentation, interviews with current and former MSIC clients and interviews with MSIC staff.

Summary of key findings

- There are clear eligibility criteria for use of the service and clients are provided with explicit rules and responsibilities, which are reiterated by staff and other clients.
- The internal management protocols provide clear responses according to the reason for exclusion.
- The majority of clients report that the rules are fair. Some reported these encourage self-regulation and positive behaviour change in clients.
- Between 2001-02 and 2009-10, 1,933 clients were refused admission to the MSIC.
- Intoxication was the leading reason for exclusion from the MSIC, with a previous exclusion being the second most common reason.
- Excluded clients referred to other services were most commonly referred to Kirketon Road Centre and drug treatment services.
- Three interviewed clients had experience of not being allowed to use the MSIC because of the exclusion criteria reported that it had led to negative consequences for them (charged for public injecting and overdose requiring ambulance attendance).
- Management and staff described the importance of maintaining the low-threshold nature of the service and skilful de-escalation, using sanctions or time-outs as a last resort.
- The majority of local service system representatives who commented on intoxication as a reason for exclusion referred to the findings of the Coronial Inquest conducted during the Trial period supporting the policy.
- One service representative, recommended that, as with people on Opioid Treatment Program (OTP), consideration be given to discretion being able to be applied to young people aged 16-18 who are already injecting, if there is a second opinion and aggressive case management can be applied.
- Two service representatives suggested a change of policy be considered in relation to pregnancy, with the recommendation that women who are pregnant be seen as a high priority for engagement and, if they choose to continue injecting, be allowed to do so at the MSIC.

Exclusion processes

As previously stated, there are clear eligibility criteria for use of the service which were developed as part of the Internal Management Protocols prior to the initial opening of the MSIC.

Clients must be 18 years or over, have injected illicit drugs previously, not known to be or obviously pregnant, not to be accompanied by children and not to be intoxicated by alcohol or other drugs.

At registration, eligible clients are provided with information on acceptable behaviour while at the MSIC, including legal requirements of using the service. These guidelines are reinforced through staff (and peer) attitudes towards client behaviour.

Clients who do not meet the eligibility criteria or who have been sanctioned are unable to use the MSIC. According to the Internal Management Protocol, responses vary according to the reason for exclusion:

- **Clients aged under 18 years** are assessed for referral to local youth specific services, such as the NSW State Government Innovative Case Management – Brokerage evaluations. Where feasible, staff will offer to escort the young person to the service. Young people under 16 assessed to be at risk are referred to the Department of Community Services for assessment, support and assistance[144].
- **Clients who have not previously injected** are actively engaged by MSIC staff and further assessed for referral to appropriate services to discourage the transition to injecting drug use.
- **Clients known to be or obviously pregnant** are actively referred to an appropriate drug treatment service and the Chemical Use in Pregnancy Service (CUPS) at the Langton Centre for appropriate ante, peri and post-natal care.
- **Clients accompanied by children** are actively engaged and staff assess whether the child is at risk. Where the child is assessed as at risk, staff will notify the Department of Community Services. Where the child is not assessed to be at risk, staff will refer the client to a relevant support service with childcare. Assessment and referral can be arranged to Jarrah House, a residential drug treatment facility for women with children.
- **Clients assessed as intoxicated** are unable to use the MSIC. They are advised of the dangers of drug overdose and discouraged from further drug or alcohol use. Staff will offer to refer clients to an appropriate safe place and/or contacting a friend or relative to collect them.

Client exclusion

Table 9-1 illustrates the proportion of outcome types for visitors who come to the MSIC. Over 99% (604,612) of the MSIC visitors have been admitted each year since its inception, less than 1% of visitors were either refused entry (1,933) or left the premises (2,001).

Table 9-1: Proportion of outcome types of visits to the MSIC

Outcome	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Admitted	31,639 (99%)	56,637 (99%)	79,738 (99%)	68,397 (99%)	72,032 (99%)	81,284 (99%)	72,018 (99%)	74,183 (99%)	68,684 (99%)	604,612 (99%)
Left premises[145]	101 (<1%)	126 (<1%)	254 (<1%)	143 (<1%)	184 (<1%)	397 (<1%)	195 (<1%)	291 (<1%)	310 (<1%)	2,001 (<1%)
Refused	37 (<1%)	103 (<1%)	234 (<1%)	236 (<1%)	203 (<1%)	286 (<1%)	263 (<1%)	317 (<1%)	254 (<1%)	1,933 (<1%)
Total valid records	**31,777**	**56,866**	**80,226**	**68,776**	**72,419**	**81,967**	**72,476**	**74,791**	**69,248**	**608,546**

Source: Medically Supervised Injecting Centre (MSIC)

Table 9-2 illustrates the reasons why clients were excluded from the MSIC. Intoxication was the leading reason identified, with 700 instances overall of intoxication related exclusions (79% of exclusions where a reason was recorded to 30 April 2010). This was followed by the client being previously sanctioned (or 'banned') (118 instances or 13% of exclusions where a reason was recorded to 30 April 2010). Other unacceptable behaviour was the reason for a further 51 exclusions and 12 exclusions were because the client was pregnant.

The recording of client refusals, in particular the recording categories in the MSIC database changed during the course of the evaluation – it may therefore not be possible to directly compare the data presented here to previous evaluation data.

Table 9-2: Reason for exclusion from the MSIC

Refusal reason	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Intoxicated	9 (82%)	57 (93%)	107 (89%)	67 (88%)	20 (87%)	60 (87%)	100 (81%)	159 (73%)	121 (65%)	700 (79%)
Sanctioned client		2 (3%)	8 (7%)	1 (1%)	2 (9%)	1 (1%)	14 (11%)	44 (20%)	46 (25%)	118 (13%)
Other unacceptable behavior		1 (2%)	3 (3%)	6 (8%)		7 (10%)	8 (7%)	12 (6%)	14 (7%)	51 (6%)
Pregnant	1 (9%)	1 (2%)	1 (1%)	1 (1%)	1 (4%)	1 (1%)	1 (1%)	3 (1%)	2 (1%)	12 (1%)
< 18 years	1 (9%)		1 (1%)	1 (1%)					1 (1%)	4 (<1%)
Other (specify)									3 (2%)	3 (<1%)
Total valid records	**11**	**61**	**120**	**76**	**23**	**69**	**123**	**218**	**187**	**888**

Source: Medically Supervised Injecting Centre (MSIC)

Table 9-3 below shows the number of valid records for exclusions and breaks this number down by the gender of the excluded client. Most clients excluded were male, accounting for 1,498 exclusions (75%) of all exclusions recorded to 30 April 2010. Females were excluded 458 times during the same period (accounting for 25% of all exclusions recorded to 30 April 2010).

Table 9-3: Exclusion from the MSIC by gender

Gender	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Male	24 (65%)	76 (74%)	191 (82%)	177 (75%)	144 (71%)	212 (74%)	207 (79%)	229 (77%)	168 (72%)	1,428 (75%)
Female	12 (32%)	27 (26%)	43 (18%)	58 (25%)	57 (28%)	73 (26%)	54 (21%)	69 (23%)	65 (28%)	458 (25%)
Transgender	1 (3%)			1 (<1%)	2 (1%)	1 (<1%)	2 (<1%)	1 (<1%)		8 (<1%)
Total valid records	**37**	**103**	**234**	**236**	**203**	**286**	**263**	**299**	**233**	**1,894**

Source: Medically Supervised Injecting Centre (MSIC)

From 2008, additional information was recorded regarding referral to other services for those clients that were refused entry to the MSIC. While only a small number of records (37 for 2008-09 and 75 for 2009-10), the service that excluded clients were

most frequently referred to was the Kirketon Road Centre (KRC). In 2008-09 and 2009-10 41% and 51% of excluded clients respectively were referred to KRC.

Table 9-4: Excluded clients referred to other services

Referred to	2008-09	2009-10
KRC	15 (41%)	38 (51%)
Drug Treatment Service	6 (16%)	7 (9%)
Hospital	1 (3%)	2 (3%)
Mental Health Service		1 (1%)
Other Health Service	7 (19%)	4 (5%)
Other	8 (22%)	23 (31%)
Total valid records	**37**	**75**

Source: Medically Supervised Injecting Centre (MSIC)

Table 9-5 below shows the reasons clients reported for enquiring to the MSIC and the service they were subsequently referred to (if not receiving service at the MSIC) for 2008-09 and 2009-10. The leading reason for enquiring to the MSIC was that the client was seeking a Needle and Syringe Program (NSP) (47 total recorded enquiries). This was followed by the client specifically wishing to use the MSIC (reported 15 times). In total 50 enquiries recorded were for 'other' reasons and the reason for two enquiries was given as seeking information about the MSIC (data not shown).

Where the reason for enquiry was recorded as either seeking an NSP or wishing to use the MSIC, 67-68% of clients were subsequently referred to KRC, with the remaining 32-34% being referred to other services (including other health services).

Table 9-5: Reason for enquiring to the MSIC and subsequent referrals to other services

	2008-09	2009-10	Total valid records
Seeking NSP			
KRC	8 (50%)	24 (77%)	32 (68%)
Other	3 (19%)	6 (19%)	9 (19%)
Other Health Service	5 (31%)	1 (3%)	6 (13%)
Seeking NSP subtotal	***16***	***31***	***47***
Wishes to use the MSIC			
KRC	3 (50%)	7 (78%)	10 (67%)
Other	2 (33%)	2 (22%)	4 (27%)
Other Health Service	1 (17%)		1 (7%)
Wishes to use the MSIC subtotal	***6***	***9***	***15***
Other			
Drug Treatment Service	6 (43%)	6 (17%)	12 (24%)
Hospital	1 (7%)	1 (3%)	2 (4%)
KRC	4 (29%)	10 (28%)	14 (28%)
Mental Health Service		1 (3%)	1 (2%)
Other	3 (21%)	15 (42%)	18 (36%)
Other Health Service		3 (8%)	3 (6%)
Other subtotal	***14***	***36***	***50***
Total valid records	**36**	**76**	**112**

Source: Medically Supervised Injecting Centre (MSIC)

Client feedback on exclusion practices

Interviewed clients were asked the following question and prompts

'Do you think the way this place works is fair?' [prompt for client rules and responsibilities; sanctions]

Thematic analyses of the feedback shows the following key themes, which primarily demonstrate that clients think the MSIC is fair:

- **Well understood rules and responsibilities** - all clients were able to describe the main rules and responsibilities relating to exclusions and to give specific examples of behaviour that would lead to an exclusion.
- **Support respectful environment** – a number of clients commented that the client rules and responsibilities were '*necessary'* and reflected '*common sense, respect and decency to show consideration to others - staff and other clients'.*
- **Fair rules** - One client comment reflects this well: '*The rules are fair. I won't start up or do anything because I need this place. It's here for my benefit so I have to respect the rules'.*
- **Self-regulating system** – a number of clients also reported that clients themselves reinforce the rules and regulations. One client commented that '*[you've got to stop others] abusing the system so everyone has to learn to live by the rules'.* Another client observed that the rules 'work': *'it's impressive, considering the number of people that come through here there are only a small number of incidents'.*
- **Encourages behaviour change** - *'lots of people tone down a lot so they can use the place…I see changes in people after a while, they get more respectful towards staff'.*

However, 3 clients interviewed who were unable to use the MSIC (due to a time-out or suspected pregnancy) said it led to negative consequences:

- **Overdose** – '*I got banned from here. I shot up and needed an ambulance. It was a bit rough but my own responsibility'.*
- **Police attention** - *'I was sanctioned for passing a fit in its wrapper…and then I got charged for shooting up in the street'.*
- **Suspected pregnancy** – *'I've got a bit of a potbelly and they thought I was pregnant once and I wasn't allowed to use the MSIC…I didn't think that was very fair'.*

Management and staff feedback on exclusion practices

Key themes raised by management and staff were as follows:

- **Clear expectations** - there are clear boundaries established about client behaviour at registration, with breaches addressed on a case-by-case basis.
- **Commitment to accessibility where possible:** the MSIC management and staff reported that, as a low-threshold service, they recognise the importance of engaging clients and therefore work with behaviours that may not be tolerated elsewhere *('we're not offended by rude words').* In the event of an incident, staff seek first to de-escalate the situation while maintaining the safety of staff, other clients and the person. The issues underlying the behaviour are assessed after the incident.
- **Exclusion due to intoxication** – some staff considered excluding intoxicated clients (as referred to in the Internal Management Protocols) as contrary to harm reduction principles as clients who are refused entry may use drugs on the streets in an unhygienic and unsafe environment (and at higher risk of overdose in an intoxicated state). An alternative perspective offered by other staff suggested this exclusion criterion supported education provided to MSIC clients associated with the risk of injecting when intoxicated by other drugs (including alcohol). This education and exclusion protocol in combination may discourage clients from injecting when intoxicated as they are aware of the higher risk of overdose. It was reported in the final round of staff interviews, that with respect to the findings of a Coronial Inquest, its deliberations had considered, and supported the existing policies and principals related to intoxication and this had been beneficial in relieving staff concern about this practice.
- **Option to address unacceptable behaviour** - staff acknowledge the need for some kind of mechanism to curb unruly or violent behaviour from clients. Time-outs were seen as the option least harmful to client well being. Staff noted that no clients are permanently sanctioned. Where the MSIC has indefinitely sanctioned clients, clients have changed their behaviour and these are eventually lifted. MSIC staff remarked that they always strive to provide alternate options before sanctioning clients.

Local service representatives' perspectives on exclusion practices

- In relation to **intoxication**, the majority of local service system representatives interviewed in relation to exclusion referred to the findings of the Coronial Inquest conducted during the Trial period supporting the policy. NSW Police further stated that MSIC staff routinely notify Police if they had concerns about an intoxicated person who had left the MSIC premises against advice. However, two service representatives saw refusing due to intoxication as a 'drastic step' and indicated their preference for intoxicated people not to be refused, with a preference (where possible) for the person to wait with staff until they were able to inject more safely.

- In relation to **underage injecting**, Kirketon Road Centre recommended that, as with people on the Opioid Treatment Program (OTP), consideration be given to discretion being able to be applied to young people aged 16-18 years who are already injecting, if there is a second opinion and aggressive case management can be applied.
- In relation to **pregnancy**, it was recommended by KRC and NEAMI that women who are pregnant be seen as a high priority for engagement and if they choose to continue injecting, be able to do so at the MSIC.

The **impact of exclusion criteria** was discussed with both NSW Ambulance and St Vincent's Emergency Department to test if they came into contact with people who had been refused. NSW Ambulance reported whilst it was rare for them to see MSIC clients, they occasionally see them when the MSIC had been closed and they had not been able to use there. St Vincent's Emergency Department reported that they were not aware of people presenting to the Emergency Department after being refused entry to the MSIC, insofar as , *"one of the places they would come is here to us and it hasn't come up on the radar".*

9 Evaluation domain 6: To review the effectiveness of the MSIC on clients' health and wellbeing

To review the effectiveness of the MSIC on clients' health and wellbeing, the evaluation considered the following questions:

- How effective has the MSIC been in reaching its intended target group?
- What are the trends in overdose, health and treatment of MSIC clients since the MSIC opened?
- Is there evidence of a reduction in overdose related morbidity and mortality amongst MSIC clients?
- Is there evidence of improved health amongst MSIC clients, such as incidence of infectious diseases, including HIV and Hepatitis C?

To review the effectiveness of the MSIC on clients' health and wellbeing, the evaluation is informed by further review of the MSIC client database and external data sources (NSW Ambulance, Accident and Emergency, Coronial Information, Needle and Syringe Program data and population estimates of the local injecting drug user population) as well as interviews with clients and former clients of the MSIC, MSIC staff and local service system representatives and a survey of current clients.

Information from relevant external data sources is provided in Section 12.

Summary of key findings

- MSIC is an accessible service, used by a significant proportion of injecting drug users in the Kings Cross area.
- Previous research estimates that 80% of injecting drug users in the area at any one time used the MSIC. A substantial proportion (approximately 40%) of MSIC clients reported that they had not engaged with any form of support or treatment service prior to attending the MSIC. Approximately half of the clients interviewed stated they knew at least one injecting drug user who did not use the MSIC, although they generally stated that the majority of people they knew did use it.
- The majority of clients interviewed had become aware of the MSIC through word of mouth. Many of the clients who have been engaged with the service learned about it through the media attention surrounding the opening. The majority of clients interviewed stated they encourage other injecting drug users to attend the MSIC primarily because of the access to medical care in case of overdose, safety, hygiene and being off the streets, thereby avoiding attention from other drug users, police and the general public.
- There is overwhelming support and encouragement by relevant local service system representatives to encourage injecting drug users in the area to use the MSIC.

- Nearly all clients interviewed stated they had seen someone overdose either in the MSIC, outside the MSIC, or both and were able to identify early signs of an overdose in other people and themselves.
- The majority of surveyed clients agreed[146] with the statements: *'Since coming here, the MSIC has helped me to respond better if I see an overdose inject more safely (including reducing my risk of overdose)* (82%) and help other people when they overdose (85%)[147]Almost 80% of clients interviewed reported that they have changed their behaviour to reduce the risk of overdoses.
- The majority of surveyed clients agreed with the statements: *Since coming here, the MSIC has helped me get in contact with other services (i.e. use the telephone at the MSIC to call another service* (82%)[148] and/or *get help with other issues such as accessing services such as housing and legal services* (73%) [149]
- The majority of clients reported that they had accessed other non-AOD services since they started using the MSIC. Common service types accessed included general health, housing and other support services.
- Nearly all of the clients interviewed reported that they had accessed other drug and/or alcohol treatment programs since attending the MSIC. Over half had been, or were accessing opioid replacement programs.
- The majority of clients reported that they injected more safely since becoming MSIC clients. Over half indicated that they had sought and received advice from a member of staff about injecting and this had been helpful. Advice included information on how to prepare to inject, how to use equipment properly and advice on 'complications' and risks.
- A number of approaches were commonly reported to have been adopted to support safer injecting. These included using clean equipment for single use, not sharing, accessing clean equipment through Needle Syringe Programs for occasions when they were not injecting at the MSIC, swabbing and generally making sure that hands are clean before injecting. Approaches that had reportedly been adopted to improve vein care included using vitamin E cream and alternative injecting sites.
- The majority of clients surveyed reported that they had changed their behaviour and had positive outcomes from attending the MSIC. Of note is that nearly all reported that since coming to the MSIC they now inject more safely (97%) and have reduced injecting in public (96%).

