Overdose Prevention and Emergency Naloxone (OPEN) Project - Evaluation Report

2012 - 2014

NSW GOVERNMENT Health
South Eastern Sydney Local Health District

A Kirketon Road Centre and Langton Centre Initiative

The Overdose Prevention and Emergency Naloxone (OPEN) Project 2012 – 2014

- Evaluation Report

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Prepared by Dr Karen Chronister

For further information please contact:

Ingrid van Beek
Director
Kirketon Road Centre (KRC)
PO Box 22
Kings Cross NSW 1340
Ingrid.vanBeek@sesiahs.health.nsw.gov.au
+ 61 2 9360 2766

Nicholas Lintzeris
Director
The Langton Centre (TLC)
591 South Dowling Street
Surry Hills NSW 2010
Nicholas.Lintzeris@sesiahs.health.nsw.gov.au
+ 61 2 9332 8777

The OPEN Project Investigators

[1]Kirketon Road Centre (KRC); [2]The Langton Centre (TLC)

Ingrid van Beek[1]
Nicholas Lintzeris[2]
Mihaela Ivan[1,2]
Anthony Jackson[1,2]
Anni Ryan[2]
John Kearley[1,2]

and Associate Investigators

Simon Lenton – National Drug Research Institute, Curtin University, WA
Paul Dietze – Centre for Population Health, The Burnet Institute, VIC

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The views expressed in this report are those of the OPEN Project team and not necessarily those of NSW Health or the South Eastern Sydney Local Health District.

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The Overdose Prevention & Emergency Naloxone (OPEN) Project
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EXECUTIVE SUMMARY

The Overdose Prevention and Emergency Naloxone (OPEN) Project is an intervention that aims to reduce opioid overdose-related morbidity and mortality by training people who inject opioids in overdose prevention and emergency management, and the prescription and dispensing of take home naloxone. The Project was initiated by Kirketon Road Centre (KRC) and the Langton Centre (TLC) and was the first of its kind in New South Wales and the second in Australia.

- Between July 2012 and March 2014, 83 people at risk of opioid overdose attended the OPEN training and were provided take home naloxone: 67 at KRC and 16 at TLC. An additional five carers recruited through KRC were trained, but were not prescribed take home naloxone as part of the Project and are excluded from the analyses.
- Thirty-five participants (45%, 24 from KRC and 11 from TLC) completed a follow-up interview about their knowledge and experiences of opioid overdose after six months.
- The mean age of Project participants was 40 years; 63% were male, and they began injecting drugs at 21 years of age on average.
- OPEN participants had a high level of knowledge about opioid overdose prevention and management prior to the training session, 82% of the questions being answered correctly on average. This increased to 93% post-training.
- All but one of the participants felt they had learned new things and were more confident responding to an overdose situation immediately post training. Participants also felt more informed (24% increasing to 95%) and more confident to inject naloxone (51% increasing to 96%).
- At least 30 opioid overdose reversals were reported by 18 of the 35 participants who provided follow-up interviews. There were no deaths reported in any of the reversed overdoses. Nine participants had witnessed and responded to two or more overdose situations. All of the participants believed naloxone prevented the recipients from dying in these instances.
- At 6 month follow up 94% still felt the training session was “very useful.” While average knowledge scores had almost returned to baseline levels (82% pre-training cf 84% at follow up) participants still felt significantly more confident to manage an overdose and that they would be able to inject naloxone (97% and 100% respectively) at follow up.
- The formal evaluation of OPEN was ceased earlier than originally anticipated due to concerns that the additional time involved was reducing uptake among clients attending both KRC and TLC. It was appreciated that this decision would affect the ability to measure the significance of any site differences in some outcome variables.
- The OPEN Project was assessed to be a feasible intervention in both settings overall, however strategies to increase uptake, particularly at TLC, warrant further examination.

Recommendations

1. KRC and TLC should develop and support strategies to increase the uptake of opioid overdose prevention and emergency management including the distribution of naloxone.
2. Interventions such as this should be further integrated into routine clinical care for clients at risk of opioid overdose attending these respective services, and be extended to other health settings in SESLHD and elsewhere.
3. Strategies to enable similar opioid overdose interventions to be delivered in non-health settings accessed by people at risk of opioid overdose should be encouraged and facilitated where possible.

BACKGROUND

There is significant morbidity and mortality associated with opioid overdose among people who inject opioids.[1-4] However most opioid overdose deaths occur in private settings with other people present, providing an opportunity for intervention before an ambulance arrives thereby potentially reducing such morbidity and mortality .[5,6]

Naloxone is an opioid antagonist that reverses the effects of opioids. It has a long history of use by medical and paramedical personnel in the emergency management of opioid overdose cases in both clinical and non-clinical settings. The World Health Organization recommends the use of naloxone in opioid overdose situations and included naloxone on the List of Essential Medicines for all healthcare facilities in 2003.[7,8]

Overdose training and take home naloxone distribution programs were first introduced in the mid-1990s. They have continued to expand globally since that time with more than 200 naloxone distribution programs being delivered in a range of settings at the current time including the United Kingdom, United States, Canada, Germany, Eastern Europe, and Central Asia.[9]

In 2013 the United Nations Office on Drugs and Crime and the World Health Organization endorsed making naloxone available to first responders, to people dependent on opioids, and their peers and family members who are likely to be present when an overdose occurs as a new area for overdose prevention and treatment.[9]

The OPEN Project

The Overdose Prevention & Emergency Naloxone (OPEN) Project is an intervention that incorporates both overdose management training and the prescription and dispensing of take home naloxone in an Overdose Management Pack to people who inject drugs (PWID) at risk of opioid overdose. The Project was initiated by the Kirketon Road Centre (KRC) and the Langton Centre (TLC) without external funding in July 2012. It was the second project of this kind in Australia[10] and the first in New South Wales.

The Intervention

OPEN Project participants attended an opioid overdose prevention and management training session delivered by trained health practitioners (health education officers, nurses) at KRC and TLC. The training session was usually a group activity (typically two to four participants) of approximately 30 to 45 minutes in duration and included information on the risk factors and myths about overdose, the symptoms and signs of opioid overdose, managing an emergency overdose situation including calling for ambulance assistance and basic life support measures, the intramuscular injection of naloxone hydrochloride, and the storage of naloxone. [See Appendix A for training slides used.]

All participants completed a pre- and post-training questionnaire to assess their knowledge of opioid overdose risk factors, prevention and emergency management, as well as their attitudes towards naloxone use and responding to an opioid overdose themselves. [Appendices F and G] The knowledge and attitude questions were adapted from the Opioid Overdose Knowledge and Attitudes Scales (OOKS and OOAS)[11] to minimise the time required to complete the questionnaire.

Participants who completed the training and demonstrated satisfactory post-training knowledge were referred to a KRC or TLC medical officer for review. The medical officer prescribed and dispensed naloxone in an Overdose Management Pack after reviewing the individual participant's personal risk and history of opioid overdose, and assessing that he/she had the necessary knowledge and skills to administer naloxone.

The Overdose Management Pack included two vials of 400 mcg naloxone (later replaced by 400 mcg Minijets), appropriate needles and syringes, a resuscitation mask, written instructions for opioid overdose management and administering naloxone, and health promotion information regarding opioid overdose prevention.

The Evaluation

The formal evaluation of the OPEN Project was approved by the South Eastern Sydney Local Health District (SESLHD) Human Research Ethics Committee in December 2011. It was intended to include the first 200 participants: 100 at each recruitment site over a 12 month period.

The aim of the evaluation was to assess:

1. the uptake of the intervention and its acceptability to the target population;
2. participants' knowledge and attitudes before and after the training session;
3. participants' experience in opioid overdose situations 6 months after the intervention;
4. the feasibility of delivering take-home naloxone programs in these different Australian health settings, specifically a targeted primary health care setting integrated with a needle syringe program (KRC) and an alcohol and other drug (AOD) treatment setting including a large opioid pharmacotherapy (OTP) program (TLC).

Participants who successfully completed the training and received an Overdose Management Pack were invited to formally consent to participate in the OPEN evaluation study. These participants also agreed to be contacted for research follow-up after six months.

The follow-up interview included questions about participants' experience using naloxone since the training, a subset of the knowledge and attitude questions, and items to evaluate the training. [Appendices J and K]

Beginning in July 2012, the Project was promoted at KRC and TLC to clients who inject drugs at risk of opioid overdose. However after 18 months participant recruitment had slowed down at both sites. Feedback received from participants and staff suggested that uptake of this intervention was being limited at least in part by the additional time required to complete the consent and other formal aspects of the evaluation. For this reason it was agreed to cease the formal evaluation of the Project. TLC subsequently surveyed its OTP client base to gain a better understanding of the possible barriers to uptake at that site, which we also report here.

Although the smaller sample than originally anticipated limited our ability to determine statistical differences between sites, some differences were evident and are presented here, and should be interpreted with caution. The current report includes evaluation data collected from July 2012 through to March 2014.

RESULTS

Project Participants

Between July 2012 and March 2014, 83 PWID at risk of opioid overdose attended the OPEN training and were provided with an Overdose Management Pack. Sixty-seven of these participants were recruited at KRC with the remaining 16 were recruited at TLC.

Five additional participants recruited at KRC were carers and had never injected drugs. While completing the training components of the OPEN intervention these carers were not prescribed or

dispensed naloxone (being ineligible under current regulations) and were not included in the analyses.

Among eligible participants (n=83), 63% were male, the mean age was 40 years, and 18% were Aboriginal. [Tables 1 & 2] Nearly one-third (32%) reported injecting daily or more often, while 27% reported not injecting at all in the past month. Over half (56%) of the participants reported that heroin was the last drug injected. Sixty-four percent had previously experienced an opioid overdose and 94% had previously witnessed an opioid overdose.

There were few differences between those participants recruited at KRC compared to TLC. However significantly more participants at KRC had injected in the month prior to the Project (82% versus 37%, p=0.005), while similar proportions (34% and 25% respectively) injected daily or more often. More KRC participants spoke English at home (97% versus 81%, p=0.047). Whilst comparable proportions reported no recent alcohol use (28% at KRC, 44% at TLC), 31% of drinkers at TLC reported drinking five or more drinks on a typical day compared with 22% of KRC clients (p=0.035).

Of the 78 participants who consented to be followed-up for an interview six months after training 35 completed an interview: 24 participants from KRC and 11 from TLC, rendering a 45% follow up rate overall and 37% and 85% at these respective services. The mean time between training and the follow-up interview was 290 days, and was significantly longer at KRC (327 days) compared to TLC (209 days, p=0.004).

None of the differences among participants between the two sites persisted in the group of individuals completing the follow-up interview. There were few differences between the individuals completing follow-up interviews and those who did not within each site. However at KRC a greater proportion of those participants completing follow-up interviews had lifetime experience of overdose compared to those who did not (78% versus 50%, p=0.024).

Impact of OPEN intervention on Knowledge and Attitudes related to opioid overdose

Comparison of participants' knowledge and attitudes at each point during the Project is at Table 3. OPEN Project participants already had a high level of knowledge with respect to opioid overdose symptoms, risk factors, and management prior to the Project training session with participants answering an average of 28.6 of 35 questions correctly (82%) at baseline. Despite this, participants' knowledge scores increased to 93% immediately after the training (p<0.001), however dropped back to 84% at follow-up.

Prior to the OPEN intervention participants did not feel informed enough or confident to manage an opioid overdose with only 24% feeling they had enough information to manage an overdose at baseline and only 38 participants (51%) feeling they would be able to inject naloxone. After the training, participants felt more informed, with reports of having "enough information about opioid overdose management" increasing to 95% (p<0.001) immediately afterwards and remaining at 97% at follow-up. Participants' confidence around injecting naloxone increased to 96% (p<0.001) after training and remaining high (100%) at follow-up.

The training session emphasised the importance of calling an ambulance and provided an opportunity to discuss concerns regarding ambulance attendance at overdoses such as police also attending. While 84% of participants initially disagreed with the statement "If someone overdoses I would call an ambulance but I wouldn't be willing to do anything else" (considered a favourable response to this item) this increased to 93% immediately after the training, but then returned to 86% at follow-up. Similarly, 80% of participants disagreed with the statement "If someone overdoses I would be concerned about calling an ambulance in case the police came" prior to

training increasing to 86% after the training. But this remained at a similar level at six month follow up (83%).

The large majority (90%) of participants believed it was important for family and friends to be prepared to deal with an overdose and have access to naloxone prior to the training. This increased to 96% ($p=0.030$) and 95% ($p<0.001$) respectively immediately after training. Although not significant, participants expressing that family and friends should be prepared to deal with an overdose had dropped back to 86% at follow up, while 97% still felt family and friends should have access to naloxone.

Training Evaluation

Participants were asked to evaluate the usefulness of the training session at its conclusion and usefulness of both the training and the materials provided in the Overdose Management Pack during follow-up interviews. After the training session 99% of participants felt they had learnt new things and felt "more confident" in responding to an overdose situation. Among those returning after six months, two-thirds (67%) found the written materials in the Overdose Management Pack to be "very useful" and 94% still said the training session was "very useful."

Recorded Overdose Reversals at Follow-up

Positive experiences were reported by the participants who applied the knowledge and skills practised in the training session and completed a follow-up interview. At least 30 opioid overdose reversals were reported by 18 participants, including one overdose of a participant themselves (administered by a witness), and nine participants who witnessed and responded to two or more opioid overdoses since receiving their Overdose Management Packs. Of these 18 participants, 17 reported that naloxone was used to manage the overdose. In all instances of reported overdose reversals, the person regained consciousness; 40% in less than two minutes and another 40% in less than five minutes.

Only four participants reported that the individual receiving naloxone reversal was "angry." No other complications or issues were reported. When naloxone was used, it was injected by the OPEN participant in 87% of the overdose situations documented or by another bystander or ambulance personnel in the remaining instances. Nine participants felt "very confident" injecting naloxone and seven indicated it was "very easy" to inject. Overwhelmingly participants believed naloxone prevented the recipients from dying (100% of participants). Of the participants reporting witnessing overdoses, 11 reported calling for an ambulance. Three overdose situations witnessed by participants were apparently attended by police.

Staff Survey

Evaluation of the OPEN intervention's acceptability in the different health settings was also informed by a staff survey. An in-service session was held in both services to provide an overview of the Project followed by a brief questionnaire to identify staff attitudes and views of the Project's strengths as well as areas of concern. [Appendix L]

The anonymous self-administered questionnaire was completed by 37 staff: 22 at KRC and 15 at TLC, including 16 nurses, four medical officers, eight allied health professionals, and nine others.

Overall staff believed it is appropriate and acceptable to discuss opioid overdose prevention and management with clients, and 92% believed that clients had the right to be offered naloxone to manage an opioid overdose. These staff identified the potential reduction in opioid overdose mortality, clients' empowerment, and the opportunity to educate and discuss opioid overdose with clients as strengths of the intervention. However a few staff members also expressed concerns that

naloxone may be used inappropriately by clients or that clients may otherwise be discouraged from addressing their drug use as a result of the Project. Clinic staff also raised concerns with respect to the future sustainability of the Project without political and financial support and also wanted the intervention to be available to people who inject drugs more broadly.

Staff at KRC were also asked to complete a similar questionnaire post intervention implementation to inform the final assessment of Project feasibility. [Appendix M] In July 2014, 19 KRC staff completed the questionnaire including nine staff who were directly involved in the Project. Similar to the pre-intervention results, staff believed it was appropriate and acceptable to discuss opioid overdose prevention and management with clients and 95% believed clients had the right to be offered naloxone. Strengths identified again included clients' empowerment, the opportunity to educate and discuss opioid overdose with clients, and the potential life-saving impact of clients using naloxone to manage opioid overdoses. Staff concerns after two years of implementation highlighted challenges with participant recruitment and identified the length of time and quantity of paperwork involved with the formal evaluation as barriers to client uptake. A few staff expressed concerns that not all staff were fully trained in the Project implementation, particularly medical officers needed to prescribe naloxone, and recommended that this be addressed in continuing and expanding the OPEN Project.

This survey was not re-administered among staff at TLC, the low participant recruitment overall and lapse in any recruitment for more than six months in this setting, along with staff turnover since first implemented being considered insurmountable limitations to applying the pre- and post-intervention assessment method by this time.

Client Uptake Survey: the Langton Centre

TLC surveyed clients attending its OTP program regarding any barriers to uptake of the OPEN Project in this setting as part of its ongoing quality assurance efforts. Over a two week period in September 2013 all clients attending TLC for OTP dosing or clinical appointments were asked by a researcher to answer six questions. Clients were assured of the anonymous nature of the survey and that their willingness to participate would in no way impact the provision of services available. [Appendix N]

Approximately two-thirds of eligible TLC OTP clients (those attending the clinic within the two week period, n = 121) were interviewed. Although 88% were aware of its existence, none of the surveyed clients had participated in the OPEN intervention. Only 42 participants (35%) indicated that they might be interested in future participation, and of these, most (77%) indicated a preference for the training to be part of a routine appointment with a case manager or doctor. Primary reasons that clients were not interested in participating were indifference (36%), not wanting to be involved with people who are still using drugs (24%), and not having time to participate in the structured group training activities (21%).

DISCUSSION

The OPEN Project was feasible in both health settings, and training was valued highly by participants and staff alike in both settings. Uptake was substantially higher at KRC. This may have been because training sessions conducted in KRC's drop-in area have long been seen by staff as part of core business making it easier to incorporate the logistics of implementing the OPEN Project at this site. The very low threshold, harm reduction focus of this service where clients are assumed to still be actively using drugs, may also have made an overdose prevention program more immediately relevant to its client base.

Conversely, as suggested by the survey results, many of TLC's OTP-based clients may not have perceived that an overdose prevention program was especially relevant to them personally. They may have also had greater concerns regarding the social desirability of being seen to be interested in such a program when enrolled on TLC's opioid dependence treatment program.

Participant follow-up rates for evaluation were low and often delayed, particularly at KRC. Its largely street-based client population with high levels of transience may have affected this. The lack of a dedicated researcher coordinating this Project is also likely to have been a factor. In retrospect, the six month follow-up period was probably also too long. Similar studies have used a three month period.

Approximately half of the participants followed (18 /35) reported naloxone being used in an overdose, highlighting the utility and need for such overdose prevention interventions in these high risk groups. The high use of naloxone may reflect bias in the participants followed up for the research interview. Nevertheless, even allowing for no naloxone use in any of the other participants (possible yet unlikely), almost a quarter of participants (22%) used naloxone to reverse an overdose.

Throughout the Project challenges were addressed. Because client and staff time was limited, it was soon identified that the training session needed to be shorter and opportunistically offered. As already noted, the decision to cease the formal evaluation was to streamline the training and enable it to be offered both in a scheduled way and as needed for individuals attending both settings.

In response to these findings TLC has developed a brief intervention that applies the key training themes of the OPEN intervention and provision of naloxone and related equipment in an abridged format that only takes approximately 15-20 minute, and is designed to be delivered as part of routine clinical appointments. TLC now plans to integrate this brief intervention into routine clinical care of opioid using clients attending all SESLHD Drug and Alcohol Services.

The cessation of the evaluation before reaching its proposed target numbers limited the power to assess the significance of the evaluation's results, particularly intergroup comparisons and the follow-up analyses. These results also can't be generalised to other people who inject opioids both within the services, and elsewhere, as we can't be confident of the representativeness of such a small sample.

Overall, the educational component of the OPEN Project was both acceptable and useful for participants. Noteworthy is that the training session also included key information with respect to actions to take in any medical emergency such as placing the person in the recovery position and calling for an ambulance. The knowledge gains achieved through overdose education likewise have the potential to translate to increased knowledge to respond in non-overdose medical emergency circumstances.

Although there was a high level of knowledge regarding opioid overdose recognition prior to participation, this was improved by the training and did not significantly decline at follow-up. Similarly, participant attitudes around feeling knowledgeable enough to manage an overdose and confident enough to inject naloxone were more favourable after the training and through to the follow-up. However our results also suggest that refresher or booster sessions to maintain knowledge and attitudes may be beneficial to reduce the declines by the time of follow-up in some areas. Such refresher sessions may be possible as part of naloxone replenishment or other routine clinical appointments.

The need for a registered medical practitioner to prescribe naloxone to trained individuals face-to-face continues to pose a challenge to expanding the intervention to settings where such personnel are not onsite. This is particularly the case with stand-alone needle syringe program settings, which would otherwise be natural locations to promote and conduct such training given its actively using client base. KRC intends to overcome this barrier in its area by extending its medical capacity to such locations using a 'flying squad' model where a small team provides the training and prescription on an outreach basis at pre-arranged times.

Current regulations also prohibit carers or other potential first responders being prescribed and dispensed naloxone directly, to use in the event of witnessing someone else overdosing. Presently, these challenges must be managed within the Project while interested parties seek further legal advice regarding the Good Samaritan legislation allowing witnesses to respond. Advocacy efforts to change the pharmaceutical scheduling for naloxone to become an over-the-counter medication should also be supported, whilst recognising the challenges this provides in ensuring adequate education of consumers.

CONCLUSION

Despite its limitations, the evaluation of the OPEN Project provides an evidence base upon which to go forward with this public health intervention at both KRC and TLC. Lessons learnt will be applied to the sites' respective approaches to maximise uptake by those most at risk of opioid overdose. Ongoing monitoring and evaluation will help assess the effectiveness of any Project modifications implemented over time to ensure its responsiveness to any changes in the overdose landscape. This will also contribute to the small but growing evidence base for Naloxone Distribution Programs in Australia.

More broadly the OPEN Project team recommends all efforts to upscale naloxone availability in order to achieve the coverage levels needed to have an impact on opioid overdose rates at a population level. This may include the involvement of other groups such as paramedics, police, pharmacists and general practitioners, as well as the expansion to other non-health settings in contact with people who use opioids such as homelessness shelters and public housing. Take-home naloxone should also be promoted in drug detoxification, correctional settings, emergency department and pain management clinics and at the time of induction to and withdrawal from opioid pharmacotherapy, when opioid overdose risk is known to be heightened.