Accessing the intended target group

Previous research on the injecting drug user population in the Kings Cross area in 2001/2002 estimated there were approximately 1,103 injecting drug users in the area each month, of whom approximately 70% attended the MSIC[150].

Client experience in accessing the MSIC and their role in supporting others to access it

Interviewed clients were asked:

- *'How did you first find out about the MSIC?'*
- *'Do you encourage other injecting drug users to come here? If so, what do you tell other injecting drug users about the MSIC?'*

Awareness of the MSIC

- **Social networks** – the largest proportion of clients interviewed had found out about the service through people they knew (typically friends/other injecting drug user).
- **Media** – attention on the MSIC appears to have been a useful 'advertisement' for clients with almost one third of clients interviewed reporting that they heard about the service through the media[151].
- **Other** – some of the clients interviewed reported they heard about the service from another service or by walking past.

Recommending the MSIC

- The majority of clients interviewed reported that they encouraged other injecting drug users to attend the MSIC. This is consistent with results from the client survey, where 97% of clients also reported that they encouraged other injecting drug users to attend.

As shown below, common reasons interviewed clients provided for encouraging use of the MSIC primarily related to:

- access to medical care in case of overdose
- safety
- hygiene
- being off the streets (avoiding attention from other drug users, police and the general public).

To note, this last point is consistent with findings that injecting drug users who feel they have to inject in a hurry to avoid being disturbed by police (or other drug users) are at increased risk of injecting related harm.[152]

Direct comments by clients as to whether they encourage the use of the MSIC and the reasons why include:

- *'…I say it's safe, private, confidential, clean, you reduce your chance of overdosing and dying, less risk of the police'*
- *'It's safe, you don't leave needles in the streets for kids to find, it's clean, safe, you don't get harassed by police or idiots'*
- *'it's clean, well-run, safe and there's backup if anything happens…'*
- *'prefer here than on the street, it's cleaner, you can get advice, it's safer here'*
- *'yes, I tell them that's it safe…'*
- *'it's safer, you're off the street so police can't see you and you're out of the way of the general public'.*
- *'All the time. I tell them how it works and if they weren't here before it opened, I tell them what it was like [in Kings Cross] before it opened'*

Local service system representatives' perspectives and support for people using the MSIC

There is overwhelming support and encouragement by relevant local service system representatives for injecting drug users in the area to use the MSIC.

When asked '*do you encourage clients that identify as injecting drug users to use the MSIC to support safer injecting practice?'*, all service representatives interviewed reported that they would and do encourage existing injecting drug users to use the MSIC.

- **NSW Police** – report that they would encourage anyone they knew who was using to attend the MSIC because of the MSIC's record and level of care and to support harm minimisation.
- **NSW Ambulance** – report that they always recommend the MSIC to people, particularly if they don't know about the service (e.g. have recently left prison), describing the MSIC as providing a safe injecting environment and an opportunity for injecting drug users to access referrals to services and access drug treatment.
- **St Vincent's Emergency Department** – report that they always recommend people who present to the Emergency Department to go to the MSIC and KRC because they have the skills and experience to assist injecting drug users.
- **St Vincent's Alcohol and Drug services –** report all clients are told about the MSIC**.**
- **Kirketon Road Centre (KRC)** - refer people to the MSIC as well as displaying posters.
- **Langton Centre -** report that, at assessment for drug treatment, clients are told that if they do choose to continue using, they should do so at the MSIC.

- **Wayside Chapel –** report that they strongly encourage all injecting drug users to utilise the MSIC.
- **A local mental health service** – reported that they refer to the MSIC and that their anecdotal feedback from clients is very positive, including for clients with mental health conditions.
- **Private methadone provider** – said that although all the clients in the area know of the MSIC, if the clinic knows the person is injecting, they discuss using at the MSIC as part of safer injecting practices.

Reasons for not accessing the MSIC

Clients who were interviewed were asked if they knew any injecting drug users who do not use the MSIC and the reason/s why.

Approximately half of the clients interviewed stated they knew at least one injecting drug user who did not use the MSIC (although clients generally stated that the majority of people they knew did use it).

Reasons given for the minority not using the MSIC include:

- not living in the Kings Cross area
- wanting to inject when the MSIC was closed
- wanting to use their own space and a perception of 'overcrowding' in the MSIC
- not wanting to wait to inject
- not being able to inject themselves[153]
- being barred from the MSIC
- unwanted police attention if known as an MSIC user.

Overdose-related events (onsite at the MSIC)

Introduction

The nature of overdose-related events occurring on-site at the MSIC and the MSIC protocols for responding were described in a previous evaluation in 2007 and are reprised with revision below.

Overdose-related events occurring on-site at the MSIC are recorded via the MSIC database. A specific emergency treatment form is also completed by the attending staff member/s, which documents clinical details of the specific event. Clinical observations including respiration and heart rates, blood pressure, pulse oximetry (to measure the arterial oxygen saturation of haemoglobin) and Glasgow Coma Scores (to assess a person's level of consciousness) are used to diagnose drug overdose cases and to assess treatment outcomes. Clinical protocols enable registered nurses to

administer oxygen and naloxone (Narcan®) in the event of an opioid-related overdose and other basic life support measures in the event of other drug overdoses[154].

These clinical protocols of the MSIC reflect that within a supervised injecting facility it is possible to intervene very early in the course of an overdose-related event. This earlier intervention may negate the need for subsequent naloxone administration, thereby avoiding potential naloxone-precipitated withdrawal syndrome and increasing the opportunity for clinical monitoring post overdose[155]. This strategy may reduce the likelihood of the client using further opioids to overcome acute withdrawal symptoms induced by naloxone which may then lead to further risk of overdose. On-site overdose-related event data was available for the 12 year period April 1998 to end March 2010. It should be noted that the MSIC also has specific clinical protocols for other drug overdoses e.g. psychostimulants overdose/toxicity protocols.

Findings

Table 10-1 below shows the number and type of overdose-related events for MSIC visitors to date. Heroin-related overdose requiring oxygen was the most frequent type of overdose-related event, constituting 68% of total overdose-related events recorded between 2001-02 and 2009-10. The next most frequent type of overdose-related event were heroin related overdose where oxygen and naloxone was required (16% of all overdose-related events recorded 2001-02 to 2009-10). The remaining overdoses were for other heroin-related overdoses or overdoses for other opioids or drugs.

Table 10-1: Number and type of overdose-related events for MSIC visitors

Overdose-related events	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total valid records
Heroin related overdose - oxygen only	132 (54%)	236 (74%)	380 (78%)	279 (78%)	273 (80%)	253 (73%)	215 (68%)	309 (67%)	254 (46%)	2,331 (68%)
Heroin related overdose - oxygen & naloxone	50 (20%)	49 (15%)	69 (14%)	62 (17%)	55 (16%)	64 (18%)	55 (17%)	77 (17%)	83 (15%)	564 (16%)
Heroin related overdose - oxygen - naloxone - ambulance	1 (<1%)	2 (1%)	1 (<1%)	3 (1%)	1 (<1%)	1 (<1%)	2 (1%)		7 (1%)	18 (1%)
Heroin related overdose – ambulance								2 (<1%)		2 (<1%)
Other opioid related overdose - oxygen only						8 (2%)	32 (10%)	53 (11%)	155 (28%)	248 (7%)
Other opioid related overdose - oxygen & naloxone							6 (2%)	11 (2%)	37 (7%)	54 (2%)
Other opioid related overdose - oxygen - naloxone - ambulance							1 (<1%)		3 (1%)	4 (<1%)
Other drug overdose	63 (26%)	33 (10%)	35 (7%)	15 (4%)	12 (4%)	20 (6%)	7 (2%)	8 (2%)	9 (2%)	202 (6%)
Other drug overdose - ambulance								1 (<1%)	2 (<1%)	3 (<1%)
Total valid records	**246**	**320**	**485**	**359**	**341**	**346**	**318**	**461**	**550**	**3,426**

Source: Medically Supervised Injecting Centre (MSIC)

Table 10-2 below presents the number of reported overdoses per 1,000 injections by drug type. The highest rate of overdoses overall was recorded for heroin injections (9.1/1,000 visits). In 2001-02, overdoses per 1,000 heroin injections was 11.5. This declined to 6.7/1,000 heroin injections in 2002-03 before trending upwards to a level more than double (14.6/1,000 heroin injections) in 2009-10.

Overdoses per 1,000 injections of other opioids were first evident in 2006-07 (albeit at less than 1 per 1,000 injections). This rate increased to 5.4 overdoses per 1,000 injections in 2009-10.

Overdoses per 1,000 injections of other drugs were 4.2 in 2001-02. However, this rate declined to 0.5 in 2007-08 before increasing again to 1.3 in 2009-10.

Table 10-2: Overdoses by 1,000 injections

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Overdose per 1000 heroin injections	11.5	6.7	7.6	6.7	7.8	10.6	10.1	12.9	14.6	9.1
Overdose per 1000 other opioid injections						0.3	1.2	1.9	5.4	2.0
Overdose per 1000 other injections	4.2	2.6	1.8	1.2	0.8	1.1	0.5	0.8	1.3	1.6

Source: Medically Supervised Injecting Centre (MSIC)

Feedback from clients on reduction in overdose

The majority of surveyed clients agreed[156] with the statements: '*Since coming here, the MSIC has helped me to':*

- *'respond better if I see an overdose, to inject more safely (including reducing my risk of overdose)'* (82%)
- *'help other people when they overdose'* (85%)[157]

Interviewed clients were asked 6 questions about overdose:

- *'What are the early signs of overdose?'*
- *'Do you do anything differently now to reduce the risk of overdosing?*
- *'Have you ever seen anyone overdose?'*
- *'Have you seen anyone overdose at the MSIC?'*
- *'Do you do anything differently now if you see someone having an overdose?'*
- *'How did you learn to do this?'*

Nearly all clients interviewed stated they were able to identify early signs of an overdose in other people and themselves.

Clients were asked about common measures taken to minimise the risk of overdose (not injecting when already affected by other drugs or alcohol, 'tasting' for purity, calling an ambulance when needed and using less if their tolerance had reduced).

The majority of clients interviewed reported they have changed their behaviour to reduce the risk of overdose, most commonly stating they call an ambulance if required, using less if their tolerance is reduced or using their drugs in portions.

A number of comments by clients provide further information:

- *'If I buy from someone I don't know I always use in two goes, rather than all at once'.*
- *'I never use on top of my psych drugs- I know that if I use on top I'll overdose'.*
- *'I know my own tolerance and I know that it might change, so I'm careful'.*
- One client's approach to reduce overdosing was *'to always come to MSIC'.*
- This was echoed by another MSIC client: *'I saw someone drop* [ed. overdose] *here. The staff responded so quickly, it was a perfectly brilliant response. That's why I come here and that's why this place has never lost a person. I'm proud of that and them [the staff]'.*

Nearly all clients interviewed had seen someone overdose either in the MSIC, outside the MSIC or both. Most said they would try to keep the person awake and would call an ambulance. A considerable number of clients reported that they had done first aid training, although this was often several years old. Clients reported that this gave them confidence to know what to do if someone overdosed with them. However, some clients also referred to the 'common myths' about responding to an overdose and stated that it was useful to see how staff responded to an overdose.

Referral outcomes

Please note this section considers only referral outcomes. Section 8.5 provides comprehensive description of client referrals. Section 3.2 also describes the role of the MSIC in providing a gateway to drug treatment.

Client experience with other general services since attending the MSIC

The majority of surveyed clients agreed with the statements: '*Since coming here, the MSIC has helped me':*

- *'get in contact with other service (i.e. use the telephone at the MSIC to call another service'* (82%)[158]
- *'get help with other issues such as accessing services such as housing and legal services'* (73%) [159].

Interviewed clients were asked about other services they had accessed since attending the MSIC:

- *'Have you accessed other health or support services since you have come to the MSIC?'*

The majority of clients reported that they had accessed other non-AOD[160] services since they started using the MSIC. Common service types accessed were general health, housing and other support services.

Staff had provided active support in helping them to access other services. Clients overwhelmingly reported that MSIC staff provided advice about drug treatment and support options available: *'they [staff] have more idea about what is available out there, they've got lots of useful networks'.*

Other, more practical support commonly reported included:

- '*putting me in touch with a few detoxes'*
- *'the staff wrote me a reference letter/ letter of support [for housing]'*
- *'I can talk to the staff if I find it [drug treatment]tough going'*
- making telephone calls to other services and/or taking clients to other services.

A number of clients also talked about receiving brokerage funding through the MSIC to continue to access programs which they would not otherwise have been able to access. The clients who received brokerage were very positive about the impact of this.

A few clients reported that the involvement of MSIC staff had made it easier for them to access services where they had previously had difficulty. Examples included writing letters of recommendation/ support to secure housing and providing advice about alternative options (when a client could not get into the service they were continually pursuing). The latter example reinforces other feedback that indicates that staff facilitate referrals indirectly through educating and 'guiding' clients to make decisions about drug treatment options.

One client reported a more concrete example of receiving support from MSIC staff to access other services: *'I had been trying to get into [an opioid replacement service] for years. I asked the staff to call for me and I got a space right away.'* It is noted that it is likely that there were other, broader factors influencing this outcome.

Client experience with alcohol and drug services since attending the MSIC

The majority of surveyed clients agreed with the statements:

- *'Since coming here, the MSIC has helped me to understand my drug treatment options (counselling, detox, rehab, pharmacotherapies etc)'* (84%)[161]
- *'Since coming here, the MSIC has helped me to manage my drug use better'* (74%)[162]
- *'Since coming here, the MSIC has helped me to start drug treatment'* (57%)[163].

Nearly all clients interviewed reported that they had accessed other drug and/or alcohol treatment programs since attending the MSIC. Over half had been, or were, accessing opioid replacement therapies. About one third had accessed a detox, rehab and alcohol and drug counselling. A smaller proportion had accessed peer support.

During conversations, all clients showed an awareness of the range and type of drug and alcohol treatment services in the area and also talked about specialist services in other areas of Sydney. A number of clients talked about being initially referred to support/ drug treatment services while in prison.

A small number of clients commented that MSIC staff had not been instrumental in providing information or supporting them to access other services and that they were either already engaged in other services, or became aware and engaged with them independently of the MSIC. A few clients reported they had not accessed other services, generally stating that they '*had no need'* for these, but that they knew of other clients who had been supported by the MSIC to access other services.

A small number of clients gave examples of not being able to access other AOD services. Most commonly clients reported difficulties accessing rehabilitation and stated this was because of a lack of places, requirements to register interest (e.g. calling at 7.30am every morning) and places not being available at the right time. One client reported not being able to access services because he is illiterate and stated that this is an exclusion criterion to a number of programs that are education-based.

Impact on injecting practices and injecting related health

Surveyed clients were very positive about the impact of the MSIC on their injecting practices.

Surveyed clients were asked '*What do you think about the MSIC staff and services: advice from MSIC staff (vein care, safer injecting)?'* The majority of clients reported this was very good (77%) or good (16%).

The majority (92%) of surveyed clients agreed[164] with the statement: '*Since coming here, the MSIC has helped me to inject more safely (including reducing my risk of overdose'*)

Interviewed clients were asked four questions about injecting practices:

- *'Do you think you inject more safely now? Why? How is it safer?'*
- *'Do you do anything differently to look after your veins better? What?'*
- *'Do you do anything differently for blood safety? What?'*
- *'Have you ever received advice from someone working here about safer injecting? Was it helpful?'*

Common responses from interviews suggested the following impact of the MSIC on injecting practices:

- **Improved injecting practices** - the majority of clients interviewed reported that they injected more safely since becoming MSIC clients. Over half indicated that they had sought and received advice from a member of staff about injecting and this had been helpful. Advice included information on how to prepare to inject, how to use equipment properly and advice on 'complications' and risks.
- **Common approaches reported** - a number of approaches were commonly reported to have been adopted to lead to safer injecting. These included using clean equipment for single use, not sharing, using Needle Syringe Programs, swabbing and generally making sure that hands are clean before injecting. Approaches that had reportedly been adopted to improve vein care included using vitamin E cream and alternative injecting sites.
- **Awareness** - clients reported that they were injecting more safely because '*you know what can go wrong and so you are more careful'.*
- **Habitual behaviour improvement** - a number of clients also noted that they had adopted safer injecting practices through habit as a result of coming to the MSIC. Comments were also made that staff encourage wellbeing more generally, for example through asking about medication compliance, making sure people drank enough water and ensuring that no one injected after drinking alcohol.
- **Improved blood awareness** - interviewed clients generally reported an awareness of blood safety related to sterile injecting equipment *'using clean fits'* and environmental risks, such as *'not sitting near someone when they have a shot'* or *'not using a fit if it's been on the floor'.*

A small number of clients reported that their injecting habits had not become safer since coming to the MSIC, as they felt that they had always been very thorough, safe and hygienic in injecting. However, these clients also gave examples of how staff had provided them with advice on new approaches, which they valued. One client commented '*staff will tell us about new equipment and approaches, which is really helpful'*.

10 Evaluation domain 7: To review the effectiveness of the MSIC in relation to the local community in improving public amenity

To consider the effectiveness of the MSIC in relation to improving public amenity, the evaluation considered the following questions:

- What is the effectiveness of the MSIC on reducing discarded injecting equipment in local public places?
- What is the effectiveness of the MSIC on reducing drug users injecting in local public places?
- What are the views of the local community with regard to the MSIC and public amenity?
- What level of support is there for the MSIC amongst local residents and local businesses?

This evaluation domain is informed by a review of needle and syringe disposals/collection data, MSIC data, a survey of the local community (residents and business operators), interviews with local service system representatives and information from clients.

Summary

- Data on needle and syringe collections shows that the total number of needles and syringes collected in the vicinity of the MSIC in the period 2003-04 to 2008-09 has decreased substantially, with the greatest impact being observed in the sectors immediately adjacent to the MSIC. This is consistent with findings from previous evaluations.
- It should be noted, that in the absence of comparison data for the period prior to the MSIC commencement, it is not possible to entirely attribute the reduction to the operation of the MSIC.
- Current client survey findings suggest behaviour change that supports this trend of reduced needles and syringe collection, with self-reported reduction in public injecting, and reduced likelihood of leaving injecting equipment in public reported.
- The majority of residents surveyed report they have seen discarded injecting equipment in public places at some point in time, although this has declined slightly over time. Of those who have ever seen discarded equipment, there is a steady decline in the proportion who had seen discarded equipment in the past month.
- The proportion of people surveyed who have ever seen someone injecting in public has declined since the survey was first conducted in 2000. The proportion of those people who have seen someone injecting in the previous month has declined substantially over time.
- There is very strong resident and business support for the MSIC which has trended upwards over time.