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Table 1. Demographic characteristics of participants at Kirketon Road Centre (KRC) and the Langton Centre (TLC)

	KRC (n=67)	TLC (n=16)	Total (n=83)	P-Value[1]
Age – mean (std deviation)	39 (11)	44 (11)	40 (11)	0.088
Gender – n (%)[2]				0.070
Male	39 (58)	13 (81)	52 (63)	
Female	27 (40)	2 (13)	29 (35)	
Transgender	1 (1)	1 (6)	2 (2)	
Country of Birth: Australia – n (%)[2]	57 (85)	12 (75)	69 (83)	0.456
Language at home: English – n (%)[2]	65 (97)	13 (81)	78 (94)	0.047
Aboriginal – n (%)[2]	12 (19)	2 (13)	14 (18)	0.253
Educational attainment – n (%)[2]				0.535
Primary school	2 (3)	1 (6)	3 (4)	
Some high school	19 (28)	7 (44)	26 (31)	
Completed school certificate	10 (15)	2 (13)	12 (14)	
Completed high school certificate	7 (10)	0 (0)	7 (8)	
Some tertiary education	16 (24)	2 (13)	18 (22)	
Completed tertiary education	13 (19)	4 (25)	17 (20)	
Current accommodation – n (%)[2]				0.445
Private rental	17 (26)	2 (13)	19 (23)	
Home owner	2 (3)	0 (0)	2 (2)	
Public housing	27 (41)	12 (75)	39 (48)	
Sleeping rough	4 (6)	0 (0)	4 (5)	
Shifting between relatives/friends	6 (9)	1 (6)	7 (9)	
Crisis accommodation	2 (3)	1 (6)	3 (4)	
Boarding house/hostel	3 (5)	0 (0)	3 (4)	
Other	5 (8)	0 (0)	5 (6)	
Consumes alcohol – n (%)[2]				0.389
Never	19 (28)	7 (44)	26 (31)	
Monthly or less	19 (28)	5 (31)	24 (29)	
2-4 times per month	7 (10)	1 (6)	8 (10)	
2-3 times per week	17 (25)	1 (6)	18 (22)	
4 or more times per week	5 (7)	2 (13)	7 (8)	
Number of drinks on typical day – n (%)[2]				0.035
1-2 drinks	14 (21)	5 (31)	19 (23)	
3-4 drinks	19 (29)	0 (0)	19 (23)	
5-6 drinks	11 (17)	3 (19)	14 (17)	
7-9 drinks	2 (3)	0 (0)	2 (2)	
10 or more drinks	2 (3)	2 (13)	4 (5)	
Not asked/answered	18 (27)	6 (38)	24 (29)	
Smokes – n (%)[2]	53 (79)	13 (81)	66 (80)	0.577
Ever witnessed an overdose – n (%)[2]	56 (95)	12 (92)	68 (94)	0.558

1 P-value based on Fisher's exact (categorical variables) or t-test (continuous variables) of significant difference between sites.
2 Percentages have been rounded after analysis and therefore may not sum to 100%.

Table 2. Injecting drug use, treatment, and overdose history.

	KRC (n=67)	TLC (n=16)	Total (N=83)	P-Value[1]
Age of first injection – mean (sd)	21 (8)	20 (8)	21 (8)	0.677
Frequency of injecting – n (%)[2]				0.005
More than 3 times most days	8 (12)	1 (6)	9 (11)	
2-3 times most days	7 (11)	3 (19)	10 (12)	
Once per day	7 (11)	0 (0)	7 (9)	
More than weekly, not daily	18 (27)	2 (13)	20 (24)	
Less than weekly	14 (21)	0 (0)	14 (17)	
Did not inject last month	12 (18)	10 (63)	22 (27)	
Last Drug Injected – n (%)[2]				0.401
Heroin	33 (51)	12 (80)	45 (56)	
Methamphetamine	12 (18)	1 (7)	13 (16)	
Cocaine	1 (2)	1 (7)	2 (3)	
Methadone	7 (11)	0 (0)	7 (9)	
Morphine	5 (8)	0 (0)	5 (6)	
Suboxone	1 (2)	0 (0)	1 (1)	
Subutex/Buprenorphine	1 (2)	0 (0)	1 (1)	
Other	5 (8)	1 (7)	6 (8)	
Ever prescribed methadone – n (%)[2]				0.508
Yes, currently	39 (61)	12 (75)	51 (64)	
Yes, in the past	12 (19)	3 (19)	15 (19)	
No, never	13 (20)	1 (6)	14 (18)	
Ever prescribed buprenorphine – n (%)[2]				0.428
Yes, currently	3 (5)	0 (0)	3 (4)	
Yes, in the past	32 (57)	6 (43)	38 (54)	
No, never	21 (38)	8 (57)	29 (41)	
Ever prescribed suboxone – n (%)[2]				0.451
Yes, currently	5 (10)	3 (25)	8 (13)	
Yes, in the past	10 (19)	1 (8)	11 (17)	
No, never	36 (69)	8 (67)	44 (69)	
Don't know	1 (2)	0 (0)	1 (2)	
Ever had other drug treatment – n (%)[2]				0.644
Yes, currently	16 (24)	3 (19)	19 (23)	
Yes, in the past	36 (55)	11 (69)	47 (57)	
No, never	14 (21)	2 (13)	16 (20)	
Ever experienced an overdose – n (%)[2]	40 (63)	11 (69)	51 (64)	0.775
Number of times overdosed – n (%)[2]				0.769
Once	8 (12)	2 (13)	10 (13)	
2-4 times	19 (30)	4 (27)	23 (29)	
5-9 times	4 (6)	2 (13)	6 (8)	
10 or more times	6 (9)	2 (13)	8 (10)	
Not asked/answered	27 (42)	5 (33)	32 (41)	
Location of overdose – n (%)[2]				0.472
Own home	12 (18)	1 (6)	13 (16)	
Friend's home	3 (5)	3 (19)	6 (7)	
Dealer's home	2 (3)	0 (0)	2 (2)	
Street, park, beach	7 (11)	2 (13)	9 (11)	
Car	3 (5)	0 (0)	3 (4)	

Public toilet	2 (3)	0 (0)	2 (2)	
MSIC	4 (6)	2 (13)	6 (7)	
Squat	1 (2)	0 (0)	1 (1)	
Commercial shooting room	1 (2)	0 (0)	1 (1)	
Other	4 (6)	3 (19)	7 (9)	
Not asked/answered	27 (41)	5 (31)	32 (39)	
Deliberately overdosed – n (%)[2]	5 (8)	0 (0)	5 (6)	0.576
Overdosed alone – n (%)[2]	8 (12)	4 (25)	12 (15)	0.427
Ambulance attended overdose – n (%)[2]	23 (35)	5 (31)	28 (35)	0.494
Taken to hospital during overdose – n (%)[2]	13 (20)	4 (25)	17 (21)	0.582
Given Narcan during overdose – n (%)[2]				0.559
Yes	16 (25)	7 (44)	23 (29)	
Don't know	4 (6)	1 (6)	5 (6)	
No	17 (27)	3 (19)	20 (25)	

1 P-value based on Fisher's exact (categorical variables) or t-test (continuous variables) of significant difference between sites.
2 Percentages have been rounded after analysis and therefore may not sum to 100%.

Table 3. Knowledge and attitudes[1] at baseline, post-training, and at follow-up.

	Favourable Response[2]			P-Values[3]		
	Baseline (n=70)[4]	Post-Training (n=83)	Follow-Up (n=35)	Baseline v Post-Training	Baseline v Follow-Up	Post-Training v Follow-Up
Knowledge, as percentage of correct responses – mean (std deviation)[4]	82 (15)	93 (5)	84 (8)	<0.001	0.467	<0.001
I have enough information about how to manage an overdose. – n (%)[5]	17 (24)	78 (95)	34 (97)	<0.001	0.464	0.681
I would need more training before I can feel confident to help someone who overdosed.[6] – n (%)[5]	15 (22)	69 (83)	24 (69)	0.012	0.609	0.082
If someone overdoses I would be able to inject naloxone. – n (%)[5]	35 (51)	80 (96)	35 (100)	<0.001	0.501	0.002
If someone overdoses I would call an ambulance but I wouldn't be willing to do anything else.[6] – n (%)[5]	59 (84)	77 (93)	30 (86)	0.055	0.612	0.016
If someone overdoses I would be concerned about calling an ambulance in case the police came.[6] – n (%)[5]	55 (80)	71 (86)	29 (83)	<0.001	0.010	0.946
Family and friends of drug users should be prepared to deal with an overdose. – n (%)[5]	63 (90)	80 (96)	30 (86)	0.030	0.374	0.719
Family and friends of drug users should have access to naloxone supplies. – n (%)[5]	63 (90)	78 (95)	34 (97)	<0.001	0.505	0.580

1 Knowledge and attitude items adapted from OOKS and OOAS for baseline, post-training, and follow-up questionnaires.
2 Favourable responses include "agree" and "strongly agree."
3 P-values based on t-tests of difference in means (knowledge score) or Fisher's exact test for attitudinal items.
4 All of the participants (N=83) completed the knowledge-based items; however, 13 participants did not answer the attitude-based items on the baseline questionnaire, thus n=70 for these items.
5 Percentages have been rounded after analysis and therefore may not sum to 100%.
6 Favourable responses to these items indicated by disagreement with the statement ("completely disagree" and "disagree").

APPENDICES

Note: Forms and questionnaires included in Appendices C - K are those versions used at Kirketon Road Centre. Instruments used at the Langton Centre were identical except for the name of facility and investigator.

OVERDOSE PREVENTION EDUCATION & Naloxone Project

By the end of today you will know how to:

1. **Avoid** having an overdose
   - Know the risks & how to reduce them
2. **Assess** someone who has overdosed
   - Recognise the signs of an opioid overdose
3. **Treat** someone who has overdosed
   - Emergency response
   - When & how to use naloxone

2

What Are Opioids?

- Opium
- Heroin
- Codeine
- Methadone (long acting)
- Morphine (MS Contin)
- Oxycodone (OxyContin)
- Hydrocodone (Vicodin)
- Fentanyl
- Hydromorphone (Dilaudid)
- Palfium
- Pethadine

Papaver Somniferum
"Poppy Plant"

3

What is an Opioid Overdose?

- Taking **more** of an opioid drug than the body can handle
- Opioid class drugs '**depress**' the respiratory system causing breathing to **slow down, become shallow and then stop altogether.**
- The person may first 'go on the nod' or just 'drop', become unconscious, turn blue (due to lack of oxygen), and have a seizure.
- The heart may then stop, leading to death.

4

Apart from death, opioid overdose can also cause serious health problems, which may be irreversible…

- Damage to important organs like the brain (after 3-5 minutes of not breathing)
- Muscle damage from lying in the one position too long, which can then lead to kidney failure
- Pneumonia from vomit entering the lungs
- Serious injury from falling, having a car accident if driving and burns from lit cigarettes starting a fire.

5

Risk factors for overdose

- Mixing opioids with other depressants especially alcohol and benzos (e.g. Xanax) even when taken a long time beforehand
- Reduced 'tolerance' e.g. after not using while in prison, drug-free detox or naltrexone treatment
- Using a higher than usual purity or amount
- Having other systemic health problems

e.g. having an infection with a high temperature

- Injecting alone (no one to call for help)
- Injecting instead of other ways of using drugs, especially for the first time

Preventing Overdose

- Don't use more than one depressant drug at a time including alcohol or benzo's before having a shot
- Use less if you haven't used for a while (consider just having a taste shot first, then if OK, inject the rest)
- Be extra careful if you have a new dealer/unfamiliar supply
- Look after your general health
- Inject with others – safety in numbers
- Consider snorting, smoking, shafting or swallowing your drugs instead of injecting

7

Signs of Opioid Overdose

Lowered consciousness, not responding to verbal or physical stimulation

Blue lips, tongue and hands, cool pale skin

Breathing infrequently, snoring or not breathing

'Pinned' small pupils

Checking for response

- Call the person's name, squeeze an ear lobe or shoulder or rub their central chest (but don't hurt them!)

If they don't respond it is probably an overdose!