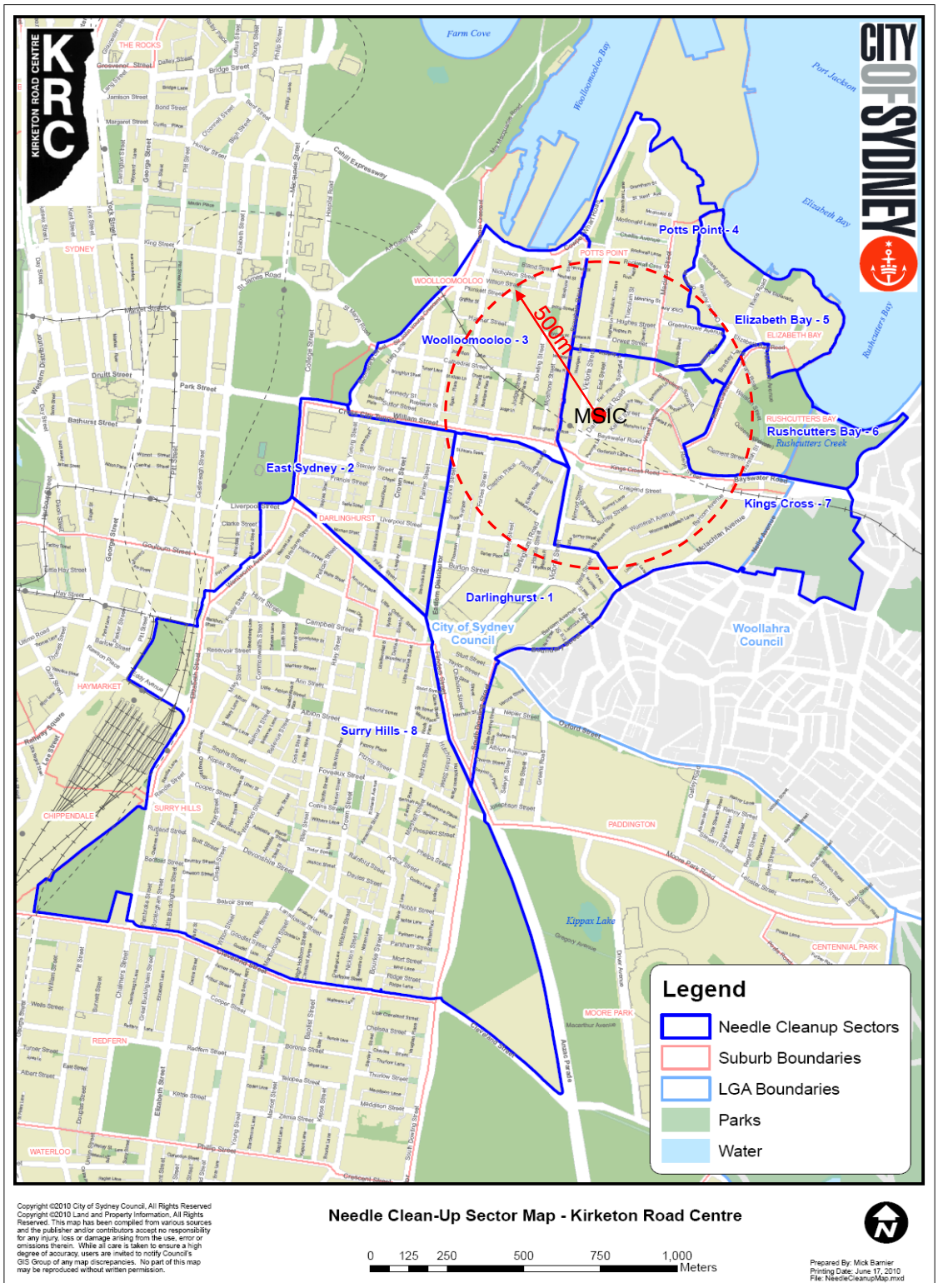
Discarded equipment

The Kirketon Road Centre (KRC), a primary health care service in Kings Cross, provides a Needle Clean Up service which collects discarded needles and syringes in Eastern Sydney, Darlinghurst, Kings Cross and Woolloomooloo on weekdays. A designated worker collects any injecting equipment discarded in public locations identified as "hot spots", which are monitored and adjusted when patterns of public injecting change. The majority of hot spots are located within a 500 metre radius of the MSIC. The worker also responds to calls from the public to the NSW Needle Clean Up Hotline.

Monthly counts of discarded needles and syringes collected by the KRC Needle Cleanup Team have been provided for the years 2003-04 to 2009-10 (May to April)[165] for each of the eight defined sectors around the MSIC (see Figure 11-1 below).

It is noted that the City of Sydney also collects needles and syringes via community sharps bins located in public places. KPMG were unable to source data for collections of needles and syringes collected by the City of Sydney Community Sharps Bin Collection during the period of the evaluation. An increase in the number of needles and syringes being disposed of in these bins may explain the decrease in the number of needles and syringes collected in public areas.

Figure 11-1: Needle and syringe clean up service sectors

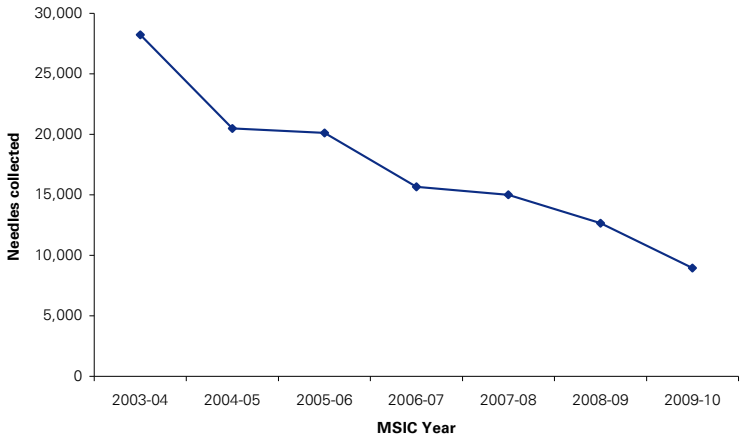


Source: Modified from map generated by City of Sydney Council

Figure 11-2 below indicates the total volume of needles collected by the KRC Needle Clean Up Team for the years 2003-04 to 2009-10 (May to April)[166]. Notably, between 2003-04 and 2008-09[167] there has been a 55% decrease in the total number of needles collected (28,231 in 2003-04 to 12,646 in 2008-09).

In interpreting links between trends in the numbers of needles collected and the opening of the MSIC, it is important to bear in mind that the data provided below are entirely from the period following the opening of the MSIC. In the absence of needle collection data for the period prior to the opening of the MSIC, it is not possible in this analysis to comment directly on the impact of the MSIC on needle collection following its opening. Rather, the analysis focuses on general trends in needle collection in the period from 2003-04 to 2008-09. It is highlighted that findings from the evaluation completed in 2007 identified a decrease of around 50% following the establishment of the MSIC to January 2007[168].

Figure 11-2: Volume of needles collected by KRC Needle Cleanup Team



Source: Kirketon Road Centre Needle Cleanup

Needle collection by sector

Table 11-1 below presents the number of needles collected by the KRC Needle Cleanup Team in each sector in the years 2003-04 to 2009-10 (May to April). The sections that follow provide a summary of the trends by Clean Up collection sector.

Table 11-1: Needles collected by Clean Up Service sector

Sector	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10[169]
Sector 1: Darlinghurst	7,075	3,560	3,668	2,570	1,846	2,416	1,040
Sector 2: East Sydney	3,059	3,229	2,798	2,690	1,497	1,170	1,119
Sector 3: Woolloomooloo	7,449	5,171	4,417	2,588	2,603	1,722	1,393
Sector 4: Potts Point	1,809	1,487	1,147	1,111	1,432	736	498
Sector 5: Elizabeth Bay	3	4	26	34	32	87	77
Sector 6: Rushcutters Bay	48	157	77	435	242	126	62
Sector 7: Kings Cross	6,416	4,018	5,631	4,366	4,785	2,840	1,812
Sector 8 : Surry Hills	2,372	2,852	2,338	1,861	2,562	3,549	2,940
Total	**28,231**	**20,478**	**20,102**	**15,655**	**14,999**	**12,646**	**8,941**

Source: Kirketon Road Centre Needle Cleanup

Sector 1: Darlinghurst

There has been an overall downward trend in the total number of needles collected on a year on year basis in the five year period 2003-04 (7,075) to 2007-08 (1,846). However, in 2008-09 an increase in needles collected was recorded (2,416). It is noted that part of Sector 1 lies within a 500m radius of the MSIC.

Sector 2: East Sydney

Within Sector 2 (East Sydney area) there was an overall reduction in the yearly number of needles collected in the East Sydney area in the period 2003-04 to 2008-09. The number of needles collected fell in every year apart from 2005-06. The 1,170 needles collected in 2008-09 was around a third of the total collected in 2003-04. It is noted that Sector 2 lies outside a 500m radius of the MSIC.

Sector 3: Woolloomooloo

In the Woolloomooloo sector there has been a sharp downward trend in needles collected in the period 2003-04 to 2009-09. Needle collections have fallen every year apart from 2007-08. The 1,722 needles collected in 2008-09 was over four times lower than the 7,449 needles collected in the sector in 2003-04. It is noted that part of Sector 3 lies within a 500m radius of the MSIC.

Sector 4: Potts Point

The number of needles collected in Sector 4 (Potts Point) has fallen year on year between 2003-04 and 2008-09, with the exception of 2007-08 where there was an increase. In addition, the 736 needles collected in the Potts Point sector in 2008-09 was less than half of the 1,809 collected in 2003-04. It is noted that the trend in needles collected in this sector (Potts Point) is similar to that in the other sectors that surround the MSIC and have part of their boundary within 500m of the MSIC (although the absolute number of needles collected in Sector 4 was lower).

Sector 5: Elizabeth Bay

The total number of needles collected in Sector 5 (Elizabeth Bay) across all six years was 186. This represents the lowest total of all eight sectors by a considerable margin. This considerable differential is likely to be due primarily to Elizabeth Bay being geographically separate and more 'affluent' compared to the surrounding suburbs where injecting drug use may be more prevalent. There has however been an upward trend in needles collected in Sector 5 across the period, although the absolute numbers of needles collected (3 - 87) remain low (the lowest of all the sectors).

Sector 6: Rushcutters Bay

Sector 6 (Rushcutters Bay) had the second lowest incidence of needles collected after Sector 5 (Elizabeth Bay) across the period of analysis. Also similar to Sector 5, there has been an overall upward trend in the number of needles collected between 2003-04 and 2008-09. There were 48 needles collected in 2003-04 increasing to 126 needles collected in 2008-09. The year 2006-07 had the highest number of needles collected for the sector, at 435.

Similar to Sector 5, Sector 6 (Rushcutters Bay) is a geographically separate and more affluent area compared to the surrounding suburbs where drug use is more prevalent. These factors may in part account for the lower overall rates.

Sector 7: Kings Cross

The results for the Sector 7 (Kings Cross) indicate fluctuations in the number of needles collected in a year on year basis. Overall, Sector 7 (King Cross) where the MSIC is located saw the greatest number of needles collected of all the sectors over the period from 2003-04 to 2008-09 (28,056). This is not unexpected as the MSIC was intentionally located as close as practical to the area of highest discarded needles, levels of public injecting and reported drug dealing in the period leading up to the MSIC commencement.

The number of needles collected more than halved during the reported period, from 6,416 collected in 2003-04 to 2,840 needles collected in 2008-09. It is noted, that similar to Sector 1 and Sector 4, there was also a degree of variation in the number of needles collected over the 6 year reporting period.

Sector 8: Surry Hills

The number of needles collected in Sector 8 (Surry Hills) over the period 2003-04 to 2008-09 has trended slightly upwards from 2,372 in 2003-04 to 3,549 in 2008-09. This sector is the furthest away from the MSIC of all the eight sectors, so assuming all other factors being equal, it may be least likely that the MSIC is having an impact on reducing discarded needles in this sector.

Summary

Overall, the data on discarded needles and syringes collected in the eight sectors indicates a decline in the total number of needles and syringes collected during the period reported from 2003-04 to 2008-09. Specifically, the number of needles and syringes collected across all eight sectors more than halved from 28,231 in 2003-04 to 12,646 in 2008-09.

The largest reductions have typically occurred in the sectors that have borders within 500m of the MSIC (particularly Sectors 1, 3 and 4). Sectors which are further away such as Sector 2 (East Sydney) have not seen such pronounced downward trends in needle and syringe collection, indeed Sector 8 (Surry Hills), the sector furthest away, has seen an increase. The total number of syringes collected in the more 'affluent' Sectors 5 and 6 have increased slightly, but absolute numbers in these areas have remained considerably lower than the other sectors.

In the Kings Cross sector (sector 7) itself, although the total number of needles collected in 2008-09 was lower than in 2003-04. This may not be unexpected as the MSIC was intentionally located as close as practical to the area of highest discarded needles and syringes, levels of public injecting and reported drug dealing in the period leading up to the MSIC commencement. The total number of needles collected in Sector 7 for 2008-09 was less than half collected in 2003-04 (2,840 needles collected in 2008-09 compared to 6,416 collected in 2003-04).

In summary, while there were fluctuations in the number of needles and syringes collected in each sector across the six year period of analysis (2003-04 to 2008-09), the data for most sectors indicate a general downward trend in the total number of needles and syringes collected. This was particularly so in sectors immediately adjacent to the MSIC. These findings are consistent with previous evaluation findings that identified a decrease of around 50% following the establishment of the MSIC to January 2007[170]. It should be noted however, that in the absence of comparison data for the period prior to the MSIC commencement, it is not possible to infer a correlation between the reduction observed and the operation of the MSIC.

Discarding injecting equipment was also explored in the current MSIC client survey, and 81%[171] of surveyed clients agreed with the statement: *'Since coming here, the MSIC has helped me to not leave injecting equipment in public'.*

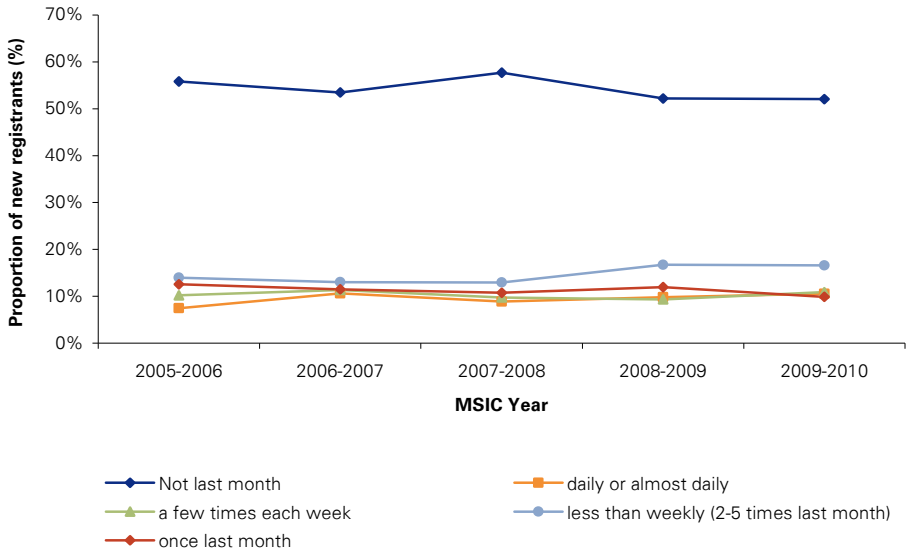
Reducing public injection

Frequency of injecting - public place

Figure 5-21 below shows that between 52% and 58% of new registrants at the MSIC reported that they had not injected in a public place in the month prior to interview (of those recorded). The proportion of new registrants who reported that they had injected in a public place once in the last month ranged from 10%-13%. 13%-17% of new registrants reported injecting 2-5 times in a public place in the month prior to registration.

New registrants who reported injecting 'a few times each week' or 'daily or almost daily' in a public place ranged from 9%-11% and 7%-11%, respectively.

Figure 11-3: Frequency of drug injecting in a public place



	2005-06	2005-07	2007-08	2008-09	2009-10
Total valid records	**215**	**774**	**688**	**705**	**578**

Source: Medically Supervised Injecting Centre (MSIC)

Table 11-2 below provides details on the location of where new registrants were likely to inject. The place that new registrants were most likely to inject was at home (61% of all new registrants (2001-02 to 2009-10)). The next places that new registrants were most likely to inject were a friend's place or on the street (both at 30% of all new registrants (2001-02 to 2009-10)).

Injecting in public was also explored in the current MSIC client survey. The majority (92%) agreed[172] with the statement: '*Since coming here, the MSIC has helped me to reduce injecting in public places'.*

Table 11-2: Number and proportion of new registrants injecting drugs at different locations [173]

Place of injection	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Number and (%) of total new registrants
Home	1,643 (60%)	1,227 (61%)	1,084 (61%)	946 (66%)	456 (50%)	533 (61%)	463 (61%)	477 (59%)	410 (61%)	7,239 (61%)
Street	1,108 (41%)	616 (31%)	469 (27%)	390 (27%)	173 (19%)	233 (27%)	186 (24%)	229 (28%)	203 (30%)	3,607 (30%)
Friend	913 (34%)	566 (28%)	495 (28%)	417 (29%)	188 (21%)	267 (31%)	249 (33%)	230 (29%)	226 (34%)	3,551 (30%)
Public toilet	716 (26%)	333 (17%)	267 (15%)	252 (18%)	110 (12%)	138 (16%)	111 (15%)	165 (21%)	130 (19%)	2,222 (19%)
Car	676 (25%)	336 (17%)	290 (16%)	243 (17%)	115 (13%)	154 (18%)	110 (14%)	148 (18%)	118 (18%)	2,190 (18%)
Dealer	316 (12%)	204 (10%)	155 (9%)	140 (10%)	52 (6%)	89 (10%)	89 (12%)	68 (8%)	83 (12%)	1,196 (10%)
Squat	217 (8%)	89 (4%)	73 (4%)	57 (4%)	16 (2%)	31 (4%)	27 (4%)	50 (6%)	36 (5%)	596 (5%)
Shooting Room	302 (11%)	59 (3%)	46 (3%)	30 (2%)	10 (1%)	22 (3%)	15 (2%)	18 (2%)	11 (2%)	513 (4%)
Other	94 (3%)	58 (3%)	41 (2%)	29 (2%)	28 (3%)	26 (3%)	9 (1%)	18 (2%)	22 (3%)	325 (3%)

Source: Medically Supervised Injecting Centre (MSIC)

Community views on amenity

Telephone surveys have been conducted of local residents and business operators in 2000 (prior to the MSIC opening), 2002, 2005 and were repeated for this evaluation. The survey explores local resident and business operator opinions regarding public injecting, discarded needles and syringes, and support for the MSIC. An online survey was also conducted for this evaluation.

To understand if local residents and business operators have experienced a change in the local amenity since the MSIC opened, the survey includes questions on recent observations of discarded equipment and public injecting in public.

Public experience with discarded equipment

The majority of residents surveyed report they have seen discarded injecting equipment in public places at some point in time, although this has declined slightly over time (84% in 2000, 86% in 2002, 78% in 2005 and 76% in 2010). The findings are similar for business operators (90% in 2000, 87% in 2002, 82% in 2005 and 80% in 2010).

Of those who have ever seen discarded equipment, there is a steady decline in the proportion who had seen discarded equipment in the past month.

Table 11-3: Proportion of local residents and community who have seen discarded equipment in the past month (in 2000, 2002, 2005 and 2010)

	2000	2002	2005	2010
Residents	(n=434)	(n=463)	(n=426)	(n=260)
Seen publicly discarded syringes in the past month?	66%	59%	52%	46%
Business operators	(n=188))	(n=181)	(n=172)	(n=162)
Seen publicly discarded syringes in the past month?	80%	73%	70%	46%

Source: NCHECR (2006) Interim evaluation report No. 2 (for 2000, 2002 and 2005) and Hunter Valley Research Foundation (2010), KPMG analyses.

There were slightly higher findings in the online survey, with 85% of respondents (n=234) reporting that they had ever seen discarded equipment in public and 58% of those reporting seeing this in the previous month.

Observed public injecting

The proportion of people surveyed who have ever seen someone injecting in public has declined since the survey was first conducted in 2000. The proportion of residents reporting this has generally trended downwards (60% in 2000, 61% in 2002, 58% in 2005 and 55% in 2010). The proportion of business operators reporting this has a similar trend (62% in 2000, 65% in 2002, 60% in 2005 and 45% in 2010).

The proportion of those people who have seen someone injecting in the previous month has declined substantially over time.

	2000	2002	2005	2010
Residents	(n=309)	(n=329)	(n=182)	(n=188)
Seen public injecting in the past month	55%	47%	34%	27%
Business operators	(n=129)	(n=135)	(n=125)	(n=92)
Seen public injecting in the past month	61%	50%	47%	22%

Sources: NCHECR (2006) Interim evaluation report No. 2 (for 2000, 2002 and 2005) and Hunter Valley Research Foundation (2010), KPMG analyses.

Similar proportions of respondents to the online survey report ever seeing someone inject in public (61%) with 35% of those respondents having seen this in the previous month.

Community support for establishing the MSIC

The proportion of residents and business operators who agreed with the establishment of the MSIC has increased over time.

	2000	2002	2005	2010
Residents	(n=515)	(n=540)	(n=316)	(n=343)
Agree with the establishment of the MSIC in Kings Cross	68%	78%	73%	78%
Business operators	(n=209)	(n=207)	(n=210)	(n=201)
Agree with the establishment of the MSIC in Kings Cross	58%	63%	68%	70%

Sources: NCHECR (2006) Interim evaluation report No. 2 (for 2000, 2002 and 2005) and Hunter Valley Research Foundation (2010), KPMG analyses.

There are similar findings from the online survey, with the majority of respondents (82%) agreeing with the establishment of the MSIC in Kings Cross.

There is very strong support for the MSIC from members of the community, which has increased over time. This may reflect that both residents and business operators have become more supportive as they have seen benefits to the local community over time.

11 Evaluation domain 8: To review relevant external factors and evidence

To consider relevant external factors and evidence, the evaluation considered the following questions:

- What are the local trends in emergency department admissions relating to injecting drug use?
- What are the local trends in ambulance call outs relating to injecting drug use?
- What are the local trends in overdoses related to injecting drug use?
- What are the local trends in deaths related to injecting drug use?
- What are the trends in the incidence of blood-borne disease?

This evaluation domain was informed by analyses of external data (NSW Ambulance, Emergency Department Information System (EDIS), Division of Analytical Laboratories (DAL), notifiable disease surveillance) and interviews with relevant local service system representatives.

Summary of key findings

Emergency Department presentations related to opioid use

- Data related to opioid poisoning presentations at hospital Emergency Departments in the Kings Cross area (i.e. St Vincent's Hospital and Sydney Hospital) and the rest of NSW suggests that the average monthly opioid-related ED presentations for the Kings Cross area declined by 20% following the commencement of the MSIC. This decrease was not as pronounced as that observed for the rest of NSW during the same period (35% reduction). However, it should be noted that a considerable degree of variation exists in the month to month number of opioid-related ED presentations both within the Kings Cross area and for the rest of NSW.

Ambulance attendances at suspected opioid overdoses

- Data from the NSW Ambulance Service between May 1995 and April 2010 suggests that following the commencement of the MSIC, the average number of ambulance attendances at suspected opioid overdoses during the hours of the MSIC operation decreased in the Kings Cross area (Sydney postcodes 2010 and 2011) by 44%. This decrease was greater than the decline observed for the rest of NSW (36%) during the same period.
- Notably, this difference was not evident in a similar analysis undertaken on ambulance attendances at suspected opioid overdoses that occurred outside of the MSIC hours of operation.
- Following the opening of the MSIC in May 2001 (to March 2010), the monthly number of ambulance attendances for suspected opioid overdoses in postcode 2011 trended downwards, while those reported in postcode 2010 trended upwards.
- Overall, the average monthly number of ambulance attendances for suspected opioid overdoses in postcode 2010 declined by 5% (when comparing pre-MSIC (May 1995 – May 2001) to post-MSIC (May 2001-May 2010) periods). This decline is not as great as that observed in 2011 (64%) for the same period.

Opioid-related deaths

- Between year 2004-05 and 2008-09 (May – April) an average of 11% of all opioid-related deaths occurring in NSW were in postcodes 2010 and 2011. This ranged from 9% to 13% over the five year period. In the absence of data from the period prior to the MSIC commencement, it is not possible to infer any contribution of the MSIC on rate or proportion of opioid-related deaths.

Blood-borne disease (such as HIV and hepatitis C)

- A notable decline was observed in the number of Human Immunodeficiency Virus (HIV) and Hepatitis C (Hep C) infection notifications between 1999 and 2009 for people living in the Kings Cross area (postcodes 2010 and 2011).
- During this period, Hep C infection notifications also declined across the rest of NSW. However, in the case of HIV infection notifications a slight upward trend was

observed for people residing in the rest of NSW over the same period. In the absence of substantial data from the period prior to the MSIC commencement, it is not possible however to attribute any change in infection notifications to the operation of the MSIC.

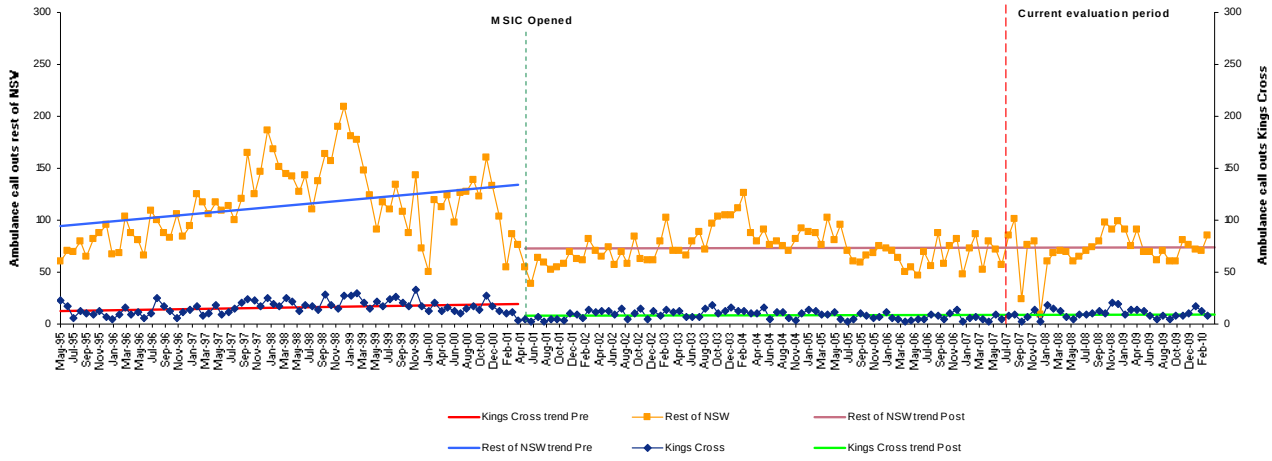
Ambulance trends

During the period May 1995 to March 2010, a total of 35,796 ambulance attendances across NSW were made to suspected opioid overdose[174]. Of these, just over half (18,168) were recorded as attending within the MSIC operating hours, and of these, 12% (2,110) were recorded within Sydney postcodes 2010 and 2011 (King's Cross area).

Figure 12-1 shows the distribution of ambulance attendances for suspected opioid overdoses per month occurring within the MSIC opening hours (n = 18,168). In the period prior to the commencement of the MSIC (indicated in Figure 12-1 with a red line) the monthly number of ambulance attendances for suspected opioid overdoses reported for the Kings Cross area (postcodes 2010 and 2011) were trending slightly upwards, with a range between 3 and 33. Similarly, the monthly number of ambulance attendances for suspected opioid overdoses for the rest of NSW also trended upward (blue trend line), with a range between 50 and 209.

Following the opening of the MSIC in May 2001 (to March 2010), the trend in the monthly number of ambulance attendances for suspected opioid overdoses in both the Kings Cross area (green trend line) and the rest of NSW (purple trend line) appeared to stabilise. However, a degree of month to month variation was still observed, with the King's Cross area ranging between 2-20 attendances per month and attendance for the rest of NSW ranging between 9-126.

Figure 12-1: Ambulance attendances for suspected opioid overdoses during the MSIC operating hours (Kings Cross area and Rest of NSW)



Source: NSW AMBOD Data

The average monthly number of ambulance attendances in the Kings Cross area (postcodes 2010 and 2011) for suspected opioid overdoses decreased by 44% from 16 per month in the period prior to the commencement of the MSIC (May 1995 to April 2010) to 9 attendances per month in the period following the commencement of the MSIC (May 2001 to Mar 2010). While not as pronounced, the average monthly number of ambulance attendances for the rest of NSW for suspected opioid overdoses decreased by 36% from 114 in the period prior to the commencement of the MSIC (May 1995 to April 2010) to 73 in the period following the commencement of the MSIC (May 2001 to Mar 2010).

Table 12-1: Average monthly ambulance attendances for suspected opioid overdoses pre and post MSIC

	Kings Cross	Rest of NSW
Pre-MSIC	16	114
Post-MSIC	9	73
Change	**-7 (44%)**	**-41 (36%)**

Source: NSW AMBOD Data

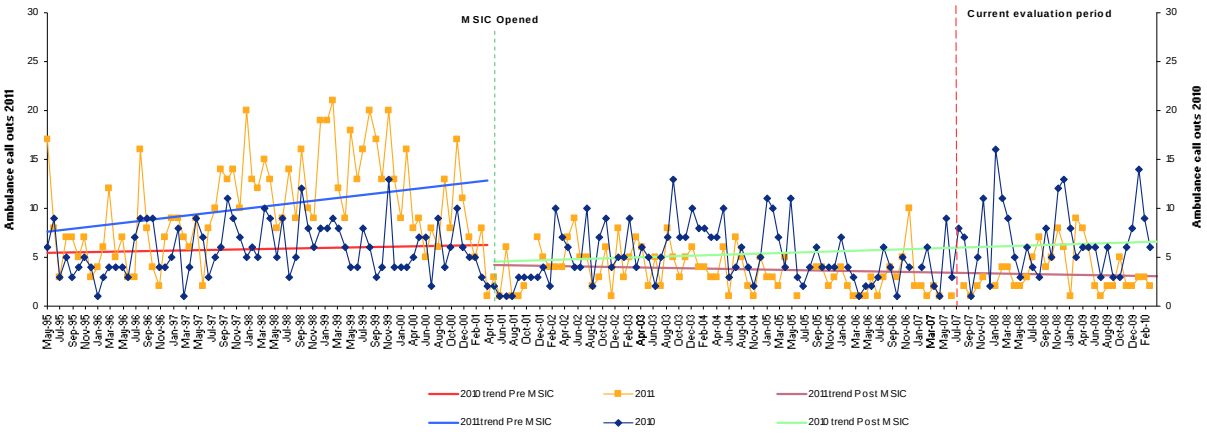
In order to gain a more detailed understanding of ambulance attendance trends in the MSIC vicinity, a comparison was undertaken between ambulance attendances in postcode 2010 (further from the MSIC) and postcode 2011 (closer to the MSIC) occurring pre and post the commencement of the MSIC. (the MSIC is located in postcode 2011 and includes the King's Cross area. Postcode 2010 includes suburbs to the south of the MSIC – See Appendix E).

Figure 12-2 shows the distribution of ambulance attendances for suspected opioid overdoses per month occurring in postcodes 2010 and 2011 within the MSIC opening hours (n = 2,110). In the period prior to the commencement of the MSIC (indicated in

Figure 12-2 with a green dashed line) the monthly number of ambulance attendances for suspected opioid overdoses reported in postcode 2011 were trending slightly upwards (blue trend line), with a range between 1 and 21 attendances per month. Similarly, the monthly number of ambulance attendances for suspected opioid overdoses reported in postcode 2010 also trended upward (red trend line), with a range between 1 and 13 attendances per month.

Following the opening of the MSIC in May 2001 (to March 2010), the monthly number of ambulance attendances for suspected opioid overdoses in postcode 2011 (purple trend line) trended downwards, while those reported in postcode 2010 (green trend line) trended upwards. A degree of month to month variation was still observed, with the postcode 2011 ranging between 1-10 attendances and attendance in postcode 2010 ranging between 1-16 attendances.

Figure 12-2: Ambulance attendances for suspected opioid overdoses during the MSIC operating hours (postcodes 2010 and 2011)



Source: NSW AMBOD Data

The average monthly number of ambulance attendances in postcode 2010 for suspected opioid overdoses decreased by 5% from 5.9 attendances in the period prior to the commencement of the MSIC (May 1995 to April 2010) to 5.6 attendances in the period following the commencement of the MSIC (May 2001 to Mar 2010). However, a much more pronounced decrease was observed in the average monthly number of ambulance attendances for suspected opioid overdoses in postcode 2011, with a 64% decline from 10.2 attendances in the period prior to the commencement of the MSIC (May 1995 to April 2010) to 3.6 in the period following the commencement of the MSIC (May 2001 to Mar 2010). This trend is consistent with that described in the previous evaluation in 2007[175], where a greater decline in the average monthly ambulance attendances (pre vs. post MSIC opening) was observed in postcode 2011 compared to postcode 2010). It should be noted however, that differences were observed between the analyses with respect to the absolute ambulance attendances presented and the changes in average monthly attendances. This may be due to differing date ranges being adopted in the 2007 evaluation report (May 1998 to May 2006) compared to this evaluation (May 1995 to March 2010)

In any case, both sets of findings suggest that the MSIC may be having a greater impact on ambulance attendances that occur within a vicinity closer to the MSIC rather than those that occur further away.

Table 12-2: Average monthly ambulance attendances for suspected opioid overdoses pre and post MSIC commencement

	Postcode: 2010	Postcode: 2011
Pre-MSIC	5.9	10.2
Post-MSIC	5.6	3.6
Change	**- 0.3 (5%)**	**- 6.6 (64%)**

Source: NSW AMBOD Data

Emergency Department presentation trends

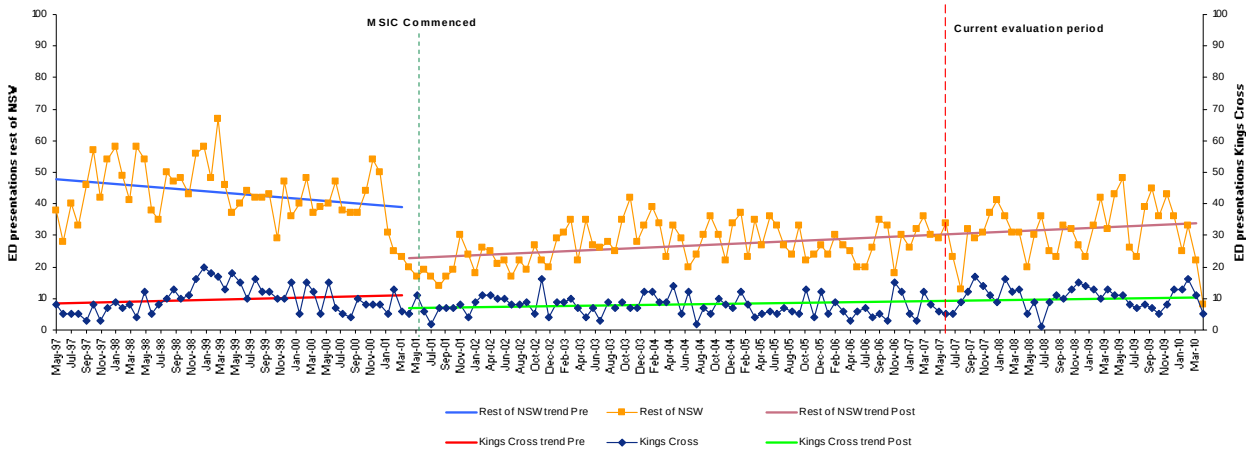
During the period May 1997 to May 2010, a total of 13,008 presentations to Emergency Departments (EDs) in NSW were related to opioid use[176]. Of these, just over half (6,552) were recorded as occurring during the MSIC operating hours[177], and of these, 21% (1,392) were recorded at St. Vincent's Hospital or Sydney Hospital.

It should be noted that, unlike ambulance attendances which can be identified specifically by postcode or attendance, the ED presentation data presented in this section does not distinguish the locality in which the opioid poisoning occurred. For this reason, ED presentations to St. Vincent's Hospital or Sydney Hospital (both servicing postcodes 2010 and 2011) were analysed as a proxy for opioid poisonings occurring in the Kings Cross area.