Overdose Myths

Do not:

- Put the person in a cold bath or shower
- Give stimulants e.g. cocaine, coffee…
- Inject them with salt (like in 'Candy'!)
- Draw off and/or re-inject the person's own blood
- Inject anything into the heart (like in 'Pulp Fiction'!)

Immediately call 000 for help

Rule 1 - Stay calm!

- Speaking clearly, ask for an **ambulance**
- Say it is "**an emergency"** & the person is "**not breathing"**
- Give the operator your address including the nearest crossroad and any landmarks if you can
- Try not to get frustrated or angry if the operator asks you to repeat any information
- When the ambulance arrives tell them what drugs the person has injected and when this was; also how much naloxone and when this was injected

NOTE- Police will not attend overdoses unless there is concern about the safety situation for ambulance personnel

Keep their airway open

- Put the person in the "Recovery Position": chin forward to open airway and mouth downwards to allow drainage of any fluids

- Make sure there is nothing in their throat blocking their airway

Breathing

- Roll the person onto their back & check for **breathing**
  - Look & feel for chest movements
  - Listen & feel for sounds of air escaping from the mouth/nose
- If the person starts breathing normally:
  - Put them back into the "recovery position"
  - Wait for the ambulance
  - Check breathing regularly until ambulance arrives
  - Reassure them that everything will be OK
  - Keep talking to them to both monitor their level of consciousness and reduce the risk they will lapse back into unconsciousness

If not breathing normally - give naloxone (Narcan) So what is it?

- A fast-acting medication that **reverses** the respiratory **depressant** effects of opioids

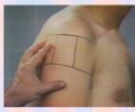
Injection Site	*Time To Take Effect*
Muscle (intramuscular)	2-5 mins

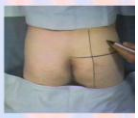
Naloxone

- Side effects are extremely rare - except withdrawal!
- Opioid withdrawal symptoms depend on how much naloxone is given and how it is given
- Intravenous naloxone causes fastest withdrawal; intramuscular naloxone has a more gradual onset
- 400mcg naloxone is a small dose compared to what ambos usually use (800mcg – 2g)

Giving Naloxone

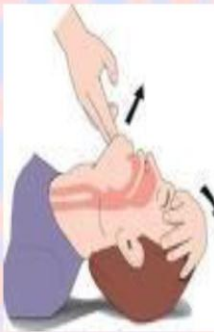
1. Unscrew mini-jet syringe cap
2. Screw needle into mini-jet
3. Remove needle cap
4. Insert needle into muscle:
   - Upper arm, outer buttock or thigh area best (no need to remove clothing)
   - At least 1/3 of the needle's length
   - Then push the plunger all the way down to administer the 400 mcg dose of naloxone
5. Take note of the time that the naloxone is given





Commence 'Rescue breathing'

1. Place one hand on forehead
2. Place other hand under chin
3. Tilt head backwards to open the airway
4. Put on breathing face mask
5. Pinch off nose
6. Seal your mouth over theirs and give quick breaths

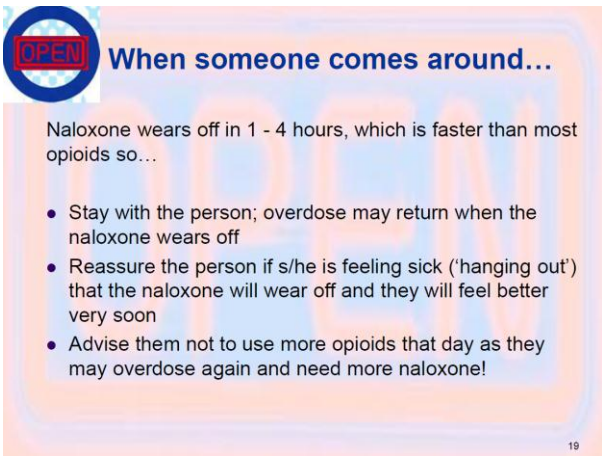


Reassess breathing

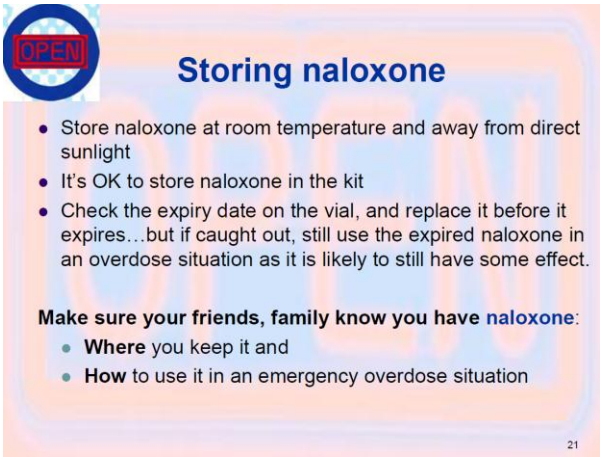
- If there is no response after 5 minutes of giving the first dose of naloxone:

1. Inject the 2nd minijet of naloxone
2. Start 'rescue breathing' again until the ambulance arrives.

18


When someone comes around…
Naloxone wears off in 1 - 4 hours, which is faster than most opioids so…
• Stay with the person; overdose may return when the naloxone wears off
• Reassure the person if s/he is feeling sick ('hanging out') that the naloxone will wear off and they will feel better very soon
• Advise them not to use more opioids that day as they may overdose again and need more naloxone!
19


Cleaning up & keeping safe
To protect everyone from viruses like hepatitis C & HIV
• Wear gloves
• Make sure that your injecting environment is safe by checking that there are no needles lying around
• Never re-cap needles
• The naloxone mini-jet should be put straight into a sharps disposal container after use.
20


Storing naloxone
• Store naloxone at room temperature and away from direct sunlight
• It's OK to store naloxone in the kit
• Check the expiry date on the vial, and replace it before it expires…but if caught out, still use the expired naloxone in an overdose situation as it is likely to still have some effect.
Make sure your friends, family know you have naloxone:
• Where you keep it and
• How to use it in an emergency overdose situation
21


Getting your Overdose Kit & OPEN Project evaluation
• Receiving your first Overdose Kit: the doctor will assess you and prescribe and dispense naloxone in a kit along with other important information
• If you use your naloxone please come back to the service to get a replacement
• Ongoing support available
• We would also like to contact you in 6 months to tell us about your experiences with naloxone and overdose. This will help us evaluate the OPEN program.
Thank you for your time!
22

Appendix B: Contents of Overdose Management Pack

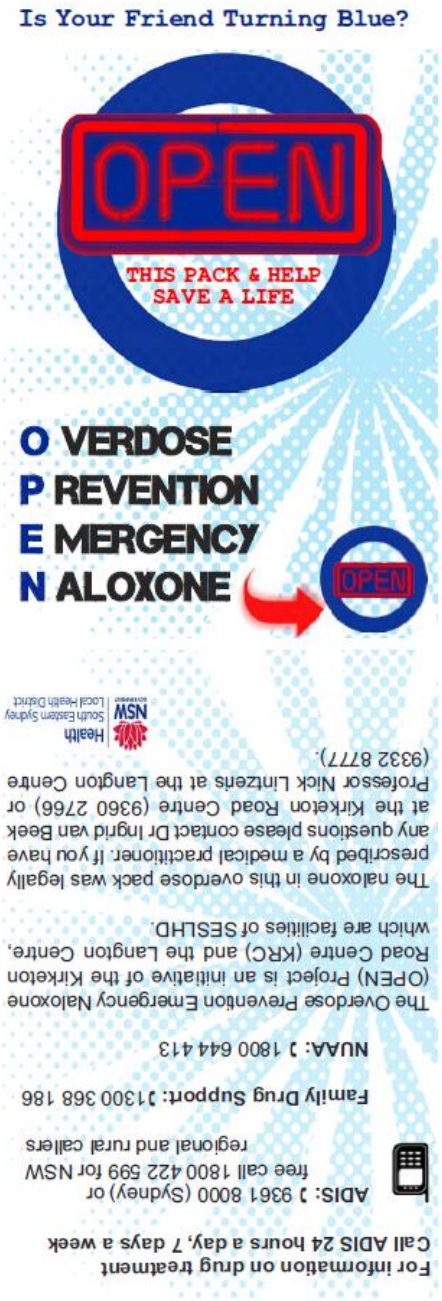
The Overdose Management Pack provided to participants included:

- 2 vials with 400 mcg naloxone HCl, later replaced by 2 Minijets of 400 mcg naloxone HCl
- Needles and syringes
- Resuscitation mask
- Written instructions demonstrating overdose management and intramuscular naloxone administration (see below)
- Health promotion information regarding opioid overdose prevention

RESPONDING TO AN OPIOID OVERDOSE

(see over for more details)

- Check the environment is safe
- Try to rouse the person
- Send for help. Call ambulance 000
- Put them in the recovery position
- Check their airway,
- Inject naloxone
- Start 'Rescue Breathing' until the person resumes breathing normally or the ambulance arrives



Is Your Friend Turning Blue?

OPEN

THIS PACK & HELP SAVE A LIFE

O VERDOSE
P REVENTION
E MERGENCY
N ALOXONE

OPEN

For information on drug treatment
Call ADIS 24 hours a day, 7 days a week

ADIS:) 9361 8000 (Sydney) or
free call 1800 422 599 for NSW
regional and rural callers

Family Drug Support:)1300 368 186

NUAA:) 1800 644 413

The Overdose Prevention Emergency Naloxone (OPEN) Project is an initiative of the Kirketon Road Centre (KRC) and the Langton Centre, which are facilities of SESLHD.

The naloxone in this overdose pack was legally prescribed by a medical practitioner. If you have any questions please contact Dr Ingrid van Beek at the Kirketon Road Centre (9360 2766) or Professor Nick Lintzeris at the Langton Centre (9332 8777).

NSW Health
South Eastern Sydney Local Health District

The Risk Factors and Recognition of Opioid Overdose

The risk of opioid overdose is increased:

- when using a higher than usual purity or amount
- after a period of not using opioids, for example after detention, detox, naltrexone or drug-free treatment when your tolerance to opioids (including heroin, methadone, Oxycontin, morphine) is reduced
- when mixing opioids with other depressant drugs such as alcohol or benzo's eg Xanax
- when injecting instead of other ways of using drugs, especially for the first time
- when having other systemic health problems like an infection with a high temperature
- when using alone with no one able to call for help

Recognising opioid overdose

Person is unconscious, not responding to their name or physical stimulus like squeezing their shoulder. Signs of overdose include having blue lips, tongue and hands, cool pale skin, breathing infrequently, snoring or not breathing at all and 'pinned' (small) pupils.

RESPONDING TO AN OPIOID OVERDOSE

Check the environment is safe/clear away any uncapped needles or other sharp objects

Try to rouse the person by calling their name or squeezing their shoulder

Call an ambulance 000

Put the person in the 'recovery position'

1. Tilt head backwards
2. Turn mouth slightly downwards to allow drainage
3. Check their airway and clear any obstructions from their mouth or throat
4. Listen and look for normal breathing

If not breathing normally *(and an occasional gasp or making snoring sounds is not normal breathing!)* **roll the person onto their back and inject naloxone**

1. Unscrew mini-jet syringe cap
2. Screw needle into mini-jet
3. Remove needle cap
4. Insert needle into muscle
5. Note time the injection is given

Inject into upper arm, outer buttock or thigh

1. Insert at least 1/3 of needle into muscle
2. Push plunger all the way down injecting the naloxone into their muscle

Start 'Rescue Breathing' until the person resumes breathing normally

1. Place one hand on forehead
2. Place other hand under chin
3. Tilt head backwards to open the airway
4. Put on breathing face mask
5. Pinch off nose
6. Seal your mouth over theirs and give quick breaths

If the person starts breathing normally:

1. Roll them back into the 'recovery position'
2. Wait for the ambulance
3. Check breathing regularly until help arrives
4. Reassure them

If the person is NOT breathing normally after 5 minutes, give 2nd naloxone injection

1. Ensure the ambulance has been called
2. Continue 'rescue breathing' until help arrives

Naloxone is a fast-acting medication that reverses the respiratory depressant effects of opioids. Side effects are extremely rare but you may get symptoms of opioid withdrawal. This will depend on how much naloxone is given and how it is given. Intravenous naloxone causes fastest withdrawal; intramuscular naloxone has a more gradual onset. 400mcg naloxone is a small dose compared to what ambos usually use (800mcg – 2g) so withdrawal symptoms should be less.

PARTICIPANT INFORMATION SHEET AND CONSENT FORM

EVALUATION OF A PILOT OPIOID OVERDOSE PREVENTION AND MANAGEMENT INTERVENTION (EOPI)

Invitation
You are invited to participate in a research study named **Evaluation of a pilot opioid overdose prevention and management intervention (EOPI).**

The study is being conducted by Dr Ingrid van Beek, Medical Director, Kirketon Road Centre.

Before you decide whether or not you wish to participate in this study, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish.

1. **'What is the purpose of this study?'**
   The purpose is to evaluate the *Overdose Prevention Education & Naloxone Project (OPEN)* in which you are currently enrolled at Kirketon Road Centre. We are conducting the evaluation to find out about the experiences and views of people who undertake the training program and are provided with a prescription for naloxone. This information will be used to assess how useful and appropriate the program is. This information will assist to make decisions about the future of the program, for example expanding it, changing it or closing it down.

2. **'Why have I been invited to participate in this study?'**
   You are eligible to participate in this study because you are participating in the OPEN Project which the study is aiming to evaluate

3. **'What if I don't want to take part in this study or if I want to withdraw later?'**
   Participation in this study is voluntary. It is completely up to you whether or not you participate. If you decide not to participate, it will not affect the treatment you receive now or in the future. Whatever your decision, it will not affect your relationship with the staff caring for you.

   If you wish to withdraw from the study once it has started, you can do so at any time without having to give a reason.

4. **'What does this study involve?'**
   If you agree to participate in this study, you will be asked to sign the Participant Consent Form.

   If you agree to participate in this study, you will then be asked to agree to the following:

   - To be interviewed after six months, to find out about your experiences in using the new knowledge and skills you gained in the overdose prevention and management session, and your later experiences of opioid overdoses and the use of naloxone. This may involve an audio- recorded interview.
   - To provide details which will be used to contact you in the event that you do not present at the study site in six months time, however this is not compulsory

It is not compulsory for you to participate in the evaluation and, if you choose not to do so, there will not be any adverse consequences for you as a result of your decision. You can withdraw from

the evaluation at any time. Furthermore, you do not need to provide any reasons if you choose not to participate in the evaluation either now or in the future.

5. **'How is this study being paid for?'**
   The study is being funded by Kirketon Road Centre.

6. **'Are there risks to me in taking part in this evaluation?'**
   There are no serious risks for your participation in this evaluation.

   The study is not intended to discover evidence of illegal activity (e.g. the use of illegal drugs now or sometime in the past) but may do so as participants will be asked about their own experiences of overdose.

   The information you provide will be kept in a secure place, and will be seen only by the authorised evaluation researchers. It will be kept confidential to the extent permitted by law **(for instance information may be disclosed if subpoenaed)**.

   As mentioned above, there will be no adverse consequences for you if you refuse to be part of the evaluation or withdraw from it later on.

   If you choose to withdraw from the study all audio recordings and computer records will be erased and all paper-based records will be securely destroyed.

   If you feel upset by any of the questions we will be asking you, our trained interviewers will be happy to assist you. Please feel free to tell them if any of the topics discussed make you feel uncomfortable. You do not have to answer the questions if you don't want to.

   The reports of the evaluation will be written in such a way that the information provided cannot be linked to any individual. Your privacy and anonymity will be assured.

7. **'Will I benefit from the study?'**
   This evaluation aims to further our knowledge and may improve the way the OPEN program is offered in the future. You will not benefit from this study.

8. **'Will taking part in this study cost me anything, and will I be paid?**
   Participation in this study will not cost you anything. You will be reimbursed for your time and reasonable travel expenses with a $30 food voucher.

9. **'How will my confidentiality be protected?'**
   Only the researchers involved in the evaluation will know whether or not you are participating in this evaluation. Any identifiable information that is collected about you in connection with this evaluation will remain confidential and will be disclosed only with your permission, or except as required by law. Only the researchers will have access to your details and results that will be held securely at Kirketon Road Centre.

   Further, the study is not intended to discover evidence of illegal activity (e.g. the use of illegal drugs now or sometime in the past) but may do so as participants will be asked about their own experiences of overdose.

   The information you provide will be kept in a secure place, and will be seen only by the authorised evaluation researchers. It will be kept confidential to the extent permitted by law **(for instance information may be disclosed if subpoenaed)**.

10. 'What happens with the results?'

The results of this evaluation may be published on the internet, in academic journals or in books, and presented to conferences. Summary results will be made available to the people who use drug and alcohol services and to others in the wider community.
In any publication, information will be provided in such a way that you cannot be identified.
Results of the study will be provided to you, if you wish.

11. 'What should I do if I want to discuss this study further before I decide?'

When you have read this information, the researcher ……will discuss it with you and any queries you may have. If you would like to know more at any stage, please do not hesitate to contact him/her by telephone on 02 - 9360 2766.

12. 'Who should I contact if I have concerns about the conduct of this study?'

This study has been approved by the Human Research Ethics Committee of the South Eastern Sydney Local Health District – Northern Sector. Any person with concerns or complaints about the conduct of this study should contact the Research Support Office which is nominated to receive complaints from research participants. You should contact them on 02 9382 3587, or email ethicsnhn@sesiahs.health.nsw.gov.au and quote reference number 11/205.

Thank you for taking the time to consider this study.
If you wish to take part in it, please sign the attached consent form.
This information sheet is for you to keep.

CONSENT FORM

EVALUATION OF A PILOT OPIOID OVERDOSE PREVENTION AND MANAGEMENT INTERVENTION (EOPI)

1. I,.....
   of.....
   agree to participate in the evaluation study described in the participant information statement set out above

2. I agree to be contacted as per the information provided on the follow-up locator information consent form

3. I acknowledge that I have read the participant information statement, which explains why I have been selected, the aims of the study and the nature and the possible risks of the evaluation study, and the statement has been explained to me to my satisfaction.

4. Before signing this consent form, I have been given the opportunity of asking any questions relating to any possible physical and mental harm I might suffer as a result of my participation and I have received satisfactory answers.

5. I understand that I can withdraw from the study at any time without prejudice to my relationship to the Kirketon Road Centre.

6. I agree that research data gathered from the results of the study may be published, provided that I cannot be identified.

7. I understand that if I have any questions relating to my participation in this research, I may contact .....on telephone. 02- 9360 2766, who will be happy to answer them.

8. I acknowledge receipt of a copy of this Consent Form and the Participant Information Statement.

Complaints may be directed to the Research Ethics Secretariat, South Eastern Sydney Local Health District – Northern Sector, Prince of Wales Hospital, Randwick NSW 2031 Australia (phone 02-9382 3587, fax 02-9382 2813, email ethicsnhn@sesiahs.health.nsw.gov.au.

Signature of participant	**Please PRINT name**	**Date**
_____	_____	_____
Signature of witness	**Please PRINT name**	**Date**
_____	_____	_____
Signature of investigator	**Please PRINT name**	**Date**
_____	_____	_____

EVALUATION OF A PILOT OPIOID OVERDOSE PREVENTION AND MANAGEMENT INTERVENTION (EOPI)

REVOCATION OF CONSENT

I hereby wish to **WITHDRAW** my consent to participate in the study described above and understand that such withdrawal **WILL NOT** jeopardise any treatment or my relationship with the Kirketon Road Centre.

Signature of participant	**Please PRINT name**	**Date**
_____	_____	_____

The section for Revocation of Consent should be forwarded to:
Dr Ingrid van Beek
Kirketon Road Centre
PO BOX 22
Kings Cross 1340 NSW.

BASELINE QUESTIONNAIRE

Office use only
KRC number _____
Last name _____ **First name** _____
Date____/_____/_____

Please complete the following questionnaire to help us update your medical history. Place the completed questionnaire back into the folder. The Medical Officer will review this questionnaire with you prior to prescribing your overdose management pack. Please let us know if you would like assistance in completing this questionnaire.

Drug & alcohol use

1. How often do you have a drink containing alcohol?
☐ Never ☐ Monthly or less ☐ 2-4 times a month
☐ 2-3 times a week ☐ 4 or more times per week

2. How many drinks containing alcohol do you have on a typical day when you are drinking?
☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-9 ☐ 10 or more

3. Do you smoke?
☐ No ☐ Yes *If yes, h*ow many cigarettes (per day) _____

4. Have you ever been prescribed any of the following medication?
Methadone
☐ Yes, am on it now. ☐ Yes, in the past ☐ No, never ☐ Don't know
Buprenorphine or Subutex
☐ Yes, am on it now. ☐ Yes, in the past ☐ No, never ☐ Don't know
Suboxone
☐ Yes, am on it now. ☐ Yes, in the past ☐ No, never ☐ Don't know

5. Have you ever had any other treatment or therapy for drug use? e.g. detox, rehab, counseling, NA
☐ Yes, am on it now ☐ Yes in the past
☐ No never ☐ Don't know

Injecting history

6. How old were you when you started injecting drugs? _____

7. **How often did you inject last month?**
☐ More than 3 times most days ☐ 2-3 times most days ☐ Once a day
☐ More than weekly, not daily ☐ Less than weekly (on 1 to 5 days)
☐ Did not inject in the last month

8. What was the LAST drug you INJECTED? (Mark one only)
☐ Heroin ☐ Methamphetamine (Speed, Base Ice) ☐ Cocaine
☐ Methadone ☐ Morphine ☐ Anabolic steroid
☐ Suboxone ☐ Subutex/Buprenorphine
☐ Other (please specify) _____

9. Where were you when you last injected?
☐ Own home ☐ Friend's home ☐ Dealer's home
☐ Street park or beach ☐ Car ☐ Public toilet
☐ MSIC ☐ Squat ☐ Commercial "shooting" room
☐ Other (please specify) _____

10. **Were you alone when you last injected?**
☐ Yes ☐ No

If no, who was present? ☐ Friend ☐ Partner ☐ Other (please specify) _____

Overdose history

11. Have you ever overdosed?
☐ No ☐ Yes
*If yes, h*ow many times_____ What drug(s) were involved? _____

12. **When did you last overdose?** _____

13. Was it a deliberate overdose?
☐ Yes ☐ No

14. Where were you when you last overdosed?(tick only one)
☐ Own home ☐ Friend's home ☐ Dealer's home
☐ Street park or beach ☐ Car ☐ Public toilet
☐ MSIC ☐ Squat ☐ Commercial "shooting" gallery
☐ Other (specify) _____

15. **Were you alone when you last overdosed?**
☐ Yes ☐ No

16. The last time you overdosed, did an ambulance attend?
☐ Yes ☐ No If no, who else was there? _____

17. **The last time you overdosed were you taken to the hospital?**
☐ Yes ☐ No

18. **The last time you overdosed were you given Narcan?**
☐ Yes ☐ No ☐ Don't know