Figure 12-3 shows the distribution of opioid-related ED presentations per month occurring within Sydney MSIC opening hours (n = 6,552). In the period prior to the commencement of the MSIC (indicated in Figure 12-3with a green dashed line) the monthly number of opioid related ED presentations reported for the Kings Cross area (presentations as St. Vincent's Hospital and Sydney Hospital) were trending slightly upwards (red trend line), with a range between three and 20 presentations. In contrast, the monthly number of opioid-related ED presentations for NSW hospitals other than St. Vincent's or Sydney Hospital (rest of NSW) trended slightly downward (blue trend line), with a range between 23 and 67 presentations.

Following the opening of the MSIC in May 2001 (to May 2010), the monthly number of opioid-related presentations to hospitals in the rest of NSW trended upwards (purple trend line), albeit at lower overall volumes (range 8-48 presentations). In the same period, the monthly number of opioid-related ED presentations in the King's Cross area, also trended slightly upwards (with a range of 1-17 presentations) (green trend line).

Figure 12-3: Opioid-related Emergency Department presentations by month, occurring during the MSIC operating hours



Source: NSW Emergency Department Information System (EDIS) Data

At an overall level, the average number of monthly opioid-related ED presentations recorded at St. Vincent's Hospital and Sydney Hospital declined by 20%, from 10 presentations per month in the period prior to the MSIC commencing (May 1997 to April 2001) to 8 presentations per month in the period post the MSIC commencing (May 2001 to April 2010).

Similarly, the average monthly opioid-related ED presentations to hospitals in the rest of NSW declined by 35%, from 43 in the period prior to the MSIC commencing to 28 in the period post the MSIC commencing.

Table 12-3: Average monthly ED presentations pre and post the MSIC

	Kings Cross	Rest of NSW
Pre-MSIC	10	43
Post-MSIC	8	28
Change	**-2 (20%)**	**-15 (35%)**

Source: NSW Emergency Department Information System (EDIS) Data

Local injecting-related mortality trends

Table 12-4 below outlines total opioid-related deaths between July 2004 and June 2009 for the Kings Cross area and the rest of New South Wales. Of the 450 opioid-related deaths across NSW in this period, 50 (11%) occurred in postcodes 2010 and 2011 (the Kings Cross area). Total yearly drug deaths fluctuated considerably across the period in both Kings Cross and the rest of New South Wales; in both jurisdictions they fell by close to half between the 2004-05 and 2005-06 financial years, before increasing in 2006-07, and again in 2007-08 and decreasing in 2008-09.

The absolute numbers of opioid-related deaths in the Kings Cross area are too low to draw out trends around deaths. In addition, the absence of opioid-related death data for the period prior to the commencement of the MSIC means it is not possible to comment on the impact the MSIC has had on opioid-related deaths.

Table 12-4: Opioid-related deaths

Location	2004-05	2005-06	2006-07	2007-08	2008-09	Total
Kings Cross	14 (10%)	7 (12%)	9 (11%)	14 (13%)	6 (9%)	50 (11%)
Rest of NSW	124 (90%)	52 (88%)	73 (89%)	90 (87%)	61 (91%)	400 (89%)
Total	**138**	**59**	**82**	**104**	**67**	**450**

Source: NSW Division of Analytical Laboratories (DAL)

Blood-borne virus trends

The presentation of notifiable infections by head of population was investigated as a replacement for the analysis presented in this section to provide a relevant comparator. However, given the limitations of the notifiable infections data and the lack substantial data form the period prior to the MSIC commencement, these data are presented as indicative only.

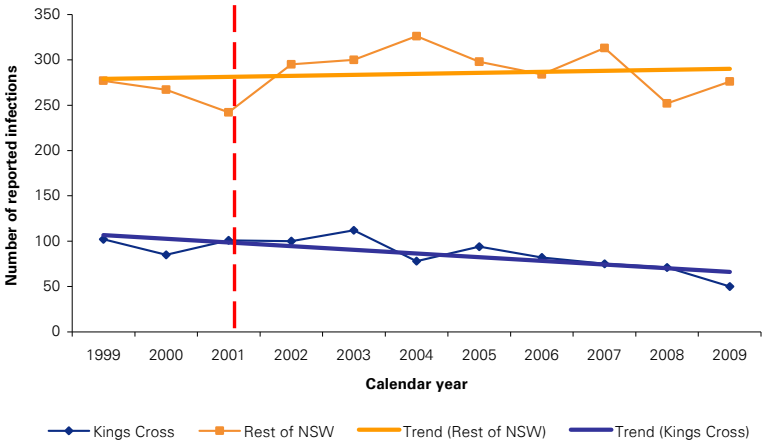
Notifiable Diseases Data (NDD) was obtained from NSW Health for Human Immunodeficiency Virus (HIV) and Hepatitis C (Hep C) infections by onset date[178] within postcodes 2010 and 2011 (The Kings Cross vicinity) and the rest of NSW in order to establish whether the opening of the MSIC in May 2001 has impacted on reported HIV or Hep C infections in the Kings Cross area.

It should be noted that only those cases with laboratory evidence of infection notified to NSW Health under the Public Health Act (1991) are included in the following analyses. Whether persons with these infections are notified depends on their health

care seeking behaviour, and the testing practices of the clinicians, which may vary across NSW. In addition, many Hep C and HIV infections are asymptomatic and remain undiagnosed for long periods or are never diagnosed. Consequently, these data are unlikely to reflect the true incidence of these infections. Finally, for many cases, the time of acquisition of the infection is unknown, and therefore the notification data represents both acute and chronic infections.

As outlined in Figure 12-4, the Kings Cross area accounts for a substantial proportion of HIV infection notifications in NSW; indeed in the period from 1999 to 2009, 23% of all HIV infection notifications in the NSW area were reported for people living in the Kings Cross area (postcodes 2010 and 2011). A downward trend (blue trend line) in HIV infection notifications was observed for the Kings Cross area for the period between 2003 and 2009. This contrasts with a slight upward trend in the rest of NSW during the same period (orange trend line).

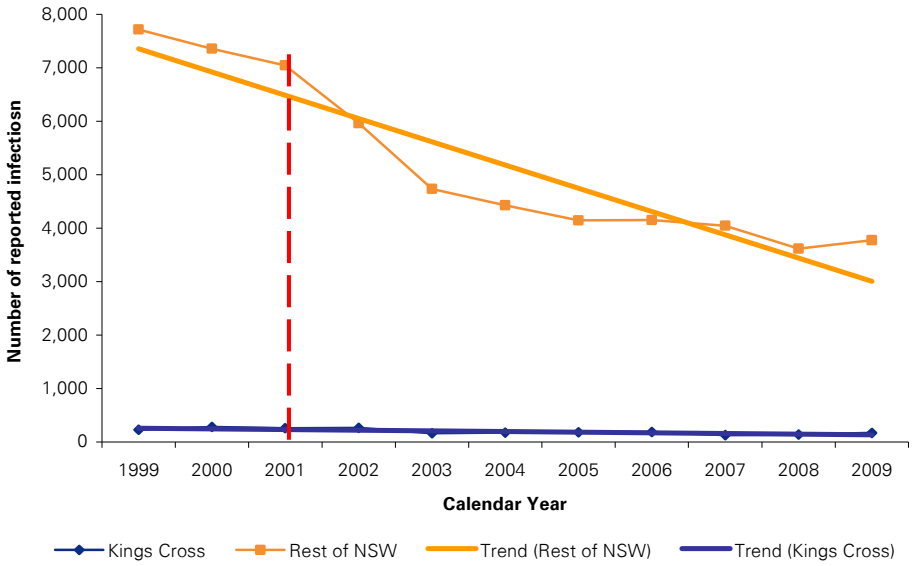
Figure 12-4: HIV infections 1999-2009



Source: NSW Health Epidemiology Branch

In terms of Hepatitis C infection notifications, the Kings Cross area accounted for a small proportion of the total notifications for NSW in the period from 1999 to 2009 (4% in total). As indicated in Figure 12-5, there was a pronounced downward trend (orange trend line) in total Hepatitis C infection notifications across the rest of NSW between 1999 (7,513) and 2009 (4,002). There has also been a downward trend (blue trend line) in hepatitis C infection notifications in the Kings Cross area (postcodes 2010 and 2011) (from 218 in 1999 to 173 in 2009). This represents an overall decrease in the number of Hepatitis C infection notifications of 47% and 21% for the rest of NSW and the Kings Cross area, respectively.

Figure 12-5: Hepatitis C Infections 1999-2009



Source: NSW Health Epidemiology Branch

Overall, the data on Hep C and HIV infection notifications indicates that there has been a downward trend in the notification of both types of disease in the Kings Cross area in the period from 1999 to 2009. In the case of HIV, this trend is in contrast to the upward trend in infection notifications in the rest of NSW, while with Hep C the trend is reflective of a downward trend in infection notifications across NSW.

In terms of links between the trends in infection notifications and the opening of the MSIC, it could therefore be suggested that the opening of the MSIC has helped to reduce the incidence of HIV and Hep C infection in the Kings Cross area. However, the limitations of the data (outlined above) should be carefully considered when interpreting these results.

Notably, in the case of HIV infection notifications, it may not be possible to infer that the reduction in the Kings Cross area compared to the rest of NSW is due entirely to the opening of MSIC, as the trend in reduced HIV infection notifications does not directly coincide with the opening of the MSIC. However, it may also be reasonable to expect such a 'lag' period before observing an effect, given the long period of asymptomatic infection associated with HIV.

12 Evaluation domain 9: Have there been any unintended results from the Trial?

To consider if there had been any unintended results from the Trial, the evaluation posed an open-ended question to relevant organisations and individuals, 'Have there been any unintended results from the Trial?'

This information was collected through interviews with current and former MSIC clients, MSIC staff, relevant local service system representatives and a survey of the local community.

Summary of key findings

- There was overwhelming support for the MSIC and the majority of 'unintended consequences' reported to the evaluation related to additional, unintended positive results.
- Positive unintended results related to an improved understanding of injecting drug use and drug users. It was reported that this support improved service responses, including aiding drug users to access drug treatment and educate about the risk of spread blood-borne viruses.
- Negative consequences reported were most often related to the unintended impact of the ongoing trial status on the MSIC and local service system.
- Individual service representatives reported client concerns about increased visibility to police as injecting drug users, as a result of accessing the MSIC and saw this as an unintended negative consequence of the Trial.

There was overwhelming support for the MSIC and the substantial majority of responses to the question of 'unintended results' were positive. Local service system representatives reported the following positive unintended results:

- Police reported that it provides an opportunity for police to have a better understanding of drug use from a health perspective and with more compassion.
- The Emergency Department representative suggested that the Trial has reduced the load in the local Emergency Departments. It was reported that previously, long term frequent injecting drug users would become disruptive and uncooperative in the Emergency Department due to an intolerance to the waiting period.
- The Trial has demonstrated that the MSIC effectively engages with long term frequent injecting drug users and helps injecting drug users to access drug treatment and improve knowledge of and practice to minimise the risk of spread of blood borne viruses.
- Greater cohesion and sophistication in the local service system and community on the issue of drug use has developed over time.
- Ability to get reliable trend and sentinel information about drugs being used.

The following negative consequences were reported:

- One service representative reported that the MSIC may prevent clients from experiencing the lowest point in their drug using period and therefore they may avoid taking action to change (i.e. seek drug treatment and other services)
- Although the majority of current and former clients interviewed reported no negative aspects to their perspective of the MSIC, a small number did describe consequences (real or perceived) related to an increase in attention from police once known to be a client of the MSIC.
- As previously described, staff and local service system representatives typically referred to the unintended impact of the ongoing trial status on the MSIC and local service system. There was a perception that the ongoing Trial status impinged on the ability for effective service planning for drug and alcohol and mental health services.

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A. Key local service system organisations

Organisation
Kirketon Road Centre
Kobi Centre, a private drug treatment facility
Langton Centre
NEAMI, a local mental health service
NSW Ambulance
NSW Police
St Vincent's Hospital Alcohol & Drug Services
St Vincent's Hospital and Sydney Hospital Emergency Department
Wayside Chapel

B. Evaluation Steering Committee - organisations represented

Organisation
Australian Institute of Criminology (Expert Advisory Group on Drugs & Alcohol Representative)
Centre for Epidemiology and Research, NSW Health
Centre for Health Protection, NSW Health
Department of Justice and Attorney General
Drug and Alcohol Clinical Advisor, NSW Health
Medically Supervised Injecting Centre
Mental Health and Drug & Alcohol Office, NSW Health
NSW Department of Premier and Cabinet
NSW Police Force

C. Previous evaluations of the Medically Supervised Injecting Centre

As noted in Section 2.1.1, this evaluation builds on a number of previous evaluation and research findings since the MSIC opened in 2001. Previous evaluations and research reports for MSIC are listed, with the focus and reported key findings for each summarised below.

- SAHA (2008) Economic Evaluation of the Medically Supervised Injecting Centre at Kings Cross (MSIC) [179]
- NCHECR (2008) Sydney Medically Supervised Injecting Centre. Client cohort study – Summary Report[180].
- BOCSAR (2008) Trends in property and illicit drug-related crime in Kings Cross: An update[181]
- NCHECR (2007) Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4: Evaluation of service operation and overdose-related events[182]
- NCHECR (2007) Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 3: Evaluation of Client Referral and Health Issues[183]
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SAHA (2008) Economic Evaluation of the Medically Supervised Injecting Centre at Kings Cross

This report describes an economic analysis 'to determine the costs and benefits of the program in relation to the broader health budget as well as to any related government agencies and private enterprise'. The analysis focused on the 'alternative health budget costs which might be expected to be incurred for those patients currently serviced by MSIC', particularly in relation to HIV and HCV prevention, overdoses, client and referral services and costs associated with police and coronial investigation of fatal overdoses.

Key findings were that:

- a comparison of the estimated costs of running MSIC against the costs of providing a similar health outcome elsewhere in the health system for a

representative comparison year found MSIC saves at least $658,000 over providing similar health outcomes through other means in the health system, although this is likely to be an underestimate given intangible costs are not measured

- sensitivity testing found that the optimal health outcomes provided by MSIC could only be achieved if Government provided additional funding, with estimates ranging from approximately $1.1 million to $3.3 million
- assuming a 'mid-point value' of human life at $3.5 million, breakeven analysis indicates that MSIC's operations would have to prevent only 0.8 deaths per year to break even on operational costs, significantly fewer than the estimated 25 lives saved in the comparison year
- 'the analysis demonstrates that even conservative estimates of the number of deaths which MSIC may prevent each year results in massive positive outcomes in economic terms for the current funding of the MSIC'[189].

NCHECR (2008) Sydney Medically Supervised Injecting the MSIC. Client cohort study – Summary Report

This summary report presents details on a cohort of clients who registered at MSIC between December 2005 and March 2008 and consented to participate (n=1,642) and provided valid follow-up data three months after registration (n=190). Key findings of the 190 clients followed up include:

- there was no significant difference pre and post registration at MSIC on employment status, sex work, accommodation status, drug type most injected or re-use of another's used needle and syringe in the three months after registration
- there was an 'overall decrease in public injecting', although clients using the MSIC more intensively were more likely to report they had injected publicly at least once since registration
- more than two in five clients reported having 'all' or 'most' of their injections at the MSIC
- about one in five (18%) self-reported receiving a referral to drug treatment and 30% of the cohort who had not had any drug treatment ('treatment-naïve') at registration reported they had had drug treatment during the three months to follow-up[190].

BOCSAR (2008) Trends in property and illicit drug-related crime in Kings Cross: An update

This report compares information on robbery, theft and drug offences for Kings Cross to the rest of Sydney for the period May 2001-December 2007, finding:

- continued decrease in the incidence of robbery and property crime in Kings Cross
- increases in arrests for possession/use of cocaine and possession/use of amphetamine

- decreases in arrests for dealing/trafficking and use/possession of narcotics
- increases in 'move-ons' and persons arrested for drug use/possession within 50 metres of the MSIC.

The authors note significant caveats associated with these findings, including impact of police activity on arrest rates and 'move-on' incidents, potential changes in willingness to report crime to police and difficulties 'disentangling any effects of the MSIC from major changes to the illicit drug market brought about by the heroin shortage'. BOCSAR concluded 'it is unclear whether these trends are attributable to the MSIC itself or other factors in the Kings Cross area'[191].

In the associated media statement released on 12 November 2008, the Director of the Bureau, Dr Don Weatherburn, *'cautioned that it would be wrong to conclude on the basis of this evidence that the MSIC is now becoming a magnet for people wanting to buy and sell drugs''*[192].

NCHECR (2007) Sydney Medically Supervised Injecting the MSIC Interim Evaluation Report No. 4: Evaluation of service operation and overdose-related events

This interim evaluation report presents information on service delivery, overdose-related events, counts of discarded needles and syringes in the local vicinity. This report covers the period of May 2001 – April 2007 and found:

- over 2,106 drug overdose incidents have been managed at the MSIC without fatality since May 2001 with 93 percent involving heroin. It is estimated a "substantial proportion" of these would likely have otherwise occurred in public if the MSIC had not been available
- Ambulance attendances at suspected opioid overdoses decreased by 63% following the opening of the MSIC (compared to a 55% decrease in the rest of NSW)
- there was a 35% decrease in the number of opioid poisoning presentations at emergency departments in Kings Cross between May 1998 and April 2006
- between January 2000 and January 2007, there was a 48% reduction in the number of needles and syringes collected by the Kirketon Road Centre Clean Up team within 500 metres of the MSIC
- the MSIC has been successful in potentially averting up to 305,113 public injections, through the provision of an accessible and safe injecting environment
- the number of discarded needle and syringes collected in the local area approximately halved over this period[193].

NCHECR (2007) Sydney Medically Supervised Injecting the MSIC Interim Evaluation Report No. 3: Evaluation of Client Referral and Health Issues

This interim evaluation report presents findings on client characteristics, drug use, risk behaviour and referrals for the period of May 2001 to April 2006, finding that:

- the profile of MSIC clients indicates that the service has been successful in reaching long-term drug users, public injectors, homeless injecting drug users and those engaged in sex work. The number and profile of clients who utilise this service indicates that the MSIC has broad acceptance among the injecting drug user community
- rates of injecting and vein care advice and referral to drug treatment by the MSIC staff exceed those reported by Vancouver's Insite facility, which is recognised as having a major impact on public health outcomes associated with injecting drug use
- a survey of 100 MSIC clients in October 2005 found that more than three quarters (78%) indicated that they would inject in a public place if the MSIC was not available and a similar proportion (77%) reported improvements in their injecting practices since registration. Approximately half of those surveyed reported access to referrals as a motivator for attending
- the MSIC has provided nearly half of all registered clients with injecting and vein care advice, an important achievement as recent studies show that poor injecting technique is associated with syringe sharing and incident HIV and HCV injection
- heroin users, daily injectors and public injectors were significantly more likely to receive a referral to drug treatment indicating that the MSIC is effectively targeting those clients at highest risk of drug-related mortality and morbidity
- among the 938 MSIC clients who received a drug treatment referral, 265 were drug treatment naïve and may have received their first referral to drug treatment at the MSIC
- public injecting was reported as the main alternative to injecting at the MSIC, potentially averting approximately 234,000 public injections
- employment of a Case Referral Coordinator from October 2004 led to a significant increase in referrals to drug treatment (from 5.3 referrals per 1000 visits in the preceding 12 months to 10.2 referrals per 1,000 client visits in the 12 months following the establishment of the role). [194]

BOCSAR (2006) Recent trends in property and drug-related crime in Kings Cross

This report examined crime data (theft, robbery and drug-related incidents) for the period mid-2002 to mid-2006, finding that:

- theft and robbery showed a predominantly decreasing pattern in Kings Cross as was the case throughout the rest of Sydney
- the continued operation of the MSIC has not at this stage had an adverse impact on crime in Kings Cross
- evidence supported previous findings that the MSIC had not resulted in a 'honey-pot' effect[195].

NCHECR (2006) Sydney Medically Supervised Injecting the MSIC Interim Evaluation Report No. 2: Evaluation of Community Attitudes towards the Sydney MSIC

The second interim evaluation report provides results of telephone surveys of Kings Cross residents and businesses on the 'attitudes towards drug use and medically supervised injecting centres, experience and perceptions of public drug use and related issues', finding that:

- around 90% of residents and business operators in 2005 reported at least one advantage to having the MSIC in the local area, with advantages including:
- reduced risk of overdose
- reduced numbers of drug users on local streets
- control of HIV/AIDS and Hepatitis C
- residents and business operators in the Kings Cross area perceive a decrease in the level of public drug use and publicly disposed injecting equipment seen in the past month
- the MSIC has not been perceived as an inducement to inject drugs among those living locally
- nearly three quarters (73% of residents; 68% of business operators) agreed with the establishment of a MSIC in the Kings Cross area. [196]

BOCSAR (2005) The impact of the Sydney Medically Supervised Injecting the MSIC (MSIC) on crime

This paper compares information on robbery, theft and drug offences for Kings Cross to the rest of Sydney for the period January 1999 to September 2002, finding:

- there was no evidence of the MSIC having an impact on robbery and theft rates
- there was no apparent increase in drug use/possession or supply offences after the MSIC opened
- there was little or no sustained increase in drug-related loitering immediately in front or behind the MSIC
- concluding that the MSIC had not resulted in a 'honey-pot effect'[197].

NCHECR (2005) Sydney Medically Supervised Injecting the MSIC Interim Evaluation Report No. 1: Operation & Service Delivery (November 2002 to December 2004)

The first of four interim evaluation reports produced by NCHECR, this describes operational activity and service delivery of the MSIC and provides summaries of the service model, internal management protocols and data collection and management systems finding that the MSIC:

- engaged its target population group and its Internal Management Protocols and clinical model achieved a good coverage of local injecting drug users
- reduced morbidity and mortality associated with drug overdoses with over 1200 overdoses successfully managed at the MSIC
- provided increased access to health and social welfare services for a marginalised IDU population with 16% of all clients receiving at least one referral
- reduced street based injecting with 51% of clients between May 2001 and December 2004 indicating at registration they would have injected in a public place if the MSIC had not been available[198].

MSIC Evaluation Committee (2003) Final report of the evaluation of the Sydney Medically Supervised Injecting the MSIC.

This report presents findings from an independent process, impact and economic evaluation of the first 18 months of the MSIC. Summary findings were that:

- the operation of the MSIC in the Kings Cross area is feasible
- the MSIC made service contact with its target population, including many who had no prior treatment for drug dependence
- a small number of opioid overdoses managed at the MSIC may have been fatal had they occurred elsewhere
- the MSIC made referrals for drug treatment, especially among frequent attenders
- there was no increase in risk of blood borne virus transmission
- there was no overall loss of public amenity
- there was no increase in crime
- the majority of the community accepted the MSIC initiative
- the MSIC has afforded an opportunity to improve knowledge that can guide public health responses to drug injecting and its harms[199].

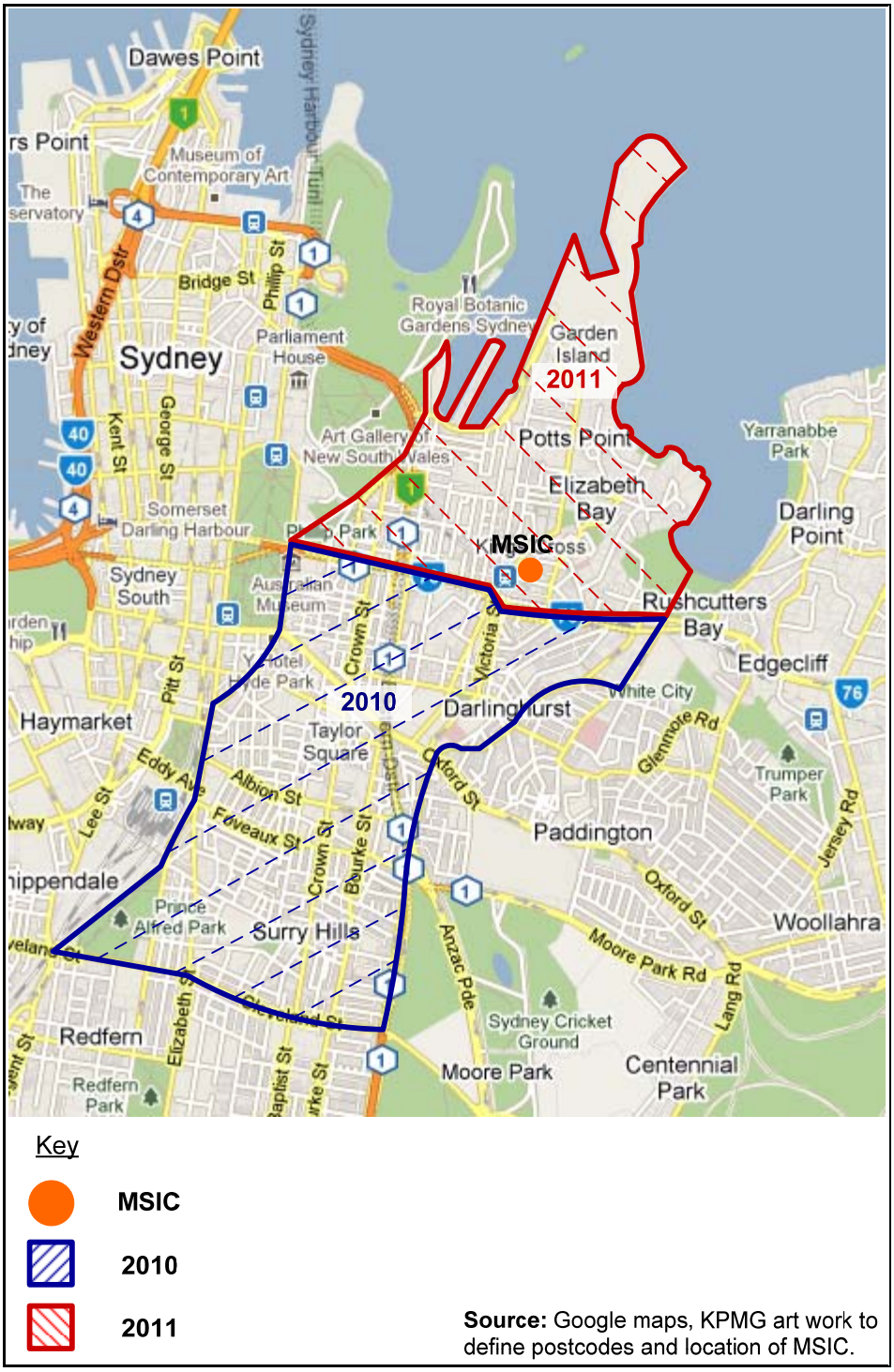
D. Evaluation domains and questions

Table 14-1: Evaluation domains and questions

Evaluation Domains - Process	Evaluation questions
1. To review client demographics	What are the demographics of current clients?
	What are the trends in relation to past client demographics?
	Do any trends suggest a change in the client group, e.g. with regard to age, medical needs, referral needs?
	Has the service responded effectively to any changes in the demographics of its clients?
	Is there any external evidence that may suggest ongoing or future changes in the client demographics?
2. To review whether the systems, protocols and processes of the Centre are appropriate for the client group	What are the client views on the Trial's systems, protocols and processes?
	What are the staff views on the Trial's systems, protocols and processes?
	Are the systems, protocols and processes subject to regular review and what are the findings of or action arising from those reviews?
3. To monitor the level of demand for the Centre	What is the number of client visits per day averaged over a month?
	What are the short and long term trends in service usage?
	Based on trend information, what predictions can be made about the future demand for the service?
4. To review whether the mix and level of services are appropriate in the context of the Government's objectives	What are the trends in service activity level?
	What are the trends in types of drug injected?
	What are the trends in utilisation of different components of the Centre's services, e.g. supervised injecting, medical treatment, referral services?
	Are the days/hours of the Centre's operation appropriate?
	What are the trends in referral of clients to drug treatment, primary health care, mental health and social welfare services? What is the basis of any such trends including arising from Centre practices?

Evaluation Domains - Process	Evaluation questions
5. To review the operation of protocols excluding clients or potential clients in certain circumstances	How many clients have been excluded and why?
	What trends are there in the reasons for exclusion?
	What processes occur when a client is to be or has been excluded, e.g. referral, medical care, security/ police intervention etc?
6. To review the effectiveness of the Centre on clients' health and wellbeing	How effective has the Centre been in reaching its intended target group?
	What are the trends in overdose, health and treatment of clients since the Centre opened?
	Is there evidence of a reduction in overdose related morbidity and mortality amongst Centre clients?
	Is there evidence of improved health amongst Centre clients, such as incidence of infectious diseases, including HIV and Hepatitis C?
	What are the outcomes for Centre clients of referrals to drug treatment and related services?
	What is the impact of the Centre on injecting practices and injecting related health of clients?
7. To review the effectiveness of the Centre in relation to the local community in improving public amenity	What is the effectiveness of the Centre on reducing discarded injecting equipment in local public places?
	What is the effectiveness of the Centre on reducing drug users injecting in local public places?
	What are the views of the local community with regard to the Centre and public amenity?
	What level of support is there for the Centre amongst local residents and local businesses?
8. To review relevant external factors and evidence	What are the local trends in emergency department admissions relating to injecting drug use?
	What are the local trends in ambulance call outs relating to injecting drug use?
	What are the local trends in overdoses related to injecting drug use?
	What are the local trends in deaths related to injecting drug use?
	What are the trends in the incidence of blood-borne disease?
9. Have there been any unintended results from the Trial?	Open-ended question

E. Location of MSIC – postcodes 2011 and 2010



F. Documentation reviewed

The following documents have been reviewed for the evaluation:

MSIC policy and procedure documentation

Previous evaluation reports.

MSIC policy and procedure documentation

The table below briefly describes policy and program documentation supporting the MSIC.

Documentation	Description
Clinical and Floor Management protocols These documents were created on or since the opening of the MSIC (2001), have been revised on an annual basis since 2001 as well as an 'as needed' basis, reviewed 2008 and scheduled for review in August 2010.	Twenty-four protocols addressing events such as client registration, notification of child at risk, floor management, vein care, infection prevention and control, blood/body fluids and needlestick injury exposure, cocaine and methamphetamine toxicity, delirium protocol, guidelines for suicidal behaviour, medical record release and confidentiality.
Security and Occupational Health and Safety protocols These documents were created on or since the opening of the MSIC (2001), have been revised on an annual basis since 2001 as well as an 'as needed' basis, reviewed 2008 and scheduled for review in August 2010.	Twelve protocols addressing issues such as security systems, aggression management, response to critical incidents and after hours incident management.
Human resources and other staff related policies	Ten policies addressing issues such as recruitment, initial training program, code of professional conduct, employees responsibility, clinical supervision and student and health worker placement.
Miscellaneous protocols	Four policies relating to media and public information, cab charge, management of complaints and client complaints and concern form.
MSIC client pamphlet	A four-sided booklet for clients that outlines guidelines and rules for using the centre, including opening hours, exclusion criteria, registration, injecting room practices, drug overdoses, legal matters, behaviour and complaint processes and contact details.
Verbal complaints flowchart	Flowchart outlining the process for complaints including documentation and (where appropriate) review of policy/practice/procedure, staff counselling/education or referral to external agency.

G. Client interview questions

Introduction

Thank you for agreeing to talk with me about your experiences coming to the MSIC.

1 How did you first find out about the MSIC? A staff member at another service told me about it ..... ☐ A friend/drug user/dealer told me about it ..... ☐ Saw it by myself ☐ Other (please specify) ..... ☐
2 In the past six months, how often have you used the MSIC? More than once a day ☐ Once a day ..... ☐ At least once a week ..... ☐ At least once a month ..... ☐ Less than once a month ..... ☐
3 Do you use the MSIC more or less now than you did when you first started coming here? Why? What has changed?
4 Why do you come to the MSIC?
5 How long have you been coming to the MSIC? 0>3 months ..... ☐ 3>6 months ..... ☐ 6>12 months ..... ☐ 12>24 months ..... ☐ 24 months+ ..... ☐ Note number of years or year of first use of MSIC.....
6 (If coming for more than seven years) Have things changed in Kings Cross since the MSIC opened? How? Is that a good or a bad thing?.

How things work at MSIC

I'm interested in how things work here at the MSIC

7 Tell me about what happens when you come here (Q2)
Entry area/waiting room
Injecting area

After-care area
8 Do you think the way this place works is fair?
Client rules and responsibilities (explore by Stages of MSIC i.e. Stage 1, Stage 2, Stage 3
Sanctions

Opening hours and places you inject

I want to ask you a couple of questions about the opening hours and places you inject

9 When is the Centre open? (Q4)
10 If you could change the opening hours, would you? To what? Why?
11 Do you inject outside of these opening hours? (if yes ask Q12 below)
12 If you inject when the Centre is closed (i.e. after hours), where do you do it?(Q4/Q7) Own/friends home ..... ☐ Car ..... ☐ Public toilet ..... ☐ Street/park ..... ☐ Shooting galleries ..... ☐ I only inject at MSIC ..... ☐ N/A ☐ Oher (specify) ..... ☐
13 Do you inject in other locations than the MSIC when the MSIC is open? Where? Own/friends home ..... ☐ Car ..... ☐ Public toilet ..... ☐ Street/park ..... ☐ Shooting galleries ..... ☐ I only inject at MSIC ..... ☐ Other (specify) ..... ☐
14 Why?

Safer injecting and overdose

I'd like to talk about the way you inject since you started using the MSIC

15 First, thinking about when you inject, do you think you inject more safely now? Why? How is it safer?
Do you do anything differently to look after your veins better? What?
Do you do anything differently for blood safety? What?
16 Have you ever received advice from someone working here about safer injecting? Was it helpful?
17 Thinking now about overdoses, do you know what the early signs of an overdose are? What are they?
18 Do you do anything differently now to reduce the risk of overdosing? What? Not injecting when already effected by other drugs or alcohol ☐ 'Tasting' for purity/injecting drugs in portions ☐ Calling an ambulance if needed ☐ Using less if tolerance reduced, like recently out of detox/jail/rehab ☐ Other ☐ Other description field: ……
19 Have you ever seen anyone overdose?
20 (if yes) have you seen anyone overdose at the MSIC?
21 Do you do anything differently now if you see someone having an overdose? What? (Q4)
22 How did you learn to do this?

Other services

I'd like to ask you about other services you have used since you have come to the MSIC

23 Have you accessed other health or support services since coming to the MSIC? Which services? General health (e.g. doctor or nurse at Kirketon Road Centre, Sydney or St V's Hospital ☐ Mental health (e.g. Darlinghurst mental health service) ☐ Housing (e.g. Homeless person's line, Edward Eager Lodge) ☐ Legal (e.g. inner city legal service) ☐

Other support (e.g. Wayside Chapel, the Crossing, Mission Australia Centre)..... ☐
24 Have you accessed any type of alcohol and drug support/treatment since you started coming here? Opiate replacement therapies (e.g. Langton Centre, Kirketon Road Centre, Kobi Clinic).... ☐ Detox (e.g. Gorman House, MacKinnon Unit at Concorde Hospital)..... ☐ Alcohol and drug counselling (e.g. Kirketon Road Centre, Kings Cross Youth at Risk) ☐ Rehab (e.g. the Buttery, Jarrah) ..... ☐ Peer support (i.e. SMART Recovery, Narcotics Anonymous) ..... ☐ Other ..... ☐
25 Did anyone at MSIC talk to you about these services?
26 Did anyone at MSIC help you get into these services?
if yes, do you think that was easier than getting in by yourself? How?
27 Have you ever tried to get into a treatment service and couldn't? What happened when you couldn't get in?
28 Are there other services you would like to get into and can't? Why not?
29 Is there anything else that you are doing now to look after yourself and your health? What?

Opinion and recommendations

30 Do you encourage other injecting drug users to come here? Why/Why not?
31 What do you tell other injecting drug users about the MSIC? (Q2)
32 Do you know injecting drug users that don't use the MSIC? Why don't they use it?
33 What are the 3 best and 3 worst things about the MSIC?