The following questions refer to <u>YOUR LAST OVERDOSE</u>

19. What drugs had you used in the 24 hours before your last overdose (tick all that apply)?
☐ Benzodiazepines ☐ Alcohol ☐ Morphine
☐ Methadone (not prescribed) ☐ Buprenorphine (not prescribed) ☐ Heroin
☐ Cocaine ☐ Speed/amphetamines ☐ Cannabis
☐ Other (specify) _____ ☐ Don't know

20. Were you receiving any medication for heroin dependence at the time of your last overdose?
☐ No ☐ Yes - Methadone
☐ Yes - Buprenorphine ☐ Yes – Other (please specify) _____

21. **Had you stopped or reduced your level of drug use in the days or weeks just before your last overdose?**
☐ No ☐ Yes (please specify) _____

22. Had you recently been discharged from any of the following?
☐ Prison/juvenile detention ☐ Home detoxification
☐ Inpatient detoxification ☐ Residential rehabilitation
☐ Other (please specify)_____

23. **Have you ever witnessed an overdose?**
☐ Yes ☐ No

About yourself

24. **How old are you**? _____

25. **Are you**
☐ Male ☐ Female ☐ Transgender

26. In which country were you born?
☐ Australia ☐ Other (please specify) _____

27. What was the main language spoken at home by your parents?
☐ English ☐ Other please specify_____

28. **Are you** ☐ Aboriginal ☐ Torres Strait Islander
☐ Both ☐ Neither

29. **What is your level of education?**
☐ Primary school ☐ Some High School
☐ Completed School Certificate ☐ Completed High School Certificate
☐ Some Tertiary education ☐ Completed Tertiary education

30. Where are you currently living?

☐ Private rental	☐ Shifting between relatives, friends, and /or acquaintances' places	☐ Caravan park
☐ Home owner or purchase	☐ Crisis accommodation(refuge)	☐ Backpackers/hotel/motel
☐ Public housing/Community housing	☐ Drug/alcohol detox or treatment facility	☐ Other, please specify
☐ Sleeping rough/squat/long grass	☐ Boarding house or hostel	

Appendix E: Carer Baseline Questionnaire

CARER'S BASELINE QUESTIONNAIRE

Office use only
Questionnaire number _____
Date____/_____/_____

Please answer the following questions about yourself. Completion of this questionnaire is OTPional and the responses are anonymous. Place the completed questionnaire back into the folder.

ABOUT YOU

1. How old are you? _____
2. Are you
   - ❑ Male
   - ❑ Female
   - ❑ Transgender
3. Have you ever received advice or training in overdose management?
   - ❑ Yes
   - ❑ No
4. Are you an injecting drug user yourself?
   - ❑ Yes
   - ❑ No
5. Have you personally ever witnessed someone having an overdose?
   - ❑ Yes
   - ❑ No
6. Have you ever experienced an overdose yourself?
   - ❑ Yes
   - ❑ No

ABOUT YOUR FRIEND/FAMILY MEMBER

7. What is their relationship to you? _____

8. Has your friend/family member ever injected in your presence?
   - ❑ Yes
   - ❑ No

9. Has your friend ever had an overdose?
   - ❑ Yes
   - ❑ No
   - ❑ Don't know

Thank you for completing this questionnaire

Appendix F: Pre-Training Questionnaire

PRE - TRAINING KNOWLEDGE AND ATTITUDES QUESTIONNAIRE

Office use only
KRC number _____
First 3 letters of surname _____ **First name** _____
Date____/_____/_____
Knowledge score _____

Please answer the following questions about your knowledge of overdose and naloxone (Narcan) and your attitudes towards overdose and naloxone. Place the completed questionnaire back into the folder.

1. Have you ever received overdose training

- ❑ Yes
- ❑ No

2. Have you ever heard of naloxone (Narcan)?

- ❑ Yes **GO TO QUESTION 3**
- ❑ No **GO TO QUESTION 7**

3. Naloxone (Narcan) is used for (TICK ALL THAT APPLY):

- ❑ Reversing heroin overdose
- ❑ Reversing cocaine overdose
- ❑ Reversing amphetamine overdose (e.g. 'Speed', 'Ice')
- ❑ Reversing the effects of OxyContin overdose
- ❑ Helping someone to get off drugs
- ❑ Don't know

4. How long does it take for naloxone (Narcan) to start having effect?

- ❑ 2-5 minutes
- ❑ 5-20 minutes
- ❑ Don't know

5. Naloxone (Narcan) effect lasts for

- ❑ Less than 20 minute
- ❑ One to 4 hours
- ❑ Don't know

6. Which are the recommended sites for injecting naloxone (Narcan)? (TICK ALL THAT APPLY)

- ❑ Upper arm
- ❑ Thigh
- ❑ Buttocks
- ❑ Don't know

7. Which of the following increase the risk of an opioid overdose? (TICK ALL THAT APPLY)

- ❑ Taking larger than usual drug doses
- ❑ Switching to injecting drugs
- ❑ Using again after not using for a while
- ❑ Using with other substances (e.g. alcohol, sleeping pills)
- ❑ Change in drug purity (e.g. through change in dealer)
- ❑ Don't know

8. Which of the following are signs of an opioid overdose? (TICK ALL THAT APPLY)

- ❑ Shallow/slow breathing
- ❑ Blood-shot eyes
- ❑ Pin point pupils
- ❑ Lips/tongue turn blue
- ❑ Loss of consciousness
- ❑ Fitting
- ❑ Deep snoring
- ❑ Don't know

9.Which of the following <u>should</u> be done when a person is showing signs of an opioid overdose?(TICK ALL THAT APPLY)

- ❑ Call the ambulance
- ❑ Place the person on their left side (in the recovery position)
- ❑ Give stimulants (e.g. cocaine, 'Speed', coffee)
- ❑ Inject naloxone (Narcan)
- ❑ Perform mouth to mouth resuscitation if the person is not breathing
- ❑ Put the person in bed to sleep it off
- ❑ Stay with the person until the ambulance arrives
- ❑ Don't know

Please mark "True", "False" or "Don't know"	**True**	**False**	**Don't know**
10. There is no need to call an ambulance if I know how to manage an overdose			
11. Ambulance staff automatically call the police if someone overdoses			
12. You don't need to do basic life support if someone gets naloxone (Narcan)			
13. If the first dose of naloxone (Narcan) has no effect a second dose can be given			
14. You can overdose again once naloxone (Narcan) wears off			
15. Naloxone (Narcan) can induce drug withdrawal symptoms			

Please tell us how much you AGREE or DISAGREE with the following:

	Completely disagree	**Disagree**	**Unsure**	**Agree**	**Strongly agree**
16. I have enough information about how to manage an overdose					
17. I would need more training before I can feel confident to help someone who overdosed					
18. If someone overdoses I would be able to inject naloxone (Narcan)					
19. If someone overdoses I would call an ambulance but I wouldn't be willing to do anything else					

20. If someone overdoses I would be concerned about calling an ambulance in case the police came					
21. Family and friends of drug users should be prepared to deal with an overdose					
22. Family and friends of drug users should have access to naloxone (Narcan) supplies					

Thank you for completing this questionnaire.

Appendix G: Client Post-Training Questionnaire

POST - TRAINING KNOWLEDGE AND ATTITUDES QUESTIONNAIRE

Office use only
KRC number _____
First 3 letters of surname _____ **First name** _____
Date____/_____/_____
Knowledge score _____

Please answer the following questions about your knowledge of overdose and naloxone (Narcan) and your attitudes towards overdose and naloxone. Place the completed questionnaire back into the folder. The Medical Officer will review this questionnaire with you prior to prescribing your overdose management pack.

1. Naloxone (Narcan) is used for (TICK ALL THAT APPLY):

- ❑ Reversing heroin overdose
- ❑ Reversing cocaine overdose
- ❑ Reversing amphetamine overdose (e.g. 'Speed', 'Ice')
- ❑ Reversing the effects of OxyContin overdose
- ❑ Helping someone to get off drugs
- ❑ Don't know

2. Which are the recommended sites for injecting naloxone (Narcan)? (TICK ALL THAT APPLY)

- ❑ Upper arm
- ❑ Thigh
- ❑ Buttocks
- ❑ Don't know

3. Which of the following are signs of an opioid overdose? (TICK ALL THAT APPLY)

- ❑ Shallow/slow breathing
- ❑ Blood-shot eyes
- ❑ Pin point pupils
- ❑ Lips/tongue turn blue
- ❑ Loss of consciousness
- ❑ Fitting
- ❑ Deep snoring
- ❑ Don't know

4. Which of the following <u>should</u> be done when a person is showing signs of an opioid overdose?(TICK ALL THAT APPLY)

- ❑ Call the ambulance
- ❑ Place the person on their left side (in the recovery position)
- ❑ Give stimulants (e.g. cocaine, 'Speed', coffee)
- ❑ Inject naloxone (Narcan)
- ❑ Perform mouth to mouth resuscitation if the person is not breathing
- ❑ Put the person in bed to sleep it off
- ❑ Stay with the person until the ambulance arrives
- ❑ Don't know

5. Which of the following increase the risk of an opioid overdose? (TICK ALL THAT APPLY) ❑ Taking larger than usual drug doses ❑ Switching to injecting drugs ❑ Using again after not using for a while ❑ Using with other substances (e.g. alcohol, sleeping pills) ❑ Change in drug purity (e.g. through change in dealer) ❑ Don't know	**6. How long does it take for naloxone (Narcan) to start having effect?** ❑ 2-5 minutes ❑ 5-20 minutes ❑ Don't know
7. Naloxone (Narcan) effect lasts for ❑ Less than 20 minute ❑ One to 4 hours ❑ Don't know	

Please mark "True", "False" or "Don't know"	**True**	**False**	**Don't know**
8. There is no need to call an ambulance if I know how to manage an overdose			
9. Ambulance staff automatically call the police if someone overdoses			
10. You don't need to do basic life support if someone gets naloxone (Narcan)			
11. If the first dose of naloxone (Narcan) has no effect a second dose can be given			
12. You can overdose again once naloxone (Narcan) wears off			
13. Naloxone (Narcan) can induce drug withdrawal symptoms			

Please tell us how much you AGREE or DISAGREE with the following:

	Completely disagree	**Disagree**	**Unsure**	**Agree**	**Strongly agree**
14. I have enough information about how to manage an overdose					
15. I would need more training before I can feel confident to help someone who overdosed					
16. If someone overdoses I would be able to inject naloxone (Narcan)					
17. If someone overdoses I would call an ambulance but I wouldn't be willing to do anything else					
18. If someone overdoses I would be concerned about calling an ambulance in case the police came					
19. Family and friends of drug users should be prepared to deal with an overdose					
20. Family and friends of drug users should have access to naloxone (Narcan) supplies					

TRAINING SESSION EVALUATION

Please complete the following questions about the overdose training session you have attended today.

Please tell us how much you AGREE or DISAGREE with the following:

	Completely disagree	**Disagree**	**Unsure**	**Agree**	**Strongly agree**
1. I have learned new things in this training session					
2. As a result of the training I feel more confident in responding to an overdose					

3. What did you like most about the training session?

_____
_____
_____
_____

4. Is there anything about the training session that you think could be improved or changed?

_____
_____
_____
_____

5. Has the training session raised any issues for you with regard to opioid overdose (e.g. past overdose of friend/partner? ☐ **Yes** ☐ **No**

6. **Would you like our help in referring you to an appropriate service to assist you with any of these issues?** ☐ Yes ☐ No

Thank you for completing this questionnaire.