H. Former client interview questions

Introduction

First, can I ask you a few background questions

1 When did you start using the MSIC?

Year:_____

2 How did you first find out about the MSIC? (please tick best answer)

- A staff member at another service told me about it ☐
- A friend/drug user/dealer told me about it ☐
- Saw it by myself ☐
- Oher (please specify) ☐

3 How long did you go to the MSIC?

- 0>3 months ☐
- 3>6 months ☐
- 6>12 months ☐
- 12>24 months ☐
- 24 months+ ☐

Note number of years or year of first use of MSIC……

4 At that time, how often did you use the MSIC?

- More than once a day ☐
- Once a day ☐
- At least once a week ☐
- At least once a month ☐
- Less than once a month ☐

Your experience at MSIC

Now, I'd like to know a bit about your use of the MSIC

5 What were the main reasons you started going to the MSIC?

6 What did you think about how the MSIC operated?

- Entry area/waiting room
- Injecting area
- After-care area
- Opening hours

7 Did you inject outside of the opening hours? (if yes ask below)

8 If you injected when the Centre is closed (i.e. after hours), where do you do it?(Q4/Q7)

- Own/friends home ☐
- Car ☐
- Public toilet ☐
- Street/park ☐
- Shooting galleries ☐
- I only injected at MSIC ☐
- N/A ☐

Other (specify) ☐

9 Did you inject in other locations than the MSIC when the MSIC is open? Where?

- Own/friends home ☐
- Car ☐
- Public toilet ☐
- Street/park ☐
- Shooting galleries ☐
- I only inject at MSIC ☐
- Other (specify) ☐

Your experience at MSIC

10 Did going to MSIC help you get in contact with any general services?
Prompt for:

- General health (e.g. doctor or nurse at Kirketon Road Centre, Sydney or St V's Hospital.. ☐
- Mental health (e.g. Darlinghurst mental health service) ☐
- Housing (e.g. Homeless person's line, Edward Eager Lodge) ☐
- Legal (e.g. inner city legal service) ☐
- Other support (e.g. Wayside Chapel, the Crossing, Mission Australia Centre) ☐

11 Did going to MSIC help you get in contact with any services for alcohol and other drugs users?
Prompt for:

- Opiate replacement therapies (e.g. Langton Centre, Kirketon Road Centre, Kobi Clinic).... ☐
- Detox (e.g. Gorman House, MacKinnon Unit at Concorde Hospital)..... ☐
- Alcohol and drug counselling (e.g. Kirketon Road Centre, Kings Cross Youth at Risk) ☐
- Rehab (e.g. the Buttery, Jarrah) ☐
- Peer support (i.e. SMART Recovery, Narcotics Anonymous) ☐
- Other ☐

12 Did anyone at MSIC talk to you about these services? *[Explore]*
13 Did anyone at MSIC try and help you get into these services? How did this work? *[Explore]*
14 Have you ever tried to get into a treatment service and couldn't? What happened when you couldn't get in?
15 Are you in contact with any alcohol and other drugs services at the moment? *[Prompts: pharmacotherapies (bupe/methadone), support groups, counsellors, programs)*

Finishing at the MSIC

I'd like to ask you about when you stopped using the MSIC

16 When did you stop using the MSIC? Year:_____ Confirm number of years ……
17 What were the main reasons you stopped using the MSIC?
(if external reasons i.e. imprisoned) If that hadn't occurred, would you have continued to use the MSIC?
18 Did your drug use change when you stopped using the MSIC? How? Why?

Your life now

I'd like to ask you a couple of things about your life now

19 Where are you living now?
20 [If away from Kings Cross], how long have you been living away from Kings Cross?
21 Are you still injecting? *[explore]*
22 Where do you inject now? Own/friends home ..... ☐ Car ..... ☐ Public toilet ..... ☐ Street/park ..... ☐ Shooting galleries ..... ☐ Other (specify) ..... ☐

23 (If injecting) are you injecting more or less now than when you were going to the MSIC?
24 (If injecting) thinking about when you inject, do you think you inject more safely now? Why? How is it safer?
Do you do anything differently to look after your veins better? What?
Do you do anything differently for blood safety? What?
25 Have you ever received advice from someone working at MSIC about safer injecting? Was it helpful?
26 Do you do anything differently now to reduce the risk of overdosing? What? Not injecting when already effected by other drugs or alcohol ☐ 'Tasting' for purity/injecting drugs in portions ☐ Calling an ambulance if needed ☐ Using less if tolerance reduced, like recently out of detox/jail/rehab ☐ Other ☐
27 Have you ever seen anyone overdose?
28 (if yes) have you seen anyone overdose at the MSIC?
29 Do you do anything differently now if you see someone having an overdose? What? (Q4)
30 How did you learn to do this?

Opinion on MSIC

I'm interested in your opinion of the MSIC

31 Do you encourage other injecting drug users to come here? Why/Why not?
32 What do you tell other injecting drug users about the MSIC? (Q2)
33 Do you know injecting drug users that don't use the MSIC? Why don't they use it?
34 What are the 3 best and 3 worst things about the MSIC?

Demographics
And to wrap up, a couple of questions about you

35 Could we look at your file at MSIC to add in some additional information you have already given the MSIC? [If ok, what is your registration ID?_____)
(If not able to access MSIC file): 36 What year were you born? 37 Gender *(do not ask unless required!)* 38 Are you of Aboriginal and Torres Strait Islander descent? 39 How old were you when you started injecting? 40 Have you ever received any sort of drug treatment?
41 Is there anything else you wish to add?

I. Client survey

KPMG are doing a project about the Medically Supervised Injecting Centre for NSW Health. This project includes this confidential and anonymous survey for MSIC clients. There are three questions. You do not have to complete this survey. By completing this survey, you show that you agree to participate in this project.

Question 1: What do you think about the MSIC staff and services? (Choose from Very poor, poor, average, good, very good, does not apply to me)

	Very poor	Poor	Average	Good	Very good	Does not apply to me	Comments
Appearance & cleanliness of the MSIC	☐	☐	☐	☐	☐	☐	
Advice from MSIC staff (vein care, safer injecting)	☐	☐	☐	☐	☐	☐	
Availability of Information about other services	☐	☐	☐	☐	☐	☐	
Referral to general health services from MSIC staff	☐	☐	☐	☐	☐	☐	
Referral to drug treatment services from MSIC staff	☐	☐	☐	☐	☐	☐	
Overall helpfulness of staff	☐	☐	☐	☐	☐	☐	.

Please turn over for question 2 and 3

Question 2: Since coming here, MSIC has helped me to… (Choose from No, Not Sure, Yes, Does not apply to me)

	No	Not sure	Yes	Does not apply	Comments
Reduce injecting in public places	☐	☐	☐	☐	
Not leave injecting equipment in public places	☐	☐	☐	☐	
Inject more safely (including reducing my risk of drug overdose)	☐	☐	☐	☐	
Respond better if I see an overdose	☐	☐	☐	☐	
Help other people when they overdose	☐	☐	☐	☐	
Get in contact with other services (i.e. use the telephone at MSIC to call another service)	☐	☐	☐	☐	
Improve my health	☐	☐	☐	☐	
Get help with other issues, such as accessing services such as (housing, legal etc	☐	☐	☐	☐	
Understand my drug treatment options (counselling, detox, rehab, pharmacotherapies etc)	☐	☐	☐	☐	
Start drug treatment	☐	☐	☐	☐	
Manage my drug use better	☐	☐	☐	☐	

Question 3: Finally, thinking about the MSIC overall: (Choose from No, Not Sure, Yes, Does not apply to me)

	No	Not sure	Yes	Does not apply	Comments
I think the MSIC is a good service	☐	☐	☐	☐	
I encourage other injecting drug users to use the MSIC	☐	☐	☐	☐	

Please put this in the locked survey box when you are done. Thank you for your time!!

J. Staff interview questions

Introduction, change in population and demand

1 How long have you worked here?

2 What changes have you noticed in the time you have worked here?

- Are there any reasons you can see for changes in the client population?
- Are there any reasons you can see for changes in relative use or demand of different drugs?

MSIC systems, protocols and processes

3 What are your views on the way the MSIC works? What works well? What could be improved?

- Entry area/waiting room
- Injecting area
- After-care area
- Client rules and responsibilities
- Staffing
- Therapeutic approach

4 Do you feel the way the MSIC works is appropriate for the client group?

Service provision and opening hours

5 Have you noticed a change in needs of clients who present? Does this impact on the services you provide – for example, in number and type of services? Do you know of any reasons for these changes?

6 Do you think the days/hours of the Centre's operation are appropriate? Why/why not? What changes would you make?

Client safe injecting knowledge, injecting practice and related injecting health

7 Do you think that clients learn safer injecting practices, vein care and BBV risk through coming here?

8 What do you think is the impact of the MSIC on injecting practices and injecting related health of clients?

9 Do you think clients have increased awareness of factors that contribute to overdose and ability to identify symptoms?

10 Do you think clients have subsequently changed practice to avoid overdose? Can you think of any particular examples of this?

Accessing other services

11 Do you think clients have greater use of other services and entry to treatment as a result of using MSIC? How does MSIC contribute to this change in other services to treatment? How much of this do you attribute to the MSIC? Can you think of any particular examples of this?

12 Have there been changes in the way MSIC provides referrals or availability of services? What do you think contributes to changes in referrals for:

a) drug treatment

b) primary health care,

c) mental health

d) social welfare services?

Change to overall client health

13 Do you see improved health amongst MSIC clients? What do you attribute this to? (Q6) Can you think of any particular examples of this?

Sanctions

14 What happens when a client is to be or has been refused entry to MSIC? (particularly explore e.g. referral, medical care, security/ police intervention etc?) How well do you think that works? Why? Is there a need for change?

15 What happens when a client is sanctioned? How well do you think that works? Why? Is there a need for change?

16 What happens when a client has indefinite sanctions? How well do you think that works? Why?

Final questions

17 Do you think the service is effective in reaching the target group? Yes/No Why?

18 Have you seen any unintended consequences of the MSIC to IDUs? To Kings Cross? To other services? Positive? Negative?

19 Within the existing funding, if you could change anything, what would it be?

20 Are there other things you would change if not restricted by funding limitations?

21 Do you have any other comments to make about the MSIC?

K. Interview questions for key local service system representatives

Introduction

1 What is your connection to the Medically Supervised Injecting Centre (MSIC)? How long have you been involved in working in the local Kings Cross area? Working with (Injecting Drug Users)IDUs?

Trend information

2 Our analyses of MSIC data suggests that client characteristics of the MSIC are typically aged in their mid 30's, about ¾ male, mostly heterosexual and about 11% report indigenous background. They have an average age of first injection at 18 years. Heroin is the most common drug used. About one quarter are injecting less than weekly and another quarter injecting less than daily. Is this consistent with your view of the IDU population in the Kings Cross area?

3 Trend information suggests demand for the service (new registrations and visits) has been reasonably constant since 2003/04 & stable during the evaluation period (2007-2009). Do you see any reason that this will change?

Your service relationship with the MSIC and MSIC clients

4 Are MSIC clients accepted into your service? What is the average wait for MSIC clients to access your services? Does this differ between MSIC clients and other clients?

5 Do you have any information on how many of your clients are, or have been, MSIC clients?

6 Do you receive many referrals from MSIC? What is the process of MSIC referring to you?

7 Do you encourage clients that identify as IDUs to use the MSIC to support safe injecting practice? Why/why not?

8 Do you know of IDUs who do not use the MSIC? Do you know why this might be the case?

Your thoughts on the MSIC

9 Do you think the MSIC provides the right mix and level of services within the local service system? Why? What would you change?

10 From your knowledge of the MSIC do you think clients experience any changes in

(a) safer injecting practice

(b) overdose avoidance and management

(c) access to health and other services

(d) access to treatment?

(e) other?

11 The MSIC is open between 9.30am-10pm Monday to Friday and 9.30am-6pm on weekends. Do you think this is the most appropriate time for them to be open? Would you like to see change to the opening times? To what? Why?

12 MSIC clients are sometimes refused entry to the MSIC under certain conditions. Have you observed any impact of these refusals?

Impact of the MSIC

13 Do you see any difference in the outcomes for MSIC clients and other clients? What do you attribute this to?

14 Do you think MSIC has a role in reducing the level of discarded injecting equipment in the Kings Cross area? Why/ why not?

15 How effective do you think the MSIC is on reducing drug users injecting in local public places?

16 (Ambulance, Emergency Department and Police only) What are the local trends in emergency department admissions relating to injecting drug use? What do you think local trends in call outs can be attributed to?

Final questions

17 Have you seen any unintended consequences of the Centre to IDUs? To Kings Cross? To other services? Positive? Negative?

L. End notes

[1] NSW Government 1999 NSW Drug Summit 1999: Government Plan of Action. Sydney, New South Wales Government
[2]NSW Government 1999, NSW Drug Summit 1999: Government Plan of Action, Rec. 3.15. NSW Government, Sydney
[3] NSW Government 1999 NSW Drug Summit 1999: Government Plan of Action. Sydney, New South Wales Government
[4] NSW Government 1999 NSW Drug Summit 1999: Government Plan of Action. Sydney, New South Wales Government
[5] Records from MSIC database
[6] Jauncey et al. (2005), *The definition of opioid-related deaths in Australia: implications for surveillance and policy, Drug and Alcohol Review, 24: 401-409*
[7] Records from MSIC database
[8] National Centre in HIV Epidemiology and Clinical Research (2007) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events* p.39
[9] Jauncey et al. (2005), *The definition of opioid-related deaths in Australia: implications for surveillance and policy, Drug and Alcohol Review, 24: 401-409*
[10] SAHA International (2008) 'Economic evaluation of the Medically Supervised Injection Centre at Kings Cross (MSIC)' available at http://www.druginfo.nsw.gov.au/__data/page/1189/MSIC_Final_Report_26-9-08.pdf
[11] Records from MSIC database
[12] National Centre in HIV Epidemiology and Clinical Research (2007) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events* p.8
[13] Day C., Topp L., Rouen D., Darke S., Hall W. & Dolan K. (2003) Decreased heroin availability in Sydney in early 2001. *Addiction,* 98, 93-95; Degenhardt L., Conroy E., Gilmour, S. & Hall W. (2005a) The effect of a reduction in heroin supply upon population trends in fatal and non-fatal drug overdoses. *Medical Journal of Australia,* 182, 20-23, Topp L., Day C. & Degenhardt L. (2003) Changes in patterns of drug injection concurrent with a sustained reduction in the availability of heroin in Australia. *Drug Alcohol Dependency,* 5, 275-86, in National Centre in HIV Epidemiology and Clinical Research (2007) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events* p.40
[14] Dietze P, Fitzgerald J (2002) Interpreting changes in heroin supply in Melbourne: Droughts, gluts or cycles? Drug and Alcohol Review, 21:295-303
[15] NSW Ambulance data, see Section 4.2.2
[16] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pgs 27-28.
[17] Note that in some cases it is possible that the ED presentation may be associated with more than one drug. This data includes all ED presentations that have recorded opioids being related to the ED presentation, irrespective of whether any other drugs have also been related to the ED presentation.
[18] See Table 3.8-1 for details of MSIC operating hours by date range
[19] NSW Health (2006) New South Wales Opioid Treatment Program: clinical guidelines for methadone and buprenorphine treatment, p2, available at www.health.nsw.gov.au
[20] Australian National Council on Drugs (2009)
[21] Ross, Teeson, Darke et al. (2004) cited Australian Council on Drugs (2009).
[22] Prochaska, J and DiClemente, C. 'Toward a Comprehensive Model of Change' from Miller, W. and Heather, N. (1986) *Treating addictive behaviours,* Plenum Publishing Corporation
[23] Smoking Cessation Guidelines for Australian General Practice, Practice Handbook 2004 accessed at www.quitnow.com.au
[24] Smoking Cessation Guidelines for Australian General Practice, Practice Handbook 2004 accessed at www.quitnow.com.au
[25] Smoking Cessation Guidelines for Australian General Practice, Practice Handbook 2004 accessed at www.quitnow.com.au

[26] Y. Hser, V. Hoffman, C. Grella, M. Douglas Anglin (2001) 'A 33-Year Follow-up of Narcotics Addicts' Arch Gen Psychiatry 2001;58:503-508.
[27] NSW Health (2006) New South Wales Opioid Treatment Program: clinical guidelines for methadone and buprenorphine treatment, p6, available at www.health.nsw.gov.au
[28] (n=119) Yes = 84%, not sure = 8%, no=3%, other (missing/NA) = 6%
[29] NSW Health NSP Activity Data for NSW and SESIAHS (2005-2009).
[30] Data from MSIC database
[31] Data from MSIC database
[32] Defined as Methadone Maintenance Treatment (MMT) and buprenorphine maintenance
[33] Refers to services in which telephone calls have been made or facilitated for "drug and alcohol treatment" (i.e. the client has accepted the referral) but no place could be provided for the client. This information was recorded in more detail from 2008 onwards.
[34] Kimber J, Mattick R, Kaldor J, van Beek I, Gilmour S and Rance J (2008) Process and predictors of drug treatment referral and referral uptake at the Sydney Medically Supervised Injecting Centre, Drug and Alcohol Review, 27:6, 602-612
[35] At time of analyses, there were twelve clients in treatment at the Langton Centre (three clients for <3 months, nine for 3-6 months).
[36] Clients could record having injected at multiple locations and proportions will not equal 100%.
[37] Data from Kirketon Road Centre Needle Clean Up service – see Section 4.2.5
[38] NSW Drug Summit 1999, Communiqué, 21 May 1999, Recommendation 3.15, 'Medically supervised injecting rooms'
[39] Rationale for location - Uniting Care Sydney MSIC http://www.sydneymsic.com/Bginfo.htm/rationale_for_location - Viewed December 2009
[40] National Centre in HIV Epidemiology and Clinical Research (2007) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events* p.39
[41] Yes = 92%, not sure = 1%, no=3%, other (missing/NA) = 5%
[42] In many cases the date of onset is unknown or not recorded, in these cases the default date recorded is the date of the specimen being taken.
[43] The opening times presented were taken from NCHECR (2007) Sydney Medically Supervised Injecting Centre Evaluation Report No. 4: Evaluation of service operation and overdose-related events, p12, and the KPMG (2009) Second quarterly report for the period August – October 2009:Inside the MSIC, p65
[44] The most current MSIC opening times were applied to the period prior to MSIC commencement to allow consistency of comparison where data (e.g. ambulance attendances and ED presentations) were restricted to MSIC opening times only. This allowed the identification of cases which would have occurred during MSIC opening times, despite the MSIC not having yet commenced operation.
[45] National Centre in HIV Epidemiology and Clinical Research (2007) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events*
[46] Degenhardt L, Hall W & Adelstein B 2001 Ambulance calls to suspected overdoses: New South Wales patterns July 1997 to June 1999. *Aust N Z J Public Health*, 25, 447-50 in National Centre in: HIV Epidemiology and Clinical Research (2007) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events*
[47] Degenhardt L, Adelstein B, Darke S, Hodda A 2002 Early indicators of trends in opioid overdose deaths: NDARC technical report no.141. Sydney, National Drug and Alcohol Research Centre, University of New South Wales in: National Centre in HIV Epidemiology and Clinical Research (2007) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events*
[48] National Centre in HIV Epidemiology and Clinical Research (2007) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events*
[49] Hunter Valley Research Foundation (2010) Kings Cross injecting room community and business surveys. Methods, coding manual and questionnaire, prepared for KPMG.
[50] Barratt MJ, Norman JS, Fry CL. (2007) Positive and negative aspects of participation in illicit drug research: implications for recruitment and ethical conduct. Int J Drug Policy. 2007 May;18(3):235-8

[51] National Centre in HIV Epidemiology and Clinical Research, 2008, Sydney Medically Supervised Injecting Centre Client Cohort Study – Summary Report
[52] The edition of User News that including the advertisement for this evaluation is available at http://www.nuaa.org.au/files/usersnews/UN60/UN60_web.pdf
[53] Platt L,Wall M, Rhodes T, Judd A, Hickman M, Johnston L, Renton A, Bobrova N and Sarang A (2006) Methods to recruit hard-to-reach groups: Comparing two chain referral sampling methods of recruiting injecting drug users across nine studies in Russia and Estonia, J Urbavn Health 83 (Suppl 1) 39-53.
[54] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 13.
[55] It should be noted that Figure 5-1 presents new client registrations by quarterly years (1 May to 30 April), whereas the 2007 evaluation report presented this information by calendar month.
[56] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 3: Evaluation of Client Referral and Health Issues,* 2007. Pg 17.
[57] The age of clients was taken as that at the date of registration.
[58] National Centre in HIV Epidemiology and Clinical Research (2009): "Australian NSP Survey National Data Report 2004-2008" National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW, pp. 9, Table 2
[59] Stafford et al (2008): "Findings from the illicit drug reporting system (IDRS)" Australian drug trends series No. 19, National drug and alcohol research centre, University of New South Wales p 8 Table 5
[60] National Centre in HIV Epidemiology and Clinical Research (2006) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 Evaluation of service operation and overdose-related events
[61] Direct age comparison of MSIC clients is less than a year and 1.5 years different respectively, with the average age of MSIC clients being 35.2 in 2008-09, compared with 36 and 36.7 in the NSP survey and the IDRS respectively.
[62] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 14.
[63] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 14.
[64] National Centre in HIV Epidemiology and Clinical Research (2009): "Australian NSP Survey National Data Report 2004-2008" National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW, pp. 9, Table 2
[65] Stafford et al (2008): "Findings from the illicit drug reporting system (IDRS)" Australian drug trends series No. 19, National drug and alcohol research centre, University of New South Wales p 8 Table 5
[66] National Centre in HIV Epidemiology and Clinical Research (2009): "Australian NSP Survey National Data Report 2004-2008" National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW, pp. 9, Table 2

[67] Stafford et al (2008): "Findings from the illicit drug reporting system (IDRS)" Australian drug trends series No. 19, National drug and alcohol research centre, University of New South Wales p 8 Table 5

[68] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 14.
[69] National Centre in HIV Epidemiology and Clinical Research (2009): "Australian NSP Survey National Data Report 2004-2008" National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW, pp. 9, Table 2

[70] Stafford et al (2008): "Findings from the illicit drug reporting system (IDRS)" Australian drug trends series No. 19, National drug and alcohol research centre, University of New South Wales, p 8 Table 5

[71] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 15.
[72] Australian Bureau of Statistics (2008) "Education and Work" http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/656CB57FE56C0491CA25750C000EF65B/$File/62270_may%202008.pdf accessed 4/6/2010
[73] ibid

[74] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 15.
[75] Australian Government "Homelessness implementation plan – New South Wales" http://www.fahcsia.gov.au/sa/housing/progserv/homelessness/national_partnership_agreement/Pages/NPAHomelessness.aspx, accessed 4/6/2010
[76] Australian Bureau of Statistics website: http://www.abs.gov.au/websitedbs/d3310114.nsf/51c9a3d36edfd0dfca256acb00118404/34b1ea06ea93fe8aca25715e0028a3db!OpenDocument accessed 4/6/2010.
[77] Ibid.
[78] Australian Bureau of Statistics (2010): "Income support among people of working age" http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features50Mar+2010 accessed 4/6/2010
[79] ibid

[80] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 14.

[81] National Centre in HIV Epidemiology and Clinical Research (2009): "Australian NSP Survey National Data Report 2004-2008" National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW, pp. 9, Table 2
[82] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 15.
[83] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 15.
[84] Report on Government Services 2010, Table 8A.25 (NSW data).

[85] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 15.
[86] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 15.
[87] National Centre in HIV Epidemiology and Clinical Research (2006) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events* p.15
[88] Throughout this section, 'other opioids' refers to the following: oxycontin, morphine, methadone, subutex, suboxone, buprenorphine and other drugs recorded only as 'other opioid'
[89] The age range for records to be considered valid was set at 9–90 years.
[90] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 16.
[91] National Centre in HIV Epidemiology and Clinical Research (2009): "Australian NSP Survey National Data Report 2004-2008" National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW, pp. 9, Table 2
[92] Stafford et al (2008): "Findings from the illicit drug reporting system (IDRS)" Australian drug trends series No. 19, National drug and alcohol research centre, University of New South Wales p 12 Table 9
[93] Australian Institute of Health and Welfare (2008): "National drug strategy household survey 2007 – first results" Drug Statistics Series number 20.Cat. no. PHE 98. Canberra: AIHW.
[94] Ross, Teeson, Darke et al, 2004, cited in Chalmers J, Ritter A, Heffernan M and McDonnell (2009) Modelling pharmacotherapy maintenance in Australia: exploring affordability, availability, accessibility and quality using system dynamics: A report prepared for the Australian National Council on Drugs, p 11.
[95] National Centre in HIV Epidemiology and Clinical Research (2009): "Australian NSP Survey National Data Report 2004-2008" National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW, pp. 3
[96] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 17.
[97] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 16.
[98] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 17.

[99] Data for this field was recorded from November 2005.

[100] Columns may add to more than 100% as people can inject in more than one location. Percentages of new registrants shown in parentheses.

[101] The recording of whether the registrant had ever shared a needle or syringe after someone else (even if it was cleaned) was introduced in 2006.

[102] Of those new registrants who reported sharing with one or more persons in the month prior to registration.
[103] Columns may add to greater than 100% as clients may share with more than one person
[104] Columns may add to greater than 100% as clients may share more than one type of equipment
[105] Further detail on the Wayside Chapel is available at http://www.thewaysidechapel.com/community-service-center.php
[106] Further detail on the Kirketon Road Centre is available at http://www.sesiahs.health.nsw.gov.au/sydhosp/services/kirketonroad.asp
[107] NEAMI is a mental health rehabilitation and support provider, which is providing some packages under the Housing and Support Initiative, http://www.neami.org.au/pages.aspx?page=27,
[108] MSIC (2008) Internal management protocols, pp 15. Document provided by MSIC and NSW Health
[109] NSW Parliament Drug Summit Legislative Response Bill 1999, section 36F.
[110] 28 of 28 responses.
[111]Drug Misuse and Trafficking Act 1985 No 226 36K Reviews of licence (2)

[112] During an occasion of additional service, clients may receive more than one additional service (e.g. a client receiving both a) blood borne virus information and b) first aid treatment, would be considered to have received two additional services).

[113] 'other opioids' refers to the following: oxycontin, morphine, methadone, subutex, suboxone, buprenorphine and other drugs recorded only as 'other opioid'
[114] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pg 19.
[115] Includes only visits where client data has been recorded in Stage 2 (i.e. the client has decided to inject and not left the MSIC at Stage 1).
[116] Additional services provided in 2008-09 were 1,255. However, the data for 2008-09 is for a partial year only.
[117] Partial year 1 May to 16 October 2008.
[118] Partial year 1 May to 16 October 2008.
[119] Partial year 1 May to 16 October 2008.
[120] Partial year 1 May to 16 October 2008.
[121] It is not possible to compare the raw numbers of additional services provided between 2008-09 and 2009-10 as the data for 2008-09 is partial year only.
[122] Partial year from 17 October 2008 to 30 April 2009
[123] Partial year from 17 October 2008 to 30 April 2009
[124] Partial year from 17 October 2008 to 30 April 2009
[125] Records from 17 October 2008
[126] Partial year from 17 October 2008 to 30 April 2009
[127] Urbanoski K (2010) Coerced addiction treatment: client perspectives and the implications of their neglect. Harm Reduction Journal 7:13
[128] Smoking Cessation Guidelines for Australian General Practice, Practice Handbook 2004 accessed at www.quitnow.com.au
[129] Chalmers J, Ritter A, Heffernan M and McDonnell (2009) Modelling pharmacotherapy maintenance in Australia: exploring affordability, availability, accessibility and quality using system dynamics. A report prepared for the Australian National Council on Drugs
[130] Hser, Y., Hoffman, V., Grella, C., & Anglin, D. (2001). A 33-year follow-up of narcotics addicts. Archives of General Psychiatry, 58, 503-508
[131] Defined as Methadone Maintenance Treatment (MMT) and buprenorphine maintenance

[132] Refers to services in which telephone calls have been made or facilitated for "drug and alcohol treatment" (i.e. the client has accepted the referral) but no place could be provided for the client. This information was recorded in greater detail from 2008.
[133] Note the partial year for brokerage compared with the full year for all treatment.
[134] Two clients who undertook short-term medicated detoxification were subsequently transferred to maintenance dosing.
[135] 45 out of the 47 individuals who received brokered treatment attended four privately operated clinics, including: Clinic 36; Garden Court, Kobi Clinic and Regent House. Clinic 36 received 47% (28) of the total brokered referrals, Kobi Clinic 35% (21), Regent House 12% (7) and Garden Court 2% (1). The remaining two individuals (4%) attended rehabilitation centres, where brokerage assistance was used to cover administrative costs to enter the facility. The rehabilitation centres used were "The Battery" and "The Lake Macquarie Recovery Service".
[136] This includes the two individuals who ceased their original brokerage treatment, before being re-referred in the same time period being analysed (they are now currently continuing with brokered treatment, and classed as current).
[137] Coughlan M and Lintzeris N (2010) MSIC-Langton Evaluation, NSW Health, South Eastern Sydney Illawarra, unpublished.
[138] Kimber J, Mattick R, Kaldor J, van Beek I, Gilmour S and Rance J (2008) Process and predictors of drug treatment referral and referral uptake at the Sydney Medically Supervised Injecting Centre, Drug and Alcohol Review, 27:6, 602-612
[139] Includes dental health referrals
[140] Recording of this referral type commenced in 2009
[141] Recording of referral types denoted with an asterisk (*) commenced in 2008
[142] These data are restricted to visits occurring between 08:00 to 22:00.
[143] There is likely to be some sampling bias reflected in this response as the clients were generally interviewed during the day at their 'usual' visit times.
[144] Medically Supervised Injecting Centre (2009) Internal management protocols, p6.
[145] Left premises refers to clients that require further assessment prior to being admitted or refused, but leave of their own accord prior to the assessment taking place.
[146] Yes = 82%, not sure = 7%, no=3%, other (missing/NA) = 9%
[147] Yes = 85%, not sure = 6%, no=3%, other (missing/NA) = 6%
[148] Yes = 84%, not sure = 8%, no=3%, other (missing/NA) = 5%
[149] Yes = 73%, not sure = 13%, no=4%, other (missing/NA) = 10%
[150] Kimber J, Hickman M, Degenhardt L, Coulson T and van Beek I (2008) Estimating the size and dynamics of an injecting drug user population and implications for health service coverage: comparison of indirect prevalence estimation methods. *Addiction*, 103, 1604-1613.
[151] All clients interviewed had been attending MSIC for at least two years, many from the time it opened, which may explain the high rate of clients finding out from the intense media attention at the time.
[152] Single E and Rohl T (1997) The National Drug Strategy: mapping the future, a report commissioned by the Ministerial Council on Drug Strategy, Canberra.
[153] Some injecting drug users are unable or unwilling to inject themselves and require someone to inject them. This is not permitted at the MSIC.
[154] National Centre in HIV Epidemiology and Clinical Research (2007) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events*
[155] Lenton S and Hargreaves (2000) Should we conduct a trial of distributing naloxone to heroin users for peer administration to prevent fatal overdoses? eMJA; 173:260-263
[156] Yes = 82%, not sure = 7%, no=3%, other (missing/NA) = 9%
[157] Yes = 85%, not sure = 6%, no=3%, other (missing/NA) = 6%
[158] Yes = 84%, not sure = 8%, no=3%, other (missing/NA) = 5%
[159] Yes = 73%, not sure = 13%, no=4%, other (missing/NA) = 10%
[160] Examples include general health services, mental health, housing, legal services or other non drug and/or alcohol specific services.
[161] Yes = 84%, not sure = 8%, no=3%, other (missing/NA) = 6%
[162] Yes = 74%, not sure = 9%, no=10%, other (missing/NA) = 6%
[163] Yes = 57%, not sure = 8%, no=16%, other (missing/NA) = 16%

[164] Yes = 92%, not sure = 1%, no=3%, other (missing/NA) = 5%
[165] Partial year from 1 May 2009 to March 2010 only
[166] Partial year from 1 May 2009 to March 2010 only

[167] 2009-10 data excluded from analysis due to being partial year
[168] National Centre in HIV Epidemiology and Clinical Research (2006) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events* p.8
[169] Partial year from 1 May 2009 to March 2010 only – provided for reference only
[170] National Centre in HIV Epidemiology and Clinical Research (2006) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events* p.8
[171] Yes=81%, not sure=2%, no=6%, other (missing/NA) =12%
[172] Yes = 92%, not sure = 1%, no=3%, other (missing/NA) = 5%

[173] Columns may add to more than 100% as people can inject in more than one location. Percentages of new registrants shown in parentheses.

[174] A suspected opioid overdose was defined as an ambulance attendance where the patient was administered the opioid antagonist naloxone (Narcan®).
[175] National Centre in HIV Epidemiology and Clinical Research, *Sydney Medically Supervised Injecting Centre Evaluation Report 4: Evaluation of service operation and overdose-related events*, 2007, Pgs 27-28.
[176] Note that in some cases it is possible that the ED presentation may be associated with more than one drug. This data includes all ED presentations that have recorded opioids being related to the ED presentation, irrespective of whether any other drugs have also been related to the ED presentation.
[177] See Table4.1 for details of MSIC operating hours by date range
[178] In many cases the date of onset is unknown or not recorded, in these cases the default date recorded is the date of the specimen being taken.
[179] SAHA International (2008) 'Economic evaluation of the Medically Supervised Injection Centre at Kings Cross (MSIC)' available at
http://www.druginfo.nsw.gov.au/__data/page/1189/MSIC_Final_Report_26-9-08.pdf
[180] National Centre in HIV Epidemiology and Clinical Research (2008) Sydney Medically Supervised Injecting Centre. Client Cohort Study – Summary Report, pp6-7.
[181] Snowball L, Burgess M and Price B (2008) Crime and Justice Bulletin 120: Trends in property and illicit drug-related crime in Kings Cross: an update, NSW Bureau of Crime and Research
[182] National Centre in HIV Epidemiology and Clinical Research (2006) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events*
[183] National Centre in HIV Epidemiology and Clinical Research (2006) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 3: 'Evaluation of Client Referral and Health Issues', pp6-9.
[184] Donnelly, N & Snowball, L (2006) 'Recent trends in property and drug-related crime in Kings Cross' Crime and Justice Bulletin, No. 105, p1.

[185] National Centre in HIV Epidemiology and Clinical Research (2006) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 2: Evaluation of Community Attitudes towards the Sydney MSIC' p3.

[186] National Centre in HIV Epidemiology and Clinical Research (2005) Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 1: Operation & Service Delivery (November 2002 to December 2004), pp2-3.
[187] Freeman K, Jones C, Weatherburn D, Rutter S, Spooner CJ, Donnelly N (2005) The impact of the Sydney Medically Supervised Injecting Centre (MSIC) on crime. *Drug and Alcohol Review* 24 (2): 173-84
[188] MSIC Evaluation Committee (2003) Final report of the Evaluation of the Sydney Medically Supervised Injecting Centre, p 207.
[189] SAHA International (2008) 'Economic evaluation of the Medically Supervised Injection Centre at Kings Cross (MSIC)' available at
http://www.druginfo.nsw.gov.au/__data/page/1189/MSIC_Final_Report_26-9-08.pdf

[190] National Centre in HIV Epidemiology and Clinical Research (2008) Sydney Medically Supervised Injecting Centre. Client Cohort Study – Summary Report, pp6-7.
[191] Snowball L, Burgess M and Price B (2008) Crime and Justice Bulletin 120: Trends in property and illicit drug-related crime in Kings Cross: an update, NSW Bureau of Crime and Research
[192] BOCSAR (2008) Recent Trends in Crime in Kings Cross Media Release, www.BOCSAR.nsw.gov.au
[193] National Centre in HIV Epidemiology and Clinical Research (2006) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 4 *Evaluation of service operation and overdose-related events*
[194] National Centre in HIV Epidemiology and Clinical Research (2006) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 3: 'Evaluation of Client Referral and Health Issues', pp6-9.
[195] Donnelly, N & Snowball, L (2006) 'Recent trends in property and drug-related crime in Kings Cross' Crime and Justice Bulletin, No. 105, p1.

[196] National Centre in HIV Epidemiology and Clinical Research (2006) 'Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 2: Evaluation of Community Attitudes towards the Sydney MSIC' p3.

[197] Freeman K, Jones C, Weatherburn D, Rutter S, Spooner CJ, Donnelly N (2005) The impact of the Sydney Medically Supervised Injecting Centre (MSIC) on crime. *Drug and Alcohol Review* 24 (2): 173-84
[198] National Centre in HIV Epidemiology and Clinical Research (2005) Sydney Medically Supervised Injecting Centre Interim Evaluation Report No. 1: Operation & Service Delivery (November 2002 to December 2004), pp2-3.
[199] MSIC Evaluation Committee (2003) Final report of the Evaluation of the Sydney Medically Supervised Injecting Centre, p 207.

Acronyms

AMBOD	NSW Health Ambulance dataset
AOD	Alcohol and other Drug
BOCSAR	NSW Bureau of Crime Statistics and Research
CUPS	Chemical Use in Pregnancy Service (Langton Centre)
DAL	Division of Analytical Laboratories dataset
EDIS	NSW Health Emergency Data Information System dataset
HASI	Housing and Accommodation Support Initiative
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human Immunodeficiency Virus
IDRS	Illicit Drug Reporting System
K2	Kirketon Road Centre Needle Syringe Program
KRC	Kirketon Road Centre
MSIC	Medically Supervised Injecting Centre
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NDD	Notifiable Diseases dataset
NSP	Needle and Syringe Program
OTP	Opioid Treatment Program
UNSW	University of New South Wales