Office use only

Referral made ☐ Yes ☐ No

Appendix H: Carer Post-Training Questionnaire

CARER POST - TRAINING KNOWLEDGE AND ATTITUDES QUESTIONNAIRE

Office use only
Questionnaire number _____
Date____/_____/_____
Knowledge score _____

Please answer the following questions about your knowledge of overdose and naloxone (Narcan) and your attitudes towards overdose and naloxone. Place the completed questionnaire back into the folder.

1. Naloxone (Narcan) is used for (TICK ALL THAT APPLY):

- ❑ Reversing heroin overdose
- ❑ Reversing cocaine overdose
- ❑ Reversing amphetamine overdose (e.g. 'Speed', 'Ice')
- ❑ Reversing the effects of OxyContin overdose
- ❑ Helping someone to get off drugs
- ❑ Don't know

2. Which are the recommended sites for injecting naloxone (Narcan)? (TICK ALL THAT APPLY)

- ❑ Upper arm
- ❑ Thigh
- ❑ Buttocks
- ❑ Don't know

3. Which of the following are signs of an opioid overdose? (TICK ALL THAT APPLY)

- ❑ Shallow/slow breathing
- ❑ Blood-shot eyes
- ❑ Pin point pupils
- ❑ Lips/tongue turn blue
- ❑ Loss of consciousness
- ❑ Fitting
- ❑ Deep snoring
- ❑ Don't know

4. Which of the following <u>should</u> be done when a person is showing signs of an opioid overdose? (TICK ALL THAT APPLY)

- ❑ Call the ambulance
- ❑ Place the person on their left side (in the recovery position)
- ❑ Give stimulants (e.g. cocaine, 'Speed', coffee)
- ❑ Inject naloxone (Narcan)
- ❑ Perform mouth to mouth resuscitation if the person is not breathing
- ❑ Put the person in bed to sleep it off
- ❑ Stay with the person until the ambulance arrives
- ❑ Don't know

5. Which of the following increase the risk of an opioid overdose? (TICK ALL THAT APPLY) ❑ Taking larger than usual drug doses ❑ Switching to injecting drugs ❑ Using again after not using for a while ❑ Using with other substances (e.g. alcohol, sleeping pills) ❑ Change in drug purity (e.g. through change in dealer) ❑ Don't know	**6. How long does it take for naloxone (Narcan) to start having effect?** ❑ 2-5 minutes ❑ 5-20 minutes ❑ Don't know
7. Naloxone (Narcan) effect lasts for: ❑ Less than 20 minute ❑ One to 4 hours ❑ Don't know	

Please mark "True", "False" or "Don't know"	**True**	**False**	**Don't know**
9. There is no need to call an ambulance if I know how to manage an overdose			
10. Ambulance staff automatically call the police if someone overdoses			
11. You don't need to do basic life support if someone gets naloxone (Narcan)			
12. If the first dose of naloxone (Narcan) has no effect a second dose can be given			
13. You can overdose again once naloxone (Narcan) wears off			
14. Naloxone (Narcan) can induce drug withdrawal symptoms			

Please tell us how much you AGREE or DISAGREE with the following:

	Completely disagree	**Disagree**	**Unsure**	**Agree**	**Strongly agree**
15. I have enough information about how to manage an overdose					
16. I would need more training before I can feel confident to help someone who overdosed					
17. If someone overdoses I would be able to inject naloxone (Narcan)					
18. If someone overdoses I would call an ambulance but I wouldn't be willing to do anything else					
19. If someone overdoses I would be concerned about calling an ambulance in case the police came					
20. Family and friends of drug users should be prepared to deal with an overdose					
21. Family and friends of drug users should have access to naloxone (Narcan) supplies					

TRAINING SESSION EVALUATION

Please complete the following questions about the overdose training session you have attended today.

Please tell us how much you AGREE or DISAGREE with the following:

	Completely disagree	**Disagree**	**Unsure**	**Agree**	**Strongly agree**
1. I have learned new things in this training session					
2. As a result of the training I feel more confident in responding to an overdose					

3. What did you like most about the training session?

_____
_____
_____
_____

4. Is there anything about the training session that you think could be improved or changed?

_____
_____
_____
_____

Thank you for completing this questionnaire.

Appendix I: Follow-Up Locater Information and Consent

FOLLOW-UP LOCATER INFORMATION- CONSENT	
Research Use Only	
Study Code |____|____|____|____| Site Code |____|____|	Date |____|____| . |____|____| . |____|____|____|____| Client Initials |____|____| Staff Initials |____|____|

I, ..., (full name of trial participant)
☐ agree to providing additional details about my addresses and contacts on page two of this form.
☐ do not agree to providing additional details about my addresses and contacts on page two of this form.

I understand that this information will be used only if the researcher is unable to contact me for the follow-up interview.

I understand that when the researcher makes contact with the people nominated on page 2, that he/she will not mention my drug or alcohol use history or status, or that I am participating in a project about drug treatment, or that the researcher is calling from Kirketon Road centre/The Langton Centre, and that the researcher will not in any other way disclose that the research project is related to drug use.

Signed: ..... Date: _____ / _____ / ____
(participant)

Researcher: ..... Date: _____ / _____ / ____

FOLLOW-UP LOCATER INFORMATION

Research Use Only

Study Code |____|____|____|____| Site Code |____|____|

Date |____|____| . |____|____| . |____|____|____|____|

Client Initials |____|____| Staff Initials |____|____|

Participant's full name: _____

Participant's aliases or nicknames: _____

MAILING ADDRESS IF DIFFERENT FROM RESIDENTIAL ADDRESS (AS SPECIFIED ON CLIENT REGISTRATION FORM)

MAILING ADDRESS

|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|

|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|

SUBURB/TOWN POSTCODE STATE

|____|____|____|____|____|____|____|____|____|____|____|____|____|____| |____|____|____|____| |____|____|____|

TELEPHONE BUSINESS HOURS MOBILE PHONE

|____|____| |____|____|____|____| |____|____|____|____| |____|____|____|____| |____|____|____| |____|____|____|

TELEPHONE AFTER HOURS

|____|____| |____|____|____|____| |____|____|____|____|

SECOND CONTACT PERSON (eg. parent, close relative)

CONTACT NAME RELATIONSHIP TO YOU

|____|____|____|____|____|____|____|____|____|____|____|____|____|____| |_____|

ADDRESS

|____|____|____|____|____|____|____|____|____|____|____|____|____|____|

SUBURB/TOWN POSTCODE STATE

|____|____|____|____|____|____|____|____|____|____|____|____|____|____| |____|____|____|____| |____|____|____|

TELEPHONE BUSINESS HOURS MOBILE PHONE

|____|____| |____|____|____|____| |____|____|____|____| |____|____|____|____| |____|____|____| |____|____|____|

TELEPHONE AFTER HOURS

|____|____| |____|____|____|____| |____|____|____|____|

NAMES AND PHONE NUMBERS OF TWO PEOPLE WHO WOULD KNOW YOUR ADDRESS OR PHONE NUMBER IF YOU MOVED DURING THE COURSE OF THE STUDY

PERSON 1

|____|____|____|____|____|____|____|____|____|____|____|____|____|____||____|____|____|____|____|____|____|____|____|____|

TELEPHONE BUSINESS HOURS MOBILE PHONE

|____|____| |____|____|____|____| |____|____|____|____| |____|____|____|____| |____|____|____| |____|____|____|

TELEPHONE AFTER HOURS

|____|____| |____|____|____|____| |____|____|____|____|

PERSON 2

|____|____|____|____|____|____|____|____|____|____|____|____|____|____||____|____|____|____|____|____|____|____|____|____|

TELEPHONE BUSINESS HOURS MOBILE PHONE

|____|____| |____|____|____|____| |____|____|____|____| |____|____|____|____| |____|____|____| |____|____|____|

TELEPHONE AFTER HOURS

|____|____| |____|____|____|____| |____|____|____|____|

OPEN follow-up interview

KRC number _____
First 3 letters of surname _____ **First name** _____
Date____/_____/_____
Interviewer _____

A. The Naloxone training

1. Did you attend training for the use of naloxone in overdose situations?
☐ YES ☐ NO

2. Who else attended the training with you? (please tick all that apply)

☐ No-one, I attended on my own
☐ At least 1 family member/friend who use(s) opiates
☐ At least 1 family member/friend who does not use(s) opiates
☐ Others_____(specify)

3. Did you train anyone else (e.g. partner/friends) in the use of naloxone?
☐ YES ☐ NO

4. Do you still possess the naloxone you were given?
☐ YES ☐ NO

5. **If 'NO', why not?**
☐ Lost
☐ Naloxone expired
☐ Used on self
☐ Used on someone else
☐ Other, please specify: _____

6. Have there been any problems with the Overdose management pack you received (e.g. How do you find the vials? Is the kit bag too big or too little? Would you like to see anything else in the kit)?
_____
_____
_____
_____
_____

7. **Where do you keep your naloxone?** _____

***Note**: The next section to be completed by client*

B. OPEN Follow-up Knowledge and attitudes questionnaire

KRC number _____
First 3 letters of surname _____ **First name** _____
Date____/_____/_____

Please answer the following questions about your knowledge of overdose and naloxone (Narcan) and your attitudes towards overdose and naloxone.

1. Naloxone (Narcan) is used for (TICK ALL THAT APPLY):

- ❑ Reversing heroin overdose
- ❑ Reversing cocaine overdose
- ❑ Reversing amphetamine overdose (e.g. 'Speed', 'Ice')
- ❑ Reversing the effects of OxyContin overdose
- ❑ Helping someone to get off drugs
- ❑ Don't know

2. Which are the recommended sites for injecting naloxone (Narcan)? (TICK ALL THAT APPLY)

- ❑ Upper arm
- ❑ Thigh
- ❑ Buttocks
- ❑ Don't know

3. Which of the following are signs of an opioid overdose? (TICK ALL THAT APPLY)

- ❑ Shallow/slow breathing
- ❑ Blood-shot eyes
- ❑ Pin point pupils
- ❑ Lips/tongue turn blue
- ❑ Loss of consciousness
- ❑ Fitting
- ❑ Deep snoring
- ❑ Don't know

4. Which of the following <u>should</u> be done when a person is showing signs of an opioid overdose?(TICK ALL THAT APPLY)

- ❑ Call the ambulance
- ❑ Place the person on their left side (in the recovery position)
- ❑ Give stimulants (e.g. cocaine, 'Speed', coffee)
- ❑ Inject naloxone (Narcan)
- ❑ Perform mouth to mouth resuscitation if the person is not breathing
- ❑ Put the person in bed to sleep it off
- ❑ Stay with the person until the ambulance arrives
- ❑ Don't know

5. Do you feel confident you would recognise an opioid overdose?

- ❑ Yes
- ❑ No
- ❑ Maybe

6. Do you know how to manage an opioid overdose?

- ❑ Yes
- ❑ No
- ❑ Maybe

7. Would you call the ambulance in an opioid overdose situation?

- ❑ Yes
- ❑ No
- ❑ Maybe

Please tell us how much you AGREE or DISAGREE with the following:

	Completely disagree	**Disagree**	**Unsure**	**Agree**	**Strongly agree**
1. I have enough information about how to manage an overdose					

2. I would need more training before I can feel confident to help someone who overdosed					
3. If someone overdoses I would be able to inject naloxone (Narcan)					
4. If someone overdoses I would call an ambulance but I wouldn't be willing to do anything else					
5. If someone overdoses I would be concerned about calling an ambulance in case the police came					
6. Family and friends of drug users should be prepared to deal with an overdose					
7. Family and friends of drug users should have access to naloxone (Narcan) supplies					

C. Drug use and personal overdoses

Definition of overdose: Overdose is defined as any of the following symptoms occurring in conjunction with your drug use: difficulty breathing, turning blue, lost consciousness, unable to be roused, collapsing. Overdose does not mean being 'on the nod'.

31. **How often did you inject last month?**

☐ More than 3 times most days ☐ 2-3 times most days ☐ Once a day
☐ More than weekly, not daily ☐ Less than weekly (on 1 to 5 days)
☐ Did not inject in the last month

32. **Have you had an opioid overdose *since receiving your Overdose management pack*?**

☐ **YES** ☐ **NO**

33. **If yes, how many** _____

Please answer the following questions about your most recent overdose experience SINCE RECEIVING NALOXONE

[Begin audio recording]

Can you describe in your own words what happened the last time you had a drug overdose?

Prompts: What happened before you overdosed? What drugs had you been using?
Had you had recent periods of abstinence due to prison treatment etc?
Who else was present when you were using?
What happened when you overdosed (what did others tell you)?
What happened after you overdosed? Did you go to hospital?
Adverse reactions, re-intoxication etc.

34. During this overdose was naloxone used to revive you?
☐ YES ☐ NO

35. If yes, to whom did the naloxone belong?
☐ Myself
☐ A Friend
☐ Ambulance
☐ Stranger
☐ Family member
☐ Other

36. Why do you think you overdosed?
☐ Reduced tolerance to opiates please specify: _____
☐ Change in purity, please specify:_____
☐ Mixing drugs (polygrug use), please specify:
☐ Other, please specify: _____

37. What happened after the overdose?
☐ I was placed in recovery position
☐ Ambulance was called
☐ Police attended
☐ I was admitted to hospital
☐ I don't know

38. Who gave you the nalxone injection?
_____

39. Where on the body was the naloxone injection given?
_____

40. How many naloxone injections were you given during this overdose?
_____

41. How long approximately did it take to regain consciousness following the naloxone injection (if known)?
_____

42. Did you experience any complications or problems from naloxone (other than the symptoms associated with opioid withdrawal)?
☐ YES ☐ NO

43. **If yes, please describe:** _____

44. **In your opinion did the naloxone prevent you dying from an overdose?**
☐ YES ☐ NO

45. Was the naloxone supply replaced by KRC? Langton Centre?
☐ YES ☐ NO

D. Witnessed overdoses

1. **Have you witnessed an opiate overdose *since receiving your Overdose management pack*?**
☐ YES ☐ NO

2. If yes, how many _____

Please answer the following questions about the overdose you witnessed SINCE RECEIVING OVERDOSE MANAGEMENT PACK

[Begin audio recording]

Can you describe in your own words what happened the last time you witnessed a drug overdose since receiving your overdose management pack?

Prompts: What happened before the overdose?
What drugs had the person been using?
Had they had recent periods of abstinence due to prison treatment etc?
Who else was present? What happened when they overdosed?
What happened after they overdosed? Did they go to hospital?
Adverse reactions, re-intoxication etc.

3. How did you recognise that this person had overdosed?

- ☐ Shallow breathing
- ☐ Pale or blue lips
- ☐ Pin-point pupils
- ☐ Unresponsive to mild pain
- ☐ Unconscious
- ☐ Fitting

4. Why do you think they overdosed?

- ☐ reduced tolerance to opiates
- ☐ change in purity
- ☐ polydrug use, please specify:
- ☐ other, please specify:

5. What actions were taken during the overdose on this occasion?

	Called an ambulance
	Stayed with the person until they come round
	Walked the person around the room
	Injected saline (salt) solution
	Placed the person in the recovery position
	Stayed with the person until the ambulance arrived
	Checked airways for obstruction
	Checked breathing
	Gave stimulants (e.g. black coffee etc.)
	Slapped or shaked the person
	Shocked the person with cold water
	Performed mouth to mouth resuscitation
	Given Naloxone
	Admitted to hospital
	Checked pulse

6. **Did the person survive the overdose?**
☐ YES ☐ NO

7. **Did the police attend?**
☐ YES ☐ NO

8. **Was naloxone used to aid resuscitation?**
☐ YES ☐ NO

9. **To whom did the naloxone belong?**
☐ Myself
☐ Another user
☐ Ambulance
☐ Stranger
☐ Other, please specify: _____

10. **If an ambulance was called, were the ambulance personnel notified that naloxone had been used ?**
☐ YES ☐ NO

11. **Who gave them the naloxone injection?** _____

12. **Where on the body was the naloxone injection given?** _____

13. **How many naloxone injections were they given?** _____

14. **How long approximately did it take for them to regain consciousness?** _____

15. **Did they experience any complications or problems such as aggression from naloxone other than the symptoms associated with opioid withdrawal?**
☐ YES ☐ No

16. **If yes, please describe:** _____

17. **If the person survived, in your opinion did the naloxone prevent the person dying from an overdose?**
☐ YES ☐ NO

18. **Was the naloxone supply replaced by the drug service?**
☐ YES
☐ NO
☐ Don't Know

E. Experience with giving naloxone

These questions are to be answered if YOU have given naloxone.

1. **How confident did you feel giving it?**
☐ Very confident
☐ Quite confident
☐ Not very confident
☐ Not at all confident

2. **How easy was it to inject the naloxone?**
☐ Very easy
☐ Quite easy
☐ Not very easy
☐ Not at all easy

3. **Was the naloxone training you received useful in this situation?**
   ☐ YES ☐ NO

4. **Do you require additional training or re-training on naloxone use?**
   ☐ YES ☐ NO

F. Overall Program Evaluation

1. **Did you find the written materials in the Overdose management pack**
   ☐ Very useful
   ☐ A little useful
   ☐ Not useful at all

2. **Did you find the overdose training session**
   ☐ Very useful
   ☐ A little useful
   ☐ Not useful at all

3. **What did you like most about participating in the program?**
   _____
   _____
   _____
   _____

4. **How can the program be improved?**
   _____
   _____
   _____
   _____
   _____

Thank you very much for your time

Appendix K: Naloxone Use Questionnaire

NALOXONE USE QUESTIONNAIRE

KRC number _____ **Date** _____

First 3 letters surname _____ **First name** _____

PERSONAL OVERDOSES	WITNESED OVERDOSES
Have you had an opioid overdose since receiving your (last) overdose management pack? ☐ NO ☐ YES If yes, how many_____	**Have you witnessed an opioid overdose since receiving your (last) overdose management pack?** ☐ NO ☐ YES If yes, how many_____
AT THE LAST OVERDOSE	AT THE LAST OVERDOSE
Was naloxone used? ☐ NO ☐ YES	**Was naloxone used?** ☐ NO ☐ YES
If yes, to whom did the naloxone belong? ☐ Myself ☐ A Friend ☐ Ambulance ☐ Stranger ☐ Family member ☐ Other _____	**If yes to whom did the naloxone belong?** ☐ Myself ☐ Another user ☐ Ambulance ☐ Stranger ☐ Family member ☐ Other_____
What happened after the overdose? ☐ I was placed in recovery position ☐ Ambulance was called ☐ Police attended ☐ I was taken to the emergency centre ☐ I was admitted to hospital ☐ I don't know	**What happened after the overdose?** ☐ The person was placed in recovery position ☐ Ambulance was called ☐ Police attended ☐ The person was taken to the emergency centre ☐ The person was admitted to hospital ☐ I don't know
Who injected you with naloxone? _____	**Who injected them with naloxone?** _____
Where on the body was the naloxone injection given? _____	**Where on the body was the naloxone injection given?**
How many naloxone injections were you given? ____	**How many naloxone injections were given?** ____
Did you experience any complications or problems from naloxone (other than the symptoms associated with opioid withdrawal)? ☐ NO ☐ YES If yes, please describe: _____	**Did they experience any complications or problems from naloxone (other than the symptoms associated with opioid withdrawal)?** ☐ NO ☐ YES If yes, please describe:_____
In your opinion did the naloxone prevent you dying from an overdose? ☐ YES ☐ No	**If the person survived in your opinion did the naloxone prevent them dying from an overdose?** ☐YES ☐ NO ☐The person did not survive

Appendix L: Staff Survey prior to the Project

OPEN Clinician in-service session

Please complete the following anonymous questionnaire. Your responses will inform the evaluation of the OPEN project.

Date_____

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. My clients have the right to be offered naloxone to manage opioid overdose	1	2	3	4	5
2. My clients consider it appropriate to discuss overdose prevention and management	1	2	3	4	5
3. It is appropriate for me to talk to clients about opioid overdose prevention and management	1	2	3	4	5

4. What do you think are the OPEN project strengths?

_____

_____

5. What do you think are the OPEN project weaknesses?

_____

_____

6. Do you have any concerns about implementing OPEN at KRC?

_____

_____

_____

7. Are you going to be directly involved in implementing OPEN? ☐ Yes ☐ No ☐ Don't know

8. Are you ☐ Medical officer ☐ Nurse ☐ Allied health professional ☐ Other

9. Any other comments ...

_____

_____

_____

Thank you for completing this questionnaire

Appendix M: Staff Survey for Evaluation at Kirketon Road Centre

OPEN Staff Feedback Survey – July 2014

Please complete the following anonymous questionnaire. Your responses will inform the evaluation of the OPEN project.

1. Are you a: (circle one) Medical Officer Nurse Allied Health Professional Other

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
2. KRC clients have the right to be offered naloxone to manage opioid overdose.	1	2	3	4	5
3. KRC clients consider it appropriate to discuss overdose prevention and management.	1	2	3	4	5
4. It is appropriate for me to talk with KRC clients about opioid overdose prevention and management.	1	2	3	4	5

5. What do you think were the OPEN project's strengths?

6. What do you think were the OPEN project's weaknesses?

7. Were you directly involved in implementing the OPEN project? Yes No

8. Any other comments?

Thank you for completing this questionnaire.

Appendix N: Client Survey at the Langton Centre

NARCAN PROGRAM IN AN OTP

1. Have you heard about Narcan training at The Langton Centre (TLC) or Kirketon Road Centre (KRC)?
   ☐ **Yes** ➔ ☐ Langton Centre **OR** ☐ Kirketon Road Centre
   ☐ **No**

2. If yes, have you participated in this training?
   ☐ **Yes**
   ☐ **No**

3. If no, are you interested in participating?
   ☐ **Yes**
   ☐ **No**

4. If you are NOT interested in participating in the training, why not? (*please tick*)

a)	Not using drugs anymore	☐
b)	Don't want to be involved with people who are using drugs	☐
c)	Don't want health workers at KRC/TLC to know that I am still using and/or in contact with drug users	☐
d)	Don't have time	☐
e)	Worried about being questioned by Police if I am found to have it in my possession	☐
f)	Don't want to be involved in overdose management in case Police attend	☐
g)	Just not interested	☐
h)	Other: (*please specify*)	☐

5. If you ARE interested in participating in the training, how would you like to access this training? (*please tick*)

a)	Part of routine appointment with your caseworker / doctor	☐
b)	Special appointment with caseworker / doctor	☐
c)	Group training led by a clinical staff member	☐
d)	Group training led by a consumer / peer worker	☐

6. What would make the Narcan training more appealing to you?

_____

_____